Concept Environmental and Social Review Summary
Concept Stage
(ESRS Concept Stage)

Date Prepared/Updated: 06/02/2020 | Report No: ESRSC01409
BASIC INFORMATION

A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Region</th>
<th>Project ID</th>
<th>Parent Project ID (if any)</th>
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<tbody>
<tr>
<td>Vietnam</td>
<td>EAST ASIA AND PACIFIC</td>
<td>P173588</td>
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Project Name: Phu Quoc Sustainable Water Management Project

<table>
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<tr>
<th>Practice Area (Lead)</th>
<th>Financing Instrument</th>
<th>Estimated Appraisal Date</th>
<th>Estimated Board Date</th>
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<tr>
<td>Water</td>
<td>Investment Project Financing</td>
<td>12/7/2020</td>
<td>2/26/2021</td>
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<tr>
<th>Borrower(s)</th>
<th>Implementing Agency(ies)</th>
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<tr>
<td>Socialist Republic of Vietnam</td>
<td>Phu Quoc Economic Zone Management Board</td>
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Proposed Development Objective(s)
The Project Development Objective (PDO) is to improve security and integrated management of Phu Quoc Island’s water resources. This will be achieved through: (i) increasing water storage capacity and supply coverage; (ii) improving wastewater management; and (iii) reducing flood risks

Financing (in USD Million)

<table>
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<tr>
<th>Amount</th>
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<td>188.30</td>
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B. Is the project 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 [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]
Phu Quoc is the largest island of Vietnam, located in the Gulf of Thailand in Kien Giang Province in Mekong Delta region. It is home to a booming tourism market and plays an important role in Vietnam’s development. Phu Quoc Island has an area of about 567 km² and resident population of around 110,000 and is home to a vibrant and rapidly expanding tourism sector. Phu Quoc is earmarked to become a ‘special administrative - economic unit’ with an aim to create growth poles and spillover effects for Kien Giang province and the broader Mekong Delta region. Moreover, Phu Quoc is expected to contribute to the regional economy as well as play an important role for Vietnam’s continued socio-economic development.
Phu Quoc’s Development Master Plan leverages the island’s geographical advantages, including rich natural environment and tourism potentials, helping to establish Phu Quoc as one of the key holiday destinations in Vietnam. It aims to support the Island’s transformation to an international tourism destination and a science and technology hub for the Southeast Asian region, balancing economic development with the protection of the environment and preservation of historic monuments and cultural heritage. This Plan has enabled substantial investment over the past ten years, helping to establish Phu Quoc as one of the key holiday destinations in Vietnam for national and international tourists. There are 70-80 flights per day with the Phu Quoc International Airport is being upgraded to handle 7.0 million visitors per year by 2030. The tourist sector directly employs 36,000 workers and indirectly support jobs / livelihoods for a further 80,000 in 2020.

The tourism boom and rapid urban growth has however had its downside, including water pollution, urban flooding and water scarcity – issues which are now placing hard earned development gains at risk. The Island’s civil infrastructure has not kept pace with rapid tourism expansion, including the challenge of meeting high demands during peak periods. The existing water supply system for example, serves less than half Island current demands, storage is grossly inadequate placing the water balance in a precious position of insecurity. In March 2020, the Phu Quoc district administration reported that the water level in Duong Dong storage reservoir was less than 20% capacity - projected dry up by May, if the current drought conditions continue. As a result, of water security threats - many new tourist resorts have constructed their own independent supplies, including poorly regulated groundwater abstraction from sensitive coastal aquifers.

The coverage and capacity of municipal drainage, solid waste and wastewater management systems is very low or non-existent and as a result unabated pollutant loads are now entering and contaminating the sensitive natural environment. Such pollution, including plastic waste, is having visible and damaging effects on fragile marine ecosystems, now threatening the Island’s natural assets and intrinsic values for which the tourism industry was founded and has thrived to date. Once pristine, beaches are often littered with trash and the river waters such as Duong Dong have become foul with wastewater from the town (domestic, hotels and restaurants, fish source factories, etc.). Moreover, only two towns have some form of drainage and flood management system, which were developed ad hoc over time, such systems are overwhelmed - subject to blockage and localized flooding each rainy season. In 2019, flood waters reached up to 1.0m high in some areas. Wastewater from houses, hotels, resorts, restaurants and other commercial properties is mixed into the stormwater, spilling into public spaces, or conveyed in open drains to the beaches and the ocean – presenting a high risk to public health that could damage the island’s reputation and its tourist industry.

Furthermore, economic losses for Phu Quoc are projected to increase as weather related development impacts intensify in the face of climate change. Increased rainfall intensity and frequency of extreme rainfall events will further overload the drainage system causing more extensive flooding. Sea level rise will impact hydraulic performance of the drainage system and increase the flood risks. A for the water supply sector there is a higher risk of depletion of water resources due to saline intrusion, rainfall decrease in dry periods and increased numbers of dry days and drought events. Such issues will have damaging economic impacts, creating a barrier to achievement of Phu Quoc Island’s long-term sustainable development goals.

It is within this context that the Phu Quoc Sustainable Water Management Project has been conceived, with the following objectives: (i) to increase Phu Quoc Island’s water security; (ii) to expand coverage of water supply and
sewerage services; and (iii) to reduce flooding and water pollution in selected areas. Under this project, water security will be enhanced through developing reservoir storage capacity and by preparing an integrated water resource management plan, which will guide relevant and holistic practices including sustainable groundwater and demand management. Moreover, the project will support resilient infrastructure for water supply, drainage, flood retention, wastewater and solid waste management, in targeted areas - critical for long-term sustainable development of the Island.

