Public Disclosure Authorized

Report Number: ICRR0021845

## 1. Project Data

Project ID P118979	•	Project Name VN-Coastal Resources for Sustainable Dev		
<b>Country</b> Vietnam	Practice Area(Lead) Environment, Natural Resources & the Blue Economy			
L/C/TF Number(s) IDA-51130	Closing Date (Original) 31-Jan-2018		<b>Total Project Cost (USD)</b> 96,620,353.18	
Bank Approval Date 10-May-2012	Closing Date (Actual) 31-Jan-2019			
	IBRD/II	DA (USD)	Grants (USD)	
Original Commitment	100,000,000.00		0.00	
Revised Commitment	100,000,000.00		0.00	
Actual	91,127,726.88		0.00	
Prepared by John Redwood	Reviewed by John R. Eriksson	ICR Review Coordin Christopher David Nelse		

Project ID P124702	Project Name VN-Coastal Resources for Sustainable Dev ( P124702 )	
L/C/TF Number(s) TF-14293	Closing Date (Original)	Total Project Cost (USD) 6229730.41
Bank Approval Date 29-Mar-2013	Closing Date (Actual)	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	0.00	6,500,000.00
Revised Commitment	0.00	6,500,000.00
Actual	0.00	6,229,730.41

## 2. Project Objectives and Components

### a. Objectives

As stated in the IDA credit agreement and the project appraisal report (PAD), the project development objective (PDO) was "to improve the sustainable management of coastal fisheries in the Project Provinces." The same language was used in the Global Environment Facility (GEF) grant agreement, which had been approved as Additional Financing (AF) for the project and signed on May 2, 2013.

As the ICR observes (para. 33, pp. 13-14), the PDO was "broadly stated and the outcome indicators defined the outcome as a result of interventions in aquaculture (Component B - see the next subsection below) and capture fisheries (Component C) in improved resources management and local beneficiaries' livelihoods and in capacity building and institutional capacity strengthening. Though no specific outcome-level indicator was stated for Component A [Institutional Strengthening for Sustainable Fisheries Management], it was designed so that Components B and C would be supported by the strengthening of the institutional framework, and by policy reforms and research."

There were three sub-objectives: (i) increase the proportion of farms meeting national standards for water effluent following the adoption of Good Aquaculture Practices (GAPs); (ii) reduction in shrimp disease losses in the production of areas applying GAPs; and (iii) increase in the proportion of areas in which sustainable Near-Shore fisheries resource management systems are applied.

Initially, there were eight Project Provinces in three "clusters": Ca Mau and Soc Trang (Mekong Delta Cluster), Khanh Hoa, Phu Yen, and Binh Dinh (South Central Coastal Cluster), and Ha Tinh, Nghe An, and Thanh Hoa (North Central Cluster). However, at the Government's request a ninth Province, Ninh Thuan, was added through a Level II restructuring on August 5, 2016.

- b. Were the project objectives/key associated outcome targets revised during implementation?
  No
- c. Will a split evaluation be undertaken?
  No

#### d. Components

Component A: Institutional Capacity Strengthening for Sustainable Fisheries Management (Appraisal Cost: US\$ 5.3 million; Actual Cost: US\$ 2.9 million). This component was designed to support three activities:

- (i) Inter-sectoral Planning for Coastal Areas provision of support for the Ministry of Agriculture and Rural Development (MARD) and the Project Provinces to carry out inter-sectoral planning and strategic environmental assessments (SEAs) in the Project Provinces for sustainable fisheries management;
- (ii) Upgrading of Vietnam Fisheries (Vnfishbase) System -- provision of support to review and upgrade the Vnfishbase system, including: (a) provision of additional information and linkage with other fisheries databases; (b) development of a knowledge management system; (c) provision of essential infrastructure; and (d) development of human resources; and
- (iii) Conducting Selected Policy Research -- provision of support to carry out selected research to contribute to the development and implementation of the Fisheries Master Plan to 2020.

Component B: Good Practices for Sustainable Aquaculture (Appraisal Cost: US\$ 48.1 million; Actual Cost: US\$ 46.0 million). This component would support good aquaculture practices through:

- (i) Improved Bio-Security Management: (a) upgrading of rural infrastructure schemes in selected major farming communities; (b) provision of technical training for farmers on GAP demonstration sites; (c) provision of technical equipment, training and operating costs for disease diagnostics, surveillance, early reporting, and outbreak containments for selected provincial and District extension centers and sub-departments of animal health/aquaculture; (d) provision of technical assistance for GAP certification, capacity building, and technical monitoring; and (e) diversification of culture species and farming systems.
- (ii) Improved Seed Quality Management: (a) upgrading of public bio-security infrastructure for selected hatchery areas; (b) introduction and implementation of a hatchery standardization program; (c) studies on hatchery planning; (d) establishment of dedicated and bio-secure shrimp hatchery areas which are designated to use only domesticated and Specific Pathogen Free (SPF) broodstock; and (e) provision of support for MARD research institutes to carry out an initial research program on domestication and breeding improvement.
- (iii) Improved Environmental Management: (a) strengthening the capacity of the Department of Natural Resources and Environment (DONRE) in the Project Provinces to conduct regular risk-based water quality monitoring programs, including provision of additional technical equipment, training, and financing of operational costs; and (b) disseminating data and results from the monitoring activities to local authorities and the public.

