Concept Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

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BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
Vietnam		P179572	
Project Name	Mekong Delta Climate Resilience and Integrated Transformation Project (MERIT)		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Environment, Natural Resources & the Blue Economy	Investment Project Financing	3/11/2024	12/14/2023
Borrower(s)	Implementing Agency(ies)		
Ministry of Finance	Ministry of Agriculture and Rural Development (MARD)		

Proposed Development Objective

To enhance climate resilience and improve livelihoods in select areas of Vietnam's Mekong Delta.

Financing (in USD Million)	Amount
Total Project Cost	450.00

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]

Vietnam's Mekong Delta (MKD) is one of the most severely exposed to climate change risks regions due to its flat topography and subsiding plains. If sea levels rise by 75–100 centimeters, almost half of the delta's area would be inundated. In the absence of immediate adaptation measures, about 45 percent of the MKD area will be affected by saltwater intrusion, resulting in an estimated total economic loss of some US$17 billion by 2030. As a result of sea-level rise and other factors, the region is projected to become a major climate out-migration hotspot by the middle of this Century.

The proposed project would provide critical resources and guidance to operationalize the vision and strategies laid out in the MDRMP and address current and future climate change impacts. Specifically, the project would: (i) help to build mechanisms and tools for regional coordination, and further enhance the capacities for data and information collection and analysis as well as the policies and modalities for data sharing among institutions (public and private) and with the general public; (ii) contribute to building new and repurposing and upgrading existing climate-resilient infrastructure at the regional and subregional levels to support the transformation of the agricultural sector and more sustainable management of natural assets, including water resources; and (iii) provide support to the repurposing and upgrading of infrastructure at the provincial level as well as to market-driven interventions to facilitate more diversified livelihoods, more efficient value chains, and more dynamic agro-entrepreneurship.

D. Environmental and Social Overview

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

The Project will be implemented in selected areas in the Mekong Delta Region (MDR) in Vietnam, a low lying region with elevation from 0.5 to 1.2 m amsl, weak geological foundations, and mixed soils such as acid sulphate soil (41%), alluvial (30.4%), saline soil (19.1%) with peat, gray soil and eroded soils present. Total MDR area is 4.3 millions ha including 6.1% water surface.

Biodiversity in the region is rich due to presence of three habitat zones: (i) upstream flood (freshwater); (ii) flood and tides (brackish); and (iii) mainly tides (saline). Wetlands, alluvial plains, mangroves and coastal ecosystems are common throughout the region. However, biodiversity and natural ecosystems have been seriously degraded due to to human activities, especially intensive agriculture. Based on the initial screening, there are no protected areas in locations of the proposed physical investments.

The largest rivers in MDR are the Mekong's two branches, namely the Tien (257 km long) and the Hau (or Bassac, 258 km long). Their flood season flow contributes 90% of the annual flow. Other rivers are Vam Co, Soai Rap, My Thanh, Bay Hap, Cai Lon, Cai Be. Large man-made canals, including the Nguyen Van Tiep, Thap Muoi, O Mon-Xa No, Rach Gia-Long Xuyen, Rach Soi – Vam Cong, Quan Lo-Phung Hiep, Vinh Te, Tri Ton – Ba, connect the large river systems. In total, the length of canals is 66,000 km.

The average annual rainfall is 1,733 mm. In flood season (June to December), about 48% of the MDR's land area can be inundated with depth of 0.5 to 4.5 m. Flood water benefits the MDR with freshwater, sediment and nutrient recharge, enriching fishery resources, and maintaining wetland ecosystems. However, during the past 20 years, after the construction of embankments and hydro-powers at upstream, floods reduced, reducing sediment input by about 56% to 64% (in 2015). Consequently, erosion is taking place at about 600 locations along river banks and coast lines causing land loss, damages to properties, livelihood, mangroves, vegetation cover and crops, and safety risks to local communities. Groundwater storage of about 22.5 million m3 is being overexploited, contributing to soil subsidence. Under the impacts of climate change, salinity intrusions through estuaries to inland canals in MDR to increases, water salinity at 4 g/L (rice tolerance threshold) reaches 50-55 km upstream of the Tien river mouth.

Administratively, the MDR consists of 13 provinces. The population is over 17.4 million, with 74% living in rural areas, compared to the national rate of 63% (GSO 2022). Population growth in the past decade has been 0.05%/year, the

lowest among regions. The rate of emigration in the MDR is the highest in Vietnam, from 8 to 14.5%. The Kinh ethnic group accounts for 91.91% of the total population. Other ethnic groups include Khmer (6.9%), Chăm (0.1%), Hoa (1.4%). Soc Trang and Tra Vinh provinces have the largest number of Khmer people, 30.7% and 31.6% of the province's population, respectively). Currently, the income of Khmer households is lower than that of average in the MDR. The average GDP per capita is lower than the national average (31% lower in 2020). Although the poverty rate in the MDR has consistently declined (from 8.6% in 2016 to 3.8% in 2021), it is still the second highest in the country. About half of labor force work in agriculture, fisheries or forestry, others work in service, industry and construction sectors. With rice, shrimp, catfish and fruits as the main productions, MDR contributes 34.6% to national agricultural GDP.

D. 2. Borrower's Institutional Capacity

MERIT will tap into considerable existing capacity for environmental and social (ES) management that has been developed in Vietnam including in MDR. MERIT includes one sub-project managed by the Ministry of Agriculture and Rural Development (MARD) and several (likely between three to five) sub-projects managed by provincial authorities. The final number of provinces participating in the project will be confirmed during project preparation.

