



Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 07/25/2024 | Report No: ESRSA03601

**I. BASIC INFORMATION****A. Basic Operation Data**

Operation ID	Product	Operation Acronym	Approval Fiscal Year
P179684	Investment Project Financing (IPF)	SPIN	2025
Operation Name	Sustainable Power and Irrigation for Nigeria Project		
Country/Region Code	Beneficiary country/countries (borrower, recipient)	Region	Practice Area (Lead)
Nigeria	Nigeria	WESTERN AND CENTRAL AFRICA	Water
Borrower(s)	Implementing Agency(ies)	Estimated Appraisal Date	Estimated Board Date
FEDERAL GOVERNMENT OF NIGERIA	Federal Ministry of Water Resources and Sanitation	25-Jul-2024	26-Sept-2024
Estimated Decision Review Date	Total Project Cost		
31-May-2024	500,000,000.00		

Proposed Development Objective

The Project Development Objective is to strengthen dam safety and improve management of water resources for hydropower and irrigation in selected areas of Nigeria.

B. Is the operation being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project Activities

[Description imported from the PAD Data Sheet in the Portal providing information about the key aspects and components/sub-components of the project]

The proposed Sustainable Power and Irrigation in Nigeria (SPIN) project will address nexus of water-food-energy challenges in Nigeria through investments in irrigation, dam safety, and



hydropower planning. By mobilizing water for productive purposes, optimizing the use of existing storage facilities, and enhancing hydropower planning capacity, the project will make integrated management of water, energy and food more effective and resilient in Nigeria. It will do this by investing in the management and resilience of multipurpose water infrastructure as well as strengthening the policies, institutions, capacities, and inter-governmental cooperation required. The proposed project includes four main components: 1) Institutional strengthening and capacity building for water resources management; 2) Irrigation Modernization; 3) Improvements in Dam Operations and enhancing dam safety; and 4) Project Management.

D. Environmental and Social Overview

D.1 Overview of Environmental and Social Project Settings

[Description of key features relevant to the operation's environmental and social risks and opportunities (e.g., whether the project is nationwide or regional in scope, urban/rural, in an FCV context, presence of Indigenous Peoples or other minorities, involves associated facilities, high-biodiversity settings, etc.) – Max. character limit 10,000]

The SPIN project will be implemented across Nigeria, focusing on rural agricultural areas. Nigeria has the highest population in Africa, and the seventh highest in the world, with an estimated population size of 211,639,374. The country is divided into six geopolitical zones, which include 36 states and a Federal Capital Territory (FCT). There are 774 local government areas (LGAs) in Nigeria. Northern Nigeria is characterized by fragility, conflict, and violence, endemic poverty, low literacy, degradation of natural resources, poor agricultural productivity, high increase of climate change vulnerability, desertification, and weak institutional capacity. Southern Nigeria is characterized by heavy rainfall, erosion, and flooding issues. The country has abundant human and natural resources, significant arable landmass, and other endowments, including mineral and natural resources.

The country is characterized by large patches of natural lowland and montane forests, important freshwater wetlands, savannas, high-altitude plateaus, and mangroves. The diversity of the country's natural ecosystems ranges from semi-arid savanna to mountain forests, rich seasonal floodplain environments, and rainforests. The river Niger and river Benue are the major rivers in Nigeria; the two rivers, with other tributaries, form a confluence in Lokoja. There are diverse environmental health-related risks such as air pollution, water pollution, oil spillage, urbanization deforestation, desertification, erosion, and flooding (due to inadequate drainage systems) caused mostly by anthropogenic activities. These challenges pose a threat to the lives and properties of Nigerians, and to a large extent, the biodiversity making up the country's ecosystem. At the top of local and global concerns is the pollution as a result of oil spillage in the Niger Delta, prominently affected community area being Ogoniland.

Nigeria's economy is rapidly growing, leading to increased energy demand. Nigeria is a major oil producer in Africa but faces challenges such as insufficient power generation and high energy poverty. The Government is working to diversify the energy mix, improve infrastructure, and invest in renewable energy. Nigeria relies on petroleum, natural gas, hydroelectricity, and solar energy. Efforts are being made to expand access to rural areas and improve energy efficiency. The Project will prepare a hydropower master plan to support the Government for a future hydropower investment planning. A Strategic Environmental and Social Assessment (SESA) will



be prepared in line with the hydropower master plan and Environmental and Social Impact Assessment (ESIA) that assesses the risks and impacts of the sub-project.

Despite Nigeria's agricultural potential, agriculture activities are mainly at a small to medium scale. Agriculture has the potential to create jobs, improve standards of living, and restore stability to the area. Agriculture is a crucial component of the Nigerian economy and the largest employer, with a significant portion of the population involved in the industry. However, there is still room for improvement in expanding the scale with the potential to compete in international markets, particularly in major crop production. It is on this backdrop that the SPIN project is also focused on agriculture development.

Insecurity remains a major concern, particularly in Northern Nigeria, due to ongoing incidents involving Boko Haram, Islamic State West African Province (ISWAP), community rivalries and Farmer-Herder conflicts. These attacks primarily occur in the Grain Belt and other regions that could greatly benefit from the SPIN project. Southern Nigeria also experiences issues of farmer-herder conflicts and uprising from secessionist groups in the Southeast and South-south regions of the country.

Based on the current assessment of the project areas of intervention, there are no presence of any known indigenous groups or other minority groups that meet the requirements of ESS7.

D.2 Overview of Borrower's Institutional Capacity for Managing Environmental and Social Risks and Impacts

[Description of Borrower's capacity (i.e., prior performance under the Safeguard Policies or ESF, experience applying E&S policies of IFIs, Environmental and social unit/staff already in place) and willingness to manage risks and impacts and of provisions planned or required to have capabilities in place, along with the needs for enhanced support to the Borrower – Max. character limit 10,000]

At the Federal level, both the Ministry of Water Resources and Sanitation and the Ministry of Power have extensive experience implementing World Bank-supported Projects that have applied both the Safeguard Policies and the ESF.

The SPIN project builds on the achievements, proof of concept and early lessons of the Transforming Irrigation Management in Nigeria (TRIMING) Project (P123112) which it seeks to scale up in other Federally-owned schemes as well as in State-owned schemes nationwide. The TRIMING Project is however, implemented using the Safeguard Policies.

The TRIMING Project has in place Environmental, Social and Gender Officers who coordinate the environmental and social (E&S) requirements at the Federal level and locally recruited Environmental and Social Officers from within the catchment of the sub-project locations to serve as the scheme level Safeguard officers. The River Basin Development Authorities (RBDAs) are not well-staffed, even for key positions. The executive cadre of the Water User Associations (WUAs) ensured compliance amongst their members with implementing pest management procedures to avoid E&S impact.