More specifically the proposed project will: (1) enhance water supply security in the context of climate change; by improving access to clean water services for about 70,000 people and about 22,000 tourists in the project area; (2) mitigate flood impacts and risks and enhance climate change resilience for core urban areas through flood control, drainage and green infrastructure; (3) minimize pollution of receiving water ways, drains and beaches caused by wastewater and garbage; (4) enhance the local agencies’ capacity in sustainable management and operation of infrastructure systems and service provision, and raise community awareness about use and protection of water resources and the natural environment; and (5) support local tourism development through updating/developing tourism development strategies of Kien Giang province, including Phu Quoc island district.

Project design elements highlight the importance of applying an integrated approach to the management of the Island’s natural assets, taking into consideration the full water supply and wastewater and drainage cycle, addressing solid waste management, climate resilience and adapting to extent feasible nature-based solutions for urban flood management. Building capacity for sustainable management and operation of services and for community awareness in protecting the environment will play a critical part in the overall approach. The project will embrace global best practice in areas that require innovation.

The project has been structured under five components, that will support activities designed to ensure that future development on Phu Quoc will balance economic growth with investments to conserve and protect the natural environment and ensure resilience to climate change. The five components of the project are as follows: (1) Component 1: Construction of Cua Can Multi-purpose Reservoir; (2) Component 2: Expanding Water Supply Transmission and Distribution Networks; (3) Component 3: Wastewater Collection and Treatment, Solid Waste Collection, and Environmental Sanitation; (4) Component 4: Resettlement and Compensation; (5) Component 5: Project Management and Technical Assistance.

D. Environmental and Social Overview

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

Phu Quoc Island, has a permanent population of approximately 100,000 people, who mainly reside in two urban centers, and 8 villages. Key industries, and sources of employment, on the island include marine product processing, fisheries, tourism, and agricultural production. The poverty rate for the island is way below the national average, at around 1.2%, and has an estimated GDP per capita of around US$5,000 which is above the national average.

Phu Quoc National Park is 31,422 ha, comprising a strict protection area of 8,786 ha, a forest rehabilitation area of 22,603 ha and an administration and services area of 33 ha. The flora in Phu Quoc National Park is diverse. The vegetation here is mainly evergreen forest growing on low mountainous terrain with a total number of up to several
hundred species, including: species of rustic trees (Melaleuca, beans, sesame, sesame oil, sand oil, sand oil, civets, chestnuts, omnis cores, skin, grapefruit), precious orchid species (Lan Van Hai, Ai Lan Lan Dep, Lan Lan), precious medicinal herbs (Ha Thu O, male mysterious, licorice, kernels, eucalyptus, cardamom, etc.) and some other parasitic species (orchids, ferns, white cotton vines). Besides a rich flora, the fauna here is also very diverse including: 30 mammal species, of which 5 species are recorded in the Vietnam Red Book such as wolves, white monkeys, gibbon, 200 species of birds with 4 species recorded in the IUCN Red list and 3 species recorded in the Vietnam Red Book; 50 reptiles, of which 9 are listed in the IUCN list and 18 species are listed in the Red Data Book in the country. Although the most important economic activity on the island is fishing not agriculture shifting cultivation as a major threat to biodiversity in the buffer zone of the national park.

Phu Quoc possesses a marine protected area is of 26,863ha and includes coral and seaweed protected areas. It supports ecosystems characteristic of the shallow coastal waters off south-western Vietnam. Seagrass beds occur mostly off the northern and eastern coasts of Phu Quoc island. Coral reefs occur around most islands in the southern sector of the marine component, and in some places in the northern sector. At 41%, the cover of living coral is relatively high but species richness is rather low, with a few taxa being dominant, including Porites and Pavona. The coral reef fish fauna is characterized by an abundance of groupers (Serranidae) and butterfly fish (Chaetodontidae). The marine biota includes 89 hard coral species, 19 soft corals, 125 coral reef fishes, 132 molluscs, 32 echinoderms and 62 species of seaweed. These include several species of conservation concern, such as Scaly Clam Tridacna squamosa and Trochus Shell Trochus niloticus. Settlement of migrants from other parts of Vietnam is leading to a rapid growth in the population of Phu Quoc island. As fishing is one of the most important economic activities for the local population, the growing population is putting increased pressure on marine resources. The area is being over-exploited, especially the shallow waters. There is also evidence that agricultural activities on the mainland are changing environmental conditions in the waters around Phu Quoc island, due to sedimentation and pollution.

The tourism boom and rapid urban growth has had environmental impacts, including water pollution, urban flooding and water scarcity. The challenges include inadequate water supply, excessive groundwater abstraction from sensitive coastal aquifers, unabated pollutant loads having visible and damaging effects on fragile coastal and marine ecosystems. Phu Quoc is also under the natural stress as extreme weather events intensify in the face of climate change. Increased rainfall intensity and frequency of extreme rainfall events will further overload the drainage system causing more extensive flooding. Sea level rise will impact hydraulic performance of the drainage system and increase the flood risks.

### D. 2. Borrower’s Institutional Capacity

The Kien Giang Provincial People’s Committee (PPC) is the decision-maker on the investment and will be responsible for overseeing project preparation and implementation, as well as approving the project feasibility study and environmental and social (E&S) documents. The PPC has appointed the Phu Quoc Economic Zone Management Board (PQEZMB) as the Project Owner. While the Kien Giang PPC has experience working with the World Bank and other IFIs, in applying their policies on E&S risk management, this is not the case for the PQEZMB. Therefore it is expected that they will establish a qualified Project Management Unit, that will be responsible for E&S risk management, and will be supported by appropriately qualified consultants. The key authorities in managing land acquisition and resettlement include the district resettlement committee, the district land fund development center, and the Department of Natural Resources and Environment.

