



**Note to Task Teams:** The following sections are system generated and can only be edited online in the Portal.

# Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 05-Apr-2017 | Report No: PIDISDSA21526

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

Country Vietnam	Project ID P163146	Project Name Vietnam - Emergency Flood Disaster Reconstruction Project	Parent Project ID (if any)
Region EAST ASIA AND PACIFIC	Estimated Appraisal Date 07-Apr-2017	Estimated Board Date 15-Jun-2017	Practice Area (Lead) Social, Urban, Rural and Resilience Global Practice
Lending Instrument Investment Project Financing	Borrower(s) Binh Dinh People's Committee	Implementing Agency Ministry of Agriculture and Rural Development	

**Proposed Development Objective(s)**

The Project Development Objective (PDO) is to reconstruct and rehabilitate infrastructure assets in disaster-affected project provinces (85 percent) and strengthen the capacity of the Government to effectively respond to future disaster events (15 percent). The PDO will be achieved by rebuilding key infrastructure assets based on a 'build back better' approach emphasizing all stages of infrastructure life cycle including design, construction, and maintenance and strengthening institutional capacities for climate and DRM.

Note: Achievement of efficacy will be assessed with 85 percent weight on reconstruction and rehabilitation of infrastructure assets and 15 percent weight on strengthening of the capacity of the government to effectively respond to future disaster events.

**Components**

Resilient Reconstruction of Flood-Damaged Infrastructure at the Provincial Level  
Disaster Recovery Capacity Enhancement  
Project Management  
Contingent Emergency Response

The processing of this project is applying the policy requirements exceptions for situations of urgent need of assistance or capacity constraints that are outlined in OP 10.00, paragraph 12.

Yes

**Financing (in USD Million)**

Financing Source	Amount
Borrower	15.16
Global Facility for Disaster Reduction and Recovery	2.00
International Development Association (IDA)	113.00



Total Project Cost

130.16

Environmental Assessment Category

B - Partial Assessment

Decision

The review did authorize the preparation to continue

Other Decision (as needed)

## B. Introduction and Context

### Country Context

1. **Since the economic and political reforms initiated in 1986, Vietnam has transformed itself from one of the world's poorest to one of the most dynamic emerging economies in East Asia.** In the past three decades, the country has enjoyed steady economic growth accompanied by notable decline in poverty reduction. Per capita income increased from US\$100 in the 1980s to about US\$2,100 in 2015. Social indicators have improved significantly with a 50 percent reduction in the under-five mortality rate, decline in the maternal mortality ratio, improved access to education, higher life expectancy compared to countries with similar per capita income, and improvement in access to services such as electricity and water. However, despite these gains, a third of the population, approximately 30 million people, lives close to the poverty line.

2. **Vietnam is highly vulnerable to natural hazards such as floods, typhoons, droughts, and landslides that pose a significant risk to development gains.** Every monsoon season, Vietnam is highly exposed to a combination of river plain flooding, flash floods, and associated landslides.<sup>1</sup> Almost 60 percent of the country's total land area and over 70 percent of its population are at risk to hydrometeorological hazards.<sup>2</sup> Over the past two decades, extreme weather events have caused more than 13,000 deaths and property damage in excess of US\$6.4 billion. Vietnam loses 1-1.5 percent of gross domestic product (GDP) annually due to natural disasters, with a peak loss of 2.9 percent of GDP in 2006. With climate change, the frequency and intensity of natural hazards are expected to increase. Vietnam is likely to incur, on average, US\$1.4 billion (VND 30.2 trillion) per year in direct damage due to floods, typhoons, and earthquakes. In the next 50 years, it has a 40 percent chance of experiencing economic loss exceeding VND 141.2 trillion (US\$6.7 billion) and a 20 percent chance of experiencing loss exceeding VND 171.2 trillion (US\$8.1 billion).<sup>3</sup> The poor and extreme poor, including ethnic minorities, are particularly vulnerable to economic shocks, including from disasters, weather extremes, and climate variability.

<sup>1</sup> Recent experience has illustrated that the country's financial risk from extreme weather efforts is increasing, along with the growing density of physical infrastructure and commercial activities in vulnerable areas.

<sup>2</sup> GFDRR (Global Facility for Disaster Reduction and Recovery). 2011. *Fiscal Impact of Natural Disasters in Vietnam*.

<sup>3</sup> Vietnam Sovereign Disaster Risk Finance Study led by the World Bank Disaster Risk Financing and Insurance Program, with technical assistance from impact forecasting and financial support of Swiss State Secretariat of Economic Affairs (SECO) (2016).



3. **High poverty rates and extreme exposure to floods and storms make the Central Region of Vietnam a priority area for efforts to strengthen disaster and climate resilience and improve well-being of vulnerable communities.** The Central Region is marked by higher-than-average poverty rates. The rivers here are mainly short and steep, and heavy rainfall, typically related to tropical cyclones, results in riverine or flash flooding. The central provinces lie along the coast of Vietnam and face challenges in responding to climate change. The number of hot days has increased significantly from 1 percent to 3 percent every 10 years. Noticeably, heavy rain has increased by 31 mm to more than 180 mm every 10 years. Total rainfall of days with torrential rain and total rainfall of days with rain have increased significantly in Quang Nam, Da Nang, Quang Ngai, and Quy Nhon with approximately 50 mm to more than 250 mm every 10 years. Mean sea level has visibly risen in the East Sea and along the Vietnam coast at the rate of about 2.8 mm per year, highest in the coastal zones in the Central and Southwest regions at 2.9 mm per year.<sup>4</sup> Recurring extreme weather events risk slowing down economic growth, and poverty contributes to vulnerability of local communities, particularly in disaster-prone areas.