The MARD subproject, the largest subproject of MERIT, will be managed by the MARD Central Project Office (CPO). The CPO has a long history of managing Bank financed projects including the Vietnam Water Resource Management Project (VIWRAP), Mekong Delta Integrated Climate Resilience and Sustainable Livelihood Project (ICRSL), Dam Rehabilitation and Safety Improvement Project (DRASIP), Vietnam-Hazard Risk Management Project etc. These projects apply the Bank's Safeguard Policies; MERIT will be the first CPO project applying the Environmental and Social Framework (ESF).

Three ESF-responsible staff have been appointed for project preparation. These include two environmental and one social officers with ES background and received ESF training delivered by the World Bank. They have been engaged in on-going projects financed by the Bank and other international financiers and are familiar with their project cycle and environmental and social management requirements. Although the capacity to prepare ES instruments is limited, they can contract consultants to prepare those documents. Their also have experience in reviewing environmental, health, and safety (EHS) terms and conditions in bidding documents, contractor's environmental and social management plans (C-ESMPs), and EHS reports prepared by construction supervisors as well construction site inspections, especially in physical investments under ICRSL which are similar to those proposed under MERIT (such as embankment upgrading combined with roads and bridges, construction of sluices, canal dredging, the successful livelihood models, etc.). Additional capacity building with formal and on-the-job trainings will be arranged during project preparation.

For other subprojects, PMUs will be established at provincial level and they will exist in parallel with MARD's CPO management. While the participating provinces will be determined at project appraisal, most of the MDR provincial authorities have experience managing Bank projects under the coordination of CPO. Safeguards capacity of some provincial project implementing agencies has been built through ICRSL project implementation. However, under MERIT, applying the ESF will be new to them, and the CPO coordination role in ES management will be more limited due to the government's revised regulations restricting international financing for "umbrella" (nationally administered

multi-provincial) projects. ESF capacity building and trainings for provincial levels will be arranged during project preparation.

A detailed ES management capacity assessment of the CPO and provincial authorities will be conducted during project preparation. A program of capacity building for ES management will then be developed accordingly.

It is noteworthy that under the support of ICRSL, the Mekong Delta Regional Masterplan (MDRMP) was prepared and approved in 2022. A Strategic Environmental Assessment (SEA) was prepared as part of the Masterplan. Although MARD were not closely involved in the preparation of this SEA, they were engaged in the preparation of the Masterplan and understood the visions and strategies set out in the Masterplan. The MERIT will begin to operationalizing the Masterplan, so it is expected that the findings and recommendations of the SEA would benefit the project design as well as its environmental and social assessments and plans.

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

Substantial

Environmental Risk Rating Substantial

The proposed project will not be located within any critical natural habitats and forests, archaeological and historical sites, or densely populated areas. The canals and rivers don't directly or indirectly link to any important/critical habitat or ecosystem. The substantial environmental risks and impacts may potentially result from the proposed physical interventions including canal dredging, sea dyke and river embankment upgrading, installation of wave breakers, construction of sluice and ship-locks etc. The potential risks and impacts of these activities include: (i) the risks of Unexploded Ordinances (UXO) left in the project areas from past wars. UXO may cause injuries or fatalities to the workers and damage properties. The risk can be mitigated by carrying out UXO clearance before handing over the site to the contractors; (ii) Generation of several millions cubic meters of materials from dredging of about several hundred kilometers of existing canals (under multiple sub-projects, mainly man-made) among 66,000 km of canals in the Mekong Deta, requiring land for storage of the dredged materials. Reduced local vegetation cover and related biological values, localized flooding, water pollution, soil erosion and slope subsidence are the key potential issues at the storage sites. Canal maintenance dredging has been happening in the Mekong Delta region from time to time and with heavy metals contents far below allowable limits, dredged materials have been considered as valuable resources for ground levelling rather than as wastes. (iii) Dredging-related water quality degradation affecting aquatic lives, removal of benthic organisms, disruption or damage to the existing canal-crossing bridges, powerlines, and canal-side houses (located very close to the water at places), disturbance to local fishing, water supply, waterway access and transportation safety. Most of these potential impacts would be in relative short term and be reversible; (iv) Substantial volumes of raw materials needed for embankment upgrading may contribute to the issues related to shortages of raw construction materials. (v) Substantial risks of spreading acidity or salinity to soil and water from the excavated locations or disposal sites. Surface runoff passing acidic or saline excavated or filling materials may harm vegetations, crops and living organisms in the receiving land and water bodies;, especially in Long Xuyen quadrangle in Long An, Dong Thap, Tien Giang) with acid-sulphate soils and in Bac Lieu, Soc Trang, Tra Vinh, Ben Tre area with saline soils (vi) Substantial health and safety risks for the workers, especially for those installing wave-breakers with bulky concrete structures on water surface, standing under heavy construction cranes while exposed to coastal waves, sunlight and winds; (vii) Flooding and erosion risk from possible changes in hydrological regime (especially

water levels and flow rates) in the intertwined river and coastal networks. Hydraulic modelling may be needed for assessing these risks. The project will be in the Mekong Delta which is under increasing influent of the global climate change, resulting in flooding and subsequent river and canal bank erosion. This will need to be factored in the project design and operation. The country's policy, legal and institutional framework, applicable to the Project sector are consistent with the ESSs to a large extent. The technical and institutional capacity of the implementing agencies (IAs) is strong evidenced by its direct successful design and implementation of a number of Bank-financed projects. Although the IAs have no experience in implementing and applying ESF and the associated environmental and social standards, they have good capacity and commitment to manage the risks and impacts under the safeguard policies. The IAs' capacity in ESF implementation can be enhanced during project preparation and implementation by training to be provided by the Bank team and consultant