Component C: Sustainable management of near-shore capture fisheries (Appraisal Cost: US\$ 52.2 million; Actual Cost: US\$ 57.9 million). This component was intended to support:

(i) Co-management of Near Shore Capture Fisheries (among governmental authorities and fishing communities in selected Districts and Communes: (a) provision of support for local fishing communities to prepare and implement co-management plans; (b) strengthening of the monitoring, control, and surveillance

systems of MARD and the Project Provinces; and (c) provision of support in developing selected basic infrastructure for local ethnic minority and/or poor fishing communities to improve their livelihoods; and

(ii) Rehabilitation of Fishing Ports and Landing Sites -- provision of support to improve hygienic conditions and operational efficiency in selected fishing ports and landing sites, including: (a) rehabilitation and/or upgrading of fishing ports and landing sites; and (b) training, capacity building, and development of management plans to improve the operational efficiency of the rehabilitated and/or upgraded sites.

Component D: Project Management, Monitoring and Evaluation (M&E) (Appraisal Cost: US\$ 12.3 million; Actual Cost: US\$ 9.4 million): (i) Project Management -- provision of support for the Project Central Unit (PCU), Provincial Project Management Units (PPMUs) and other implementing agencies for effective Project management, implementation, and supervision; and (ii) Monitoring and Evaluation -- provision of support for the establishment and implementation of an effective monitoring and evaluation system.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

**Project Cost**: At the time of appraisal, total cost was estimated to be US\$ 117.9 million. However, it was revised upward to US\$ 124.4 million after a Global Environment Facility (GEF) grant was approved in March 2013, which added US\$ 1.5 million for Component A (Institutional Capacity Strengthening for Sustainable Fisheries Management) and US\$ 5.0 million to Component C (Sustainable Management of Near-Shore Capture Fisheries. Actual costs at project closing was US\$ 116.2 million, or 98.6 percent of the original amount and 93.4 percent of the revised amount including the additional GEF financing. According to the ICR (para. 56, pg. 22), lower actual costs for Components A and D were "due to the late arrival of the TA team and the effective mobilization of provincial technical staff to support project implementation," while expenditures for Component C "exceeded appraisal estimates due to the additional upgrades of two fishing ports for the newly added province of Ninh Thuan at the request of the Government."

**Financing**: The project was financed with a US\$ 100 million IDA credit (64.6 million SDRs) and a US\$ 6.5 million GEF grant, which was approved in the form of Additional Financing in May 2013. According to the Project Paper for the GEF grant, dated March 1, 2013 para. 1, pg. 1), this Additional Financing was "to fill the financing gap due to the delay in obtaining GEF funds for CRSD [Coastal Resources for Sustainable Development Project], which was originally designed as a co-financed IDA-GEF operation. According to Annex 3 (pg. 62) of the ICR, the GEF grant was fully disbursed as was 91.8 percent of the IDA credit.

**Borrower Contribution**: At appraisal this contribution was estimated to be US\$ 17.9 million and the same amount was reported in the ICR (Annex 3, pg. 62) as having been disbursed at the time of project closing. According to the Financing data at the beginning of the ICR, both at the time of appraisal and at project closing, this total consisted of US\$ 11.7 million from the Borrower/Recipient and US\$ 6.2 million from local sources.

**Dates**: The project was approved on May 10, 2012, became effective on November 2, 2012, underwent a Mid-Term Review (MTR) on July 22, 2015, and closed on January 31, 2019, one year after the original closing date (January 31, 2018). The one year extension was granted through a Level II restructuring on January 25, 2018, which, according to the ICR (para. 59, pg. 23) was required as a result of the combination of a slow start-up as the result of the "late arrival of the TA team and turnover of key staff at the PCU [Project Coordination Unit] and some PPMUs [Provincial Project Management Units]" and the Government's request that a new province be added to the project area a the time of the second Level II

restructuring in August 2016, which led to the need for additional time in order "to complete all planned activities and disburse most of the IDA and GEF funds."

### 3. Relevance of Objectives

#### Rationale

Relevance of the project objectives is Substantial.

