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ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

For the

Afghanistan

Naghlu Hydropower Rehabilitation Project (NHRP)

Da Afghanistan Breshna Sherkat (DABS)

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LIST OF ANNEXES

List of Acronyms

ANDS	Afghan National Development Strategy
AP	Affected Person
APSDP	Afghan Power System Development Project
ARAZI	Afghan Independent Land Authority
CDC	Community Development Council
CITES	Convention on International Trade of Endangered Species
CMS	Convention on Migratory Species
COO	Chief Operating Officer
DABS	Da Afghanistan BreshnaSherkat
DSRP	Dam Safety Review Panel
EIA	Environmental Impact Assessment
ESAP	Environment and Social Advisory Panel
EMP	Environmental Management Plan
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environment and Social Management Plan
ESO	Environment Safeguards Officer
GoIRA	Government of Islamic Republic of Afghanistan
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
LAC	Land Acquisition Committee
LARPF	Land Acquisition and Resettlement Policy Framework
LLE	Law on Land Expropriation
LLM	Law on Land Management
MAIL	Ministry of Agriculture, Irrigation and Livestock
MEW	Ministry of Energy and Water
MOJ	Ministry of Justice
NEPA	National Environment Protection Agency
NEPS	North East Power System
NGO	Non Government Organisation
NHRP	Naghlu Hydropower Rehabilitation Project
NSP	National Solidarity Program
RAP	Resettlement Action Plan
REA	Rapid Environment Assessment
SIA	Social Impact Assessment
SSO	Social Safeguards Officer
TAP	Technical Advisory Panel
UNCBD	UN Convention on Biological Diversity
UNCCD	UN Convention to Combat Desertification
UNFCCC	UN Framework Convention on Climate Change

Executive Summary

Background and Project Context

1. The Government of the Islamic Republic of Afghanistan (GoIRA), through its 2006 Afghanistan National Development Strategy (ANDS), set out ambitious three to five year goals for increasing access to electricity. The aim was for electricity supply to reach at least 65 percent of households and 90 percent of non-residential establishments in major urban areas and at least 25 percent of households in rural areas. This would have represented a considerable increase over the rate of electrification – which had last been reliably estimated at six percent nationwide in 2003. More recent estimates suggest that some 25-30 percent of households have access to grid electricity. There appears to be no reliable estimate for the number of people with access to off-grid electricity although there is some 134MW of small hydro, diesel generators and solar power installed.

2. Responsibility for management and operation of the electricity system rests with Da Afghanistan Breshna Sherkat (DABS), the national electricity utility. Until 2009, DABS was a department of the Ministry of Energy and Water (MEW). DABS's corporatization has been accompanied by a strong program of commercialization supported by the World Bank and more recently by USAID. DABS is responsible for the installed domestic generation capacity, including about 230MW of hydropower and with it Naghlu Hydropower Plant, although only about 138MW is currently in service. MEW still retains a role in investment planning and project management and is the main counterpart for three existing World Bank supported projects.

Project Objective

3. The Project Development Objective is to increase the supply of domestically-generated electricity to the Afghan power system in a safe and environmentally and socially sustainable way.

Project Description

4. Since 2006 the World Bank has been financing the rehabilitation of the electrical and electromechanical parts of Naghlu hydropower plant which was built with Soviet Assistance during the 1960s. The current project under which this financing is taking place closed in March 2013. Among others, two primary problems have emerged: sediment has built up on the face of the dam and blocked the bottom outlet; and there is no auxiliary power source, leaving only manual opening and closing of the spillway gates or inlet valves in the event that the plant is not generating. Overall, under the status quo, without additional Bank financing, there is a grave risk to Naghlu not being able to continue to generate and also a significant safety risk.

5. As a result a consensus has been reached among the relevant Afghan counterparts and internally in the Bank to prepare a new emergency grant, the Naghlu Hydropower Rehabilitation Project (NHRP). This will comprise six components, as described below. The project will be implemented by MEW for the electromechanical component, since that is a continuation of their existing activities, while the civil works, including the sediment removal, will be implemented by DABS. Because of the emergency nature of the project, DABS has prepared this Environmental and Social Management Framework (ESMF) during the preparation phase and will then implement it through an ESIA, ESMP and other appropriate instruments during the implementation phase. The project will be prepared as environmental "category A".

