# Early Warning System

# WB-P153544

Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods Project



### Early Warning System Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods Project

#### **Quick Facts**

| Countries                | Vietnam  |
|--------------------------|--|
| Specific Location        | An Giang, Kien Giang, Dong Thap, Ben Tre, Tra Vinh, Soc Trang, Ca Mau, and Bac Lieu                            |
| Financial Institutions   | World Bank (WB)  |
| Status                   | Active   |
| Bank Risk Rating         | A  |
| Voting Date              | 2016-06-10   |
| Borrower                 | GOVERNMENT OF VIETNAM. MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT   |
| Sectors                  | Agriculture and Forestry, Climate and Environment, Construction, Water and Sanitation                          |
| Potential Rights Impacts | Healthy Environment, Housing & Property, Indigenous Peoples, Labor & Livelihood, Right to Food, Right to Water |
| Investment Type(s)       | Loan   |
| Investment Amount (USD)  | \$ 310.00 million  |
| Project Cost (USD)       | \$ 387.00 million  |



#### **Project Description**

The project's purported aim is to enhance tools for climate-smart planning and improve climate resilience of land and water management practices in selected provinces of the Mekong Delta in Vietnam. The project has five components:

#### **Component 1**

Enhancing Monitoring, Analytics and Information Systems To upgrade and expands monitoring systems for groundwater and surface water and develop a computer-based operation system of hydraulic infrastructure to operate network of gates and canals in the delta. It will also support the reports to advise land-use planning, spatial and territorial development, and identifying of priority 'low-regret' and climate –resilient investment.

#### Component 2

Managing Floods in the Upper Delta will potentially modify water and agricultural infrastructure The finance infrastructure schemes include increasing water retention, irrigation and upgrading of reservoirs, livelihoods improvement which support the transition from triple rice to alternative cropping and ecosystem restoration in An Giang and Dong Thap provinces.

#### Component 3

Adapting to Salinity Transition in the Delta Estuary This component consists of construction of coastal defense from earth embankments and coastal mangrove belts; modification of water and agriculture infrastructure including sluice gates to improve water quality in Ben Tre, Tra Vinh and Soc Trang; support rice farmers to change to more brackish water activities such as mangrove-shrimp, rice-shrimp.

#### Component 4

Protecting Coastal Areas in the Delta Peninsula This component includes restoration of mangroves to enhance coastal defense, support farmers to practice more sustainable brackish water activities such as mangrove-shrimp and other aquacultures, control of ground water abstraction for agricultural/aquaculture of freshwater supplies for domestic use and construction of sluice gates to manage water conditions in Ca Mau and Kien Giang. The subproject may include construction of water reservoir in Ca Mau in second phase.

#### **Component 5**

Project Management and Implementation Support

The typical investments in component 2,3 and 4 include upgrading rural roads, rehabilitation and reinforcement of low dikes in floodplain, sea and river dikes to create sediment areas for mangroves or flood/salt intrusion regulation, construction of infield sluice gates and culverts through sea dykes to regulate salinity levels, construction of weighbridge and flood spillways, construction and rehabilitation of dredging canals.

Locations: An Giang, Dong Thap, Ben Tre, Tra Vinh, Soc Trang, Bac Lieu, Ca Mau, Kien Giang, Vinh Long

Resources needed: land acquired, mangrove forest, waterways etc . Bank documents identified that 823 household to be affected by permanent land acquisition; 1,249,974 m2 agriculture land will be acquired,

#### **Early Warning System Project Analysis**

#### APPLICABLE SOCIAL & ENVIRONMENTAL STANDARDS

Based on Bank documents, the following environmental and social safeguard policies are triggered:

**Environmental Assessment OP/BP 4.01** - is triggered because the construction of sluice gates are dredging of canals may expose acid sulfate soils and release hazardous substances resulting in contaminated sediment.

**Natural Habitats OP/BP 4.04 -** triggered because construction and operation of water infrastructures such as sluices gates have small potential impacts on natural habitats of rivers, canals and estuaries. As well as Certain proposed project activities would impact the ecological flow of the rivers in the Mekong Delta, impacting aquatic flora and fauna. Changes in the ecological flow of the Mekong River may result due to installation of sluice gates and other flood/salinity control measures; leading to a reduction in the diversity and quantity of fish populations.

**Forests OP/BP 4.36** - triggered because Coastal protection/restoration to restore coastal landscapes to enhance resilience of in land farming, reduce vulnerability to the impacts of sea-level rise and coastal erosion the bank document identified increased area of mangroves in coastal areas.

**Pest Management OP 4.09** - triggered because potential increased use of pesticides and pollution and disease from shrimp farming within the development of livelihood models in sub-projects.

**Physical Cultural Resources OP/BP 4.11**- triggered because During the implementation of subprojects, relocation of graves is likely to be necessary. And These impacts are considered moderate, long term, unavoidable. Bank document identified 28 graves to be affected.

**Involuntary Resettlement OP/BP 4.12 -** triggered because Project activities are likely to involve some land acquisition resulting in physical land take and impacts on livelihood and resources. This may occur in components 2,3 and 4. It may be necessary to compensate local communities for lost homes, immovable assets and/or lost revenues/livelihoods.