They are aligned with the World Bank Group's Country Partnership Framework(CPF) for Vietnam for 2018-2022, issued in May 2017, and particularly its Focal Area 3 (Ensure Environmental Sustainability and Resilience) under which the Bank will support the adoption of models for sustainable natural resource use and management including targeted support for fisheries co-management in coastal communities and promotion of productive and sustainable use of land, forests, fisheries, and ecosystem services and their associated livelihood impacts (Objectives 10 and 11, paras. 81, 83, pp. 33-34). The project also is consistent with the CPF's goal of expanding the economic participation of ethnic minorities, women, and vulnerable groups (Objective 5, paras. 71-72, pp. 29-30). The project objectives were likewise consistent with the Government's development priorities as indicated in the 2011-2020 Socio-Economic Development Strategy and 2016-2020 Socio-Economic Development Plan, approved in February 2011 and April 2016, respectively. The latter, inter alia, prioritizes stronger environmental protection measures and improved management of Vietnam's natural assets. In addition as pointed out in the ICR (footnote 1, pg. 6), the sector continues to be of considerable economic and social importance in the country: "fisheries production in 2010 was estimated at 5.2 million tons, including 2.5 million tons from capture fisheries and 2.7 million tons from aquaculture [and] is very labor intensive [as] nearly eight million people now rely on fisheries-related activities for a major source of income and employment." However (para. 2, pg. 6), it was also "at risk due to depleting resource base for marine fisheries, increasing environmental and disease problems in aquaculture, reputational issues related to the quality of exported products, and financial difficulties suffered by farmers and fishers."

However, it is unclear how we know if the project's specific sub-objectives were the right ones to address the problems of the depleting resource base. Without this we have a gap between the bar we are looking at in formulating our project's theory of change. It may be that the specific sub-objectives are the highest priority things to address the problems outlined above, but this needs to be clearer in the project's overview of how it is tackling its' specific development problem.

#### Rating

Substantial

#### 4. Achievement of Objectives (Efficacy)

#### **OBJECTIVE 1**

#### Objective

"To improve the sustainable management of coastal fisheries in the Project Provinces"

#### Rationale

There were three aspects to the project's theory of change, each providing core aspects of what the project considered 'sustainable management' characteristics. The first of these sought to ensure farms met national standards for water effluent by increasing training for farmers, building a better measurement system and ensuring there was clarity on what needed to be measured. The second aspect sought to test these systems through monitoring the rate of losses to disease, while the third aspect sought to translate these improvements to better near-shore fisheries management and longer term sector viability.

## 1. Increase in the proportion of farms meeting national standards for water effluent following the adoption of Good Aquaculture Practices (GAP)

Theory of change: The combination of improved intersectoral planning, research, and local information and the adoption of GAPs, including in relation to waste management, would increase the number of shrimp farmers meeting national water effluent standards, contributing to achievement of the more general objective of improving the sustainable management of coastal fisheries in the Project Provinces.

#### Outputs:

- 257 communes in 40 coastal districts in 8 provinces received training in intersectoral planning (100% of appraisal target, which was not revised), involving 1,502 persons including 925 at the commune level, 444 at the district level, and 133 at the provincial level.
- Intersectoral Planning teams were established in 8 provinces (100% of the appraisal target, which was not revised) and resulted in the preparation of Intersectoral Plans (ISPs) for all 40 coastal districts.
- 13 studies were carried out for the new Fisheries Master Plan (108% of the appraisal target of 12, which was not revised) covering a range of topics including detailed planning for provincial sustainable coastal and marine aquaculture, fishing fleet development and management, fisheries logistics development strategies, leveraging private sector investments and reviewing existing fisheries policies.
- 8 provinces had the fisheries data base (VnFishbase) system upgraded, including both hardware and software, and is fully operational (100 % of appraisal target, which was not revised), containing: (i) aquaculture data on farming area and systems, production, major species, losses due to diseases/natural disasters, hatcheries/seed production, and (ii) capture fisheries data on the number and size of fishing vessels, types of fishing gear, boat type and registration, fishing licenses, a limited number of fish species, catch volume and traceability, fishing ports, and landing sites, fishing shelters, accidents at sea, marine protected areas, etc. In September 2018, the Department of Fisheries (DOF) expanded VnFishbase to all 28 coastal projects in the country.
- 50 GAP zones established with 251 GAP groups and 9,375 shrimp households covering an area of 12,537 hectares in order to manage problems of disease, water pollution, and low productivity that were affecting the shrimp farms prior to the project, although the project did not have specific targets in this regard. According to the ICR (pg 45), "GAP zones and groups proved to be effective means to deliver technical assistance more effectively to individual farmers and farmer groups, e.g., upgrading infrastructure for biosecurity, veterinary services, improved seed and broodstock, testing and

- demonstrations of improved markets and/or technology, improved infrastructure and extension services, information and awareness campaigns, training and farmer schools, marketing assistance and GAP certification."
- 32,858 farmers received training in GAP (164 percent of the appraisal target of 20,000, which was not revised).