In terms of developing E&S instruments, the TRIMING Project developed an Environmental and Social Management Framework (ESMF), Resettlement Policy Framework (RPF) and Integrated Pest Management Plan (IPMP) during the Project preparation in 2014. The TRIMING Project have implemented several Environmental and Social Impact Assessments (ESIAs) and Resettlement Action Plans (RAPs) for some of the largest irrigation schemes and dams in the country such as the Bakolori Irrigation Scheme and dam, Goronyo Irrigation Scheme, and dam, ESIA with Cumulative Impact for Kano River Irrigation Scheme and Tiga dam, Hadejia Barrage, Challawa Gorge dam and Dadin kowa irrigation scheme and dam where they demonstrated good capacity in managing E&S related issues in the project.

Under the SPIN Project, the Federal Ministry of Water Resources and Sanitation (FMWRS) will set up a Federal Project Management Unit (FPMU) in collaboration with the Federal Ministry of Power (FMP), specifically, the Dams Department and the Irrigation Department of the FMWRS and the Hydropower Department of the FMP. Each representative will manage the components and sub-components within their respective departments. Given the nature of the Project, there will be a need for good synergy between the FMWRS and FMP (including the Transmission Company of Nigeria [TCN]), particularly in the identification/selection of dams to be included in the Project and the nature of hydropower intervention and the National Environmental Standards and Regulations Enforcement Agency (NESREA) because of the regulatory role they play in controlling effects of dams and reservoirs in Nigeria. A similar structure will be set up at the state level led by the Ministry of Water Resources in collaboration with the Ministry of Agriculture, Ministry of Power, River Basin Development Agencies (RBDA) and other relevant sector representatives to implement the Project.

The SPIN Project will be implemented through 2 models across the relevant departments of the FMWRS and FMP, RBDAs and participating states. Model 1 will be implemented by the FPMU in federal financed schemes that are under the RBDAs (this is similar to what is in operation by the TRIMING Project). Model 2 will be implemented by the states through the SPIUs that will be established. Regardless of the model employed, all SPIUs and RBDAs will engage qualified Environmental, Social and Gender/GBV Officer. Security Focal Points shall be deployed from the Office of the State Security Advisor to the SPIU Offices and at the FPMU.

The Project's geographic coverage will be nationwide; however, states' participation is subject to expression of interest and compliance with the eligibility and readiness criteria agreed for the project. To date, 31 states drawn from all the six geopolitical zones of Nigeria have submitted documentation expressing interest to participate in the project. The FMWRS and World Bank will use the documentation to jointly assess interested states and group them into category 1 and category 2 states. Category 1 states would represent all states opting for SPIN Model 1 and category 2 represents states opting for SPIN Model 2. For both categories, states would be assessed against a set of demonstrated Commitment, Integrity and Capacity (CIC) criteria as set out in the PAD.

The Project has proposed under Component 1, the development of Hydropower master plan development, which will attract private sector investments. For dam safety, the National Environmental (Dams and Reservoirs) Regulations, 2014, establishes the NESREA as the



regulator to control the effects of dams and reservoirs on the environment and human health in Nigeria. However, there is need to strengthen the system by establishing a proper dam safety program. The SPIN activities on dam safety are being designed to strengthen this system. NESREA is also a member of the Project Steering Committee, and all dam safety activities will be informed and consulted with NESREA as well. The project will not overhaul dam safety legislation but will assist the government in preparing dam safety guidelines and technical standards.

Since the Environmental and Social Framework (ESF) is utilized for the SPIN Project, capacity needs to be built up for all the implementing agencies, with a specific focus on the FPMU, relevant government departments, and the Irrigation schemes officers (Project Managers, Engineers, Environment and Social Officers, etc.). On this premise, an ESF capacity-building support activity was introduced into a Component 4 of the SPIN project. In addition, SPIN ESMF suggests a detailed capacity building mechanism for all tiers in the implementing partners.

II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

High

A.1 Environmental Risk Rating

High

[Summary of key factors contributing to risk rating, in accordance with the ES Directive and the Technical Note on Screening and Risk Classification under the ESF – Max. character limit 4,000]

The environmental risk rating at Appraisal stage is “High. , due to (1) rehabilitation works on large dams (12 out 20) and (2) financing and preparation of feasibility and E&S studies for a greenfield dam. h The project aims to increase the safety of selected dams in Nigeria with a view to strengthen the dam safety management system in the country. The scope is to improve the safety of dams and associated appurtenances of 10 to 20 prioritized dams. At Appraisal the dams that will be under the project have not been selected and prioritization of existing large dams are now conducted by the government and and there could be risk of of dam failure.. However, based on the project scope and activities, three dams were selected at random and Environmental and Social Due Diligences (ESDDs), were conducted in March and April 2024, found that all such sub projects can be categorized to range from Low to substantial risks activities and they indicated the activities will only involve brownfield rehabilitation works of existing irrigation facilities and earth embankment dams. The project will not cover any greenfield construction works of new dams; however, a greenfield dam may be designed / studies prepared. A SESA will be conducted for the Hydropower Master Plan (HMP) while at a later stage, ESIA's would be required to be conducted for individual projects



identified in the HMP such as the greenfield dam previously mentioned. The civil works to be conducted under the dam safety (Component 3) will be rehabilitation works of the dam body and/or rehabilitation of irrigation and drainage works (Component 2), t 2 will also be limited to rehabilitation and expansion of already existing irrigation fields with a focus on rehabilitation of canals, repairs of broken walls, desilting of blocked field channel for proper water management, etc. The potential risks associated with the irrigation works are mainly construction related, which include dust due to earth movement and construction activities, as well as construction vehicle movement on unpaved access road; construction debris/waste, wastewater discharges including stormwater runoff from disturbed areas, and effluents from worker camp operations, siltation in the dam without effective sediment management resulting into issue of dam safety, flooding and thus impacts at the downstream population. Other risks are Occupational health and safety of workers which include physical hazards, slips and falls, work at height and moving machinery. Since the rehabilitation activities proposed will be carried out in areas of restricted access, therefore are not expected to have a direct interface with the population around the dam sites except for impact on the community health and safety from the vehicles and equipment and transportation of construction materials and workers to the project sites. Although the project will not intervene in physical hydropower infrastructural works, the project will support the preparation of hydropower studies for a greenfield dam. The Client will be required to prepare an ESIA. upon completion of the hydropower master plan, the ESIA will be used to address impacts associated with hydropower master plan such as downstream water quality and flow, biodiversity loss, fish migrations and community health and safety issues given the nature and scale of the identified risks and impacts stated above, the spread of the project across geopolitical zones and areas with fragile and climate vulnerable, the capacity and experience of TRIMING to implement ESF requirements. The risks of the subproject activities are not yet fully known in the project. Additionally, the capacity of the project proponents to undertake implementation of environmental aspects assessed at this stage is weak given the fact that TRIMING was implemented under the safeguards policies, hence the environmental risk of the project has been kept "High" at the appraisal stage.