Project Components

6. **Component 1: Mechanical, Electrical and Electromechanical Works.** This component is aimed at finishing the rehabilitation of the electrical and electromechanical parts of the plant and ensuring their sustainable operations. It will consist of three subcomponents:
   - ***Rehabilitation of Unit 1 and balance of plant***. Ongoing electromechanical rehabilitation work will be completed, focused on Unit 1. In particular, the bent rotor shaft will be tested and either repairs undertaken, if possible, or a replacement ordered. Balance of plant rehabilitation, which is not yet complete, will also be finished.
   - ***Spare parts and consumables***. Although the original contract for the rehabilitation of the electromechanical works included spare parts, additional parts and consumables are required for the sustainable operation of the plant. A separate supply contract will be procured for the parts aimed at covering a period of three years.
   - ***Additional training for plant staff***. Although some training in the rehabilitated plant has been undertaken, experience suggests that it has been inadequate to ensure sustained and safe operation of the plant. Further, more systematic and thorough training for plant staff will be undertaken in this component.

7. **Component 2: Dam Safety Improvements**. This component is aimed at ensuring the safe operation of the dam and will consist of three subcomponents as follows:
   - ***Dam Safety Audit.*** Consultants will undertake an audit of the dam's structural and operational safety, and preparation of plans and bidding documents for civil works to improve safety to acceptable standards - though it should be noted that this will be done with the aim of ensuring sustainability in the Afghan context. This work will cover identified issues such as reactivating the bottom outlet, installation of auxiliary power and other systems, improvements to the head gates, closing system, installation of instrumentation and clearance of unexploded ordnance from the dam structure. This subcomponent will also include studies on hydrological and seismological safety.
   - ***Non-structural measures.*** Consultants will also support DABS to introduce modern dam safety measures that do not entail structural or other works. This will include setting up a procedure and staffing for independent dam safety inspections; preparation of dam safety plans including operations, maintenance and surveillance manuals for civil works, emergency preparedness plans, and post-earthquake response plans. The operating manuals for the electrical and electromechanical works will be revised. Training for staff in all aspects will be conducted.
   - ***Structural and other works:*** Based on the findings of the safety audit, a contractor will be procured to undertake the improvements required to bring the dam to acceptable safety standards. Work to be included under this subcomponent will include sediment removal, reactivation of the low level outlet, introduction of independent operation of the power intake gates, installation of a standby generator for emergency opening of the spillway gates and closing of the power intake gates and installation of essential instrumentation. Other work identified in the audit will be included.

Component 3: Optimization of Power Generation. This component is aimed at examining the potential for increasing power generation at Naghlu Dam Hydropower Plant. This would ensure sustainable sediment management and potentially increase the amount of energy produced by the dam. The component will consist of two sub components:

8. **Feasibility study.** This will examine the feasibility of various options to increase power generation including but not limited to: appropriate dam operation and better management, additional storage upstream the dam, additional siphon spillway/ floating barge mechanism for controlled flushing of sediments, raising the dam crest, catchment area treatment and combination thereof. Studies will include review of topography, bathymetry, geotechnical, hydrological and electricity generation (i.e. turbine & generators), engineering and economic

and financial aspects. Since creating additional upstream storage and raising the dam would require additional land, an ESIA will also be conducted by a separate consultant.

9. **Detailed design**. Should the feasibility return a positive result, a detailed design would be prepared. Based on the findings of the ESIA, resettlement and livelihoods restoration, environment management, health and other action plans would also be prepared. These activities would then allow swift preparation of a follow-up investment project to enhance the power generation, should financing be available and security and other circumstances permit.

10. **Component 4: Environment and Social Sustainability.** This component will aim to ensure the environmental and social sustainability of the dam. It will consist of three sub components:
    - ***Addressing legacy issues.*** Early consultations with people in the project area indicate that there are a number of social legacy issues from the project. They include land, buildings and other assets for which compensation was not provided and promises of provision of electricity and jobs which have not been fulfilled. This component would support electrification in the project area and improved access to skills and training to enable local people to gain employment at the plant. As consultations proceed ways to share project benefits and improve livelihoods of those in the project area will be explored.
    - ***Environment Management.*** This component will support (a) the monitoring of the existing environment management plan for Component 1, and (b) the preparation, implementation and independent monitoring of an environment management plan for the structural and other works subcomponent of component 2.
    - ***Resettlement and livelihoods restoration:*** This sub component will support the preparation, implementation and independent monitoring of a resettlement livelihoods development plan for the structural and other works sub component of Component 2. It will not finance land acquisition.