#### Outcome:

- Ratios of adoption after training in the GAP zones (94 percent) and nearby areas (76 percent) by October 2018 according to the Project's Progress Report.
- 86% of farmers in targeted areas (i.e., GAP zones) were accessing/using appropriate waste water management systems (109 percent of revised target, of 80% and 172% of the original target of 50% over a baseline of 9%)

## 2. Reduction in shrimp disease losses in the production of areas applying Good Aquaculture Practices (GAP)

Theory of change: The combination of improved intersectoral planning, research, and local information and the adoption of Good Aquaculture Practices, especially by strengthening bio-security through the application of disease control measures and use of certified/quality seed to would allow shrimp farmers to reduce disease losses, thereby increasing output and productivity and contributing to achievement of the more general objective of improving the sustainable management of coastal fisheries in the Project Provinces.

#### Outputs:

- 32,858 farmers received training in GAP (164 percent of the appraisal target of 20,000)
- 55 hatcheries were certified as operating at bio-security standards (110 percent of revised target of 50 and (275 percent of appraisal target of 20); such standards were established under the project with assistance of an international hatchery specialist through FAO to help review and develop bio-security criteria for shrimp hatcheries in Vietnam based on international experience.
- 91 percent of farmers in targeted areas (i.e., GAP zones) are using certified/quality seed (182 percent of the appraisal target of 50)
- 41 provincial and district veterinary units in charge of aquatic animal disease management strengthened (136 percent of revised target of 30 and 512.5 percent of the appraisal target of 8)

#### Outcomes:

- Shrimp yield losses due to disease reduced to 4 percent after application of GAP in project areas
  compared with 35 percent at appraisal, or an 87 percent reduction (290 percent over the revised
  target of 30 percent reduction and 400 percent over the appraisal target of 20 percent reduction).
  According to the ICR (pg. 40), "this achievement made local farmers confident in the project and in
  adopting GAP to improve profitability and sustainability."
- 76 percent increase in incomes of aquaculture farmers adopting GAP (760 percent of the target introduced at the time of the first project restructuring on June 22, 2016, which was 10 percent). This outcome was based on the collection of data on production costs, yields, gross margins, and net profits for farmers who had adopted GAP in the project areas and those who had not in other areas,

comparing data for the same crops. According to the ICR (pg. 46) farming profit for farmers adopting GAP was VND 354 million per ha (or US\$ 15,340 per ha) compared to VND 201 million per ha (US\$ 8,717 per ha) for non-GAP farmers. The main reasons for this difference included lower disease losses and higher yields.

## 3. Increase in the proportion of areas in which sustainable Near-Shore fisheries resource management systems are applied

Theory of change: the adoption of co-management arrangements and post-harvest infrastructure for and improved monitoring, control, and surveillance, and reduced illegal exploitation of near shore fisheries would contribute to the larger objective of improving the sustainable management of coastal fisheries in the Project Provinces.

#### Outputs:

- 89,855 hectares of high biodiversity areas and important natural habitats co-managed (180 percent of revised target of 50,000 ha and 300 percent of appraisal target of 30,000 ha).
- Establishment of co-management -- in which local communities share management responsibilities with public sector authorities -- for Near-Shore capture fisheries in 19 pilot coastal Districts in 8 provinces (119 of appraisal target of 16), covering 826 km of coastlines and the participation of 13,751 fishing households through the establishment of 97 co-management groups (CMGs)
- 28 District monitoring, control, and surveillance field (MCS) stations established, equipped and fully operational (93 percent of the revised target of 30, and 175 percent of the appraisal target of 16), with the mandate to carry out routine patrols and support the CMGs in dealing with fishing violations when these were reported through the provincial hotlines, which were also established under the project. After the revised target was set (at the first Level II restructuring in June 22, 2016) it was determined that the number of MCS stations actually needed was 28 rather than 30.
- 16 patrol boats and 14 speed boats procured for the MCS stations (although there were no specific targets in this regard).
- 21 fishing ports and landing sites operating with improved hygiene conditions and handling practices (131 percent of the appraisal target of 16, which was not revised during implementation).
- Reduction in proportion of after-catch physical losses at ports and landing sites from a baseline of 25 percent to 14.5 percent (81 percent of the target established at the time this new indicator was introduced at the first restructuring on June 22, 2016, of 12 percent)

#### Outcome:

• 65 percent increase in the proportion of areas in which sustainable Near-Shore fisheries resource management systems are applied (130 percent over the appraisal target of 50 percent, which was not revised). According to the ICR (pg. 41), the criteria used to assess the success of the CMGs included: (i) reducing illegal/violating occurrences within the local fishing community -- violations to be reduced by 30 percent; (ii) participation of CMG members -- 90 percent of members contributed their member fees (although the project had no target in this regard); (iii) effective collaboration -- 70 percent of the reported cases were dealt with within one day after receiving reporting from the community, the concerned agency will verify the information, and inform the local government and local community of their actions; and (iv) community satisfaction -- 70 percent of members are satisfied with comanagement arrangements. It also reports that in the co-management areas, fishing regulations were

established, and fishing rights allocation, participatory surveillance, control and monitoring, and additional livelihood development carried out, and fishing violations were reduced by more than 30 percent compared to the situation prior to co-management (even though, here too, the project did not have specific targets for this). These achievements also contributed to amendment of the Fisheries Law passed by the National Assembly in November 2017, which introduced fisheries co-management and rights allocation to local communities throughout the country.

