



Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 24-Apr-2019 | Report No: PIDISDSC25595

**BASIC INFORMATION****A. Basic Project Data**

Country Vietnam	Project ID P167595	Parent Project ID (if any)	Project Name Transforming the Mekong Delta GCF Program for Vietnam (P167595)
Region EAST ASIA AND PACIFIC	Estimated Appraisal Date Aug 26, 2019	Estimated Board Date Dec 16, 2019	Practice Area (Lead) Environment & Natural Resources
Financing Instrument Investment Project Financing	Borrower(s) Government of Vietnam	Implementing Agency Ministry of Agriculture and Rural Development (MARD)	

Proposed Development Objective(s)

The project development objective (PDO) is to scale up the transition of small-holder farmers to climate resilient livelihoods and strengthen their participation in flood-based value chains in select areas of the upper Mekong Delta in Vietnam.

This Project is part of the overall Mekong Program for Vietnam and Cambodia.

PROJECT FINANCING DATA (US\$, Millions)**SUMMARY**

Total Project Cost	40.00
Total Financing	40.00
of which IBRD/IDA	0.00
Financing Gap	0.00

DETAILS**Non-World Bank Group Financing**

Trust Funds	40.00
Green Climate Fund	40.00



Environmental and Social Risk Classification

Substantial

Concept Review Decision

Track II-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

1. The Mekong Delta has been identified as one of the most vulnerable deltas to the impacts of climate change. Agriculture and aquaculture are increasingly affected by changes in freshwater supply due to salinity intrusion, flooding, increasing tropical cyclone intensity, and increasing temperatures. Domestic freshwater supply is expected to become less reliable due to erratic rainfall and salinity intrusion into groundwater resources. Coastal infrastructures are exposed to increased tropical storm intensity, long-term sea-level rise, and sudden-onset fluvial and coastal flooding.
2. Already, both Vietnam and Cambodia are experiencing wetter wet seasons, drier dry seasons, higher intensity rainfall, flash flooding, and increased frequency of tropical cyclones. The average annual temperatures and wet season precipitations are expected to increase significantly. Increases in wet precipitation will be coupled with increased peak daily precipitation events, drier dry seasons, and compounding water availability issues. Rice yields in the Mekong Delta are also expected to decline from 6 percent–12 percent due to the resulting inundation and salinity intrusion, while aquaculture production will also be affected.
3. In the upper delta ---the intensification of agriculture (that is, moving from two to three rice crops per year) and increased water use also threaten the water resources quality and quantity. Construction of protection dikes for intensive rice farming in recent years also reduced the water retention capacity in the upper part of the delta, resulting in more serious seasonal flooding for downstream provinces.

Sectoral and Institutional Context

4. The multi-sectoral challenge of unsustainable land use, changing hydrological regimes, and climate variability and change in the Mekong Delta requires an integrated solution in both Vietnam and Cambodia, and the related transboundary linkages. This justifies a clear need for strong and sustained effort by the Vietnam and Cambodia governments to help establish a growth path for their countries that is resilient to climate variability and able to adapt to future change, as well as help countries take advantage of external and domestic finance opportunities for sustained action on climate risks. Delta planners and decision makers need to continue making important strategic decisions, across sectors, on the future direction and nature of development amidst an uncertain future.
5. Recognizing these challenges, in Vietnam, the government has just begun implementation of the Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods Project (IDA \$310 million) –which uses an inter-sectoral and integrated approach to enhance tools for climate-smart planning and improve climate resilience of land and water management practices in selected provinces of the Mekong Delta. With high visibility and political commitment, this project approach is backed by new emerging agendas on regional coordination and regional planning mechanisms.
6. The upper delta –the focus of this Project –comprises the alluvial terraces, riverine levies, and wetland depressions of Kien Giang, An Giang and Dong Thap Provinces. The “deep flood” zones of the upper Mekong Delta in Vietnam is characterized by annual river flooding and occasional extreme flooding, and includes the Plain of Reeds