### II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS
A. Environmental and Social Risk Classification (ESRC)  

**Environmental Risk Rating**  
High

The project environmental risks and impacts relate to the investments under components 1, 2, 3, and 4 of the project, including: i) Construction of an off-stream storage with 3.7 (phase 1) and 10.5 (phase 2) million cubic meter (multi-purpose) reservoir capacity, covering 160 ha and with a dam of 7m high and 4,940m in crest length; ii) construction of a 20,000 m³/day Water Treatment Plant (WTP), medium scale transmission, distribution infrastructure along with support for household connections for about 3,600 households; iii) construction of a 10,000 m³/day wastewater treatment plant (WWTP), the medium scale rehabilitation and expansion of the stormwater drainage system, a new medium scale separated wastewater collection; and iv) Construction of a resettlement area of about 3 ha, including associated infrastructure (roads, water supply, drainage, electricity supply, lighting, communication, etc.). The purpose of the reservoir is for water supply and flood control with the water exploitation capacity in 2025 and 2030 of 3.69 million cubic meters and 10.5 million cubic meters, respectively. The reservoir is expected to be located in plantation forest and agricultural land next to the Phu Quoc National Park, while the remaining investments will have footprint in an urban and rural setting.

The main environmental risks would be expected to be high and associated with the construction of the reservoir. The anticipated risks include: i) disposal of a large amount of about 7 million cubic meters of excavated materials; ii) community health and safety from the vehicles and equipment that transport excavated soil from the project sites; iii) high accidental risk on downstream populations due to design weakness, dam stability or natural calamities like earthquakes, cloud burst or very heavy rains; iv) substantial loss of vegetation cover and potential encroachment on the buffer zone of Phu Quoc National Park; v) changes in river hydrology, downstream environmental flow, and aquatic ecosystems; and vi) adverse impact on downstream water users and waterway traffic.

The key risks related to construction and operation of the WTP, WWTP, stormwater drainage and wastewater collection systems would be expected to be substantial and include: i) community and worker health and safety; traffic safety and business disturbance; and safety risk due to unexploded ordnances (UXO) left from the war; ii) air, soil, and water pollution due to construction activities and failure or malfunction of the WWTP and WTP; iii) environmental pollution due to emissions, odors, and generation of substantial amount of sludge from the WWTPs and maintenance of the sewerage collection system; iv) and worker health and safety risks due to exposure to hazardous chemicals and pathogens.

Although Kien Giang has good World Bank safeguards experience implementing the WB-financed projects, the Mekong Delta Region Urban Upgrading Project and Vietnam Urban Water Supply and Wastewater Project, PQEZMB as the project implementing agency, has not implemented any WB-financed project so far. Lack of experience of the PQEZMB in implementing Bank-financed project and its unfamiliarity with the requirements of the WB Environmental and Social Framework (ESF) and related environmental and social standards (ESSs) would pose a risk of unsatisfactory management of risks and impacts consistent with the ESSs.

Given the type, location, sensitivity, and scale of the project, the nature and magnitude of the potential environmental risks and impacts, and the capacity the implementing agency to manage the environmental risks and impacts in a manner consistent with the ESSs, the environmental risk is assessed as High at this stage. This risk rating will be revisited during preparation upon availability of more information and analysis.
Social Risk Rating

The project social risk is rated as substantial. This is because the project will require a substantial amount of land (at least 164.5 ha for the Cua Can Reservoir and associated Water Treatment Plant), along with the relocation of at least 25 households. The lands to be acquired are the majority for production forest (acacia, cajuput) and agricultural use purposes. There may also be displacement associated with other project activities - (waste water treatment plant, drainage refurbishment, construction of a resettlement area and associated facilities) and these will be assessed during project preparation. Further assessment will be conducted in the next stage to illustrate the scale and scope of impact on land acquisition requirements and number of affected households. In addition the project will likely have to rely almost entirely on a labor force from the mainland, which would pose a number of potential risks related to large scale labor influx, including risks related to gender based violence and the transmission of communicable diseases. This risk, along with the absorption capacity of the island, will be further assessed during project preparation.

It is also the case that while the Kien Giang Provincial People’s Committee has experience with the application of the World Bank’s Environmental and Social requirements, this is not the case for the project owner (the Phu Quoc Economic Zone Management Board), who will be responsible for managing a wide range of environmental and social risks (including labor and working conditions, community health and safety and stakeholder engagement). Furthermore, the responsibility for land acquisition and resettlement lies principally with district government units, namely the Center for Land Fund Development, who have experience in applying the World Bank’s involuntary resettlement policy in previous bank financed project, but nonetheless may face capacity constraints in addressing the land clearance needs of this project, alongside the needs of the many other projects currently under construction on the island. To address these capacity constraints the PMU will appoint suitably qualified E&S consultants, and will benefit from training provided by the World Bank. In addition an Independent Monitoring Consultant will be hired to monitor compliance with E&S requirements.

The proposed project is considered part of Government post-COVID-19 economic recovery and fiscal stimulus package – whereby public investment in infrastructure is directed boost sectors critical sustainable and equitable growth.