Each of the three objectives illustrate considerable gains in applying their proposed model for system improvement and increasing the sector's long term viability. Given the combination of how each aspect of the PDO reinforced the other and the attainment against the various PDO indicators, the project's Efficacy rating is High.

Rating High

#### OVERALL EFFICACY

#### Rationale

The project achieved both its more specific and general objectives through a combination of institutional capacity building, awareness raising and training, productive innovations -- including aquaculture biosecurity improvement and co-management with local communities -- and upgraded port and landing site infrastructure. In doing so, it met or exceeded (in some cases significantly) nearly all of its performance targets, and has impacted national legislation and led to the adoption of more sustainable aquaculture and coastal fisheries practices not only in the nine project provinces (originally eight at the time of appraisal) but in other parts of the country as well. In the process, it introduced integrated spatial planning (ISP), Good Aquaculture Practices (GAP), and co-management of coastal (near-shore) fishing activities that had not previously existed in Vietnam's fisheries sector, at the same time strengthening relevant institutions at the community, provincial, and national levels (e.g., upgrading the national fisheries database - Vnfishbase).

**Overall Efficacy Rating** 

High

#### 5. Efficiency

A cost-benefit analysis was carried out at appraisal (PAD, paras. 39-43, pp 12-13), which yielded an estimated economic rate of return (ERR) of 44 percent with a net present value of US\$ 275.5 million at a discount rate of 12 percent. Expected benefits were derived from: (i) introducing GAP standards to 10,808 target hectares in the eight original project provinces "thus reducing production risk, increasing productivity, and increasing farm household incomes;" (ii) introducing co-management of coastal resources in fishing communes "that will regenerate coastal capture fisheries, increasing fish stock, the value of the catch, and fisher household

incomes;" and (iii) the rehabilitation of 16 ports and landing sites in the eight provinces "that will lead to a higher level of hygienic handling conditions and improved food safety, as well as higher fisher household and port/landing site incomes." Non-quantifiable benefits were also identified, specifically those "from an improved environment as a result of better waste and wastewater management and better resource use by aquaculture and fisher families" as well as "the contribution of the project to food safety through better sanitary conditions at ports/landing sites" and "from the building of typhoon shelters that could prevent the loss of human life" as well as "the benefits of the demonstration effect of improved governance through inter-sectoral planning and participatory co-management of fishery resources by farmer associations."

At closing, an economic and financial analysis was also undertaken, according to the ICR (para. 57, pg. 22) "using similar methods to those calculated at appraisal," the only apparent difference being that the analysis in the ICR used a discount rate of 10 percent although the ICR did not indicate why this particular rate was applied and no sensitivity analysis appears to have been conducted (at least there was no mention of this in either the main text or Annex 4 (Efficiency Analysis) of the ICR, although no sensitivity analysis was carried at appraisal either). The result was an ERR of 49 percent and a financial internal rate of return of 52 percent, with an anticipated NPV of US\$ 3.1 billion, thereby significantly exceeding the appraisal estimate. The main reasons for this, according to this source, were "the larger output from more efficient technology and higher production yields in Component B [together with] the increased revenues [and] a reduction in operational costs [for Component C]." It also stated that "the main contributing factors to the high NPV and IRR differences across provinces include the number of farms joining GAP zones and the number of vessels which became part of the CMGs [Co-management Groups]." It likewise observed that, the higher returns for Component B were primarily attributable to "reduced disease rates which increased yields due to longer lifespan for shrimp (more days spent in the pond), which reduced the chances of producing no yield or total loss of the crop, and increased sales value (better quality and larger size shrimp)," while for Component C, "the main factors were the higher sales prices resulting from an increase in the catch rate of higher quality fish, improved catch preservation at catch site, and improved handling environment and facilities at ports." The GEF financing led to additional benefits, which are described (para 58, pg. 23) as including strengthened institutional capacity and empowered fishing communities to sustainably manage coastal resources and the establishment of three Locally Managed Marine Areas (LMMAs) that "provided the basic foundation for...locally important biodiversity management in the longer term."

Implementation efficiency was also generally positive, even though project start-up was delayed during the first two years because of the later than anticipated arrival of the technical assistance team and the turnover of key staff in the central and some of the provincial project coordination units. A one-year extension was necessary in order to complete the project but this was due in part to the addition of a ninth beneficiary province at the Government's request in mid-2016. This notwithstanding, the project exceeded its planned outputs within the original cost envelope.

Because of the very high economic returns and the very significant project achievements within a justifiable time frame, Efficiency is rated High.