(PoR) and the Long Xuyen Quadrangle (LXQ). The upper delta floodplains are dominated by freshwater from the Mekong Basin and the annual overbank flooding of the Tien and Hau river channels and include the focal provinces of An Giang and Dong Thap. During the wet season, floodwater levels regularly exceed 2.0 m. Flooding in the delta is a natural process that maintains productivity and drives the dynamic evolution of the Mekong Delta. The annual flood event is responsible for replenishing the fertile sediments that are vital to agricultural productivity. Rice is the dominant crop accounting for nearly 70 percent of the agricultural production in An Giang and Dong Thap. Most of the area has been converted to agricultural land for rice intensification.

7. The environmental, social, and economic benefits of flooding in the upstream delta area are greater than in any other river basin in the world. The annual flood pulse plays a vital role in the basin's agriculture and fisheries. Floodwaters are stored for use in the dry season, particularly for irrigation. Flood-deposited sediments improve soil fertility across the floodplains. Finally, floods flush and dilute stagnant and polluted waters, recharge groundwater tables, and maintain river morphology. Additionally, the annual flood pulse sustains the world-renowned productivity of Mekong's freshwater fisheries.

8. However, rapid intensification of multiple crop rice farming over the past 20 years through extensive development of water infrastructure (high dikes and associated irrigation systems) has strongly reduced flood relief capacity, affecting downstream provinces negatively.

9. Fragmentation of the floodplains and increasing pressures from upstream developments also considerably affect the natural flow of water, sediments, and nutrients. These areas have experienced significant dike building for expansion of a third annual rice crop and to protect homesteads and human settlements from flooding, which has reduced flood water retention capacity and enhanced extreme floods in 2011. This also causes a decrease in rice yields due to soil degradation and a lack of sedimentation. In the upper delta, floods are projected to have a higher magnitude (deeper inundation) and longer duration. The main strategy for this sub-region is to protect and/or reclaim the benefits of controlled flooding (water retention, sediment flushing, groundwater recharge, etc.) measures while increasing rural incomes.

B. Relationship to CPF

10. The proposed Project represents an important contribution to the implementation of the recent Prime Minister's Resolution 120 on Sustainable Development of the Mekong Delta. Specifically, the proposed Project aims to address the issues of regional coordination, sustainable financing and international cooperation in the Mekong Delta, as well as finance the interprovincial investments which respond to some urgent needs identified and support the large-scale transformation envisioned in the Resolution. In addition, the proposed Project substantively adds to the climate resilience focus included in Vietnam's overall Socioeconomic Development Plan and is aligned with the World Bank's Country Partnership Framework.

C. Proposed Development Objective(s)

11. The project development objective (PDO) is *to scale up the transition of small-holder farmers to climate resilient livelihoods and strengthen their participation in flood-based value chains in select areas of the upper Mekong Delta in Vietnam*. This Project is part of the overall Mekong Program for Vietnam and Cambodia.

Key Results (From PCN)

An increase (number or value) of climate resilient flood-based cropping adopted by farmers in the Plain of Reeds and the Long Xuyen Quadrangle

Increased in employment (number), including for women, from flood-based value chain development in project area

An increase in the number of small farmers accessing reliable, timely and relevant climate information.

Increase of climate resilient livelihoods-related resources and training modules by DARDs/DONREs in project area