4. **While the Central Region is heavily exposed to storms and floods, some areas are also vulnerable to droughts.** Approximately 2 million people living in the Central Region were severely affected by the prolonged drought of 2015–2016 as a result of impact from the global El Nino. The 2015–2016 drought was among the most intense and long-lasting in the past 90 years. It severely affected rural livelihoods, damaging 60–90 percent of planted crops,<sup>5</sup> affecting assets, and disrupting basic services.

#### Sectoral and Institutional Context

5. **Transport infrastructure plays a critical role in economic growth and poverty alleviation in the central provinces but is in critical need of rehabilitation.** Vietnam's local road and bridge network is approximately 253,000 km long and constitutes about 85 percent of the country's total transport network (295,000 km). It serves around 80 percent of the entire population and an estimated 90 percent of the nation's poor, who mainly live in rural areas. As in the rest of the country, investments in local roads and bridges have had a significant impact on poverty alleviation, social participation, school attendance, and health services in the Central Region. However, many communes lack good condition roads and users face high mobility costs or have limited or nonexistent bridge connectivity to cities. The Central Region is marked by steep terrain, variable geology, and extensive deforestation, all of which contribute to flood risk. Hilly areas are also prone to slope failure and landslides, particularly during the rainy season, which risks the transportation infrastructure, threatens operational safety, and undermines connectivity of rural communities to markets, local services, and income-generating opportunities. Adequate design standards for different classifications of roads such as national, provincial, district, and rural roads are available. However, in many cases in the Central provinces, they have not been followed due to lack of sufficient funds. In some cases, even though the design has been followed, quality of construction is limited, contributing to infrastructure damage. In other cases, poor maintenance and design contributed to infrastructure damage during the 2016 flood events.

<sup>4</sup> IMHEN (Institute of Meteorology, Hydrology, and Environment) and UNDP (United Nations Development Programme). 2015. *Vietnam Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*.

<sup>5</sup> Vietnam: Drought and Sanitation Situation Report No.7 as of October 25, 2016, UN and GoV 2016a and 2016b.



6. **Similarly, irrigation, flood control, and drainage infrastructure play a pivotal role in Vietnam's economic and social development.** Despite the high annual rainfall, irrigation is used widely due to variation of rainfall in space and time. Approximately 60 percent of the arable land (4.5 million ha) is irrigated and provides the backbone to the country's agriculture, which in turn provides employment to 60 percent of the population. Crop production in the Central Region, including the area affected by the 2016 floods, predominantly relies on irrigation. Common irrigation systems include diverting water from local rivers, often by diversion of flow with low-height weirs, releasing water from reservoirs in the upstream mountainous areas, and, to a lesser extent, withdrawing groundwater in coastal areas. Dykes and riverbank protection works protect local communities and assets from high water levels and river floods. Irrigation and flood control systems in this region have been developed in the recent decades. However, these infrastructures are themselves susceptible to extreme flooding. As witnessed during the 2016 flooding, there was extensive damage to flood embankments/dykes, riverbank erosion protection works, irrigation canals and canal structures, temporary and raised dams, drainage culverts/sluices, and water supply schemes. In many cases, they were constructed a long time ago using the outdated technical design standards. In other cases, the infrastructures were installed with poor quality of construction and/or poor maintenance due to the lack of funds. Thus, reconstructing infrastructure that can withstand the onslaught of these recurring events is critical to providing people an adequate level of protection from natural hazards.

7. **The project will emphasize a 'build back better' approach in reconstructing and repairing damaged infrastructure.** This implies that reconstruction will focus on all phases of the infrastructure lifecycle, including design, construction, and maintenance. The proposed reconstruction civil works will fully apply the latest technical design standard, which incorporates the analysis of natural hazards' characteristics and severity and have been updated by the Government in the recent years. In addition, 'building back better' includes more than improved design standards and in this project will include emphasis on good design, quality construction including repairs, and adequate funding for maintenance. A combination of solid evidence-based planning, design and engineering solutions, information technology for early detection/forecast/response, adequate allocation of financial resources, and enabling the institutional environment can potentially yield significant economic benefits by maximizing the network integrity and minimizing negative economic and social impacts and human loss-related disastrous events.

8. **Over the last 10 years, Vietnam has made important strides in building resilience to natural hazards and the impact of climate change.** In 2007, the Government approved the National Strategy for Natural Disasters Prevention, Response, and Mitigation toward 2020 that shifted the focus of disaster risk management (DRM) from ex post response to ex ante preparedness. More recently, the National Assembly passed the first-ever law on 'Natural Disaster Prevention and Control' (Law No.33/2013/QH13), which became effective on May 1, 2014, and emphasizes an integrated approach to DRM under the direction of the newly designated CCNDPC. Critical areas of reform include delineation of institutional responsibility for key DRM functions, with the MARD as a lead coordinating agency. Despite these efforts, institutional capacity for disaster preparedness and response remains weak at the provincial level. One of the key challenges involves limited institutional coordination that limits the GoV's capacity to manage disaster risks in a more systematic way. The proposed project builds on the World Bank's ongoing activities, especially the 'Vietnam: Managing Natural Hazards Project' and the 'Mainstreaming Disaster Resilience in Vietnam Programmatic Approach' technical assistance that are supporting the GoV in strengthening capacity for disaster and climate resilience. The reconstruction



project will target its capacity-building efforts in the targeted five provinces and build on lessons learned from the ongoing activities.