A.2 Social Risk Rating

High

[Summary of key factors contributing to risk rating, in accordance with the ES Directive and the Technical Note on Screening and Risk Classification under the ESF – Max. character limit 4,000]

The social risk of the project is rated High due to the types and scale of the activities proposed, which are mainly to strengthen the capacity and institutional framework of the federal, river basin and state levels in Water Resources Management for dam safety, irrigation and hydropower optimization, support to Water User Groups (WUGs). Most of the civil works are linked to activities supporting the rehabilitation of existing dams and irrigation structures. The specific dams and irrigation schemes are not yet known. However, the Project is envisaged to be implemented nationwide with varied social sensitivities. The Client undertook an inspection of 3 dams (Naka Dam in Benue State under the Lower Benue RBDA, Doma Dam located in Nasarawa under the Lower Benue RBDA and the Wuro Keso situated in Taraba State under the Upper Benue RBDA [Wuro Keso is a project of dikes built to retain River Taraba from the Tella Barrage in Gasol] to understand more of the peculiarities of the dams. Major Social issues



identified from the studies indicated possible legacy issues owing to incomplete compensation from the Naka Dam construction, potential economic impact (about 10 burnt brick makers whose livelihoods could be impacted as a result of displacement from the command area of the dam downstream, about 20 fishermen whose livelihood could be disturbed if the Project is carried out during the period when they are allowed to fish in the reservoir), security issues, farmer-herder conflicts, labour influx risks (including sexual exploitation and abuse/sexual harassment [SEA/SH]). For potential dams under SPIN, it is critical that screening and consultation on legacy issues are carried out as part of the selection process. Impact on downstream water users will be properly assessed with the preparation of Environmental and Social Assessments, Emergency Action Plans, Livelihood Restoration Plans (LRPs) and Resettlement Action Plans (RAPs). Land acquisition and Involuntary Resettlement is a potential impact as the Project will expand irrigable area within the existing schemes to include new areas and will require preparation and implementation of RAPs (including payment of complementation, in cash or kind or provision of alternative livelihood). Besides, general population, including vulnerable and disadvantage individuals (Women, Persons with Disabilities, marginalized groups) could also be impacted if not well consulted and included as Project beneficiaries. Other potential social risks identified include inadequate coordination between concerned agencies; labour influx during the rehabilitation works which can lead to potential SEA/SH issues; security risks since the project is implemented in areas of fragility, conflict and volatile settings, which was also an issue under TRIMING Project; community health and safety issues; grievance as result of poor implementation of the interventions and compensation (where it becomes relevant). Poor stakeholder engagements can also impact the project if stakeholders are not adequately consulted, this is also relevant in the hydropower investments planning. Although the hydropower investment is focused only on the planning (no funds will be allocated to construction of infrastructure associated with hydropower investments), ESIA(s) (or potentially RAPs) will be developed which will assess the social risks associated with the future investments. Other risks may potentially involve land use issues, physical/economic displacements, downstream impact to water users, community health and safety issues, and labour risks.

[Summary of key factors contributing to risk rating. This attribute is only for the internal version of the download document and not a part of the disclosable version - Max. character limit 8,000]

B. Environment and Social Standards (ESS) that Apply to the Activities Being Considered

B.1 Relevance of Environmental and Social Standards

ESS1 - Assessment and Management of Environmental and Social Risks and Impacts

Relevant

[Explanation - Max. character limit 10,000]



The Project Development Objective is to strengthen dam safety and improve management of water resources for hydropower and irrigation in selected areas of Nigeria. The project will not finance any new dam construction but focus only on rehabilitating existing dams and their associated structures. Planned activities are neither intended to alter the original schemes, change their nature, nor expand dam extents to make them appear as new or different schemes. The main activities that will be done on the dam rehabilitations include measures for seepage reduction, hydrological and structural safety measures, strengthening the main dam body and foundation, improving basic dam facilities and dam safety instruments, and preparing an Emergency Action Plan (EAP), an Operation and Maintenance manual including operational protocols and dam health monitoring and reporting protocols and an instrumentation plan for dam safety. The project will promote the inclusion of safety protocols that address safety concerns specific to women and persons with disabilities in EAPs, preparing and implementing sediment management plans through bathymetric surveys feasibility studies, piloting of institutional models and plans for treatment of upstream drainage catchments with the construction of sediment retaining check-dams and river bank protection structures; and application of nature-based solutions to dam/reservoir operation and management. Dam safety assessment, including adequate investigation, survey, and risk analyses, as required under ESS4, will be undertaken at the early stages of project implementation before dam rehabilitation/safety enhancement plans are prepared/finalized along with the recommendations of the Client-led Dam Safety Review Panel of the respective dams. Further details are provided in the World Bank Good Practice Note on Dam Safety. Structural measures such as seepage reduction, hydrological and structural safety enhancement measures (e.g., rehabilitation /installation of additional spillways,) rehabilitation of foundation damages (cavities, piping, etc.), strengthening of concrete, masonry, and embankment structures of dams, and improving associated facilities with dams (e.g. access roads). The environmental risks anticipated under the project arise from the fact that the project will be implemented across Nigeria, with erosion, and flooding issues but is clearly focusing rehabilitation works of existing irrigation facilities and earth embankment dams. The potential environmental risks associated with the project activities are mainly construction related to construction debris/waste, wastewater discharges including stormwater runoff from disturbed areas, siltation in the dam without effective sediment management resulting into issue of dam safety, high risk of dam failure, flooding and thus impacts at the downstream population. The other risks such as occupational Health and safety of workers, disposal of construction wastes, air, noise and water quality, in case of most of the sub projects to be anticipated. The irrigation intervention will focus on rehabilitating and upgrading water distribution and conveyance systems aimed at increasing irrigation command area through the construction and rehabilitation of irrigation and drainage civil works, expanding the irrigable area within the existing schemes to include new areas. Other non-structural activities include developing master plan for the hydropower sector, feasibility studies, ESF documents and Institutional strengthening and capacity building for Water Resources Management and Hydropower Planning. The Hydropower sub-component will involve preparing a Hydropower master plan, with hydropower projects decided jointly by FMWRS and FMP. Candidate projects proposed by the ministries will be assessed using selection criteria. The SPIN Project will finance an international transaction adviser, with assistance from local consultants, to help prepare the master plan. The plan will involve stakeholder engagement, characterization of