The Phu Quoc Economic Zone Management Board (PQEZMB) has been appointed as the Project Owner who shows no experience and knowledge in preparing and implementing a project under the ESF. The project counterparts will need to familiarize on new content and concepts of the ESF, especially the new social risk management requirements (i.e. labor and working conditions, non-discrimination, community health and safety, cultural heritage, and stakeholder engagement, management of influx of labor). Given the significant resettlement impacts and potentially high risk of labor influx from the mainland, during the first year of implementation the social risk rating will be reviewed, confirmed or will be raised to High risk if needed.

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

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:
Overall, the project will have positive environmental and social benefits in terms of ensuring water security, reducing water-borne diseases and water pollution, and preventing local flooding. The main significant adverse environmental impacts would be expected to stem from construction of the reservoir including: i) water and environmental pollution due to disposal of a large amount of about 7 million cubic meters of excavated materials; ii) community health and safety from the vehicles and equipment that transport excavated soil from the project sites; iii) high accidental risk on downstream populations due to design weakness, dam stability or natural calamities like earthquakes, cloud burst or very heavy rains; iv) irreversible loss of 160 ha of vegetation cover; v) potential encroachment on the buffer zone of Phu Quoc National Park, including illigal clearance of the forest for cultivation impacting biodiversity and integrity of the national park, due to loss of household plantation of acacia and agricultural land; vi) changes in river hydrology, downstream environmental flow and associated impacts, and impacts on aquatic ecosystems (about 12km downstream from the dam); vii) adverse impact on downstream water users and waterway traffic; and viii) safety risk due to unexploded ordnances (UXO) left from the war. These impacts are anticipated to be long term, permanent and/or irreversible, and impossible to avoid entirely.

The negative environmental impacts related to construction of the WTP, WWTP, stormwater drainage and wastewater collection systems and include: i) community and worker health and safety; ii) traffic safety and business disturbance; iii) safety risk due to unexploded ordnances (UXO) left from the war; iv) air, soil, and water pollution due to construction activities and waste generation; and damages to public infrastructure and household assets. These potential adverse impacts are expected to be medium in magnitude, site-specific, predictable and/or reversible, can be readily and reliably managed through the environmental management hierarchy and mitigation measures.

During preparation, the Borrower will prepare an Environmental and Social Impact Assessment (ESIA) in accordance with the ESF and the national environmental and social assessment regulation to inform decision making in planning and technical design in the Prefeasibility and Feasibility Studies. The ESIA will describe institutional framework, the project and baseline conditions, identify and assess the potential environmental and social impacts and risks related to each investment item, and propose mitigation measures and plans to implement the measures. The ESIA will follow requirements of the relevant ESSs in identifying and managing the environmental and social risks and impacts including direct, indirect, and cumulative impacts. The ESIA will cover a preliminary consequence assessment regarding potential impacts on population, social, environment, and economic aspects in case of dam breach. The ESIA will facilitate a more holistic approach towards the design of the reservoir, WTP, WWTP, urban flood management investments (man-made and natural based solutions), and urban drainage and sewerage collection systems. The EIA will also assess the adequacy of current infrastructure design standards applicable to the proposed investments, considering the impacts of climate change and foreseeable changes of urban landscape. Public consultation and disclosure of information during the ESIA process will be in line with the relevant ESSs.

Regarding construction of the WTP and the WWTP, in addition to assessing the construction related impacts, the ESIA will focus on the site selection, plant design, and treatment technology to minimize generation of air emissions, odors, waste, sludge, and pathogens, and efficient use of water and energy. The ESIA will also address the sufficiency of the proposed WWTP capacity to commensurate with the augmented water supply. During WTP and WWTP operation, the ESIA will cover the environmental impacts related to reuse of the treated water, sludge treatment, discharge, and use, including: i) liquid effluents; ii) solid waste; iii) air emissions and odors; iv) hazardous chemicals; and v) ecological impacts. Occupational health and safety impacts during the construction and decommissioning of the WTP and WWTP are common to other large industrial projects and are addressed in the General EHS Guidelines.
Occupational health and safety impacts associated with the operational phase of the WTP and WWTP primarily include the following: i) accidents and injuries; ii) chemical exposure; iii) hazardous Atmosphere; iv) exposure to pathogens and vectors; and v) noise.

The ESIA will address the environmental issues of solid waste collection and classification and installation of trash screens at storm water inlets under the solid waste management subcomponent. Although no new development or rehabilitation of landfills will be supported by the project, due diligence of the related existing landfills will be conducted as part of the ESA. In addition, impacts and mitigation measures related to the construction and operation of the resettlement area will also be covered.

The ESIA will assess ESF capacity needs systematically to analyze the Borrower’s and other implementing agencies’ capacities and to identify opportunities for strengthening and enhancing coordination. The assessment would include the activities related to environmental and social (E&S) management such as identification of key tasks for E&S risk management; identification of relevant institution and actors involved in implementation; analysis of institutional arrangements and links; assessment of individual institutional capacity; and recommendation of actions to strengthen institutional capacity including the capacity related to dam safety during implementation.

An Environmental and Social Management Plan (ESMP) will be prepared as an integral part of the ESIA. The ESMP will consist of a set of mitigation, monitoring, and institutional measures, budget to be carried out during project implementation and operation to avoid adverse environmental and social risks and impacts, offset or reduce them to acceptable levels. The ESMP will also include technical design and management measures to address the environmental risks and impacts (sludge, odor, risks of WTP and WWTP malfunction, etc.) during operation of the WTP and WWTP.