11. **Component 5: DABS Project Management.** The component is aimed at ensuring that DABS receives advice on good international practice. It will consist of the technical, safeguards and consulting and other services needed to support implementation of the project by DABS. Consistent with the principle of /learning by doing' consultant assignments will be designed to support and mentor concerned DABS's staff, rather than implement the project. The component will include the creation and maintenance of an Environment and Social Advisory Panel, the duties of which will embrace the requirements of OP 4.01 for an independent environment panel of experts and a Technical Advisory Panel, the duties of which will embrace the requirements of the dam safety review panel as set out in OP 4.37.

12. **Component 6: Capacity Development and Scale up.** This component will support early actions needed to develop the Kunar River hydropower cascade. It is expected to finance studies to complement existing feasibility studies on planning and implementation for social development, environment and health management, consideration of alternatives and mitigations measures, hydrological, geological, geotechnical, seismic and dam safety studies, project preparation and management and preparation of financial and economic documents.

The project will be fully financed by the Afghanistan Reconstruction Trust Fund (ARTF). The project total cost is estimated to be US$83.0M.

Implementation Arrangements

13. For Component One the MEW has contracted an international company to carry out the required repair work and a consultant to oversee all elements of the work under this component. DABS has overall responsibility, including financial management and procurement, for implementing components two, three, four and five. An independent third

party, reporting directly to the Chief Operating Officer of DABS and the Bank, would be hired to monitor and report on compliance.

Potential Negative Impacts

The severity, intensity and location of the potential Environmental and Social Impacts, and when they will occur, will vary by component.

Potential Negative Environmental impacts

14. Component 1 – impacts will be associated with the electro-mechanical works taking place in the power house only and will be associated with managing removal, storage, handling and disposal of used oil's and lubricants, petroleum products and the removed parts. Other impacts may be due to loud noises and dust. These impacts are expected to be small, localized, short-lived and thus readily reversed or effectively managed with tangible mitigation measures, and are not expected to have lasting effects.

15. Component 2 – impacts will most likely be associated with removal and disposal of sediment material, and from managing public safety concerns during the removal, handling and disposal of unexploded ordinances, both from the reservoir area. Other concerns will include management of large construction equipment and plant, possible expansion and heavier use of the road networks in the area, including on access roads due to the movement of heavy construction vehicles plying these roads during construction. Furthermore, there may be downstream impacts on aquatic species and on downstream water users, such as sedimentation of irrigation facilities etc. These impacts are likely to be of concern, and their intensity and scale will be evaluated in a full Environmental and Social Impact Assessment.

16. Component 3 – impacts will be potentially associated with the raising of the dam crest, and therefore, as a consequence an increase in area of the reservoir will occur. This will potentially result in flooding of marginally more land, and therefore, may possibly further require enhanced water quality control measures in the reservoir. Early environmental scoping based on desk reviews and from field visits do not indicate the presence of endangered fauna or flora species or any significant natural habitat concerns. On the contrary, the evidence points to an already severely degraded landscape in the project area and with little or no vegetative cover at all. Hence the ongoing concerns with severe soil erosion, sediment transportation and deposition in the reservoir and downstream of the dam, which will continually have to be effectively managed going forward. Therefore, similar to Component 2, downstream impacts on aquatic species and irrigation facilities may be of some concern. The severity of these potential impacts both in terms of their intensity and scale will be evaluated as part of the feasibility studies in a standalone Environmental and Social Impact Assessment.

17. Component 4 – impacts are likely to be almost negligible as these will be mostly associated with grid connections to surrounding villages in the project area. For some villages, off-grid connections may be the only feasible choice, and for these cases, the concerns there would be how to manage lead batteries that may be used to store solar power during the day for use at night. These low scale impacts will be managed in a stand-alone ESMP for this component.

Potential Negative Social impacts

18. Component 2: The process of removing sediment from the reservoir may result in permanent asset loss and temporary land acquisition. A Land Acquisition and Resettlement Policy Framework (LARPF), based on the Afghan legal framework and compliant with the requirements of OP.4.12, has been developed and will be applied to all project components where it is not feasible to avoid land acquisition.