Social Risk Rating Substantial

The social risk is categorized as Substantial. The main social risks stem from: (i) the acquisition of land and non-land assets due to the physical investments (e.g. sluice gates, sea dykes, canal rehabilitations/upgrades, upgrading and modernizing water resources management infrastructure, roads etc.), which may be complicated further due to the presence of some of the affected households that would be considered as encroachers under the national regulations (who may also be members of vulnerable groups); (ii) the presence of ethnic minority people (mainly Khmer) in the project area, representing just over 30 percent of the total population in Tra Vinh and Soc Trang provinces; (iii) the need to develop mechanisms to support farmers to transition to the new proposed livelihood adaptation models; (iv) the resistance/non-readiness or transitional risks of some groups in changing their livelihood models, especially the most vulnerable groups (i.e. elderly, ethnic minority households, poor and landless or land poor households); and (v) temporary construction-induced impacts due to the disturbance to public service utilities, access restrictions for people in residential areas, or sensitive establishments along the roads like schools, offices, markets, etc. Besides, a relatively large number of contract workers from other provinces will be mobilized by contractors to the project sites during the construction period. This may result in potential social impacts and risks to local communities and stakeholders: sexual exploitation and abuse (SEA) and sexual harassment (SH) related to labor influx and infection of COVID-19 and other communicable diseases.

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 is expected to result in positive environmental and social (ES) impacts, contribute to increased resilience to climate shocks, improve livelihoods, especially among the vulnerable, and reduce emissions from agriculture. The damages and losses caused by flood water and salinity intrusion on livelihoods, agricultural production are expected to be reduced. Connectivity within the region through roadways and waterway is expected to be improved.

Initial screening shows that the known proposed physical investments are not located in protected areas such as national parks or nature reserve, historical or religious sites. Support to livelihood would not lead to conversion of forested land or expansion of agricultural land, and no pesticide use will be supported. Further screening on

sensitivity of project sites (including the presence of rare or endangered species) and proposed investments will be carried out when project investments and locations are confirmed.

The Project's potential negative ES risks and impacts are mainly associated with the construction and operation of the proposed investments under Components 2 and 3 (including dredging canals, construction of wave breakers, upgradation of coastal dykes and river embankments in combination with roads and bridges, building ship-locks, sluices and pumping stations, and agriculture value chain infrastructures) and the studies to inform development of policies and plans under Component 1. Construction potential ES risks and impacts includes: (i) Land acquisition and resettlement; (ii) Safety risks related to UXO left from the wars; (iii) common construction risks and impacts such as dust, noise, odor, pollution cause by solid waste and wastewater, disturbance or damages to terrestrial and aquatic lives, sedimentation and localized flooding, erosion and landslide risks, etc.); (iii) health and safety risks to the workers and public; (iv) potential social impacts refer to the temporary disturbance to public service utilities, access restrictions or sensitive establishments along sluice gates, canals, roads, etc. (schools, markets, etc.); (v) impacts on farmers through loss of some areas of productive land and difficulties in changing their traditional livelihoods; (vi) potential impacts on the Khmer communities in the Project areas; and (vii) temporary influx of workers potentially causing SEA/SH, infection of COVID-19, and other communicable diseases. There are also type-specific and site-specific risks and impacts. Dredging process would disturb canal beds, remove benthic organisms, cause water quality reduction thus affect aquatic organisms, generate large volumes of dredged materials that requires land for storage, cause pollution and safety risks at disposal sites. With r earthworks, possible spreading of acidity and salinity from disturbed acid sulphate/saline soils may result in pollution, cause harm to biological species . The existence of elevated river embankments, new sluices and ship-locks may lead to changes of water level, water quality, flow rates in water network with possible implications to aquatic lives and erosion potentials in areas beyond disturbed areas. Wave breakers may limit accessibility of boats and cause accident risks along the coastal lines. These potential risks and impacts will be assessed during the preparation of ES instruments.
During project preparation, the Borrower will carry out ES Impact Assessment (ESIA) in accordance with the ESF, WBG EHSG and national regulations. An ESIA report, which includes an ES Management Plan (ESMP), will be prepared for the MARD-managed subproject, and an ESIA and/or an ESMP will be prepared for each other subprojects depending on the nature and scope of the proposed investments. The ESIAs will describe the proposed investments, institutional framework and key stake-holders, assess ES institutional capacity on ES management, describe baseline conditions, identify and assess the potential ES risks and impacts. They also propose mitigation measures and plans to control pollution, promote efficient use of natural resources and energy usage, address the identified potential ES risks and impacts, and summarize the consultation activities and feedback received. The ES process will screen for the associated facilities (AF) against the criteria given in paragraph 11 under ESS1, identify and assess to the extent appropriate the potential ES risks and impacts. The project implementing agencies will address these risks and impacts in a manner proportionate to its control or influence over the AF. The ESMPs will summarize the key impacts and mitigation measures, propose monitoring and supervision program, and describe institutional arrangements for the implementation of the mitigation measures, monitoring and reporting requirements, and budget estimation for ESMP implementation. For each subproject involving dredging activities, a Dredging and Material Management Plan (DMP) will be prepared as part of the ESIA to address the potential impacts of dredging process, and propose monitoring and reporting protocols.

The social aspects of the ESIA will focus on identifying scope of social impacts on the local people including scope of land acquisition, the number of physical and economic displaced people (along with their socio-economic profile),

and the adverse impacts on vulnerable groups, and the socioeconomic situation of displaced people as well. Moreover, a solid social section in the ESIA will address risks/impacts/opportunities related to "livelihood transitions" and "other natural resource-based livelihoods" under Component 3, hence, based on the latter, inform mitigation and benefit-enhancing measures in the project-specific ESMP(s). In addition, the social aspects of the ESIA will identify stakeholders that need to be engaged (as either affected or interested parties) in project preparation and implementation, as well as the social risks and impacts related to labor and working conditions, occupational health and safety (OHS) and community health and safety (CHS). The ESIA will also assess the potential impacts due to the change of traditional livelihood models which could be substantial. Farmers, particularly the vulnerable ones, need to be strongly supported during the switch of livelihoods. The ESIA will highlight risks arising from labor influx in workers camps such as sexual exploitation and abuse, sexual harassment, and the transmission of communicable diseases.