Key social risks that need to be addressed include (1) risks related to land acquisition and resettlement for the Cua Can Reservoir (2) Risks related to labor and working conditions, as well as GBV and communicable diseases associated with labor influx from the mainland, and (3) risks associated with stakeholder engagement and grievance redress across all project components. It is expected that there will be limited adverse impacts on vulnerable populations, aside from those who may have to relocate out of the Cua Can Reservoir, and there are no members of ethnic minority groups, that have a collective attachment to the project affected area, who are directly affected from the project. Key social risk instruments that will need to be prepared include a social assessment (to include as part of the ESIA/ESMP for all project components), a resettlement plan (for the Cua Can Reservoir), as well as a stakeholder engagement plan and labor management procedures (for all components). The resettlement plan, stakeholder engagement plan, and labor management procedures will be prepared during project preparation.

The Borrower will prepare an Environmental Social Commitment Plan (ESCP). The ESCP will set out the activities to be carried out during project implementation and could be adjusted during the project cycle in line with the evolution of environmental and social risk and impacts. The ESIA and ESCP will be disclosed prior to project appraisal.

Areas where “Use of Borrower Framework” is being considered:

Although Vietnam has an advanced E&S Framework, there are gaps between the environmental and social assessment regulation and practice, especially in description of the environment, level of impact analysis and mitigation measures, and public consultation and disclosure of information. In addition, there is no experience of the
implementing agencies in implementing and applying ESF and its associated environmental and social standards. Therefore, there are no plans to use the Borrower’s E&S Framework within this project.

**ESS10 Stakeholder Engagement and Information Disclosure**

Along with the project proponents (Kien Giang Peoples Provincial Committee and the Phu Quoc Economic Zone Management Board), direct beneficiaries and project affected people, there are a number of interested parties identified as stakeholders during the initial screening. At the provincial level these included the Department of Planning and Investment, the Department of Finance, the Department of Construction, the Department of Natural Resources and Environment, the Department of Agriculture and Rural Development. At the district and commune level these include the Phu Quoc Peoples Committee, Commune People’s Committees, the District Center for Land fund Development, along with socio-political organizations, (Fatherland Front, Women’s Union, Farmers’ Union, Veteran Union, the Youth Union, the Elderly Union), tourism and business associations, residents associations, and Phu Quoc National Park. In addition, Kien Giang Water Supply and Sewerage One Member Limited Company who has the mandate to manage and operate the water supply system is the key stakeholder. There is a need to strengthen coordination and collaboration among local administrations for ensuring project management and implementation to required standards.

In addition, special attention will be paid to urban traders, and small businesses that may be have their business activities disrupted by the construction the investments in the water distribution and sewage system. Women and those working in the towns in restaurants and bars who may have more interaction with workers. The Bank team will collaborate with the Borrower in identifying “disadvantaged or vulnerable” project-affected individuals, or groups during stakeholder identification and analysis. This is to confirm their differing interests and vulnerabilities identified, and appropriate measures put in place to ensure they are engaged and their interests and concerns factored into project design and implementation.

Since the project is prepared under COVID19 crisis circumstances, any project-related impacts on vulnerable and marginal groups and individuals may exacerbate existing hardships. Disadvantaged and vulnerable groups under these circumstances may be the elderly, disabled or those who are rendered unable to preserve their livelihoods and therefore exceptionally susceptible to impacts from the project (temporary restrictions on business activities or land taking that affects livelihoods). These groups should be identified in the engagement plan and measures identified to prevent or minimize associated impacts.

During the preparation of the project, stakeholders will be involved in environment and social impact assessment and consultations on mitigation measures for social risks and impacts, including measures for compensation and resettlement. Depending on the situation with COVID19, a mix of conventional media (radio, television) for information provision and internet and mobile telephone text-based communications for soliciting feedback of different stakeholders could be used during project preparation, depending on the social distancing requirements in place. The Implementing agency will prepare a stakeholder engagement plan (SEP) proportionate to the nature and scale of the project activities and its potential risks and impacts and which will include a Grievance Redress Mechanism (proportionate to potential risks and impacts) that will be publicized, accessible, allows anonymity, maintains records, and provides feedback to complainants.
A Grievance Redress Mechanism (GRM) will be established in coordination with localized grievance redress processes in order to ensure that all concerns and complaints are captured and addressed by implementing agencies and competent bodies. One innovative feature, of the administrative system in Viet Nam, is the one stop shop established at all administration levels from ward/commune level to provincial level, for citizen to lodge their concerns or grievances. If grievances cannot be resolved through this mechanism, then the issue can be escalated to a Provincial inspectorate or the provincial court. However, a GRM should be established at project level to facilitate efficiency and effectiveness of resolving complaints of affected people. The project GRM will be an integrated part of the SEP. The social development team is preparing a knowledge product based on an assessment of project-level GRMs in the Vietnam Portfolio to draw out lessons learned from the GRM performance for infrastructure heavy operations, including recommendations in order to strengthen the GRM and local grievance redress processes. The lessons from this knowledge product will feed into the design of this project level GRM.

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

The project will require direct workers (for the PMU), contracted workers (to work on construction sites for recruited contractors, and as consultants) and primary supply workers (to provide aggregate material and equipment). The project is not expected to require community workers. Vietnam already has in place a relatively comprehensive (and evolving) framework for labor and working conditions such as the Labor Law (2019), the Law on Occupational Health and Sanitation (2015), the Social Security Law (2014), and the Official and Card Law (2019). Vietnam also recently ratified Right to Organize and Collective Bargaining Convention, which will come into effect in July 2020. The policies and regulations stated in this legislation reflect the principles of ESS2 on issues such as fair treatment, non-discrimination and equal opportunities to workers, supports the rights and benefits of the workers, recognizing workers’ rights to establish or join associations of workers, prohibition on sexual harassment/forced labors/child labor (under 15), etc. As the PMU is a government entity where laws and regulations have to be followed, trade unions and official grievance redress mechanisms exist. Therefore, minimal risks related to ESS2 for direct project workers are foreseen. The labor management procedures for the PMU will be assessed during preparation. The exceptional circumstances of Covid19 crisis are likely to pose occupational health and safety concerns for project workers. Provision of PPE, protocols for hygiene and distancing at the workplace, including transport of workers, as well as emergency response protocol in event of an outbreak (where would be infected workers be isolated, sent for treatment) need to be addressed in the labor management procedures.