9. The project focuses on climate-related disaster risk management, generating climate change adaptation co-benefits. The project aims to reduce the current and future risks and vulnerabilities that Vietn Nam is exposed to, both in the five target provinces where the proposed structural investments are focused (Ha Tinh, Quang Ngai, Binh Dinh, Phu Yen and Ninh Thuan), and also nationally through component 2.

### **C. Proposed Development Objective(s)**

Development Objective(s) (From PAD)

The Project Development Objective (PDO) is to reconstruct and rehabilitate infrastructure assets in disaster-affected project provinces (85 percent) and strengthen the capacity of the Government to effectively respond to future disaster events (15 percent). The PDO will be achieved by rebuilding key infrastructure assets based on a 'build back better' approach emphasizing all stages of infrastructure life cycle including design, construction, and maintenance and strengthening institutional capacities for climate and DRM.

#### **Key Results**

10. Key PDOs will be measured through the following indicators. Further details are provided in the Results Framework and Monitoring.

- (a) Direct project beneficiaries (disaggregated by gender and poor)
- (b) Number of beneficiaries provided with improved/restored transport connectivity
- (c) Area of land protected with reconstructed flood prevention/control infrastructure (ha)
- (d) Area provided with irrigation and drainage services (ha)
- (e) Satisfaction of beneficiaries with reconstructed/rehabilitated flood-damaged infrastructure that reflected their needs (percentage - disaggregated by gender and poor)
- (f) Operations and maintenance plans of built infrastructure are adopted, budgeted, and implemented
- (g) Number of provinces using the improved damage and loss assessment methodology to prioritize post-disaster recovery and/or reconstruction

### **D. Project Description**

#### **Project Components**

11. The proposed project will finance four components, which will be implemented over a period of four years (for further details on the component description, see annex 2).

**Component 1: Resilient Reconstruction of Flood-Damaged Infrastructure at the Provincial Level (US\$122.74 million, of which US\$112.35 million IDA and US\$ 10.39 million counterpart fund)**



12. The objective of Component 1 is to strengthen resilience of flood-affected communities in five selected provinces through the reconstruction and rehabilitation of damaged critical provincial-scale infrastructure, especially irrigation, flood control, and road/bridge infrastructure. This component will be implemented by the selected provinces. The affected areas will benefit from restored access to public services/facilities, thereby increasing the economic growth and access to social services. The reconstructed critical flood prevention structures and the restored roads and bridges will also increase the safety of people and assets and serve as supply and rescue lines in the event of a disaster. It will have five subcomponents, each of which will be implemented by the respective provinces:

- (a) **Subcomponent 1: Resilient Reconstruction in Binh Dinh Province (US\$51.74 million IDA, US\$4.07 million counterpart fund).** This subcomponent will fund (i) damaged roads and bridges, including landslide protection and slope stabilization, associated drainage systems, and other structures to increase resilience; (ii) damaged irrigation systems, including diversion structures, canals and canal structures, and desilting and reshaping of drainage channels; and (iii) damaged flood prevention/control structures, including river embankment structures, dykes, revetments, and so on.
- (b) **Subcomponent 2: Resilient Reconstruction in Phu Yen Province (US\$16.00 million IDA, US\$1.26 million counterpart fund).** This subcomponent will fund resilient reconstruction of damaged roads, bridges, irrigation systems, and flood prevention/control structures in Phu Yen Province.
- (c) **Subcomponent 3: Resilient Reconstruction in Quang Ngai Province (US\$15.88 million IDA, US\$2.21 million counterpart fund).** This subcomponent will fund reconstruction of damaged roads, bridges, irrigation systems, and flood prevention/control structures in Quang Ngai Province.
- (d) **Subcomponent 4: Resilient Reconstruction in Ninh Thuan Province (US\$15.81 million IDA, US\$1.67 million counterpart fund).** This subcomponent will fund reconstruction of damaged roads, bridges, irrigation systems, and flood prevention/control structures in Ninh Thuan Province.
- (e) **Subcomponent 5: Resilient Reconstruction in Ha Tinh Province (US\$12.92 million IDA, US\$1.18 million counterpart fund).** This subcomponent will fund reconstruction of damaged roads, bridges, irrigation systems, and flood prevention/control structures in Ha Tinh Province.

**Component 2: Disaster Recovery Capacity Enhancement (US\$2.43 million, of which US\$2.0 million GFDRR grant and US\$0.43 million counterpart fund)**

13. The objective of Component 2 is to strengthen the institutional capacity of the Government at the central and provincial levels to respond to future disasters. It will be implemented by the MARD.

14. Component 2 will finance (a) evaluation of the effectiveness of the existing flood risk reduction efforts in the Central Region, using the 2016 floods as a case study; (b) development of streamlined fast-track procedures for preparation, prioritization, financing resources mobilization, and implementation of the emergency reconstruction and recovery; and (c) building capacity of DRM agencies on the damage and loss assessment methodology. Counterpart funding will partially support the participation of provincial officials to the training and workshop organized by Component 2.



**Component 3: Project Management (US\$5.00 million, of which US\$0.65 million IDA and US\$4.35 million counterpart fund)**

15. The objective of Component 3 is to support project management, safeguards, and monitoring and evaluation (M&E). It will be implemented by the Binh Dinh Provincial People's Committee (PPC). It will fund activities related to supporting project implementation such as overall reporting, project-related audits, safeguards, M&E, project oversight, midterm reviews, and end-of-project impact evaluations. Component 3 will also fund equipment and provision of training to strengthen the Provincial Project Management Units (PPMUs), as well as individual consultants and operating costs. This component will also support coordination and reporting of the different components of the project.