In addition to the ESIA(s)/ESMP(s), to address the potential Project's risks and impacts, a Resettlement Planning Framework (RPF) (for the MARD-managed subproject), site-specific Resettlement Plans (RPs) Ione for each of the province-managed subproject), an Ethnic Minority Planning Framework (EMPF), a Stakeholder Engagement Plan (SEP) and Labor Management Procedures (LMP) will be prepared. The RPF, provincial RPs, EMPF, SEP, LMP will be prepared during project preparation. Based on the field risks assessments, site-specific Resettlement Plan (RPs) for provinces under MARD-managed subproject, and site-specific Ethnic Minority Development Plans (EMDPs) will be prepared after appraisal.

An ES Commitment Plan (ESCP) will also be prepared for the entire project. The ESCP will set out the activities to be carried out during project implementation and could be updated during project implementation.

The Resettlement Policy Framework (RPF) will be prepared for MARD component, and provincial Resettlement Plan (RP) will be prepared, one for each of the beneficiary provinces, and an EMPF will be prepared, consulted and disclosed prior to project appraisal. Also, when needed, Ethnic Minority Development Plans (EMDPs), will be prepared.

For MARD-managed subproject, the TORs for the development of plans on sedimentation and dredging management include the requirements to incorporate ES considerations, mitigation measures and monitoring responses.

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 site-specific baseline conditions, level of impact analysis and mitigation measures, gaps in social aspects of the ESIA, 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

Some of the Project's key stakeholders identified during the initial screening were mostly project proponents such as the Project implementing agencies, as well potential affected people, and a number of interested parties. For the MARD-managed subproject, the Ministry of Agricultural and Rural Development (MARD) will be the project owner

and will be represented by the Central Project Management Office (CPO). MARD's sub-departments will also be engaged in the appraisal of technical design and construction management. The CPO will also work with local authorities during project implementation regarding land acquisition and contractor management. For provincial-managed subprojects, the key stakeholders include the Provincial People's Committees and related relevant authorities at provincial, district, and possibly commune levels. Consultants and contractors are also among the key stakeholders during project implementation. The Borrower will engage with stakeholders throughout the project life cycle.

Stakeholders will be involved in the preparation process of the ESF instruments. Consultations will be conducted during the preparation of the ESF instruments to identify/verify baseline conditions, identify potential site-specific potential impacts and risks and determine the appropriateness of proposed site-specific mitigation measures. The ESF instruments will document the consultation activities and summarize the feedback received. Relevant suggestions and recommendations received will be incorporated into the project's engineering designs and environmental and social management plans.

Disadvantaged and vulnerable groups among project affected people may include the elderly, disabled, or those rendered unable to preserve their livelihoods (such as vulnerable squatters encroachers) and therefore exceptionably susceptible to impacts from the Project (temporary restrictions on business activities or land taking acquisition that affects livelihoods). These groups should be identified in the stakeholder engagement plan, and measures identified to prevent or minimize associated impacts.

The implementing agencies will prepare, consult, and disclose a Stakeholder Engagement Plan (SEP) before the appraisal stage. The SEP will be updated and redisclosed when needed by the MARD and/or relevant provincial authorities throughout the different phases of the project life cycle. The SEP will help establish a systematic approach to stakeholder engagement that will help PMUs identify stakeholders and build and maintain a constructive relationship with them, particularly the project-affected parties.

The SEP will ensure that beneficiaries, project-affected parties (PAP), and communities will be engaged, as per ESS10 paragraph 5, especially regarding project design options (and livelihood models. The approach to engagement activities will consider the needs of Ethnic minority groups, poor, vulnerable, and disadvantaged communities. This will include measures to over language and literacy barriers to ensure the engagement process (and ultimately project benefits) are accessible to all. The SEP will include a Grievance Redress Mechanism (GRM)..

The Borrower will disclose the project documents prior to project appraisal to inform stakeholders about the proposed project activities, the potential environmental and social risks and impacts of the Project, including ESIAs/ESMPs, ESCP, RAPs, and LMP, and SEP. In addition, the Borrower will continue to engage with project-affected parties and other interested parties during project implementation in a manner appropriate to the nature of their interests and the potential environmental and social risks and impacts of the Project.

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 (such as CPO/PPMU permanent or contracted staff), contracted workers (e.g. skilled and non-skilled construction workers engaged by contractors) and primary supply workers (e.g. workers engaged for essential construction materials to be purchased for the project, as defined in ESS2). It is not likely that the project will engage community workers, as civil works will be the contractors' responsibility. It is not expected that a significant number of foreign workers will be contracted for this project. However, workers may be recruited (or relocate from) other provinces of Vietnam.

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 civil servant 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 exploitation abuse and harassment, forced labor, child labor (under 15 years old), and Occupational Health and Safety (OHS) risks. As the PMU is a government entity where laws and regulations have to be followed, trade unions and official grievance redress mechanisms exist.