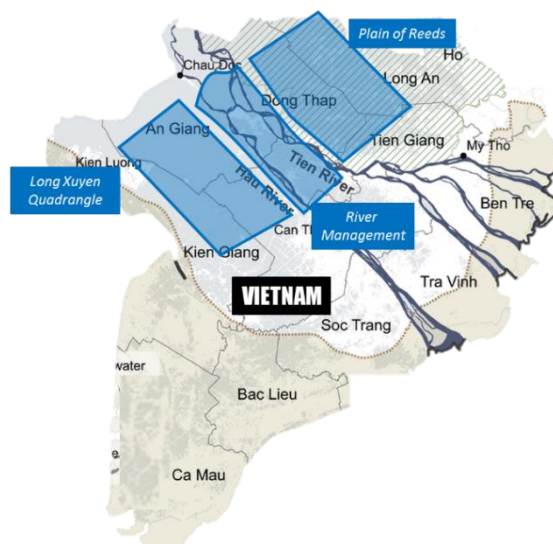


D. Concept Description

12. This proposed project is part of a multi-country program that covers both Vietnam and Cambodia which seeks to enhance a spatially integrated approach across the Mekong Delta in Vietnam and Cambodia to increase climate resilience, identify innovative investments in nature-based solutions, that contribute to the paradigm shift in delta development that adapts to climate risks; and contribute to long-term planning, institutional coordination, and sustainable financing efforts in Vietnam and Cambodia. The Program –will aim to follow a Series of Projects (SoP) approach, with the Vietnam Project being prepared first. The Projects in Vietnam and Cambodia –which are individual but related investment projects –will adopt a regional and integrated approach for the Mekong Delta that harmonizes social, economic, institutional and policy needs at scale (crossing administrative boundaries) and focusing on knowledge sharing aspects for improved decision-making, while considering uncertainties and reconciling sectoral trade-offs. Innovation in livelihood models, as well as in nature-based solutions (infrastructure as well as non-structural measures) is at the heart of this Program -and aims to support a paradigm shift with systems adaptation feeding into long-term transformational adaptation (see figure).

13. The proposed Project would complement the on-going IDA project on Integrated Climate Resilience and Sustainable Livelihoods (MD-ICRSL) --- following the same transformative and integrated approach. The MD-ICRSL project provides financing for water management infrastructure and works on pilot projects to help bring about a transition towards climate resilience livelihoods. *However, to bring about change and transformation at the farmer/ community level requires further investments in small-scale infrastructure, development of value chains for climate-resilient crops, and capacity building/extension as well as climate services.* This GCF grant –brings in critical financing to the farm/ community level, to deepen the transformation to a sub-regional strategy for the upper delta and work to strengthen interprovincial coordination.

14. The proposed project for Vietnam focuses on the upper delta provinces of Vietnam’s Mekong Delta. The provinces within the Plain of Reeds (PoR) and Long Xuyen Quadrangle (LXQ) have undertaken visioning exercises and reached wide political consensus to transition out of three-rice towards more nature-based solutions of flood-based agriculture which help mitigate extreme floods and droughts. *While rice-based value chains are well-developed in the upper delta, there is a strong need to improve, and enhance flood-based agriculture value chains, that would directly help in facilitating livelihood transitions at the farm/community levels.* Such interprovincial investments are expected to provide efficient and cost-effective solutions that work to adapt to natural conditions of the floodplain, rather than invest in expensive structural measures that maintain business as usual.



15. The Project includes two components –the first, supporting the implementation of policies related to PM Resolution 120; the second, providing critical financing for feasibility studies and other analyses to prepare interprovincial projects, as well as for small-scale infrastructure to enable farmers/ communities to effectively transition livelihoods for greater climate resilience. The two components are to be undertaken in parallel.



Component 1: Policy Implementation Support for PM Resolution 120 (~US\$7 million)

Sub-component 1.1: Supporting Inter-Provincial and Regional Coordination

16. Under PM Decision 593, several visioning and technical workshops were undertaken to explore interprovincial projects in the Plain of Reeds and Long Xuyen Quadrangle. Following Decision 593, MPI issued a set of criteria on regional linkages projects and guidelines on classification and selection of regional public investment projects (Decision No. 625/QD-KHDT). MPI requested all provinces in Mekong Delta and line ministries to develop regional project/program proposals and submit for screening and inclusion in the regional public investment project list. More recently, under Resolution 120, MPI has been tasked to review Decision 593 and propose solutions to improve regional coordination in the Mekong Delta, to submit to PM by December 2018. A Bank-executed TA (Australia-Bank Partnership Phase 2 – ABP2) is help support MPI on studies relating to regional coordination (including lessons learned from other countries). This GCF sub-component will help support the implementation of policies/mechanisms relating to regional coordination, and specifically relating to interprovincial projects.