**Component 4: Contingent Emergency Response (US\$0.0 million)**

16. The objective of this component is to improve Vietnam's capacity to better respond to disasters. Following an adverse natural or man-made event that causes a major disaster, and after a Government declaration of a national disaster, this component will be intended to strengthen the emergency preparedness and immediate response capacity. The GoV may also request the World Bank to reallocate project funds to this component to partially cover emergency response and recovery costs. The funds are allocated for immediate use after an eligible disaster in the future. This component could be used to channel additional funds should they become available as a result of an emergency.

**B. Project Cost and Financing**

17. **The lending instrument will be Investment Project Financing (IPF) in the amount of US\$130.16 million to the GoV and the implementation period will be four years.** A summary of the financing by component, IDA financing, and percentage is presented in Table 1:

**Table 1. Project Cost and Financing by Project Component (in US\$, millions)**

Project Components	Project Cost	IBRD or IDA Financing	Trust Funds	Counterpart Funding
<b>Component 1:</b> Resilient Reconstruction of Flood-Damaged Infrastructure at the Provincial Level	122.74	112.35	0	10.39
<b>Component 2:</b> Disaster Recovery Capacity Enhancement	2.43	0	2	0.43
<b>Component 3:</b> Project Management	5.00	0.65	0	4.35
<b>Component 4:</b> Contingent Emergency Response	0	0	0	0
<b>Total Costs</b>	130.16	113.00	2.00	15.16
<b>Total Project Costs</b>	<b>130.16</b>	<b>113.00</b>	<b>2.00</b>	<b>15.16</b>
<b>Front End Fees</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>





Total Financing Required	130.16	113.00	2.00	15.16
--------------------------	--------	--------	------	-------

### C. Lessons Learned and Reflected in the Project Design

18. The proposed project builds on lessons learned from the World Bank's extensive experience supporting operations such as the past Natural Disaster Risk Management Project or the ongoing Vietnam: Managing Natural Hazards and Dam Rehabilitation and Safety Improvement Projects and the GFDRR-funded Mainstreaming Disaster Resilience in Vietnam Programmatic Approach, as well as the World Bank's global experience in post-disaster emergency infrastructure reconstruction projects including, for example, the Myanmar Flood and Landslide Emergency Recovery Project, the Cambodia Ketsana Emergency Reconstruction and Rehabilitation Project, and the India Disaster Recovery Projects. The main lessons learned that have been incorporated into project design are the following:

- (a) **Enhancing the climate resilience of the infrastructure to be rehabilitated is a priority.** Emergency reconstruction projects have a heavy focus on the restoration of the infrastructure damaged by the floods. It is recognized that the reconstruction project, though prepared under a shorter time frame, also provides a good opportunity to 'build back better' by improving the design and quality of infrastructure to be restored and reconstructed, thus enhancing its longevity and resilience of local communities. This project very much incorporates these 'build back better' principles. Further, review of the current design standards for transport and flood protection/irrigation infrastructure will also be undertaken to recommend improvements where applicable based on assessment of the flood risk at the river basin level, taking into account potential climate change effects.
- (b) **Decentralized implementation and streamlined institutional and implementation arrangements are the right approach to build capacity at the provincial level.** In some cases, new reconstruction agencies need to be established, for example, as was the case with the Nepal earthquake housing reconstruction project. However, experience has shown that where possible it is more efficient to leverage existing arrangements and strengthen capacity. In this project, decentralized project implementation arrangements are used where the provinces, especially existing PPMUs from the World Bank-funded Dam Rehabilitation and Safety Improvement Project, are the main implementing agencies. Further, their capacity will be extensively supported through Components 2 and 3.
- (c) **Maintenance is a critical issue for long-term sustainability of infrastructure.** Well-maintained reconstructed infrastructures can provide a cost-effective and sustainable solution to community access. For example, maintenance of roads, irrigation canals, and dykes is a common challenge, since these are not always adequately funded. Lack of maintenance leads to unnecessary weakening of the structures, increasing their vulnerability. To address this issue, the operations and maintenance (O&M) procedures developed by the World Bank-funded road assessment management system and irrigation modernization and reform will be incorporated into the detailed technical design packages to ensure that maintenance is incorporated into the work flow of the provinces.



- (d) **Streamlined procedures for fast-tracking of the Government's fund allocation and implementation arrangements are critical for emergency recovery and reconstruction.** Despite the challenges of not having such a streamlined procedure in place during the emergency recovery loan preparation, it has proved to be a good opportunity for central and provincial governments to be advocated the needs of establishing a streamlined procedure for emergency recovery and reconstruction preparation and implementation. Component 2 will thus support line ministries and provinces to review the current procedures and develop recommendations on financial instruments and mechanisms for the fast-tracking of emergency funds. It will enable a better Government response to the needs of post-disaster recovery and reconstruction.
- (e) **Focus on adaptation and preparedness for the future is an important complement to infrastructure investment.** Globally, there is evidence that some disaster response programs have focused too heavily on rebuilding infrastructure and not sufficiently on strengthening capacity for adaptation and preparedness. This is critical as risk-sensitive planning can help safeguard these investments. Moreover, the direct and indirect benefits from investing in prevention and preparedness measures are far greater than the potential costs that will be incurred without them. Scaling up of the Vietnam – Managing Natural Hazards (VN-Haz)-supported integrated flood risk management plan using the river basin approach in the project's target provinces and other provinces in the Central Region helped provincial authorities achieve sustainable recovery and long-term disaster risk reduction.