Efficiency Rating

High

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	44.00	100.00 □ Not Applicable
ICR Estimate	✓	49.00	100.00 □ Not Applicable

<sup>\*</sup> Refers to percent of total project cost for which ERR/FRR was calculated.

#### 6. Outcome

Relevance of objectives is rated Substantial. Efficacy and Efficiency are rated High. As the first Bank-supported project in the fisheries sector in Vietnam, it exceeded appraisal expectations and its success has influenced national fisheries legislation and led to the replication of the innovative practices introduced by it to other parts of the country. In accordance with IEG's guidelines, the overall outcome of the project is thus rated Highly Satisfactory

a. Outcome Rating Highly Satisfactory

#### 7. Risk to Development Outcome

The risk to development outcome is modest, as project beneficiaries now have clear economic incentives to maintain the good practices and co-management arrangements introduced under the project. In addition, the same good practices have now been incorporated for promotion and adoption nationwide through amendment of the National Fisheries Law in November 2017, including integrated spatial planning (ISP), aquaculture biosecurity, and fisheries co-management. Beyond this, the present project is viewed as the first stage in a longer-term national program, support for which is expected to come in part from a proposed follow-on second Bank-financed project, that will expand the good practices and infrastructure improvements introduced under the present operation to the remaining coastal provinces, of which there are 28 altogether including the 9 that specifically benefited from this project. The ICR also states (para. 104, pg. 36) that project achievements "are likely to be sustained because the capacity and skills developed with the project will remain in the provinces among the implementing agencies, technical agencies, farmers, fishers, and their organizations."

#### 8. Assessment of Bank Performance

## a. Quality-at-Entry

The project was well-designed and appraised, according to the ICR (paras. 99-100, pp. 34-35) based on a "sound concept" [and with the Bank] providing appropriate expertise and new initiatives to address complex problems in the fisheries sector (that is, integrated spatial planning, sustainable aquaculture, and sustainable near shore capture fisheries)." It also argues that "measures to assure quality were adequate and possible risks correctly identified." The guidance and support provided to both the client and the Bank team by the FAO specialists, who had significant prior experience both with aquaculture and capture fisheries, was an important contributing factor in this regard. Considering that this was the Bank's first operation in the fisheries sector in Vietnam, the initial complexity of project design was also reportedly addressed by the Bank during preparation by reducing the proposed number of activities and scope, although the ICR does not provide further details in this regard. However, it also affirms that its design was "built on the Government's existing systems and structures with appropriate plans to mobilize and strengthen these for project implementation" and that "adequate budget and TA were allocated for capacity building of implementing agencies and local communities, and an appropriate implementation support plan was developed to provide timely support to these agencies." During appraisal, the Bank assessed the project's overall risk as being substantial, mainly on account of the "inadequate experience of the implementing agencies, the governance risk associated with project decentralization, and the compliance risks in handling procurement, financial management and safeguards (PAD, pg 11). The main mitigation measures proposed and taken to mitigate these risks was to provide capacity building for the implementing agencies and intensive monitoring and supervision. especially during the early years of project implementation. In retrospect, the only shortcoming was underestimation of the subsequent difficulties encountered in contracting the needed technical assistance, which contributed to the nearly two-year start-up delay in project implementation.

**Quality-at-Entry Rating** Satisfactory

## b. Quality of supervision

Bank supervision was also of good quality. Missions were carried out twice a year and most Bank project team staff were based in the field. Supervision mission skill mix included specialists in procurement, financial management, social and environmental safeguards, aquaculture, capture fisheries, community development, ports and landings, monitoring and evaluation, and rural development. The Bank team also successfully mobilized additional technical expertise from the FAO Cooperation Program to assist with such technical aspects as biosecurity standards in aquaculture and hatcheries, standards and operational procedures for fishing ports and landing sites, and coastal fisheries co-management, as well as from the International Union for the Conservation of Nature (IUCN) and the US National Oceanic and Atmospheric Administration (NOAA) to provide integrated spatial planning training to the Project Coordination Unit (PCU) and the Provincial Project Management Units (PPMUs). The Bank team also reportedly assisted the PCU to improve the quality of data collected for Monitoring and Evaluation (M&E) purposes during implementation through several training workshops.

**Quality of Supervision Rating**Satisfactory

# Overall Bank Performance Rating Satisfactory

#### 9. M&E Design, Implementation, & Utilization

#### a. M&E Design

The M&E design was in line with the Aligned Monitoring Tool system of the Ministry of Planning and Investment (MPI) and based on the project's Results Framework to track progress and feed into systems used by MARD, MONRE (Ministry of Natural Resources and Environment) and MPI. M&E staffing was considered "adequate: according to the ICR (para 87, pg. 31) with an M&E specialist at the central level and staff in each of the provincial project management units (PPMUs). Progress reports were to be submitted quarterly basis and reviewed by MARD and the Bank on a biannual or annual basis.