19. Component 3: A decision to raise the height of the 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 fundamental principle of the LARPF is the need to ensure social justice and equity for those people directly affected by the project. This is considered to be especially important in the Naghlu context where, almost fifty years after the hydropower plant was built, there remains a strong perception among many upstream and downstream communities that they were seriously disadvantaged under the resettlement program of the 1960s and have not benefited from the Naghlu plant.

20. Component 4: This includes provision for the electrification of villages in the immediate project area. This will be a direct, tangible benefit to communities in the Naghlu vicinity and should help counter a major grievance voiced by communities - that to date they have not received any benefit from the project. Very small areas of land may be bought outright (willing buyer- willing seller) to facilitate the siting of electricity poles and pylons.

Environmental and Social Management Framework (ESMF)

21. A framework approach is adopted as the specific alignment of activities in a number of components is unknown at the time of project appraisal. This approach permits the early identification of potential adverse impacts without the requirement of rigorous analysis.

22. During the process of developing the ESMF for NHRP a range of project and other relevant documents were studied, detailed meetings were held with project technical staff to understand various aspects of the project and field visits made to collect and check data. Consultations were held with representatives from local communities located upstream and downstream of Naghlu Dam as well as other stakeholders, including representatives from local government and NGOs,(see Annexes 1A and 1B) to inform them about the proposed project, and receive their comments and recommendations on social and environmental issues related to it.

23. The ESMF prescribes guidelines and procedures that would avoid, mitigate, or minimize adverse environmental and social impacts of supported activities and interventions. The ESMF is consistent with the requisite environmental and land laws of the Islamic Republic of Afghanistan and also in accordance with the World Bank Policies on Environmental Assessment (OP 4.01), Involuntary Resettlement (OP4.12), Dam Safety (OP 4.37), and Projects on International Waterways (OP/BP 7.50)

Legislative, Regulatory and Policy Framework

24. The primary relevant laws and regulations framing social and environmental issues are:
    a. The Environment Law of Afghanistan (2007)
    b. The Constitution of Afghanistan (2004)
    c. The Land Expropriation Law (2009)
    d. The Law on Managing Land Affairs (2008)
    e. The Afghan Land Policy (2007)
    f. The Law on the Preservation of Afghanistan's Historical and Cultural Heritages (2004)

World Bank Operation Policies triggered in the NHRP

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment (OP/BP 4.01)	[X]	[ ]	[ ]
Natural Habitats (OP/BP 4.04)	[X]	[]	[ ]
Pest Management (OP 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]	[ ]	[ ]

Stakeholder identification, consultation and participation

25. The NHRP will identify direct and indirect stakeholders and will prioritize stakeholder consultations to inform the design and decision making of the project, and thus improve the effectiveness, relevance and sustainability of all project components.

26. Consultations are considered vital in building trust and collaborative relationships between different groups within communities and the project. Consultations will include: providing people with information about proposed activities and their potential environmental and social impact; soliciting feedback from different groups within communities, particularly people's concerns and recommendations regarding proposed activities; incorporating these in project design to the extent possible and sharing with communities mitigation measures included in the design to address potential impacts.

27. A dynamic participatory approach that seeks to involve the various stakeholders in decision-making about environmental management, livelihood and community development programs will be encouraged throughout the course of the project.

28. This approach will also be used to inform the implementation of an effective grievance redress mechanism, which would be readily accessible in the project areas.

29. A preliminary NHRP safeguards Consultation and Participation Plan (Table 2, page 27) that sets out a consultative and participatory process and requirements for addressing both environmental and social concerns for each component, has been prepared.

30. All consultations will be documented in writing, and where culturally acceptable, with photographs and/or video of proceedings. These would then be filed in the project files.

Overview of social studies in the NHRP

31. Various types of social studies will be carried out during the project:
    (i) Pre-feasibility Stage Social Assessment
    (ii) Component 2: ESIA ⟶ household census- RAP
    (iii) Component 3: ESIA ⟶ household census - RAP
    (See Annex 7, Annex 8 and Annex 12 b)

Pre-Feasibility Stage Social Assessment

32. A pre-feasibility social assessment to collect and analyze socio-economic, cultural and political information across specified areas in Sarobi and Tagab districts will begin during the preparation phase. The study's findings will inform the development of activities across the project, especially for component 4.