## **E. Implementation**

### Institutional and Implementation Arrangements

19. **Project coordination and management.** The project will be implemented in a decentralized manner under the direction of PPCs in each of the five provinces. The PPCs will guide, support, and supervise the respective PPMUs. Binh Dinh's PPC will play an oversight role at the provincial level, and its PPMU will be responsible for liaising and coordinating with the Project Management Units (PMUs) in the other four provinces. In addition to a regular PPMU's responsibilities, the Binh Dinh PPMU will be in charge of the day-to-day overall implementation and management of the project, except Component 2, which will be managed by the MARD. The Binh Dinh PPMU will hire a project M&E and Coordination Consultant to help coordinate project activities.

20. **Project implementation.** The existing PPMUs at selected provinces, which are currently in charge of implementing the World Bank-funded Dam Rehabilitation and Safety Improvement Project, will be utilized for this project. These units are familiar with the World Bank's requirements and procedures on fiduciary and safeguard policies. As such, they will be in charge of the day-to-day management and implementation of the project in their respective province. However additional staff will need to be added to each of the PPMUs who can dedicate efforts to implementation of the emergency project. Qualified full-time senior Transport Engineers and Procurement Experts with an engineering background, fully responsible for handling the Systematic Tracking of Exchanges in Procurement (STEP, the World Bank's procurement network that is mandatorily used), and at least two



senior Transport Engineers who have experience in road and bridge design and construction **have been mobilized by all PPMUs**. The PPMUs will be responsible for the preparation of engineering designs, safeguard mitigation plans, procurement, financial management (FM), contract administration, and all aspects of project management at the provincial level.

21. Component 2 will be implemented by the MARD under the guidance of the CCNDPC). The CCNDPC will provide overall strategic, policy, and coordination among various Government agencies (for example, the MPI, MOF, MOT) and provinces to facilitate the implementation of the component as designed. A PMU will be established in the Directorate of Water Resource of the MARD to be in charge of the implementation monitoring, audit, procurement, FM, contract administration, and payment to contractors as well as handing over.

22. **Citizen engagement in this project is in line with broader efforts to mainstream good governance and a consultative process into operations, as guided by the principles of participation, transparency, and accountability of CPS 2012-2016.** During implementation, citizen engagement will be fostered through (a) active consultation with communities (for instance, those living alongside the roads or behind the dyke to be rehabilitated) in the design, construction, and maintenance of civil works; (b) formation of a community supervision group in each project location to provide oversight for subproject implementation according to the Vietnamese regulations; and (c) setting up of grievance redress mechanisms (GRMs). Environmental and social safeguards documents also emphasize consultations with project beneficiaries and affected communities. The preparation of safeguards as well as technical documents will collect baseline data for tracking citizen engagement, including relating to the accessibility of citizens to different types of roads and participation in labor-intensive work. During implementation, feedback will be collected from beneficiaries on project activities, results, and how grievances in relation to the implementation of the project are addressed. A citizen engagement indicator has also been included to assess the overall development impact of this project.

23. **Implementation readiness.** A number of steps are being undertaken to ensure implementation readiness. The existing PPMUs for the Dam Rehabilitation and Safety Improvement Project with core qualified staff members have already been assigned to be in charge of this project. In addition to the staff mobilization, the project target provinces have also been mobilizing available resources, experiences, and results gained from other ongoing projects for preparation of the feasibility study (FS), technical design, Project Operations Manual (POM), and so on to ensure both quality of the project documents and meeting of the emergency readiness conditions. Particularly, the draft POM, clarifying roles and responsibilities, was approved by PPCs in **April 2017**. A Project Procurement Strategy for Development (PPSD) and procurement plans for all five provinces have been prepared. Bid documents including detailed technical design for priority packages are under preparation. It is expected that the bidding process for some of the priority civil work packages will be completed during the preparation phase. The construction will then be started immediately after the project effectiveness period ends. In addition, key consultancies to support project implementation, such as construction supervision and project M&E, will be procured within the effectiveness period. To support this process, terms of reference for key consultancies (for example, for detailed designs and supervision of works) are under preparation and will be agreed upon before effectiveness. Financial reporting requirements and auditing arrangements have been agreed and are detailed in Annex 3.



24. **Coordination with other donor-financed projects in the five target provinces.** The world Bank is financing the following projects: (a) Dam Rehabilitation and Safety Improvement Project in all five provinces; (b) Vietnam - Managing Natural Hazards (VN-Haz) Project in Ha Tinh, Quang Ngai, Binh Dinh, and Ninh Thuan; (c) the Coastal Resources for Sustainable Development in Binh Dinh, Ha Tinh, and Phu Yen; (d) Vietnam Central Highlands Poverty Reduction Project in Quang Ngai; (e) Vietnam Irrigated Agriculture Improvement Project in Ha Tinh; and (f) Da Nang - Quang Ngai Expressway Development Project in Quang Ngai. The project will continue to coordinate with these ongoing projects to effectively support the provincial development priorities and project implementation, particularly on resource mobilization of counterpart finance, staff, procurement plan, M&E, and construction supervision.

25. The project will also support dialogue, during its implementation, to ensure complementarity of the project with the Integrated Rural Development Sector Project in the central provinces financed by the Asian Development Bank (ADB) and the ongoing disaster reduction initiatives supported by the Japan International Cooperation Agency (JICA). The dialogue will aim to strengthen coordination and leverage supports of development partners to contribute to the endeavors of the PPCs to achieve their sustainable development goals.