One challenge on the application of this framework is the lack of systematic labor inspection, especially when it comes to construction contractors and primary suppliers, where there is a heavy reliance on self-reporting. For contracted workers, a template for labor management procedures (LMP) will be developed for inclusion in the bidding documents. For primary suppliers of materials and equipment, there is neither the practice, or experience, of conducting due diligence on labor and working conditions among potential sources of aggregate material and equipment. Therefore, a monitoring procedure will need to be in place prior the commencement of works, to ensure compliance with national laws and ESS2. In addition to labor management procedures, and primary supplier monitoring systems, the implementing agency will develop OHS procedures (to be included in the ESMP), a grievance
redress mechanism specific to labor and working conditions, and a system for monitoring third party contractors compliance with agreed OHS and LMP.

**ESS3 Resource Efficiency and Pollution Prevention and Management**

Given the type and large scale of the project, substantial amount of resources and materials will be required, and the adverse impacts on human health and environment are expected to be substantial to high. Nevertheless, risks and impacts related to the release of pollutants, waste generation, management of disposal materials and hazardous wastes, impacts on community, and resource use efficiency will be assessed, and mitigation measures will be proposed during project preparation. The potential adverse risks and impacts related to excavation, storage, transportation, and disposal these materials will be assessed in detailed during the ESA process with associated proposed mitigation measures. An excavated material management plan will be prepared to manage these risks and impacts. Risks and impacts due to generation of non-hazardous waste as well as hazardous wastes will also be addressed during the ESA process taking into account the standards measures in the World Bank Group Environment, Health, and Safety Guidelines. The treated wastewater will need to meet Column A water quality requirements (i.e., water used for water supply purposes) of the National Technical Regulation on Municipal Wastewater QCVN14-MT:2015/BTNMT. Advanced treatment technology and processes for the WWTP will be considered for reduction of bad odors and sludge. Operation of the WWTP system will also include a sludge treatment unit for the handling, temporary storage, transportation and final disposal. Given the type and scale of the project, it is not expected that construction and operation of the reservoir, 20,000 m³/day WTP, and 10,000 m³/day WWTP, and collection of solid waste will produce significant GHG emissions. Nevertheless, impacts and mitigation measures related GHG emissions will be addressed in the ESA process during project preparation, and gross GHG estimation will be conducted if necessary. To the extent technically and financially feasible the project will adopt measures, specified in the WB Group ESHG for Water and Sanitation and other Good International Industry Practice, for efficient use of raw materials and for optimizing energy use.

**ESS4 Community Health and Safety**

It is expected that there will be an influx of the entire labor force to be mobilized for the construction phase from mainland Vietnam, which may pose social risks to the community in terms of exposure to sexual exploitation and abuse, and transmission of communicable disease (such as COVID-19). The size and composition of this labor force, as well as the potential risks to the local population will need to be assessed during the project preparation process. However, it is possible that hundreds of workers would need to be brought from the mainland during peak construction. It should however be noted that the island has significant experience in accommodating large workforces, with many major tourist and other economic development projects requiring large workforces in recent years. It also has significant absorption capacity, due to the availability of accommodation facilities to accommodate tourists that will likely be underutilized. In addition, during preparation, the project should (i) undertake a mapping of service providers and assess the capacity and quality of these services for the survivors, (ii) assess the ability of the implementing agencies to respond to SEA/SH risks, (iii) assess the risk of SEA/SH for the project, (iv) establish procedures to review and update risk assessments during project implementation, (v) identify and include appropriate mitigation measures for including in the project design and bidding documents (including worker codes of conduct). In addition, efforts will be made to manage the potential labor influx by developing a labor influx management strategy to be included in the environmental and social assessment (ESA). The ESA will also assess
community exposure to risks and impacts of project, including negative road safety issues and risks associated with the project security personnel; community exposure to hazardous materials; potential risks and impacts on ecosystem services; and application of the concept of universal access where technically and financially feasible. Appropriate mitigation measures will be proposed and included in the ESMP.

The new embankment dam for creating an off-stream reservoir under the project is likely to be a “large dam” as per paragraph 2 of ESS4 (i.e., dams between 5 meters and 15 meters impounding more than 3 million cubic meters), and dam safety is intrinsic part of the project. Natural disaster like earthquake, cyclones/storms do exist in the sub project areas. Potential risk of accident and incidence do exist during construction and operation stages of the dam without proper safety measures. Dam safety assurance is required by ESS4 and should follow its procedures early in the project preparation. Dam safety reports will be technical reports and will be prepared as separate documents from the Environmental and Social Assessment (ESA). Whilst the dam will be designed against extreme natural hazards, possible occurrence of unforeseeable events beyond design standards cannot be ruled out. The resilient structural and non-structural measures of the dam can minimize the impacts of climate change and other threats to the dam and downstream communities.