water resources, environmental and social conditions in the watersheds, identification of a portfolio of hydropower projects, analysis of hydropower capacity and energy capabilities, including potential for hybrid operation of solar energy resources with hydropower, and strategic decision-making to rank hydropower and multipurpose projects. For the hydropower master plan that will be financed by the Project, the Client will prepare due diligence assessments including Aa Strategic Environmental and Social Assessment (SESA) will be conducted during the implementation phase to systematically examine the environmental and social risks/impacts and issues associated with the government's policies, plans, or programs in the water resources and power sector for now and in the future. Additionally, the Client under the SPIN Project will conduct a feasibility study and at a later stages, individual projects identified under the master plan would be subject to site-specific full assessments such as ESIA's, or RAPs (where relevant) to assist in development planning, program identification for PPP procurement, project design, construction tendering, construction, and operation. The potential social risks and impacts include land take, physical and economic displacements, legacy issues from poorly conducted compensations, impact on physical cultural heritage, labour influx risks, complaints on the impact of works during farming season, farmer-herder issues that may affect the level of work done, and insecurity issues that may be exacerbated as a result of the project activities. To put these risks in context, the Client led the development of ESDDs by assessing three dams across three different states. The ESDDs indicated that the rehabilitation proposals primarily relate to minor/moderate civil works, confined to the existing Dam body within the dam area, and impacts are also localized, resulting in moderate to substantial risks. Major environmental and social risks identified include construction-related risks, potential land take, economic displacements, and labour influx risks. ESIA's and ESMPs were recommended for the dams with substantial to moderate impacts, respectively. Specific studies such as EAPs were also recommended to address flood warnings, downstream impacts, and Occupational Health and Safety Plans (OHSM). RAPs and LRP was also recommended. The Client has prepared an extensive Environmental and Social Management Framework (ESMF) that outlines the procedures from the screening of activities to the finalization of appropriate mitigation instruments for all types of impacts and risks. The ESMF also incorporates preparation, approval, and monitoring protocols to track ESMPs and provides institutional capacity-building approaches for the project staff to ensure effective management of environmental and social implementation. As part of the SPIN project procedure for E&S, all participating states will be required to conduct ESDD for all sub-project dams to identify the risk category. For all low to moderate risks, a standard ESMP with relevant guidelines will be prepared and implemented. However, large dams will require a full ESIA regardless of the scope of rehabilitation works. For all sub-projects categorized as Substantial to High Risk, a ESIA will be conducted. The SEA/SH Action Plan will outline preventive and response measures for SEA/SH incidents. Insecurity is a critical challenge in the potential locations. The SPIN Project will leverage on the already established security risk management structures with the full participation of government partners. The Borrower will be required to develop Security Management Plans (SMPs) for each state during Project implementation.

ESS10 - Stakeholder Engagement and Information Disclosure

Relevant

[Explanation - Max. character limit 10,000]



ESS10 is relevant to and will apply to all its components and subcomponents. Stakeholder engagement is critical for social and environmental risk management, project sustainability, and success. Key stakeholders under the project include: Affected/Interested parties: Host Communities, Community members, landowners, tenants and leaseholders, landless or squatters, farmers and livelihood-dependent households, reservoir fishers, Livestock owners, including herders, wage laborers and workers, small-scale business owners, socially vulnerable people, Farmers associations, Women farmer Groups, Community Associations and Interest Groups, such as WUAs, fishermen, Academics/Think Tanks, Media. Other Interested Parties/Influential Parties: The Federal Ministry of Water Resources and Sanitation (FMWRS), the lead implementing ministry for the project, the Federal Ministry of Power (FMP) and Participating State Governments (PSG). As well as Traditional leaders and NGOs/CSOs, Private sector Investors, organizations, among others. Disadvantaged or vulnerable individuals or groups, Elderly people above the age of 65, female-headed Households (widows), Persons with disabilities, People living in extreme poverty, internally displaced persons and orphans. Other affected persons who do not fit into the above categories may still experience adverse impacts on their livelihoods, assets, or well-being due to the project. They may face disruptions in access to essential services, changes in social dynamics, or loss of community cohesion, requiring tailored support and assistance to mitigate negative consequences. The Stakeholders Engagement Plan (SEP) incorporates views from all stakeholders through meaningful consultations and feedback to improve the environmental and social sustainability of the project and its activities, enhance its acceptance, and significantly contribute to successful project design and implementation. The SEP is clear, concise, and focuses on the project while identifying its stakeholders. Stakeholder engagement was held in languages suitable for the beneficiaries to understand and explain the opportunities for public consultation and provide a deadline for comment and feedback. The proposed project will leverage and upgrade the existing TRIMING Grievance Mechanism (GM) (to reflect ESF requirements) to address the concerns and needs of beneficiaries. Given that the GM was prepared under the operational policy, it will be revised to reflect the provision of the ESF before the implementation of project activities. Feedback from early engagement with stakeholders informed the project design and preparation, and this will be an iterative process throughout the project's life. Based on the engagement activities thus far and the profile of the stakeholders identified, certain engagement activities have been planned for the project going forward and are articulated in the SEP. The SEP will be updated periodically based on a monitoring process and stakeholders' feedback throughout the project's life. The SEP will continue to ascertain key project risks as the communities see them, ensure that the concerns of communities are acknowledged and addressed, inform better designs for the project, and identify the best monitoring mechanisms of activities. Furthermore, the SEP will be updated by the Client to include awareness raising for communities regarding the risks associated with the project activities, the use of security personnel should the project engage one (as it was with TRIMING) and to inform them of grievance arrangements should they wish to raise grievances related to security personnel. The project will have two main GMs: the project-level GM, which will be managed by each participating State Project Implementation Unit (SPIU), and the labour-specific GM for project workers (all direct workers, contracted workers and community workers). The GMs will include SEA/SH protocols, including multiple channels to initiate a complaint and specific procedures for SEA/SH, such as confidential and anonymous reporting



with safe and ethical documenting of SEA/SH cases to ensure responses to potential SEA/SH incidents follow ethical standards and international best practice. GRM operators will be trained on how to respond to SEA/SH-related reports.