Potential risks for contracted workers relate to labor and working conditions, such as child labor, forced labor, work-related discrimination, and OHS risks. The key OHS risks for project workers exist at construction sites and workers' accommodation during the construction phase, and to the operators of sluices and ship locks during the operation phase. At construction sites, the issues would relate to: (i) workers' exposure to dust, emissions, noise, unpleasant odours, vibrations; or working conditions with considerable safety risks, such as operating heavy construction plants, working on water surface for bridge construction, wavebreaker installation or canal dredging especially in unfavourable weather conditions or near unstable slopes, welding, working on electrical systems or fuels and gases. Worker's accommodation conditions, particularly the availability of a clean water supply, drainage and sanitation facilities, exposure to extreme weather conditions etc., can have implications to the health and safety of the workers. These risks will be identified and assessed in the ESIAs, and addressed by the mitigation measures in the Environmental and Social Codes of Practices (ESCOPs), the Codes of Conduct (CoC) for workers. Training for both workers and community representatives on relevant topics should also be planned to avoid conflicts and enhance project outcomes. Together with other relevant parts of the ESMP, the Labor Management Procedures (LMP) which will in turn be incorporated into the bidding documents. The LMP will also include a fully-functioning and easily accessible grievance mechanism for project workers. The risks of Covid19 infection and transmission are likely to pose occupational health and safety concerns for project workers. Provision of Personal Protection Equipment (PPE), protocols for hygiene and distancing at the workplace, including transport of workers, as well as emergency response protocols in the event of an outbreak (where would be infected workers be isolated, sent for treatment) need to be addressed in the labor management procedure.

The LMP and grievance mechanism for workers apply to direct, contracted, and primary supply workers, and will therefore be needed at the right time for when these people will be employed. The LMP will set out the requirements

with regards to contractual document for direct workers, identify and assess the potential risk of child labor and serious safety issues with regards to the primary supply workers.

ESS3 Resource Efficiency and Pollution Prevention and Management

Construction or rehabilitation/upgrading of sluices, ship-locks, roads and bridges, sea-dykes, river and coastal embankments, etc.) would cause common environmental risks and impacts such as dust, noise, vibration, pollution in relation to the generation of waste and wastewater. To addres these, ESCOPs and Workers' CoC will be included in subproject ESMPs.

Climate resilience has been the key in the Project. The physical investments and supports to livelihood have been proposed to address climate-related issues such as flooding risks, erosions, salinity intrusions, emissions from agriculture etc. How the design of these investments could incorporate the measures to ensure climate resilience, reduce emissions and support the maintenance/recovery of ecosystem services are discussed below together with the measures to address the type-specific and site-specific risks and impacts.

Canal dredging. It is anticipated that dredging approximately 280 km of interprovincial canals under the MARD subproject would generate about 7-8 million cubic meters of dredged materials. Dredging will result in increased turbidity and possibly reduced dissolved oxygen (DO) with implications to aquatic lives and water usages. Experience with the projects in the Mekong Delta indicates that heavy metal (i.e. Pb, As, Cd, Hg, Pb) contents are well below the national standards. Unpleasant odors, reduced aesthetical values, nuisance, and pollution due to leakage wastewater could be issues at temporary and final storage areas.

DMP will be prepared as part of the ESMP for managing the potential ES risks and impacts of the dredging process. The DMP should cover: (i) descriptions of dredging areas and proposed dredging methods; (ii) characterization of the dredged materials (volumes, pH and salinity, heavy metals and pesticide); (iii) the potential risks and impacts of dredging, temporary storage, transportation and disposal; (iv) mitigation measures including design requirements of the storage sites; (v) ES monitoring and supervision program; and (vii) cost estimation. The "soil bank" concept has been initiated in the MDR under past projects. Dredged materials from the project would be valuable resources for ground elevation to address flooding risks in the MDR if not used for embankment upgrading in the Project.

Embankment upgrading. The subprojects will cover upgradation of river embankments combined with rural roads to improve accessibility for local communities, protect crops from the low flood in August to help livelihood more resistant to climate. Nature-based solutions or bio-enginnering solutions will be applied to embankment designs where applicable. The upgraded embankments would make early (low flood) drained to downstream quicker but also retain flood water inland longer once it overflow the embankments. Flood water retained by the upgraded embankments may support ecosystem services in the related areas: recharging groundwater, cleaning up harmful pests in crop-lands, and promoting the growth of native aquatic flora and faunas as well as other species in the food chains. Road and bridge design will take into account the temperature tendency under climate change scenario for their stability and durability (Guidelines developed under Bank-financed Local Road Assets Management Project).

On the other hand, soil, sand and rocks for fillings will be needed; however, these materials are limited or becoming scare in the MDR. Therefore, the sources of materials for fillings should be considered carefully, only licensed suppliers should be selected. Efficient use of these materials would be critical. The project should reuse the dredged materials for filling at the embankments if it is technically feasible. Construction packaging and scheduling are critical in this regard.

In the longer term, canal dredging in the MDR will likely be implemented under the Sedimentation Management Plan and Dredging Program (SMP and DP) to be developed under Component 1 of the Project. Pollution, health and safety risk as well as efficient use of the dredged materials should be considered thoroughly and assessed during the preparation of such Plan and Program and ensure that mitigation measures and monitoring are included. The TORs for the preparation of the SMP and DP should reflect such requirements. On the other hand, during operation phase, improved surface water storage and transmission capacity of the dredged canals may contribute to to reduce ground water extraction, reliefing subsidence issues in MDR.

Regarding sluice operations, maximal openings of gates should be considered to minimize potential pollutions related to stagnant water (in line with SEA's recommendations). On the other hand, improved water transmission capacity of the dredged canals are expected to reduce water pollution in canals at downstream in dry season.

Materials used for sea-dyke construction will be resitance to corrosion potentials of salinity in sea water. Space between the piles will allow the movements of aquatic living organisms between inside and outside the dykes, and canal mouths will be left open for maintaining both continuity of ecosystems and waterway transports.