The larger construction activity like regulating weir and intake construction may have risk to ecosystem services which may have results in adverse health and safety risk to depended community. The Environmental and Social Assessment (ESA) for the dam shall be made including effect of climate change and mitigation measures; to minimize such impacts and enhance resilience; and measures for protection of occupational health and safety.

The Borrower will engage experienced and competent professionals for the supervision of the design and construction of the dam, and require the owner of the dam to adopt and implement dam safety measures during the design, bid tendering, construction, operation, and maintenance of the dam and associated works. Specifically, the client is required to undertake the followings: (a) Reviews by an independent panel of experts of the investigation, design, and construction of the dam and the start of operations; (b) Preparation and implementation of a Dam Safety Report; (c) Prequalification of bidders during procurement and bid tendering; and (d) Periodic safety inspections of the dam after completion, and implementation of measures required to address safety deficiencies. The adequacy of the implementation arrangement and capacity of the entity which would be responsible for design, construction supervision, and future operation and maintenance of the dam will also ensured.

The Panel of Independent Experts will consist of three or more experts, appointed by the Borrower and acceptable to the Bank, with expertise in various technical fields relevant to the safety aspects of the particular dam. The Panel will review the investigation, design, and construction of the dam and the start of operations. The Panel will also review and advise the Borrower on matters relative to dam safety and other critical aspects of the dam, its appurtenant structures, the catchment area, the area surrounding the reservoir, and downstream areas. The Borrower will extend the Panel’s composition and terms of reference beyond dam safety, to cover such areas as project formulation; technical design; construction procedures; and, for water storage dams, associated works such as power facilities, and river diversion during construction.

The Dam Safety Report will contain the following information and be prepared as follows: (a) Plan for construction supervision and quality assurance. This plan will set out details of the organization, staffing levels, procedures, equipment and qualifications for supervision of the construction of the new dam. The plan will be due for appraisal.
(b) Instrumentation plan. This is a detailed plan for the installation of instruments to monitor and record dam behavior and the related hydrometeorological, structural and seismic factors. This plan will be incorporated into the bidding stage.

(c) Operation and maintenance (O&M) plan. This plan will set out details of the organizational structure, staffing, technical expertise and training required; equipment and facilities needed to operate and maintain the dam; O&M procedures; and arrangements for funding O&M, including long-term maintenance and safety inspections. A preliminary plan will be prepared and provided to the Bank during project preparation. The plan will be refined and completed during project implementation. The preliminary O&M plan is due for appraisal.

(d) Emergency preparedness plan. This plan will specify the roles of responsible parties when dam failure is considered imminent, or when expected operational flow release threatens downstream life, property, or economic operations that depend on river flow levels. The broad framework plan is due for appraisal.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

The initial screening shows that the project will require an estimated 160ha of land for the construction of the Cua Can Reservoir, in addition to the relocation of 25 households. There will be an associated facility (a Water Treatment Plant), that will not be financed by the project, but which will be constructed during the timeframe of this project and is essential for viability of the project. The Water Treatment Plan will be located on a vacant 4.5ha site adjacent to the reservoir, and will be included in the assessments and resettlement plan to be prepared for this project. Aside from the households located on the site, the proposed reservoir occupies land that is used for forest (timber harvesting), agricultural (pepper) and livestock production. Previous assessments completed by the JICA survey team indicated that no irrigation or fishery activity were observed in the Cua Can River downstream of the proposed reservoir. This survey also indicated that there are no poor people present in the reservoir area. The lands to be acquired are the majority for production forest (acacia, cajuput) and agricultural use purposes. Further assessment will be conducted in the next stage to illustrate the scale and scope of impact on land acquisition requirements and number of affected households. To accommodate the households that will have to relocate from the reservoir area, the project will develop a 3-ha resettlement site with complete technical and social infrastructure, to ensure project readiness.

A socio-economic assessment will be conducted by the Project owner to collect data and information for preparation of a resettlement action plan (RAP) for the reservoir area, water treatment plant, and resettlement site. The other components of the project (a water transmission and distribution network, Wastewater collection and treatment, solid waste management and environmental sanitation) are expected to be undertaken within the existing right of way of public roads or available publicly owned land. Because all proposed works and their boundaries will be identified at the preparation stage, a resettlement policy framework is not required. A resettlement action plan will be prepared to meet the requirements of the new ESF of the World Bank. At the implementation stage when detailed project designs is available, (and following the completion of a detailed measure survey and replacement cost study) the RAP will be updated and disclosed locally to affected people.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

The project is not located in the Phu Quoc National Park or its buffer zone. The land use type in the reservoir location is agricultural land allocated to the local people mainly for plantation of acacia and Eucalyptus. The screening result shows that the habitat is modified by human agricultural activities; however, there is potential availability of some
wildlife species in this large area of 160 ha. The buffer zone the Phu Quoc National Park, a transition strip between
the project site and the protected area for the mobility of wildlife species, is located in a close proximity to the
reservoir site. The at this stage location of the reservoir has been proposed to avoid significant impacts on the
national park and its biodiversity. Detailed analysis of alternatives for the reservoir location will be performed as part
of the pre-feasibility study and ESA process and during project preparation and consider the technical, economic, and
environmental and social aspects. Given the proposed location of the reservoir, the project is not expected to have
direct significant negative impacts on the buffer zone and biodiversity of the protected area. However, households
that lose their plantation forest land and agricultural land may opt for encroachment of the buffer zone as an
alternative livelihood, creating substantial adverse impact on the national park. The impacts on the buffer zone and
the National Park and associated mitigation measures need to be assessed in detail and to be adequately addressed
in the ESIA. The assessment would also cover the bio-diversity status of the buffer areas to be diverted for the
reservoir and determine if there is need for bio-diversity offsets with relevant action plan. Care will be taken to
ensure that the project impacts on the aquatic and terrestrial species and the ecosystem of the the buffer zone and
the national park are well assessed and managed. The impacts of the project on the national park buffer zone on the
ecosystem services from the provisioning services, regulating services, supporting services and cultural services point
of view will also be assessed in the ESIA. The Borrower will conduct the environmental and social assessment in
accordance with requirements of ESS6 during project preparation and implementation, including impacts on
plantation forest, protection forest, and the modified natural habitats such the river and its ecosystems during
construction and operation. The environmental and social assessment process during project preparation will assess
the potential risks and impacts to natural habitats from the various project activities, including potential direct,
direct, and cumulative impacts on key biodiversity receptors.