#### b. M&E Implementation

While there were some initial quality issues with reporting, this improved over time. During the June 2016 Level II restructuring, two new intermediate results indicators were added to the M&E framework -- increase in incomes of aquaculture farmers adopting GAP and proportion of after-catch physical losses at ports/landing sites -- and the targets for several of the original indicators were raised to reflect the GEF additional financing.

#### c. M&E Utilization

The M&E data collected were used by the PCU and PPMUs for the project progress reports and, according to the ICR (para 91, pg. 32) provided "timely information...to identify the constraints to be addressed, areas for improvement, and priority actions for the next implementation period." It also observed that , "at a higher level, experiences and lessons form the project were used as input for t e Fisheries Law amendment in November 2017 and addressing the recommendations from the EU [European Union] with regard to the Yellow Card for IUU [Illegal, Unreported, and Unregistered] fishing, issued in October 2017."

## **M&E Quality Rating**

Substantial

#### 10. Other Issues

#### a. Safeguards

The environmental and social safeguard policies triggered by the project, which was classified in Category B, were: OP 4.01 (Environmental Assessment); OP 4.04 (Natural Habitats); OP 4.10 (Indigenous Peoples); and OP 4.12 (Involuntary Resettlement). A social assessment prior to appraisal (PAD, para 51, pg. 14) indicated that possible negative social impacts would be "limited land acquisition for small-scale civil works

associated with the upgrading of fishing ports, landing sites, and bio-security facilities for local farming communities" and that Khmer ethnic communities in the coastal areas of Soc Trang province might be among those affected by project land acquisition. An Environmental and Social Management Framework (ESMF) was likewise prepared to guide the project in the screening, assessing, and mitigating project environmental and social impacts. This framework required that for each type of infrastructure activity, the implementing agencies would prepare standard mitigation measures in the form of Environmental Management Plans (EMPs) for complicated subprojects or Environmental Code of Practice (ECOP) for simple small-scale construction and dredging subprojects. In addition, a Resettlement Policy Framework (RPF) was prepared by MARD in compliance with OP 4.12 and relevant Vietnamese laws, which specified the steps to be taken for preparation, review, and appraisal of Resettlement Action Plans (RAPs) for subprojects to be identified during project implementation. In accordance with the requirements of OP 4.12 an Ethnic Minority Policy Framework (EMPF) was also prepared by MARD to guide the preparation of Ethnic Minority Development Plans (EMDPs) during implementation.

During implementation, all infrastructure subprojects were subject to environmental and social screening followed by preparation of an Environmental Protection Commitment (EPC) report consistent with national law and Bank environmental safeguard requirements. Minor issues arose fo some infrastructure construction subprojects involving workplace safety, slow construction of wastewater treatment facilities for upgraded ports and landing sites, and limited environmental monitoring and inspection by local government Departments of Natural Resources and Environment (DONREs), but were addressed by the Provincial Project Management Units (PPMUs) in response to Bank recommendations. No complaints regarding environmental risks or impacts were reported and, according to the ICR (para. 94, pg. 33), "overall, the project was in full compliance" with Bank environmental safeguards requirements.

Overall compliance with social safeguards was also deemed "satisfactory" (ICR, para. 96, pp. 33-34). No physical displacement of households was necessary and even though 441 households and two organizations lost part of their lands, and these lands were either donated or adequately compensated for, and no negative impacts on livelihoods or living conditions were observed or reported. Four EDMPs were prepared and successfully implemented in Soc Trang, and about 74,000 local Khmer households reportedly received benefits through the project as a result.

#### b. Fiduciary Compliance

**Procurement**: Despite delays during the early years of project implementation -- mainly for port and landing upgrading contracts - due to borrower unfamiliarity with Bank procedures and later during occasional periodic Government budget constraints, procurement was considered generally satisfactory.

**Financial Management**: Performance was consistently rated moderately satisfactory although, according to the ICR (para. 98, pg. 34), supervision missions "identified that an adequate FM system was in place that could provide, with reasonable assurance, accurate and timely information that the World Bank loan proceeds were being used for the intended purpose." Payments were well controlled, quarterly financial statements were submitted on time and annual audited financial reports were unqualified. However, internal audit activities were apparently not carried out in as timely a manner as expected.

#### c. Unintended impacts (Positive or Negative)

According to the ICR (para. 75, pg. 28), in addition to other project impacts, the development of coastal infrastructure seemed to be an effective way of adapting to climate change in a context of sea level rise and increased saline intrusion, especially in the Mekong Delta.

#### d. Other

**Gender**: Efforts to address gender gaps were: (i) providing equal opportunities for women in technical training for aquaculture; (ii) providing training for women in alternative livelihoods (arts and crafts, fish processing, food processing, chicken, pig, and goat raising, etc.); (iii) carrying out consultations with women's groups when designing extension and alternative livelihood programs; (iv) reducing women's time on childcare to create greater opportunities for income generating activities; and (v) monitoring and reporting gender-segregated data as part of the project M&E.