#### **F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)**

The project area will cover the five central provinces of Ha Tinh, Quang Ngai, Binh Dinh, Phu Yen, and Ninh Thuan as having suffered the worst devastation from the severe floods in October through December 2016. Majority of investments will be located in the following four river basins: i) Ha Vang and Rac river basin – Ha Tinh province; ii) Ve river basin – Quang Ngai province; iii) Kon river basin – Binh Dinh province; iv) Ba river basin – Phu Yen province; and v) Dinh river basin – Ninh Thuan province. These river basins are considered to be Vietnam's most disaster-prone areas. They are located entirely within Vietnam territory. Most of the rivers are short and steep causing fast water flows and accumulation of sediment at the river mouths. The project area lies within the tropical monsoon region, with an average temperature of 27°C, and two major climate patterns, the North Central and the South Central Coast. In the project area, 70% of the total land area is used for agriculture. The rest consists of non-agriculture land (about 10%) and unused land (20%). The terrestrial ecosystems of the region mainly consist of the old-growth forests. Freshwater ecosystems are found not to be unique. In the area, many National Parks and Natural Reserves of high biodiversity value have been established; however, none of the proposed subprojects will be located within and/or near these areas. The Central Regional experiences most of the different types of natural disasters in Vietnam, of which the most frequent are floods, typhoons, heat waves, and drought. Floods and inundations in the region usually occur on a large scale, simultaneously in several provinces, and sometimes cover the entire region. Floods have been hitting the region more frequently and more fiercely, causing human casualties, property damage, and soil and water pollution. Storms and tropical low pressure are happening more regularly and intensely.



## G. Environmental and Social Safeguards Specialists on the Team

Bernard Baratz, Hoa Thi Mong Pham, Son Van Nguyen, Thong Trung Le

## SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>This policy is triggered due to the potential adverse impacts associated with activities under Component 1, requiring the identification, mitigation and monitoring of potential adverse environmental and social impacts associated with rehabilitation and reconstruction of the existing roads, dykes, embankments, bridges, irrigation canals, and weirs, irrigation pumping stations, and water supply systems, and reconstruction of some bridges in disaster-affected areas. The project has been classified as Category B under OP 4.01. All works will focus on rehabilitation and reconstruction of infrastructures damaged during the flood, which are expected to be small and medium scale, and to be implemented in the existing road's and bridge's right of way, generating only minor to moderate and localized environmental and social impacts that can be easily identified, mitigated and managed. No large scale, significant and/or irreversible impacts are expected. Overall, the expected environmental impacts are mostly associated with the construction phase of the rehabilitation works, and include debris management, worker sanitation, noise control, use of non-hazardous materials, soil erosion etc.</p> <p>Category A subprojects will be excluded from project financing due to the scope of the expected rehabilitation works and the restrictions in timing typical of an emergency operation.</p> <p>All subprojects for the first 18 months of implementation have been screened to be Category B, and thus, either an Environmental and Social Management Plan (ESMP) or Environmental Codes of Practice (ECOP) will suffice.</p>



		<p>A list of the remaining subprojects has also been identified, and an Environmental and Social Management Framework (ESMF) will be prepared to provide general guidelines to the Client to ensure that the proposed project is implemented in an environmentally and socially sustainable manner and in line with the applicable World Bank safeguard policies and Government regulations.</p>
Natural Habitats OP/BP 4.04	Yes	<p>The project interventions are not located near critical habitats and mainly involve rehabilitation and reconstruction activities on the existing infrastructures. Therefore, it will not impact any protected area nor will it affect important/endangered flora or fauna species or biodiversity areas of high value. However, pollution risks related to removal and disposal of substantial quantities of non-hazardous construction materials associated with the destroyed structures (embankment protection devices, bridges) consisting of concrete, scrap metal, stone, sand from irrigation canals and small streams for rehabilitation and reconstruction works could affect natural habitats such as waterways. Therefore, this policy is triggered. Impacts on natural habitats and associated mitigations measures will be addressed in the relevant subproject ESMPs.</p>
Forests OP/BP 4.36	No	<p>The project activities and locations of the different subprojects would not have the potential of having impacts on the health and quality of forests or the rights and welfare of people and their level of dependence upon or interaction with forest or bring about changes in the management, protection or utilization of natural forests or plantations. As a result, this policy is not triggered.</p>
Pest Management OP 4.09	Yes	<p>The project will not finance any procurement or use of pesticides. However, improvements in agricultural production from improved and more stable water supply may lead to the use of pesticides in some subprojects. In those situations, a pesticide management plan will be required to be included in the subproject ESMP/ECOP. No pesticides are to be used for land clearance.</p>
Physical Cultural Resources OP/BP 4.11	Yes	<p>It is not expected that the project will require relocation of PCRs such as monuments, temples,</p>



		<p>churches, religious/spiritual and cultural sites. However, project rehabilitation and new construction activities may involve relocation of graves which are also considered PCR, and thus this policy is triggered. Some civil works may also include excavation activities, which may result in chance finds, the “chance find procedures” will be included in the ESMP/ECOP and civil works contracts.</p>
Indigenous Peoples OP/BP 4.10	Yes	<p>An initial screening conducted by the Bank specialist has confirmed that there are ethnic minority communities as per the Bank OP 4.10 definition, to be affected by and benefited from the project hence the World Bank policy on Indigenous Peoples OP/BP 4.10 will be triggered. An Ethnic Minority Planning Framework (EMPF) will be prepared guiding procedures to ensure free, prior, and informed consultation with affected ethnic minority communities to ascertain their broad community support, measures to ensure they benefit from project supports and minimize/mitigate any adverse impacts on them. The EMPF outlines and guides the preparation and implementation of subproject Ethnic Minority Development Plans (EMDPs) based on social assessment to be carried out to identify ethnic minorities and potential project impacts on them in the project area.</p> <p>The social assessment (SA) and preparation of the EMPF will be carried out early in project implementation stage to allow adequately inform the preparation of site-specific EMDPs.</p>
Involuntary Resettlement OP/BP 4.12	Yes	<p>The project will support resilient recovery and reconstruction in four priority provinces affected by the 2016 floods and future climate-related events. Specific investments for the first 18 months of implementation are identified with objectives of causing no significant social impact which is expected to occur. Since the project will use build-back-better approaches for affected roads and infrastructures, there is a possibility that some subprojects may cause losses of land or assets. In addition, it is envisaged potential loss of livelihoods due to the temporary restriction of access and interruption of irrigation water supply during</p>





construction period.