ESS2 - Labor and Working Conditions

Relevant

[Explanation - Max. character limit 10,000]

The SPIN project activities will include different categories of workers. Direct workers. This category of workers will comprise a mix of civil servants from various relevant line ministries who have been deployed or have a legal transfer of their employment or engagement to the Project, full and part-time, under the Federal Project Management Unit (FPMU). Direct workers will also comprise project staff hired as consultants. These workers make up the FPMU team, consisting of the Federal Project Coordinator, Technical Officers, Procurement Officer, Internal Auditor, Accountant, Financial Officer, Monitoring & Evaluation Officer, Gender Officer, Environmental Safeguard Officer, Social Safeguard Officers, and Communications Officer, among others. The specific project activities and their locations have yet to be decided, and thus, the exact personnel load for each project activity and staffing level could not be determined at the time this A Labour Management Procedure (LMP) was prepared. However, based on the experience of the TRIMING project, upon which the SPIN project will be scaled up, the Direct worker will record an estimate of 110 Direct workers. Contracted workers. The categories of contract workers to be involved in the Project will be consultant service providers who will provide implementation support services to the FPMU in preparation of documents and support, and the staff of contractors, suppliers, and contractors to be subcontracted to arrange for design and civil works, and for construction and supervision activities which the SPIN project may implement. Preference will be given to local workers, including those who may come from host communities to work as unskilled labours. Learning from the experience of the TRIMING project, it is estimated that between 300 to 500 contracted workers will be engaged under the SPIN project. Community Workers. This category of workers is made up of labourers sourced from communities where projects are meant for community development, and the labour is a contribution by the community. For the SPIN project, this category of workers may include community members, members of the producer organisations, farmers, women-led farmers, Water Users Association, and/or Project beneficiaries who are mobilised by the local contractors for community works, whether paid or unpaid. While applying ESS 2 provisions for community workers, the Project will pay specific attention to sensitisation and training of community workers on OHS risks, as well as the technical knowledge and behavioural awareness to minimize the risks. Primary Supply Workers. A primary supply worker is a worker employed or engaged by a primary supplier, providing goods and materials to the Project, over whom a primary supplier exercises control for the work, working conditions, and treatment of the person. It can only be anticipated that the SPIN project will have such employees, as this cannot be stated precisely. If the Project has such workers, they shall be treated as the other workers in the sense that they shall be required to observe all necessary regulations, i.e., signing a Code of Conduct. Timing of Labour Requirement The direct workers at FPMU will generally be required to work full-time and around the year for the project duration. Other experts/consultants will be hired on demand throughout the project period. The timing for the involvement of contracted workers will be known at later stages;



however, they will be engaged depending on the implementation of various project interventions. Based on available information. The key labour risks that may be associated with the Project: These include, for example: • The conduct of hazardous work, such as working at heights or in confined spaces, use of heavy machinery, or use of hazardous materials • Likely incidents of child labour or forced labour, concerning the sector or locality • Likely presence of migrants or seasonal workers • Risks of labour influx or gender-based violence • Risk of SEA/SH • Possible accidents or emergencies, concerning the sector or locality • General understanding and implementation of occupational health and safety requirements • Security risk. The management of workers' vulnerability threats and identified labour risks for the SPIN project will be governed by the ESS2, ILO standards, Labor Act, and other national regulations. The policies include: - Non-discrimination and equal opportunity for all workers. - Clear terms and fair employment conditions. - Safe working conditions and standard facilities for all workers. - Conducting job hazard and risk assessments. - Providing adequate work tools and protective equipment. - No child or forced labour. - Free of Sexual Harassment, Sexual Exploitation, and Gender-Based Violence. - Grievance redress mechanisms for workers. - Right of association and collective bargaining. - Proper documentation of management in line with OHS requirements. - Reasonable termination procedures. - Continuous consultation with workers for the improvement of labor management procedures will be ensured. Grievance Mechanism for Workers This LMP recognizes the significance of having a structured process for managing complaints and has established a grievance redress mechanism for workers. Thus, a GM will be implemented to ensure that all workers' complaints are dealt with appropriately, corrective actions are implemented, and the complainant is informed of the outcome. Contractor Management The LMP will form an integral part of the bidding documents to be issued to consultants/contractors and shall form part of the awarded contracts to all consultants/contractors. Selection of consultant/contractors shall be made according to the World Bank procurement procedures and occupational health and safety as provided in the World Bank standard procurement documents and applicable Nigerian laws.

ESS3 - Resource Efficiency and Pollution Prevention and Management

Relevant

[Explanation - Max. character limit 10,000]

Natural resources such as water, sand, gravels, earth, and chemical compounds are required to rehabilitate and upgrade the irrigation and drainage infrastructure and rehabilitate and improve hydropower and storage works. Commitment to adoption of guidelines for optimal use of required resources following the 3R (recycle, recovery, reuse) principle of pollution prevention will be taken by the borrower. The use of technicality and financially feasible and cost-effective options will be promoted as part of mitigation measures to avoid or minimize impacts related to poor soil conservation and management, nutrient management, solid waste management, water management, pesticides and fertilizers management, and air quality. These risks are construction stage and can be handled as per standard practices of camp site management and appropriately planned Muck and Debris Disposal. Going forward it has been recommended to have Resource conservation Plan and Muck Disposal Plan under the ESMP. Construction Management guidelines for material handling and spills into the water especially paint etc. will be incorporated in the ESMP/ ESMF. The WBG Environmental Health & Safety



Guidelines and Good Practice Note on Environmental Health & Safety Approach for Hydropower Project will also be considered in the project, including a Water Resources Management Plan as part of the ESIAs to assess impact on water use. Notwithstanding that cleaner alternatives would be sought for energy generation, the project will also estimate GHG emission, also, the project could have an impact on the water availability during construction and/or operation, and for that a water management plan will also be prepared. The project has also prepared a Pest management plan to manage the risk of pesticide used resulting from the activities supported by the project. Construction Management guidelines for material handling and spills into the water especially paint etc. will be incorporated in the ESMP/ ESMF.