Sub-component 1.2: Supporting Financing Mechanism for the Mekong Delta

17. Through the recent Prime Minister Resolution 120, the GoV is discussing the design and development of a financing mechanism (sources of capital, instruments, and areas to be financed) that helps support priority projects that are climate resilient. Bank-executed TA is currently underway to provide support to MOF on (i) international experience in similar funding mechanisms, (ii) ways in which funds of the nature that MOF is considering have been capitalized, and (iii) rationalization of funds available now. The results from this TA will be directly linked to the design of this sub-component. The GCF funding will help support capacity building activities as well as technical assistance to develop monitoring and prioritization frameworks for what is to be financed.

Sub-component 1.3: Improving Enabling Environment for Private Sector Financing and Entrepreneurship

18. One of the tasks highlighted in the PM Resolution 120 is to encourage and attract investment from private sector in agricultural and rural development in the Mekong Delta through review and formulation of appropriate mechanism and policies. Related to the scope of this project, livelihood transitions being promoted in the deep flood zone will require supporting value chains for flood-based agricultural projects, including enabling private sector financing. The aim of this objective is to help develop value chain linkages and global value chain integration for the flood-based products. The Project will partner with selected provinces and help to identify with other players in value chains to enforce regulations, facilitate linkages and promote high value-added exports.

19. During project preparation, the team will work closely with ongoing TA on agribusiness in the Mekong Delta. One is IFC/FCI's work on agribusinesses in Vietnam (and an upcoming TA in the Mekong Delta), which will help to design solutions relating to the main constraints in flood-based agribusiness such as weak linkages along the value chain, lack of market information, limited branding and marketing skills to promote quality and safe products in high value and sustainable markets. A second is *under ABP2, work on private sector well as on livelihoods will begin broad analysis of gaps in enabling environment for private sector entry in the Mekong Delta*. This sub-component will build on those results, deepening the findings to specific agribusiness in the upper delta to help transition to climate-resilient cropping, as well as help support implementation of recommendations that are developed from that work.

20. Specifically, this sub-component will help to (i) strengthen the enabling environment in flood-based and climate-resilient agribusiness, with roles and responsibilities of the public and private sector and (ii) identify incentives for private sector participation in climate-resilient agribusiness in the flood retention areas of PoR and LXQ; and (iii) reducing the financial risks associated impacts climate change on the raw material base such as the use of crop insurance.



Sub-component 1.4: Enhancing Climate Information Services and Transboundary Collaboration in the Mekong Delta

21. To support the enabling environment for the appropriate deployment of climate resilient value chains, the project will support the development of improved agro-meteorological services, and training on the formulation and dissemination of dynamic or updated crop calendars, the formulation and distribution of advisories for slow-onset climate events such as droughts, floods, decadal and seasonal climate bulletins, as well as early warnings for extreme rainfall events. The Project may also support the design of tools and guidelines for managing climate risks at farm and landscape levels, linked to an ICT platform, and to the training provided to farmers (building on VNSAT). *Ongoing work –financed by ABP2 --on Land, Climate & Water Data Analytics Services –will help to design this.*

22. Specific activities that work towards fostering technical collaboration across the Mekong Delta, with Cambodia in terms of research (between research agencies), knowledge sharing (technical guidance and livelihood models), and learning (possible south-south knowledge exchange). This transboundary is prioritized by the Government of Vietnam, which increasingly sees the value of more regional solutions relating to climate resilience. Technical collaboration will be facilitated through twinning arrangements between research agencies as well as universities in Vietnam and Cambodia. Joint training activities may use the Mekong Delta Center (to be established under the MD-ICRSL project) and will be aligned with the Mekong GEF grant as well as the training subcomponent under the ABP2.