Agricultural diversification in the project reflects the transformation from traditional cultivation of three rice crops annually to one or two crops and an alternate agricultural production (aquaculture/shrimp farming/duck raising etc.) recommended by the Masterplan. This shift has been happening in the MRD and proven to bring about multiple benefits. The project is not planning to support pesticide use but will encourage integrated pest management. As water demand in the alternate crop is less than rice crop, after the transformation the total annual agricultural water use (which accounts for 75-80% of total water demand) is expected to be reduced, easing the pressure on water supply in dry season and possible groundwater extraction. GHG (methane) emission from one or two rice crops will also be less than three crops per year. Post-harvest loss from crops will be reduced, resource use is more efficient as the rice remained at field after rice harvesting season would feed the fish, shrimp or even ducks. Inundation of rice field in the alternate crop would help to interrupt the growth chain of harmful insects and rats, the sediments from floodwater and the wastes from shrimps/fish/ducks will become fertilizer for rice thus the demand for agro-chemicals (pesticides and fetilisers) will be reduced in the next rice crop. With the use of rice straw for mushroom production then composted and returned to the field as fertilizer, generation of agricultural wastes will be reduced.

Acid sulphate soils exist in some areas of the MDR with pH ranging between 3.5 and 5.5. Possible spreading of water leakage from acid-sulphate soils may harm receiving lands and water bodies. Experience with the projects in the Mekong Delta shows that this adverse impact is not expeced to be significant. Powder limes have been usually used for increasing soil pH before soil acidity is further reduced naturally by rainwater or floodwater. Leakage water control is the key in acid-sulphate soils impact management. The approved SEA proposed specifically recommended "to strictly manage excavation and fillings, removal of vegetation covers and drainage in acid-sulphate soil areas as these activities may spread acidity, causing acidity of water in water bodies". If project sites involve acid-sulphate soil,

ESIA/ESMP will include propose mitigation measures appropriate to the levels of soil acidity, taking into account local conditions and SEA's recommendations. Environmental quality monitoring will be proposed accordingly.

ESS4 Community Health and Safety

During the construction phase of the proposed physical investments, community health and safety issues may arise from construction impacts and risks. Such risks include (but are not limited to) bad odors, increased level of dust, noise, vibration, soil and/or water pollution or unhygienic conditions caused by solid wastes or wastewater from construction sites and workers' camps, localized flooding, increased traffic safety risks, riverbank subsidence caused by dredging, erosions or soil subsidence at materials/wastes storage or disposal site , social tensions and adverse impacts related to the influx of workers, etc.

The Project does not involve construction of new dams, rehabilitation of existing dams, or dependence on existing dams.

The initial screening for risks related to gender based violence (GBV), sexual exploitation and abuse (SEA)/sexual harassment (SH) associated with worker influx indicated that the risk was moderate. The moderate risk rating is because project activities will take place in communes where there are mechanisms in place to limit the possibility of SEA/SH risks from manifesting (e.g. commune level public security, ward level monitoring committees, women's union representatives), and the number of workers would be limited and much of the works would be carried out mechanically by machines and construction plants. Even if the level of labor influx might increase during the construction phase, given that the locations where work is taking place may not be sensitive and that even if a large number of workers are mobilized, they will be scattered throughout many worksites.

To manage SEA/SH impacts and risks, the following activities should be carried out during project preparation as part of the project's ESIAs/ESMPs and LMP: (i) mapping of service providers and assess the capacity and quality of these services for survivors of SEA/SH, (ii) assessing the risk of SEA/SH to the project, (iii) assessing the ability of the implementing agencies to respond to SEA/SH risks, (iv) establishing procedures to review and update risk assessments during project implementation, and (v) identifying appropriate mitigation measures for inclusion in the project design and bidding documents (including codes of conduct with SEA/SH-related protections). In addition, efforts will be made to manage potential labor influx by developing a labor influx management strategy to be included in the ESMPs and LMP. The project will also look to include provision of capacity building and training of relevant stakeholders including contractors and project workers, in addition to capacity building for government partners. The Gender-Based Violence (GBV) risks should be monitored throughout project implementation through regular re-assessment with the risk screening tool and regular monitoring engagement. The need for additional measures of this ESS will be further assessed during project preparation as part of ESA process.

During operation phase, there are also health and safety risks for local communities related to the operations of the upgraded embankments which also functions as rural roads, new bridges, sluices. These could be traffic safety risks along the road or new bridges, especially at cross or curvy sections, or bridge approach road. Alternative analysis and the results of hydraulic modelling as part of the feasibility study will be used for predicting whether the upgraded

embankments and other interventions in the canal and river systems would cause any significant increases in flooding risks along some river/canal sections (could be upstream, downstream, or the other side of the river/canal if embankment is upgraded on one canal side). Alternatives should be investigated and considered, mitigation measures should be proposed based on the results of such predictions.

The ESIAs will screen, identify and assess all impacts and risks related to community health and safety, and the ESMPs will include ESCOPs, the Workers codes of conducts and propose mitigation measures in accordance with the mitigation hierarchy and response to type/site specific risks and impacts. For example, the design of roads and bridges will include measures for traffic control. If walkways are built for public access, the design will allows universal access in accordance with the requirements of ESS4.

As the project is implemented in MD region which is highly susceptible to natural disaster and climate change. The project physical infrastructure will be designed with “climate informed” and “disaster risk management” elements.