ESS4 - Community Health and Safety

Relevant

[Explanation - Max. character limit 10,000]

Dam safety assessments of all dams are required as per ESS4 and would come early in the project implementation as the basis for the dam rehabilitation plans. Nigeria has over 600 dams that were constructed for irrigation and hydropower purposes. Under the SPIN Project, the Government has indicated the rehabilitation of about 10 -20 dams (categorized as medium to large dams, earth filled with multipurpose use) that will potentially be rehabilitated, but the exact dams are not yet known. The dam safety status of these dams are also not yet known. The SPIN Project will strengthen the capacity and improve the management framework for dam owners, operators, and agencies overseeing dam safety to help address dam safety risks. The project will help develop comprehensive dam safety guidelines consisting of standards, operational manuals, and rules to help dam owners and operators comply with dam safety requirements. The Government will conduct a Dam Safety Portfolio Risk Analysis to rank the dams according to the safety risks they impose on the public and environment. This will further identify and prioritize the preliminary order of the rehabilitation program accounting for the dams that present the most significant dam safety risks. Within the portfolio of proposed dams to be supported under the SPIN project, the Government conducted Dam Panel of Experts (DPOE) reports of 3 dams (Doma Dam in Nasarawa State, Naka Dam in Benue State and Wuro Keso retention pond (also known as Gassol) in Taraba State) to inspect the status of the dams. Project Screening Templates were also developed which indicated potential activities to be conducted to rehabilitate the dams. To understand the potential environmental and social risks and impacts of the 3 dams, the client prepared Environmental and Social Due Diligence (ESDD). The ESDD rated the dam sub-project activities from low to substantial risks based on the level of proposed work to be carried out and the impact on environmental and social sensitivities, which are mainly localized. Potential impacts include Occupational health and safety and community health and safety. None of the dams investigated appeared to be near any protected area. However, settlements located downstream of the dams, and members of the communities should be well-consulted if the dam is supported under SPIN. The ESDD for the Naka dam revealed some existing legacy issues and the presence of burnt brick in the command area of the dam, whose livelihood could be potentially impacted if SPIN selects the dam for rehabilitation. The ESDD recommended preparing a detailed ESIA and Livelihood Restoration Plan/Resettlement Action Plan. Furthermore, if these dams are selected under the SPIN Project, additional assessments will be carried out to include dam safety assessments, site-specific environmental and social assessments, and other specific plans,



including EAPs. As part of the SPIN project procedure for E&S, all participating states will be required to conduct ESDD or environmental and social audit for all sub-project dams to identify any liability, legacy issues, how cumulative impacts were considered for the dam construction and operation model, environmental flow and the risk category. The studies will be done using the dam safety plans that will be developed under SPIN Project. The Bank will clear all ESDD and the assessment of the risk profile. Wherein it has been described as low to moderate risks, a standard Environmental and Social Management Plan (ESMP) with relevant guidelines will be prepared and implemented; however, all large dams will require a full ESIA regardless of scope of civil works at those specific sites. For all sub-projects categorized as Substantial to High risk will undergo a detailed ESIA. During the implementation of the project, dam rehabilitation plans will be developed to include structural and non-structural measures identified through investigative studies, including systematic hydrological assessment, stability analysis, geotechnical studies, and geophysical and bathymetric surveys. The dam safety plans will also include dam safety instrumentation plans, emergency action plans, operation and maintenance plans Flood Forecasting and Warning System for Dam Operations (FFWSDO), and integrated reservoir operations, including streamflow forecasting for climate-resilient dam management, as well as an operation and maintenance plan. The dam operators will ensure the security and safety of personnel. As security has been indicated as a pertinent risk, each State PIU will develop Security Management Plans (SMPs) before carrying out the respective sub-project activities. Furthermore, Security Focal Points shall be deployed from the Office of the State Security Advisor to the SPIU Offices. This method is in place in other Bank supported Project such as Agro-Climatic Resilience in Semi-Arid Landscapes (ACRESAL) P175237. If the security personnel are engaged and armed, no proceeds of the Project will be used to support the procurement of firearms. In addition, their deployment will follow the requirements of ESS4 and adopt the World Bank's Guidelines of the Good Practice Note on "Assessing and Managing the Risks and Impacts of the Use of Security Personnel." Overall, before deploying security personnel, the SPIU shall take measures to ensure that security personnel are: 1. Screened to confirm that they have not engaged in past unlawful or abusive behaviour, including sexual exploitation and abuse (SEA), sexual harassment (SH) or excessive use of force. 2. Adequately instructed and trained regularly on the use of force and appropriate behaviour and conduct (including in relation to SEA and SH) and will adopt the Voluntary Principles on Security and Human Rights as the relevant good international industry practice to meet the requirements of ESS4. 3. Deployed in a manner consistent with applicable national law. The SPIU shall promptly review all allegations of unlawful or abusive acts of any security personnel, take action (or request appropriate parties to take action) to prevent recurrence and, where necessary, report unlawful and abusive acts to the relevant authorities. In addition, accessible grievance arrangements shall be made publicly available to receive and facilitate resolution of concerns and grievances about the Project, consistent with ESS10 and described in the SEP. The project activities pose potential community health and safety risks, such as accidents during structural interventions, theft of equipment, and SEA/SH due to the influx of workers. The Project will prepare a SEA/SH Action Plan.

ESS5 - Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

Relevant



[Explanation - Max. character limit 10,000]

The activities under the project will support the rehabilitation and revitalization of 40,000 ha of irrigated command area across all geopolitical zones. The Federal and state schemes which will be supported by the SPIN Project will be determined based on technical and implementation readiness criteria agreed with the FMWRS. Given that the locations of subprojects are not yet known at this stage of the project preparation, the project prepared a RPF to be disclosed by Appraisal. The RPF will facilitate ESS5 requirements under the project activities. The RPF aims to clarify resettlement principles, organizational arrangements, and design criteria to be applied to subprojects or project components to be prepared during project implementation. Once the specific locations of the subproject are identified and the necessary planning information becomes available, the framework will be expanded into a RAP or LRP proportionate to the potential risks and impacts of the project. While the project is not expected to entail significant land acquisition and displacement, its activities that will cause physical and economic displacement, if any, will not commence until such specific plans have been finalized, approved by the Bank and prompt compensation and resettlement assistance payments are made to Project Affected Persons (PAPs). The participating States shall cover the cost associated with compensation and resettlement assistance. The SPIN Project will not allocate funds for the construction of infrastructure associated with hydropower investment. It is important to emphasize that the selected investment will undergo a comprehensive screening process to assess potential impact on land use. In cases where it is relevant, the Client will be required to develop a RAP in conjunction with the completion of ESIA.

ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources

Relevant

[Explanation - Max. character limit 10,000]

Depending on the location of the proposed sites for irrigated command areas and the scale of hydropower and storage works, habitat degradation and conversion may cause significant threats to aquatic and terrestrial biodiversity. Construction of larger structures like spillway may lead to cutting of larger number of fully grown trees and/or diversion of forest area and changes in water flow may have impacts on aquatic ecosystems, meaning it may have high risk to ecosystem service and needs to be adequately address through appropriate avoidance, minimization or mitigation and compensatory measures. During the implementation of the proposed hydropower master plan, Habitat degradation and conversion may occur due to changes in hydrologic flow regime, dewatering river reaches, development of access routes and transportation corridors, and construction material extraction. These activities may adversely impact downstream water quality, like dissolved oxygen, turbidity levels, irreversible biodiversity loss, fish migrations; flooding of biomass (especially forests) and resulting underwater decay, and/or reservoir stratification. Desktop reviews/literatures suggests the following risks attributed to dam rehabilitation - risks of habitat destruction and fragmentation, loss of biodiversity, and alterations to the natural flow regimes of rivers, which can have far-reaching consequences on the ecological balance were identified. The risks can be mitigated using construction stage Bio-diversity Management guidelines. All the risks and impacts relevant to ESS6 will be assessed as part the procedures laid down in the ESMF of the Project.



Early screening can improve macro-level project site selection to avoid selecting areas with high biodiversity values, such as critical or natural habitat, areas with high conservation values, those modified habitats that contain significant biodiversity value or provisioning or regulating ecosystem services. Risks and impacts relevant to ESS6 will be assessed as part of the ESAs. If required, a separate Biodiversity Action Plan will be prepared.

ESS7 - Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

Not Currently Relevant

[Explanation - Max. character limit 10,000]

Not relevant

ESS8 - Cultural Heritage

Relevant

[Explanation - Max. character limit 10,000]

This standard is relevant to the project associated with chance finds of tangible and intangible cultural resources. The project will not finance activities affecting cultural heritage resource sites. The Borrower shall avoid impacts on cultural heritage. When avoidance of impacts is not possible, the Borrower will identify and implement measures to address impacts on cultural heritage in accordance with the mitigation hierarchy. Where appropriate, the client shall develop a cultural heritage management plan. An environmental and social screening procedure has been developed in the ESMF to identify cultural heritage and assess tangible and intangible heritage in consultation with affected stakeholders. In line with national laws and regulations, a chance-find procedure is articulated in the ESMF if contractors stumble upon such chance-finds during project implementation.

ESS9 - Financial Intermediaries

Not Currently Relevant

[Explanation - Max. character limit 10,000]

Not relevant

B.2 Legal Operational Policies that Apply

OP 7.50 Operations on International Waterways

Yes

A notification to all riparian states has been sent out in April 2024 from Government of Nigeria to all riparian countries through the basin commissions (Niger Basin Authority and Lake Chad Basin Commission). Both NBA and LCBC have replied with No Objection.

OP 7.60 Operations in Disputed Areas

No

B.3 Other Salient Features



Use of Borrower Framework

No

[Explanation including areas where "Use of Borrower Framework" is being considered - Max. character limit 10,000]

This project will adopt the Environmental and Social Framework and its Environmental and Social Standards rather than the borrower's E&S framework. The required steps will be detailed out in the ESCP. The Project, however, is subject to the national, state laws and approval clearances (riparian notifications) as per the existing legal-institutional framework. These laws will be respected, and clearances and approvals will be obtained prior to approval.

Use of Common Approach

No

[Explanation including list of possible financing partners - Max. character limit 4,000]

Common Approach may be considered; however, it is not clear at this stage. This will be assessed further during Project Implementation.

B.4 Summary of Assessment of Environmental and Social Risks and Impacts

[Description provided will not be disclosed but will flow as a one time flow to the Appraisal Stage PID and PAD - Max. character limit 10,000]

The project involves the rehabilitation of existing dams and their associated structures, technical studies for potential hydropower investments, sedimentation management, underutilized irrigation schemes, and expansion to irrigable areas within the existing schemes. The project spans various states with varying geographical conditions and environmental and social sensitivities, making environmental and social considerations a high risk. The FMWRS has proposed about 10 to 20 dams (categorized as medium to large dams, earthfilled with multipurpose use) that will potentially be rehabilitated, but the exact dams are not fully known. The dam safety status of these dams are not yet known. The SPIN Project will strengthen the capacity and improve the management framework for dam owners, operators, and agencies overseeing dam safety to help address dam safety risks. The project will help develop comprehensive dam safety guidelines consisting of standards, operational manuals, and rules to help dam owners and operators comply with dam safety requirements. Other interventions will include measures for seepage reduction, hydrological and structural safety, strengthening the main dam body and foundation, and improving basic dam facilities and safety instruments for storing water for potable supply, irrigation, and power generation. Additionally, the project will involve assessing water resources and irrigation schemes, designing and retrofitting infrastructure for efficient water use, modernizing gravity systems, installing canal monitoring tools, developing new conveyance infrastructures.

Potential environmental and social risks associated with the rehabilitation of dam and irrigation schemes include dam failure, issues related to occupational health and safety of workers, community health and safety issues, grievance as a result of poor implementation of the interventions, compensation (where it becomes relevant), weak dam operation and maintenance, emergency preparedness and potential dam failure. Poor stakeholder engagements can also impact the project if stakeholders are not adequately consulted. The project is implemented in



fragile, conflict-affected and volatile settings, making security risk levels equally high. The capacity of staff to implement E&S measures at the state levels will vary across states and will be strengthened through the ESF technical support that will be provided under Component 4.

Other social issues may include minor land acquisition and temporary loss of livelihood during the rehabilitation of the irrigation schemes. Since the specific sub-project are not yet known, a Resettlement Policy Framework was prepared by the Client. This document spells out the key objectives and principles of the policy and will give guidance to the preparation of subsequent resettlement action plans (RAPs). Specific attention will be given to payment of appropriate compensation to affected persons as indicated in the RAPs and the development of grievance redress mechanism at the community level that will be accessible to all stakeholders as well as arrangements for monitoring the implementation of RAPs. In addition, robust assessments of other potential social impacts related to land tenure and use will be conducted as part of the ESIA process at each of the project sites.

The Government conducted Dam Panel of Experts (DPOE) reports of 3 dams (Doma Dam in Nasarawa State, Naka Dam in Benue State and Wuro Keso retention pond (also known as Gassol) in Taraba State) to inspect the status of the dams. Project Screening Templates were also developed which indicated potential activities to be conducted to rehabilitate the dams. To understand the potential environmental and social risks and impacts of the 3 dams, the client prepared Environmental and Social Due Diligence (ESDD). The ESDD rated the dam sub-project activities from low to substantial risks based on the level of proposed work to be carried out and the impact on environmental and social sensitivities, which are mainly localized. Potential impacts include Occupational health and safety and community health and safety. None of the dams investigated appeared to be near any protected area. However, settlements located downstream of the dams, and members of the communities should be well-consulted if the dam is supported under SPIN. The ESDD for the Naka dam revealed some existing legacy issues and the presence of burnt brick in the command area of the dam, whose livelihood could be potentially impacted if SPIN selects the dam for rehabilitation. The ESDD recommended preparing a detailed ESIA and Livelihood Restoration Plan/Resettlement Action Plan. Furthermore, if these dams are selected under the SPIN Project, additional assessments will be carried out to include dam safety assessments, site-specific environmental and social assessments, and other specific plans, including EAPs.