**Ethnic Minority Development**: Approximately 220,000 Khmer people received benefits from the project through the four Ethnic Minority Development Plans (EMDPs), of which about 108,000 were women and some 83,000 were directly supported. Under these plans, the project provided training on farming technologies, farm management, and gender and basic life skills, procured environmentally-friendly fishing gear, and built family latrines. It also financed the upgrading of access roads, communal houses, a kindergarten and other facilities. According to the ICR (para. 67, pg. 25), "activities supported by the project helped reduce social and knowledge gaps between local Khmer and Kinh groups and build trust among Khmer communities as they join the CMGs [Co-management Groups]."

**Capacity Building and Institutional Strengthening:** Training and support were provided to the implementing agencies at both the central and provincial levels both for project management and the innovations to be introduced such as integrated spatial planning, GAP, biosecurity and fisheries comanagement, drawing in part on the FAO for this purpose.

Mobilizing Private Sector Financing: This occurred both for the family aquaculture farms and the improved hatcheries, as well as for the fishing ports and landing sites upgraded under the project. With respect to the improved hatcheries, for example, according to the ICR (paras. 72-73, pp. 27-28), "four private companies had already registered to invest in new shrimp hatcheries with a total registered investment around VND663 billion (equivalent to US\$28.5 million," while in relation to the improved ports and landing sites, "this leveraged private investors to invest in logistic supplies and support services including petrol stations, cold storages (sic), ice plants, ship repairing services, and so on (around VND10 billion per each port)."

**Poverty Reduction and Shared Prosperity:** In aquaculture, increased productivity and profits enabled many poor families to pay their debts ad improve their living conditions, while in near shore fisheries similar benefits were observed. According to the ICR (para 74, pg. 28), "in the longer term, income form fishing activities is expected to improve land become more stable as fisheries resources gradually recover as a result of reduced destructive fishing practices and better resource management."

11. Ratings			
Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Highly Satisfactory	Both Efficacy and Efficiency are rated High and Relevance of Objectives is rated Substantial. According to IEG guidelines, this leads to a Highly Satisfactory Outcome Rating
Bank Performance	Satisfactory	Satisfactory	
Quality of M&E	Substantial	Substantial	
Quality of ICR		High	

#### 12. Lessons

The ICR highlights four lessons which are of relevance for similar projects:

- 1. Integrated spatial planning has proven to be an effective tool for improving planning of coastal areas. This was achieved in the project through inclusion, consultation, participation, and information-sharing between related sectors, as has the decentralization of roles and responsibilities from the central to the provincial levels.
- 2. Introduction of the GAP (Good Aquaculture Practices) zones can lead to cooperation among small farmers. In this project small farmers undertook collective action to improve biosecurity infrastructure, environmental monitoring, disease risk management, and outbreak containment. Through use of appropriate technology they demonstrated clear benefits in reducing shrimp disease risks and improving survival rates and also increased yields and farm profitability.
- 3. Co-management in near shore areas along provincial coastlines resulted in increased fishermen's incomes and more sustainable fisheries. This process included mass information and awareness campaigns, local participation and training, strategic public sector support in preparing and implementing Co-management Plans (CMPs), infrastructure upgrading, and monitoring, control, and surveillance (MCS) strengthening together with the promotion of alternative livelihoods can result in increased incomes and more sustainable production from coastal capture fisheries.
- 4. In principle, shifting fishers to alternative forms of employment can reduce pressures on fisheries. However, experience from this project indicates that including a sub-component in this regard adds

complexity to the project and suggests that a longer time horizon may be needed in order to achieve results at scale. It was thus recommended that alternative livelihood initiatives should instead be integrated in broader local government socio-economic development plans and supported through separate programs.

In addition IEG draws the following lesson:

5. The project illustrates how the Bank's mobilization of external specialized technical assistance -both for aquaculture and near-shore coastal fisheries --during both preparation implementation, in
this case from the FAO Cooperative Program, can contribute positively to its successful outcome,
especially considering that this was the first Bank operation for the fisheries sector in the country.
This is an example of good practice.

#### 13. Assessment Recommended?

No

### 14. Comments on Quality of ICR

This is an excellent ICR, which is well-written and provides a comprehensive picture of project design, implementation, outputs, and outcomes. There is a clear link between the narrative, the ratings, and the evicence, and the quality of the evidence and analysis is substantial and informs all aspects of the ICR. It also contains a good economic analysis that disaggregates costs and benefits to the individual participating province level as well as presenting consolidated figures for the project as a whole. It also describes project institutional strengthening aspects by component as well as for the operation as a whole. There were a few very minor areas in the ICR where clarifications were requested by IEG and these were subsequently made in a discussion with the co-TTLs and ICR main author, but these did not detract from the overall very high quality of the ICR. Finally, the lessons are specific, useful, and based on evidence of what actually occurred in the project.

a. Quality of ICR Rating
High