**Safety of Dams OP/BP 4.37 -** triggered because The potential construction and operation of a water reservoir for water supply and fire prevention in U Minh Ha National Park in Ca Mau province, and thus may have significant impacts on natural habitats and biodiversity of the national park.

**Projects on International Waterways OP/BP 7.50** - triggered because the project is located in the Mekong Delta and may include flood retention and fisheries sub-projects that may have an impact on upstream riparian. but the Bank has determined that the project deals with existing schemes and will not produce any adverse impacts on upstream countries. On this basis, the project activities fall under the exception of the riparian notification requirement

**Indigenous People** - triggered because There are 1,845 ethnic minority households (6,641 people) which are potentially affected by the Sub project due to the proposed livelihood improving models. Bank documents also state that ethnic minority households may have to adapt or change their current livelihood models to more climate resilient ones.



#### **People Affected By This Project**

#### **OUR RISK ASSESSMENT**

Based on the World Bank's project documents, this project poses potential risks to the following human rights:

**The Right to a Healthy Environment** bank document identified project level construction may cause loss of vegetation covers, contamination of land and water due to disposal of dredged materials, exposure of acid sulfate soil from excavation, increase air pollution, noise, vibration. Improper management of sluice gate potentially cause epidemic of fish and shrimp diseases.

#### **Right to Property and Adequate Housing**

Bank documents identified 823 household are be affected by permanent land acquisition; 1,249,974 m2 agriculture land will be acquired, 70 household will be permanently relocated during the first year subprojects. 153 household to be temporary affected by land acquisition mostly in An Giang province with temporary acquisition of 108.00 m2 public land in Kien Giang.

#### The Right to Livelihood

The project will have long term impacts on current livelihood by changing community livelihood -from 3 crops rice to 2 crops, from rice farming to forest-shrimp growing. Potential decrease of incomes and disruption of livelihood may occur as bank documents identify: Water supply interruption is likely during construction. The interruption of water supply of rice cultivation and aquaculture ponds may result in lower incomes and the risk of uncontrolled situation of diseases on the shrimps. The bank document recognized the technical risk of the farmer livelihood transitions considered Substantial. Project may increase migration to urban areas because local people may not adapt well with the project activities.

#### Indigenous People Rights

Low education and landless ethnic minority men and women work low paid for shrimp and cockle farms. The conversion of livelihood model may pose significant impact to poor and landless ethnic minority people especially on the employment opportunities.

#### **Right to Water**

The construction of sluice gates, bridges, embankments, canals and river dredging may interrupt the irrigation and domestic water supply also to the near surface ground water. Based on a local source, there are conflicts in brackish areas due to the land use plan. People want to grow shrimp because of the higher profits, but all the infrastructures aim to promote rice farming. Therefore, it might lead to some conflicts in the brackish area.

#### **Right to Food**

The changes in water flow and interruption of rivers may affect the fish population and barrier to fish migration to the extend people downstream food are cultivated from the river ecosystems. The acquisition of the agricultural land would also affect the rights to food.



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#### **Investment Description**

• World Bank (WB)

Bank financing: World Bank Borrower: Government of Vietnam Amount of bank loan or investment: USD 310 million Total project cost: USD 387 million



#### **Contact Information**

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#### CONSULTATIONS

The bank document stated that two rounds of public consultation were conducted by the borrower in October 2015 and January 2016. The bank document stated that the consultation involved affected people and local authorities through public meeting, questionnaires, interviews, panel discussion. The affected people raised their concerns during public consultation on land acquisition, relocation and house demolition and impacts during construction and operation especially for local salt producers.

#### **PROJECT-LEVEL GRIEVANCE MECHANISMS**

Project-affected communities and individuals that affected by the project may submit complaints to the project-level grievance redress mechanism.

#### ACCOUNTABILITY MECHANISM OF WORLD BANK

The World Bank Inspection Panel is the independent complaint mechanism and fact-finding body for people who believe they are likely to be, or have been, adversely affected by a World Bank-financed project. If you submit a complaint to the Inspection Panel, they may investigate to assess whether the World Bank is following its own policies and procedures for preventing harm to people or the environment. You can contact the Inspection Panel or submit a complaint by emailing ipanel@worldbank.org. You can learn more about the Inspection Panel and how to file a complaint at:

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#### Bank Documents

- Integrated Safeguards Data Sheet (Appraisal Stage) Mekong Delta Integrated Climate Resilience and [Original Source]
- Integrated Safeguards Data Sheet (Concept Stage) Mekong Delta Integrated Climate Resilience and Su [Original Source]
- Official Documents- Disbursement Letter for Credit 5845-VN (Closing Package) (English) [Original Source]
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- Official Documents- Supplemental Letter Ref. Financial Data for Credit 5845-VN (Closing Package) (En [Original Source]
- Project Information Document (Appraisal Stage) Mekong Delta Integrated Climate Resilience and Sust [Original Source]
- Project Information Document (Concept Stage) Mekong Delta Integrated Climate Resilience and Sustai [Original Source]
- Vietnam Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods (MD-ICRSL) Project [Original Source]
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- Vietnam Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods Project : resettlem [Original Source]
- Vietnam Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods Project : social as [Original Source]

#### **Government Documents**

Project report: Mekong delta integrated climate resilience and sustainable livelihoods (MD- ICRSL/WB

[Original Source]



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#### **Other Related Projects**

• WB-P159976 GEF Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods Project