Earthworks activities in the catchment and within the river beds, including vegetation clearance, reservoir
preparation, slope stabilization, blasting, excavations, filling, and quarry operations, will contribute to large amounts
of soil movement around the project site. The erosion risk is considered high given the steep topography, high and
intense rainfall during the rainy season, scale of earthworks, and the characteristics of the overburden in the area
(easily erodible). Sediment discharges into the river system can adversely affect habitat and aquatic organisms.
Erosion and sedimentation require control through mitigation measures that are specified in the CESMMP. Mitigation
measures will include land stabilization through design, greenbelt allocation, and engineering efforts to reduce,
capture and treat soil erosion.

The project will involve primary suppliers, especially for sand supply. The ESIA will include an evaluation of the
systems and verification practices used by the primary suppliers to: (i) identify where the supply is coming from and
the lisened source area; and (ii) where possible, limit procurement to those suppliers that can demonstrate that they
are not contributing to significant degradation of river natural or critical habitats.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities
An initial screening of the project area indicated there are no ethnic minority people present who would have a
collective attachment to sites where project activities will be taking place. Therefore, this ESS is not relevant. The task
team expects this to be confirmed during the social assessment to be conducted during the project preparation
phase.
ESS8 Cultural Heritage

The project initial environmental and social screening identified no adverse impacts on tangible local cultural heritage such as pagodas, churches, family shrines, cemeteries or temples, and intangible cultural heritage. However, during construction chance finds may be revealed. The scope of applicability of this ESS will be further assessed during project preparation as part of ESA process. In any case, the ESA will at a minimum produce a chance find procedure for physical cultural heritage that may be affected during project implementation, as well as a screening process to minimize possible impacts on cultural heritage such as pagodas, churches, family shrines and temples.

ESS9 Financial Intermediaries

At this stage, no financial intermediaries are expected to be involved in the project. Therefore, this ESS is not relevant.

B.3 Other Relevant Project Risks

No other relevant project risks envisaged.

C. Legal Operational Policies that Apply

<table>
<thead>
<tr>
<th>OP 7.50 Projects on International Waterways</th>
<th>No</th>
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<tbody>
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<td>The project will not be implemented on any international waterway or its tributary.</td>
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<th>OP 7.60 Projects in Disputed Areas</th>
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<td>The project will not be implemented in disputed areas.</td>
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III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered?  

No

Financing Partners

No common approach is considered at this stage.

B. Proposed Measures, Actions and Timing (Borrower’s commitments)

Actions to be completed prior to Bank Board Approval:

1. Prepare the following documents in consistent with ESF requirements:
   - ESIA in consistent with the ESF requirements;
   - Dam Safety Report;
   - Resettlement Action Plan (RAP) in consistent with the ESF requirements;
   - Stakeholder Engagement Plan (SEP), and included details on a grievance redress mechanism for the project;
   - Labor Management Procedures (LMP), OHS procedures and Grievance Mechanism for project workers, monitoring mechanisms for labor and working conditions for primary suppliers and third party contractors;
   - Environmental and Social Commitment Plan (ESCP).
(2) Prior to project appraisal, disclose the SEP, RAP, ESIA, and ESCP in a timely manner, in an accessible place, and in a form and language understandable to project-affected parties and other interested parties as set out in ESS10, so they can provide meaningful inputs into project design and mitigation measures.

**Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):**

- Commitment to prepare the relevant instruments per Environmental and Social Standards (ESSs’) requirements.
- Adequate allocation of resources (human, finance) for application/implementation of ESF, ESSs and relevant instruments.
- Commitment to prepare and implement a capacity build plan with strong focus on application/implementation of ESF, ESSs and relevant instruments.
- Update Resettlement Action Plan, based on detailed designs and the latest Detailed Measure Survey and Replacement Cost Study, and establish associated grievance redress mechanism.
- Establish a Project Level Grievance Redress Mechanism.
- Update Stakeholder Engagement Plan based on the public health situation regarding communicable diseases.

**C. Timing**

**Tentative target date for preparing the Appraisal Stage ESRS**

| 10-Nov-2020 |

**IV. CONTACT POINTS**

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<th>World Bank</th>
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<td><strong>Borrower:</strong> Socialist Republic of Vietnam</td>
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**Implementing Agency(ies)**

| Implementing Agency: Phu Quoc Economic Zone Management Board |

**V. FOR MORE INFORMATION CONTACT**
VI. APPROVAL

Task Team Leader(s): Hung Le, David Lord

Practice Manager (ENR/Social) Stephen Ling Recommended on 27-May-2020 at 15:16:40 EDT

Safeguards Advisor ESSA Peter Leonard (SAESSA) Cleared on 02-Jun-2020 at 08:19:50 EDT