The Borrower will be assisted to further consult with the WBG ESHG and GIIP to identify and apply relevant resilience measures. The ESIA should consider climate change in structural design and siting location as appropriate. The project will not involve construction of new dams, rehabilitation of existing dams, or dependence on existing dams.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

This standard is relevant. Land acquisition will be needed for the proposed investments, such as coastal dykes, sluice gates, canal rehabilitation/upgrades, control structures, in-field infrastructures (such as canals, embankments, sluices/culverts, pump stations), roads, etc. Depending on the scope of investments and specific locations, several households (HHs) would be impacted and/or physically and permanently relocated. It is likely, some affected households will be considered encroachers under the national regulations, a number of whom may be considered vulnerable. The type of impacts includes: (i) loss of land, such as residential, agricultural, and non-agricultural; (ii) loss of assets attached to the land, such as houses, structures, businesses, graves, standing crops, and trees; and (iii) loss of income generation opportunities due to loss of land-based livelihoods, etc. Although the land acquisition and physical displacement impacts might be relatively limited in each province, the impacts would be significant as the Project's footprint covers several provinces.

To assess and address the impacts mentioned above and risks, a Resettlement Planning Framework (RPF) (for the MARD-managed subproject and to meet the GoV requirement for multi-province projects) and Resettlement Plans (RPs) for each province-managed subproject will be prepared, consulted, and disclosed prior to the WB's appraisal. It is also important to note that, following the Vietnamese regulations, and because this Project's footprint covers several provinces, the Government of Vietnam (GoV) is required to prepare an overall resettlement planning framework to harmonize and consolidate the policies/regulations applied in the Project, which will follow the WB's ESS5. The RPF will cover resettlement principles, organizational arrangements, funding mechanisms, grievance redress mechanism (GRM), and design standards. After Project's appraisal, based on the inputs from the Project's technical Feasibility Study (FS), ESIA, and RPF, site-specific Resettlement Plans (RPs) will be prepared for each

province under the MARD-managed subproject (in addition to the site-specific RPs prepared pre-appraisal for the provincial sub-projects).

Following the national legislation, the relevant Provincial People Committees (PPCs) and District People Committees (DPCs) will be responsible for Land Acquisition and Resettlement (LAR) in their administrative jurisdictions. This could be a challenge for the district government units as they may need more resources and capacity to hand over the land required for the project and resettlement sites on time, so the capacity will be strengthened in line with the provisions included in the RPF.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

Mekong delta has been modified largely by agricultural, aquaculture and infrastructures. Biological resources in the region remains relatively diverse but significantly degraded and vulnerable. The main natural ecosystems presence in the MDR region include: (i) mangroves in saline, brackish water zones or areas frequently inundated by tides; (ii) peat swamps; (iii) melaleuca, grass and shrubs on areas seasonal inundated with freshwater; (iv) freshwater ecosystems in rivers and canals; (v) tide alluvial plains; (vi) coastal swamps; (vii) seagrass; (viii) coral; and (viii) evergreen forests, mostly on islands.

According to the SEA, the total areas of forests in the MDR is about 300,000 ha including 62,400 ha of specialized forest, 47,300 ha watershed protection forests and 189,000 ha production forests. Currently there is no primary natural forest in the MDR (except in Phu Quoc island, not covered by the Project), forests are regerminated or replanted forests. Fragmentation of habitats created small species populations thus making them more vulnerable to economic development and climate change.

There are existing nature conservation areas in the MRD region include national parks, nature biosphere, landscape conservation areas, UNESCO biosphere conservation areas such as the U Minh forests in Kien Giang , the UNESCO Wetland in Ca Mau, the Tra Su wetland in An Giang province, the bird sanctuary in Bac Lieu, or the Tram Chim National Park in Dong Thap. These full list of conservation areas in the Mekong Delta are listed in MONRE Decision no. 1107 dated 12 May 2015.

Unconfirmed information on the number of terrestrial species exposed that there are 23 mammals, 386 birds, 35 reptiles and 6 amphibians. Aquatic species are diverse with 347 species including 187 floating floral species and 100 fauna species, and 60 benthic species. There are up to 1100 fish species in rivers, estuaries and along the coast. Mekong river is the unique habitat of 87 species. Biodiversity is high in the inland inundated areas with typical landscape of the MDR located in Dong Thap Muoi, Long Xuyen quadrangle, parts of Long An, Tien Giang and the west of the Hau river, and the peat swamps in U Minh forests in Ca Mau and Kien Giang. However, many parts of these areas had been hydrologically disconnected from the large rivers, natural ecosystems in the MDR has been degraded seriously. Stagnant water developsdevelops leading to the expansion of invasive species while habitats for migratory bird and fish have been narrowed down. Between 2008 and 2016, 63 species became instinct. From 2012 to 2016, the areas of mangroves were reduced about 10%, about 15,340 ha. The areas of malaleuca forest also reduced 59.5% in about 10 years. The composition of protective species in the Mekong Delta has been significantly degraded due to

removal of mangroves, melaleuca deforestation, fragmentation of habitats and human activities. There are 50 endanger species in MDR (6 mammal species, 16 bird species, 13 reptile species, 9 amphibians, 6 fish species).

The project investments will not be located in any critical natural habitats and forests. Screening for proximity to protected areas, forests, ecologically important areas when the locations of specific investments, source of raw construction materials, waste disposal sites and any relevant ancillary work items are identified. The presence of endangered species in the areas of influence will also be conducted during environmental assessment. The project will not support those investments that are located in critical natural habitats and forests or potentially cause significant negative environmental impacts to ecologically important areas. A number of studies on the sensitivity of natural habitats in the Mekong Delta have been carried out. The ESA process should review these studies and identify the key environmental impacts that project investments including livelihood activities are likely to have on natural habitats. Depending on the sensitivity of project locations, the TORs for ESIAs/ESMPs will include the requirements to assess the potential impacts on ecosystem services and aiming at providing multiple season/multiple year data. Special attentions will be paid to the low-laying coastal areas.