Environmental and Social Impact Assessments

33. Environmental and Social Impact Assessments will be coordinated by DABS safeguards officers and carried out by consultant firm(s) as a core element of components 2 and3 of the NHRP, as summarized in the matrix in Table 1. Findings from these assessments will inform the development of Environment and Social Management Plans (ESMPs) and, where relevant, Resettlement Action Plans (RAPs).

Application of 'Safety of Dams' policy to Naghlu Dam

34. The dam design shall be guided by and compliant with the World Bank policy on safety of dams (OP4.37). DABS is responsible for ensuring appropriate measures are taken and sufficient resources provided for the safety of the dam. The dam rehabilitation works shall be designed and their implementation supervised by experienced and competent professionals.

35. DABS will appoint experts, acceptable to the World Bank, to form an Independent Panel of Experts (Panel), known as the Technical Advisory Panel to review and advise DABS on matters relative to the safety aspects of the rehabilitation works. DABS views the Panel as an objective reviewer, whose independence and integrity will be safeguarded. The Panel shall be maintained for the duration of the project, until all facilities are placed into final operation.

Institutional Arrangements

36. The Chief Operating Officer (COO) of DABS will have overall responsibility for ensuring effective compliance with the requirements set out in the ESMF. The COO will identify an Environmental Safeguards Officer (ESO) and a Social Safeguards Officer (SSO) who will have specific responsibility for overseeing the implementation of the ESMF provisions during preparation, implementation, monitoring and evaluation of the project. The Safeguards Officers (SOs) will be supported in their work by World Bank Social and Environmental Specialists, especially during the initial stages of the project. The SOs will liaise closely with DABS management at the Naghlu plant and representatives of local communities at each stage of project development.

Capacity Building

37. The overarching objective will be to build and strengthen the institutional capacity of DABS to better support the development and integration of social and environmental measures into the project. An assessment will be carried out by DABS, supported by the World Bank, to identify training needs of DABS' staff on environment and social issues at national and local levels. A capacity-building strategy will be developed to meet identified training and other capacity building needs.

Monitoring and Evaluation Framework

Internal Monitoring and Reporting

38. At local level, DABS safeguards officers, together with DABS local project management team, local government and local communities will be responsible for monitoring to ensure that all required environmental and social mitigation measures, set out in the Environment and Social Management Plans (ESMPs) for each project component, are implemented satisfactorily. They will also have responsibility for monitoring RAP implementation/entitlements.

39. Information collected from various stakeholders (e.g. representatives of men and women's CDCs, farmers, shopkeepers, local government officials from Sarobi district, local NGOs and contractors) together with observations of project activities will be reported monthly to DABS national office in Kabul using standard reporting forms.

40. At national level DABS COO will take responsibility for overseeing progress in implementing the ESMF and assessing the effectiveness of mitigation measures against agreed indicators and parameters.

External Monitoring and Evaluation

41. External assessment of compliance with mitigation measures will also be carried out on a regular basis by an Independent Third Party Monitoring Agency to be appointed by DABS and agreed by the World Bank with the results communicated to DABS and the World Bank. This Agency will be responsible for the preparation of the semi-annual compliance report on LARAPs and ESIA/ESMPs (see Annex 13).

42. An independent SIA of RAP implementation will take place after a RAP has been fully implemented.

43. An Environment and Social Advisory Panel (ESAP), comprising internationally and locally recognized environment and social specialists, will provide another layer of oversight and advise DABS on key environment and social issues.

Grievance Redress Mechanism (GRM)

44. The key elements of the NHRP's GRM, which will address grievances related to both environmental and social concerns, are (i) attempts to resolve the dispute at local level (ii) grievance redress committee and (iii) appeal to DABS' management.

45. DABS management, ESS team and implementing partner will have an important role in ensuring that affected communities have a full understanding of the GRM, ways to access it and (i) the concept of just compensation for involuntary acquisition of land and/or assets and (ii) ensuring environmental and social mitigation measures in the ESMP's are implemented as planned.

Communication

46. An outline communications strategy and plan have been developed to increase the overall effectiveness of the project. In the NHRP context an effective communication strategy has heightened importance as a result of community concerns, many of which date from the 1960s when the dam was built. The communication plan is already being implemented through consultations on the ESMF. This consultation process helps make affected communities aware of the planned project and provide affected communities with an opportunity to comment on it and helps reduce possible misinformation about proposed activities.

ESMF general guidelines

47. The ESMF provides general policies, guidelines, codes of practice and procedures for the management of environmental and social issues to be integrated into the implementation of the project.