As part of the SPIN project procedure for E&S, all participating states will be required to conduct ESDD or environmental and social audit for all sub-project dams to identify any liability, legacy issues, how cumulative impacts were considered for the dam construction and operation model, environmental flow and the risk category. The studies will be done using the dam safety plans that will be developed under the SPIN Project. The Bank will clear all ESDD and the assessment of the risk profile. Wherein it has been described as low to moderate risks, a standard Environmental and Social Management Plan (ESMP) with relevant guidelines will be prepared and implemented; however, all large dams will require a full ESIA regardless of scope of civil works at those specific sites. For all sub-projects categorized as Substantial to High risk will undergo a detailed ESIA.

During the implementation of the project, dam rehabilitation plans will be developed to include structural and non-structural measures identified through investigative studies, including systematic hydrological assessment, stability analysis, geotechnical studies, and geophysical and bathymetric surveys. The dam safety plans will also include dam safety instrumentation plans, emergency action plans, a Flood Forecasting and Warning System for Dam Operations (FFWSDO),



and integrated reservoir operations, including streamflow forecasting for climate-resilient dam management, as well as an operation and maintenance plan. The dam sites will ensure the security and safety of personnel.

As the precise scope and design of proposed activities are not known at appraisal, the project employed a framework approach and has prepared an Environmental and Social Management Framework (ESMF) that provides, among others, the detailed procedures for E&S screening of proposed activities/ subprojects and suggests generic mitigation measures. The ESMF further lays down the procedures for screening to that will lead to the preparation of further E&S instruments for addressing the identified impacts and risks, i.e. standard ESMP with appropriate guidelines and environmental code of practices for low to moderate-risk sub-projects and detailed ESIA for substantial to high-risk sub-projects. ESMF also includes preparation, approval and monitoring protocols to track ESMPs and provides institutional capacity-building approaches for the project staff to effectively manage the requirements of environmental and social implementation as set out in the ESMF/ESMPs.

Other documents have been prepared by the Borrower, such as the Resettlement Policy Framework, Labor Management Procedure, and Pest Management Procedure, which will guide the preparation of site-specific documents. The prepared Stakeholder Engagement Plan (SEP) will support and guide effective stakeholder engagement. The strategy outlines systems and processes to ensure stakeholders and the public participate actively in all project design and implementation aspects.

The ESMPs/ESIAs will specify the types of plans that need to be prepared as required under each applicable ESS. These may include Biodiversity Management Plans, Waste Management Plans, Cultural Heritage Management Plans, Labor Management Procedures, and Occupational Health and Safety Measures. In addition to these plans, Environmental, Social, Health and Safety (ESHS) and SEA/SH-related provisions will be included in the bid documents. Environmental and Social Commitment Plan, Security Management Plans (SMPs) and Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) Action Plans will also be prepared.

For the hydropower master plan that will be financed by the Project, the Client will prepare due diligence assessments including a

Strategic Environmental and Social Assessment (SESA) during the implementation phase to systematically examine the environmental and social risks/impacts and issues associated with the government's policies, plans, or programs in the water resources and power sector for now and in the future. The SESA will cover the Hydropower Master Plan. At a later stage, individual projects identified under the master plan would be subject to site-specific full assessments such as ESIAs or RAPs (where relevant). The ESIA will be used to address impacts associated with hydropower master plan such as downstream water quality, biodiversity loss and fish migrations.

Implementation of E&S requirements. The SPIN Project will be implemented through 2 models, with Model 1 implemented by the FPMU in federal financed schemes that are under the RBDAs, and Model 2 implemented by the states through the SPIUs. Regardless of the model employed, all SPIUs and RBDAs will engage qualified Environmental, Social and Gender/GBV Officer, and Security Focal Points from the State Ministry of Environment, Department of Lands, State Ministry of Women Affairs and the State Security Advisors respectively. Through its Component 4, the Project will provide ESF training to officers, including leveraging training provided through the SPESSE Program.



C. Overview of Required Environmental and Social Risk Management Activities

C.1 What Borrower environmental and social analyses, instruments, plans and/or frameworks are planned or required by implementation?

[Description of expectations in terms of documents to be prepared to assess and manage the project's environmental and social risks and by when (i.e., prior to Effectiveness, or during implementation), highlighted features of ESA documents, other project documents where environmental and social measures are to be included, and the related due diligence process planned to be carried out by the World Bank, including sources of information for the due diligence - Max. character limit 10,000]

- ESMF, RPF, LMP, SEP, IPMP to be disclosed before Appraisal
 - Dam Safety Assessments and Audits prepared during implementation
 - Environmental and Social Due Diligences of any known dams prior to effectiveness. Corresponding Environmental and Social Assessments (e.g. Environmental and Social Impact Assessment, Environmental and Social Management Plan, Environmental and Social Audit, based on the recommendation from the ESDD and/or outcomes of E&S screening). ESIAs on existing dam/irrigation sites will incorporate an audit/assessment of possible legacy issues/liabilities that need to be addressed.
 - Resettlement Action Plans or livelihood restoration plan that details out the extent of land acquisition / restriction, measures to limit impact and appropriate mitigation plans including compensation where necessary.
 - Security Management Plan with appropriate measures to mitigate project risk and risk to communities / beneficiaries.
 - Revision of the Grievance Mechanism that details out available channels and procedures for beneficiaries to lodge in complaint.
 - SEA/SH Action Plan and Accountability Framework
 - ESIAs/ESMPs or stand-alone ESMPs once specific sites are identified
 - Site specific Plans such as OHSMP, Waste Management Plan, CHSMPs as part of the ESIAs or ESMPs
 - Biodiversity Management Plans (BMPs) or Action Plans (BAP) as relevant based on screening of specific sites
 - Strategic Environmental and Social Assessment (SESA) will be conducted during the implementation phase.
- At a later stage, individual projects identified under the Hydropower master plan would be subject to site-specific full assessments such as ESIAs or RAPs (where relevant).
- Dam Safety Plans in line with ESS4

III. CONTACT POINT

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