Component 2: Scaling up Climate Resilience for Interprovincial Projects (~\$30 million)

23. The main activities under Component 2 of the project focus on the preparation of feasibility studies related to flood ‘friendly’ and nature-based infrastructure, climate-resilient investments, and potential investments in floodplain eco-tourism, including: i) financing for small infrastructure at the farm/ community level and connecting with flood-based agriculture value chains; ii) small-scale infrastructure investments for flood retention ponds, low embankments, in-field canal improvements etc; small infrastructure at the farm/ community level to enable their participation in the livelihood transitions and connecting with flood-based agriculture value chains; and iii) “soft investments” needed to enable scale out of the livelihood models. Additional activities will support riverbank erosion management in the upper delta. Visioning workshops were held for the Plain of Reeds (Dong Thap PPC-led) and the Long Xuyen Quadrangle (An Giang DARD-led) in October 2016 and May 2017, respectively ---to brainstorm and build consensus on proposed changes in land and water use. In addition, following the issuance of the Decision 625 on criteria for regional linkage projects, MPI provided technical support to the provinces to discuss and identify regional investment projects to be considered for finance by the state budget.

Sub-component 2.1: Investing in Natural Capital in Plain of Reeds (~US\$12 million)

24. This part of the floodplain is being considered for an interprovincial project that will restore its ecosystem functions, to absorb flood waters, as well as to moderate salinity intrusion further downstream. Results from the visioning workshop have shown strong interest in building value chains around fruit production (such as mango, pineapple), lotus, melaleuca aquaculture (such as catfish and blue-legged shrimp). With the articulation of an investment plan in line with the visioning workshops, the proposed Grant will help finance the necessary feasibility studies related to flood ‘friendly’ and nature-based infrastructure, as well as potential investments in floodplain eco-tourism. Also included will be “soft investments” needed to enable scale out of the livelihood models that are proving to be viable.

- This includes financing for small water management infrastructure at the farm/ community level to enable their participation in the livelihood transitions they are expected to undertake, and well as related to connecting with flood-based agriculture value chains. Identified small-scale infrastructure investments include financing for flood retention ponds, low embankments, in-field canal improvements etc.



- Potential investments in small-scale infrastructure to derive value from floodplain ecosystems, including from potential ecotourism opportunities.
- The component will also finance the feasibility studies for select medium-scale investments which are proposed by the provinces within the PoR sub-region. Under Decision 625 (criteria for regional projects) MPI will review these proposed investments and develop a priority list of interprovincial projects.
- The Project will also improve climate resilience of each stage of the agricultural value chain by investing in critical production and post-harvest infrastructure, intensification, and commercialization of select flood-based agriculture/aquaculture products –at the community/district level.

Sub-component 2.2: Securing Long-Term Sustainability in Long Xuyen Quadrangle (~US\$12 million)

25. This part of the floodplain is being considered for an interprovincial project to support a phased transition from low-value intensive rice to branded high-value and environmentally-friendly production. Preliminary stakeholder consultations have shown interest in building value chains around giant freshwater prawn, lotus farming (including setting up cooperatives for lotus milk for export), as well as innovations such as floating vegetable gardens, linked to potential agribusiness. The grant is expected to finance the “soft investments” needed to enable scale out of the livelihood models that are proving to be viable. This includes the preparation of feasibility studies for related climate-resilient investments; and identifying priority infrastructure and livelihoods support.

- The grant would include financing for small infrastructure at the farm/ community level to enable their participation in the livelihood transitions they are expected to undertake. Identified small-scale infrastructure investments include financing for flood retention ponds, low embankments, in-field canal improvements etc.
- The project aims to support agricultural cooperatives to undertake the construction of post-harvest units for cleaning, drying and storage on selected flood-based crops, and will be subject to their willingness and readiness to integrate climate-resilient practices and technologies at every stage of the value chain.
- Potential investments in small-scale infrastructure to derive value from floodplain ecosystems, including from potential ecotourism opportunities.
- The component will also finance the feasibility studies for select medium-scale investments which are proposed by the provinces within the LXQ sub-region. Under Decision 625 (criteria for regional projects) MPI will review these proposed investments and develop a priority list of interprovincial projects.