The project will require land acquisition and hence the OP/BP 4.12 involuntary resettlement is triggered. In accordance with the OP 4.12, for sector investment operations that may involve involuntary resettlement, the Bank requires that the project implementation agency screen subprojects to be financed by the Bank to ensure their consistency with this OP. For these operations, the borrower submits, prior to appraisal, a RPF that conforms to this policy. As per GoV requirements set forth in the Land Law 2013 and Decree 16/2016/ND-CP guiding the ODA utilization and management, a Resettlement Policy Framework (RPF) for five project provinces will be prepared and submitted to the Prime Minister for approval during the project preparation though all other safeguards documents will be deferred to implementation stage. The RPF guides principles and procedures to identify, assess, minimize and mitigate social impacts, including screening criteria, eligibility criteria, entitlement matrix and valuation methodology; and implementation arrangements to be applied to subproject Resettlement Action Plans (RAPs). The RPF will be submitted to RSS for review and approval prior to project negotiations. The RPF will be approved by Prime Minister before the project implementation.

All subproject RAPs will be prepared and submitted to the Bank for approval. The respective Provincial People's Committee (PPC) will then approve the RAPs and all compensation, assistance and resettlement activities should be completed prior to civil works commencement.

Safety of Dams OP/BP 4.37

No

The project does not involve construction or rehabilitation of dams and new canal nor changing the quantity of water flow. All proposed canals will not tap water directly from dam/reservoir. They are on-farm irrigation water distribution system (grade IV and V) from the existing primary and secondary irrigation canals. The ESMF will include screening procedures to ensure that subprojects that are dependent on existing dams will not be financed.





Projects on International Waterways OP/BP 7.50	No	The project investments will be implemented in the river basins that are entirely located within Vietnam territory. Therefore, this policy is not triggered.
Projects in Disputed Areas OP/BP 7.60	No	Project activities be will not be undertaken in disputed areas.

## KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

### A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

The potential adverse socio-environmental impacts would be those associated with construction and operation of the proposed physical investments under Component 1 and ancillary works such as quarry areas, sources of construction materials, disposal sites for non-hazardous wastes, etc. These include commonly known construction impacts and risks, such as: i) safety risks related to unexploded ordinances left from the war; ii) loss of vegetation cover and trees iii) increased level of dust, noise, vibration; iv) pollution risks related to removal and disposal of substantial quantities of non-hazardous construction materials associated with the destroyed buildings and structures (homes, embankment protection devices, bridges) consisting of concrete, scrap metal, stone, sand from embankment failure and erosion that that will be removed from irrigation canals and small streams; v) traffic disturbance, and increased traffic safety risks; vi) erosion and land slide risk on slopes and deeply excavated areas as well potential negative impacts on existing weak facilities; vii) interruption of existing infrastructure and services such as water and power supply; viii) disturbance to daily socio-economic activities in project area and social disturbance; ix) health and safety issues related to the public and the workers at construction sites; x) social impacts associated with construction disrupting businesses by construction related activities and mobilization of workers to the site including due to relocation of graves; and xi) land acquisition in case of widening/improving the damaged structures; and xii) impact on ethnic minority communities in the project areas.

However, these potential negative impacts would be expected to be moderate, localized, temporary, limited range and reversible, and can be mitigated through the application of good construction and management practices and with close supervision of contractor performance by field engineers and in close consultation with local communities. The impacts and mitigation measured will be addressed during the preparation of the ESMPs/ECOPs/RAPs/EMPDs for these subprojects, including those associated with labor influx. Therefore, the project has been categorized as a Category B project for environment.

OP/BP 4.12 Involuntary Resettlement. and OP/BP 4.10 Indigenous Peoples are also triggered.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:  
No long term negative impacts are envisaged if the Project is implemented with due care and observing the relevant procedures.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

The nature of the Project is to provide for emergency rehabilitation of flood-impacted infrastructure, thus reducing threat to life, property and livelihood in case of future similar events. As such, long-term alternatives to suggested



measures have not been discussed in detail and will be considered during subproject design. However, all the subprojects will follow the concept of “Build Back Better”. Alternatives to replacement will be considered in terms of higher or stronger embankments or alternative design parameters offering increased resilience to severe flooding events.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

The Safeguard Action Plan includes: i) Planned project activities, locations, and general environmental and social baseline (as far as known), and the expected environmental and social impacts; ii) Sequencing and, if practical, tentative implementation schedule for safeguard processing such as project RPF, EMPF, ESMF, subproject RAPs, ESMPs/ECOPs, and EMDPs; iii) Preparation time for safeguard instruments, including Bank review, revisions, clearance, and approval steps; iv) Disclosure and consultations; v) Roles and responsibilities, including supervision arrangements for safeguard preparation, implementation and monitoring; vi) Estimated costs for the safeguard preparation and implementation process.