The ESMPs will include the measures to mitigate the identified potential negative impacts and risks caused to biological resources and biodiversity, including the potential impacts of dredging on fish and aquatic species, forest fire risks related to the behaviors of the workers if relevant etc. Where earthworks taking place in areas with the presence of acid-sulphate soils, the ESIA will include the measures to reduce soil acidity and manage leakage water/surface runoff in order to prevent spreading of acidity into the surrounding land and water bodies as terrestrial and aquatic habitats of biological resources. The DMP will be required to include measures for mitigating the potential impacts and risks on aquatic lives and aquaculture.

For sub-projects involving wave breakers and dykes in the coastal area, the potential risks and impacts on coastal and estuary ecosystems will be identified and assessed, and mitigation measures will be proposed accordingly.

The ESA process will also consider and assess the potential biological risks and impacts related to ecotourism once the project supports on this area become clear. Mitigation measures will be proposed accordingly and included in relevant ESMPs.

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

This standard is relevant. Initial social screening activities show that there will be potential impacts on the Khmer community in the project area. It is confirmed that Khmer community qualifies as Ethnic Minority (Indigenous Peoples, following WB terminology) as per ESS7. Khmer have largely integrated into the Kinh community and have inter-married with the Kinh. However, this group makes up a large proportion of the poor and remains the poorest and more vulnerable group. The landlessness incidence is also high among Khmer households in the Mekong Delta. Khmer group in the MKD has their own language but has largely integrated into the Kinh community and is able to communicate also in Vietnamese. Khmer people in the Mekong Delta have a rich and unique traditional culture.

Buddhism is an almost unique religion and has influenced many aspects of Khmer life. Each “soc” (village) has at least one temple with a characteristic architecture: the social face, the religious and cultural center of the community. Impacts on Khmer cultural and religious sites will have to be assessed: i.e., access to pagoda/temples, especially during the construction period, and relocation of graves. Regarding the implementation of income restoration programs to be included in the ESIA/ESMPs or the RPF/RPs, the below average level of educational attainment among the Khmer community may require additional support on training.

Meaningful consultation among the Khmer community will have to identify a bespoke approach for income restoration. The strategy for engagement with ethnic minorities will be included in the SEP and an Ethnic Minority Planning Framework (EMPF) will be prepared, consulted, and disclosed prior to the appraisal. In those areas where Khmer people are confirmed (following the four criteria stated in para 8 of ESS7), site-specific Ethnic Minority Development Plans (EMDPs) will be prepared after appraisal for implementation. Project activities in areas where EMs are present must ensure they are fully consulted in a culturally-appropriated manner and have opportunities to benefit from the project activities.

ESS8 Cultural Heritage

The Oc-Eo ancient native culture appeared since the 10th century, was first discovered in Oc Eo of Kien Giang province. Historical structures such as temples, pagodas and churches of the Kinh ethnic group, the pagodas of the Khmer ethic exist in Tra Vinh, Soc Trang. Islam cathedrals are also present in An Giang provinces.

The SEA provided a comprehensive list of existing cultural heritage sites in each province in the MD region. The typical cultural heritages include the Mahatup (Chua Doi) and Dat Set (Clay) temples in Soc Trang, Chua Phat lon and Chua Tam Bao in Kien Giang, the Gac Thap historical site in Dong Thap province, the Dong Noc Nang historical site and the Thanh Hoang Temple in Bac Lieu province. Thus, screening for the potential impacts on cultural heritages will be conducted for the proposed physical investments. Siting of relevant works (such as agricultural hubs) will avoid the existing physical cultural sites. During the preparation of the ESIAs/ESMPs, further survey and consultations with the local cultural and archeological authorities will be carried out to identify the existence of tangible and intangible heritage within the area of influence of the Project; assess the extent to which the project interventions may cause impacts to these cultural assets; and propose appropriate mitigation measures to be included in ESMP for implementation. In any case, the ESA will 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

The project will not channel funds through financial intermediaries, the CPO and PPMU will manage the fund.

C. Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways	Yes

OP 7.60 Projects in Disputed Areas	No

III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered? No

Financing Partners

None

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

Actions to be completed prior to Bank Board Approval:

(i) Prepare and implement the following sets of documents for each of the subproject in consistent with ESF requirements:

- Final Draft Environmental and Social Impact Assessment (ESIA) and/or Environmental and Social Management Plan (ESMP) for each sub-project
- Final Draft Resettlement Policy Framework (RPF) for MARD-managed subproject (which also meets the GoV requirement for multi-province projects) and final draft Resettlement Plan (RP) for each province-managed subproject
- Final Draft Ethnic Minority Planning Framework (EMPF)
- Final Draft Environmental and Social Commitment Plan (ESCP).
- Final Draft Stakeholder Engagement Plan (SEP).
- Final Draft Labor Management Procedures (LMP). The presentation of one LMP will be similar to SEP

Given the MARD subproject likely covers several provinces where provincial-managed investments are also located, one LMP and one SEP will cover all subprojects. These documents should be comprised of common parts which are applicable for all subprojects, and individual section(s) that are applicable to multiple subprojects

(ii) Prior to project appraisal, disclose the draft ESIAs, and ESCP, SEP, RPF/RPs, EMPF 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):

- Cooperation mechanisms in the project covering multiple subprojects but without formal coordinating roles.
- Consultation and information disclosure during detail design and project implementation

- Appointment and mobilization of staff being in charge of ES aspects in provincial-managed subprojects

C. Timing

Tentative target date for preparing the Appraisal Stage ESRS 05-May-2024

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Implementing Agency(ies)

Implementing Agency: Ministry of Agriculture and Rural Development (MARD)

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VI. APPROVAL

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Practice Manager (ENR/Social)	Martin Henry Lenihan Recommended on 04-Jan-2023 at 17:18:37 GMT-05:00

Safeguards Advisor ESSA	Nina Chee (SAESSA) Cleared on 10-Jan-2023 at 21:26:18 GMT-05:00