Subcomponent 2.3: Piloting Innovation in Riverbank Erosion Management (~US\$6 million).

26. Riverbank erosion has been a critical issue of the Mekong region, especially the upper and middle delta (An Giang, Dong Thap, Vinh Long, Can Tho). Serious landslide incidents happen more frequently, creating horrendous damages to communities and livelihoods along the river banks. MARD is currently tasked to urgently work on a comprehensive river management plan and land-use plans for the riverbank corridors, aligned to the overall flood retention strategy of the sub-region.

27. Despite the urgency and seriousness of the riverbank erosion challenge in the region over the last few years, efforts from the GoV have largely been focused on dealing with the incidents of landslides and resettlement of affected households as emergency reaction. There is a lack of research studies, activities or programs undertaken to tackle the issue in a systematic, comprehensive and strategic manner.

28. The grant will support the identification and piloting of innovative solutions along the Hau and Tien rivers to address river erosion and the associated issues related to the affected communities and livelihoods. The subcomponent will support the GoV to fill these gaps and support the implementation of the Mekong River Management Plan through:



- i. In-depth research on the appropriate technical solutions to riverbank erosion management and river training;
- ii. Piloting of innovative measures (groins, reveting, rip-rap) for management of riverbank erosion and riverbank corridor;
- iii. Undertaking feasibility studies on riverbank erosion management.

Component 3: Project Management and Monitoring (US\$3 million)

29. The component will support activities related to the management and implementation of the program.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	Yes
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

As part of environmental and social screening, the team has reviewed a number of relevant documents, including project concept note, resolution 120 of the Government on sustainable development of Mekong Delta, decision 593 of the Prime Minister on piloting the socio-economic linkage for Mekong Delta development, land law, labor code. In addition, documents (e.g. regional environmental and social assessment, PAD, ISRs) prepared under Mekong Delta Integrated Climate Resilience and Sustainable Livelihood Project (MDICRSLP) have also been reviewed to inform E&S risks and impacts of GCF funded operation.

The project is expected to bring about significant positive impacts for enhancement of climate resilience, and contribution to long-term planning, regional coordination, and sustainable financing efforts in Vietnam's Mekong Delta. The potential adverse environmental and social risks and impacts would be associated with policy revision and development activity under Component 1 that may have environmental and social implications, and the activities under Component 2. There is medium to low probability of serious adverse effects to the environment and human health (e.g., due to accidents, improper use and disposal of pesticides, etc.) due to activities of the project. Although sensitive areas such as national parks and a bird sanctuary exist in the project area. However, no project activities will be allowed in these sensitive areas. In addition, given the nature and small scale of the project activities the adverse impacts on them are expected small. The substantial environmental risks are related to the technical assistance (TA) which will help preparation of feasibility studies (FS) for future medium-scale infrastructure projects. The outcomes of the TA support would have environmental and social implications going forward, entailing risks and potentially inducing adverse impacts. Given the type, location, sensitivity and scale of the future projects with their FS prepared by the project, they may pose substantial risk for the environment.

The social risks/impacts of the project are rated as Moderate. Component 1 of the project may have some social implications across a wide geographic area. The site-specific impacts under Component 2 due to the construction of small livelihood related infrastructures would be mostly temporary, predictable and manageable. The social risks/impacts associated with interprovincial investments, for which the project will finance feasibility studies, are considered moderate. This largely because of the moderate scale of the infrastructure that will be financed. There is a also possibility that some livelihood models (especially if shrimp farming is promoted) having negative consequences for neighboring farmers who continue rice production, and do not adopt these livelihoods.



The relevance of the ESSs to the project has also been assessed and include ESS1 through ESS8 and ESS10. In addition, the Bank Policy on Projects on International Waterways is triggered for the project.

Note To view the Environmental and Social Risks and Impacts, please refer to the Concept Stage ESRS Document.

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APPROVAL

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