All the implementing agencies (PPMUs) have intensive experience in implementing the World Bank safeguard policies under different Bank financed projects. All PPMUs, through their dedicated staff/unit, will be responsible for implementing and monitoring the safeguard instruments (ESMF, ESMP/ECOP, RPF, EMPF, EMDP, and RAP) as well as mitigation measures defined in the instruments. The implementation of safeguard instruments will be internally monitored by the PPMUs in close coordination with the respective Peoples' Committees, line departments at different administrative levels and externally supervised by independent monitoring agencies. Implementing agencies will ensure that activities related to environmental and social safeguards will be properly tracked, reported and documented. Independent monitoring will start around the same time as implementation of activities and will continue until the end of the project/sub-project. The performance of, and compliance with, safeguard instruments will also be subject to regular supervision by the Bank Task Team. During the project implementation, appropriate training will be provided to the PPMUs, consultants and local community representatives on the safeguard instruments to be applied to the Project.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

Key stakeholders are principally individuals and families affected by these devastating flood events as well as by the project activities, including those affected by land acquisition. Consultation with those affected by the floods will be critical because in most instances the subprojects will not be a simple replacement of what was previously in place prior to the floods, but may well be alternative structures which will be more flood resistant or resilient. These differences may require careful explanation to the flood affected parties.

The affected people and communities and other relevant stakeholders will be consulted on the RPF, EMPF, RAPs, EMDPs, ESMF, ESMPs/ECOPs. At least one public consultation will need to be conducted when the draft of these safeguard instruments are prepared. The feedbacks from the consultations will be incorporated into the subproject design, the final draft RAPs, EMDPs, ESMF, ESMPs/ECOPs. Consultation with the affected communities and people and other related stakeholders will be continued during project implementation. The draft and final Vietnamese version of the RPF, EMPF, RAPs, EMDPs, ESMF, ESMPs/ECOPs will be disclosed both locally at the PPMUs offices, related provincial and district departments, subproject areas. The English version of these documents and this Appraisal Stage Integrated Safeguards Data Sheet will be disclosed at the Bank internal and external websites.



## **B. Disclosure Requirements**

The review of this Safeguards has been Deferred.

### Comments

Disclosure will be at each of the five Provinces and on the DARD website

The review of this Safeguards has been Deferred.

### Comments

A draft RPF will be prepared and sent to the Bank prior to Project Negotiations. The first draft Vietnamese version of the RPF was disclosed on website of Binh Dinh (as coordinating/focal point) on March 22, 2017. The final draft RPF was disclosed on the Bank portal on March 27, 2017. The final RPF once approved will be disclosed on borrower's respective websites and on the Bank internal and external website subsequently prior to Negotiation.

The review of this Safeguards has been Deferred.

### Comments

EMPF/EMDPs will be prepared and sent to the Bank for review and approval. It will be disclosed in-country and at the Bank internal and external website, consultations will be organized on the draft EMPF/EMDPs with relevant GoV agencies, local authorities, civil society representatives and ethnic minority communities to collect feedback and contributions to the final document that will be published subsequently.

The review of this Safeguards has been Deferred.

### Comments

to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.

## **C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)**

### **OP/BP/GP 4.01 - Environment Assessment**

Does the project require a stand-alone EA (including EMP) report?

Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?

Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?

Yes



#### **OP/BP 4.04 - Natural Habitats**

Would the project result in any significant conversion or degradation of critical natural habitats?

No

If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?

Yes

#### **OP 4.09 - Pest Management**

Does the EA adequately address the pest management issues?

Yes

Is a separate PMP required?

No

If yes, has the PMP been reviewed and approved by a safeguards specialist or PM? Are PMP requirements included in project design? If yes, does the project team include a Pest Management Specialist?

No

#### **OP/BP 4.11 - Physical Cultural Resources**

Does the EA include adequate measures related to cultural property?

Yes

Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?

Yes

#### **OP/BP 4.10 - Indigenous Peoples**

Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?

No

#### **OP/BP 4.12 - Involuntary Resettlement**

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?

Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?

No

#### **The World Bank Policy on Disclosure of Information**

Have relevant safeguard policies documents been sent to the World Bank's Infoshop?

No

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable



and accessible to project-affected groups and local NGOs?

No

#### **All Safeguard Policies**

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?

Yes

Have costs related to safeguard policy measures been included in the project cost?

Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?

Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?

Yes

#### **CONTACT POINT**

##### **World Bank**

Dzung Huy Nguyen  
Disaster Risk Management Specialist

Dung Anh Hoang  
Sr Transport. Spec.

Poonam Pillai  
Senior Environmental Specialist

##### **Borrower/Client/Recipient**

Binh Dinh People's Committee  
Tan Thi To  
Director of Binh Dinh PMU  
thitotan79@gmail.com

##### **Implementing Agencies**



Ministry of Agriculture and Rural Development  
Kim Long Tran  
Gen. Director of ICD  
longtk.htqt@mard.gov.vn

#### FOR MORE INFORMATION CONTACT

The World Bank  
1818 H Street, NW  
Washington, D.C. 20433  
Telephone: (202) 473-1000  
Web: <http://www.worldbank.org/projects>

#### APPROVAL

Task Team Leader(s):	Dzung Huy Nguyen Dung Anh Hoang Poonam Pillai
----------------------	---

#### Approved By

Safeguards Advisor:	Surhid P. Gautam	05-Apr-2017
Practice Manager/Manager:	Barjor E. Mehta	05-Apr-2017
Country Director:	Ousmane Dione	07-Apr-2017