Public Disclosure Authorized

Report Number: ICRR0022046

1. Project Data

Project ID	Project Name
P112611	Increasing Resilience to Climate Change
Country	**Practice Area(Lead)**
Vanuatu	Environment, Natural Resources & the Blue Economy

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
TF-13694,TF-13810,TF-13869,TF-95486	31-Dec-2018	9,887,312.42
Bank Approval Date	**Closing Date (Actual)**	
04-Dec-2012	28-Jun-2019	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	9,746,079.84	9,746,079.84
Revised Commitment	9,821,954.90	8,885,686.82
Actual	9,831,120.22	9,887,312.42

Prepared by	Reviewed by	ICR Review Coordinator	Group
Chikako Miwa	Christopher David Nelson	Christopher David Nelson	IEGSD (Unit 4)

2. Project Objectives and Components

a. Objectives

Original Project Objective: Help increase the resilience of communities in the Recipient's territory to the impacts of climate variability and change and natural hazards on food and water security as well as livelihoods (European Union Grant Agreement dated July 12, 2013, Schedule 1, page 7; Global Environment Facility (GEF) Grant Agreement, Schedule 1)

Revised Project Objective: Strengthen disaster risk management systems and pilot investments in select villages in the Recipient's territory to increase the resilience to the impacts of natural hazards and climate

variability and change (Amendment to GEF Grant Agreement dated June 28, 2017, para. 2; Amendment to Global Facility for Disaster Reduction and Recovery (GFDRR) Grant Agreement dated June 28, 2017, para. 2)

The Project Objective was revised at a Level-1 restructuring in June 23, 2017.

For the purposes of this ICR Review, the following sub-objectives of the Original and Revised Project Objectives will be assessed:

Sub-objective 1: Help increase the resilience of communities in the Recipient's territory to the impacts of climate variability and change and natural hazards on food security

Sub-objective 2: Help increase the resilience of communities in the Recipient's territory to the impacts of climate variability and change and natural hazards on water security

Sub-objective 3: Help increase the resilience of communities in the Recipient's territory to the impacts of climate variability and change and natural hazards on livelihood

Sub-objective 4: Strengthen disaster risk management systems to increase the resilience to the impacts of natural hazards and climate variability and change

Sub-objective 5: Pilot investments in select villages in the Recipient's territory to increase the resilience to the impacts of natural hazards and climate variability and change

b. Were the project objectives/key associated outcome targets revised during implementation?

Yes

Did the Board approve the revised objectives/key associated outcome targets?

Yes

Date of Board Approval

23-Jun-2017

c. Will a split evaluation be undertaken?

Yes

d. Components

Component 1: Institutional Strengthening for Climate Change Adaptation and Disaster Risk Management (Appraisal cost: US$4.37 million. Actual cost: US$4.84 million, which was 111 percent of the approved cost.)

Component 1 intended to strengthen the Recipient's project management capacities, specifically targeting the following.

Sub-component 1.1: The NAB-Secretariat/Project Management Unit (PMU)

Sub-component 1.2: The National Disaster Management Office

Sub-component 1.3: Early warning systems to strengthen capacity of national multi-hazard warning and emergency operations center to respond to disasters

Component 2: Increasing Community Resilience (Appraisal cost: US$2.43 million. Actual cost: US$2.62 million, which was 108 percent of the approved cost.)

Target area of Component 2 was revised at the Level 1 restructuring as follows. The revision was made to support the vulnerable communities in the central and southern islands in Vanuatu, which were severely affected by Tropical Cyclone (TC) Pam in 2015.

Original: Increasing Community Resilience on Active Volcanic Islands and Coastal Areas

Revised: Increasing Community Resilience in Areas Affected by Tropical Cyclone Pam

Component 2 intended to enhance rural communities' resilience against climate change and disaster risks though improving coordination abilities at all levels, including national, regional, and community-based stakeholders.

Sub-component 2.1: Strengthened Methods, Processes and Protocols for Climate Change Adaptation and DRM

Sub-component 2.2: Enhancing Community and Ecosystem-based Adaptation and Disaster Risk Management

Component 3: Promotion of Improved Technologies for Food Crop Production and Resilience to Climate Change (Appraisal cost: US$2.48 million. Actual cost: US$1.42 million, which was 57 percent of the approved cost.)

Component 3 intended to support the Project Implementing Entity and the Recipient to develop approaches, strategies and technologies for adapting to climate change and responding to food security and market demands.

Sub-component 3.1: Production and Distribution of improved plant genetic material

Sub-component 3.2 Distributing Improved Agricultural Technologies to support on-farm production and resilience to climate change

Component 4: Rural Water Security: Increased Access to Secure Water Supply (Appraisal cost: US$2.24 million. Actual cost: US$1.05 million, which was 47 percent of the approved cost.)

Component 4 intended to support the Recipient to increase access to secure water supply by (i) completing the national inventory of rural water systems, updating rural water supply standards and guidelines for rural water supply provision, and improving outreach to partners working in the sector; and (ii) installing rainwater catchment and storage systems to supply safe water to rural communities.

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

Project Cost: At appraisal, the original cost estimate was US$11.52 million (PAD, Table 1, page 7). At ICR submission, the actual cost was US$9.93 million (ICR, Annex 3, Table 3.1, page 50).

Financing: At appraisal, expected financing sources were: US$5.58 million from GEF, US$2.77 million from EC EuropeAID Agency, US$2.73 million from GFDRR, and US$0.44 million from the Recipient (PAD Datasheet). At ICR submission, the actual costs were financed with US$5.58 million from GEF, US$1.62 million from EC EuropeAID Agency, and US$2.73 million from GFDRR (ICR, Annex 3, Table 3.1, page 50).

Dates: The Project was approved on December 4, 2012, and became effective on April 24, 2013. The Mid-Term Review (MTR) was published on November 16, 2015. The Project was closed on June 28, 2019, which was 6 months after the original closing date of December 31, 2018.

The Project had the following three restructurings: one Level 1 restructuring in 2017 and two Level 2 restructurings in 2016 and 2018.

The Level 1 restructuring was conducted to change: the PDO, the PDO indicators, scope of activities, components, component costs, implementation arrangements, safeguards triggered, legal covenants, categories of expenditures, and closing date. In response to the request from the Government, the restructuring aimed to simplify the Project and support the communities affected by TC Pam through the micro-projects. The closing date was extended from December 31, 2017 to December 31, 2018. The other changes made at the Level 1 restructuring were discussed in the relevant sections in the ICR Review.

The Level 2 restructurings were conducted to extend closing dates of the trust funds. In 2016, the closing date of the GFDRR trust fund was extended from March 21, 2016 to December 31, 2017. In 2018, the closing date of the GEF grant was extended from December 31, 2018 to June 28, 2019.

Phases: Phase I covered the period from project approval in December 2012 to June 2017; Phase II from Level 1 Restructuring (June 2017) until the project closing in June 2019. The share of actual credit disbursements made by each phase were as follows: 69% (US$6.89 million, Phase I); and 31% (US$3.04 million, Phase II) (ICR, Table 5).

Split Evaluation: Changes in a project's scope or ambition (and therefore its outcome targets) occurred due to TC Pam in March 2015. IEG concurred with the ICR team that a split evaluation was deemed necessary.

3. Relevance of Objectives

Rationale

Country Context. Geographically, Vanuatu comprised of about 80 islands with a total land area of 12,336 square kilometers, which spread over 1,300 km from north to south in the Western Pacific Ocean. The country had high exposure to frequent and damaging natural hazards, including volcanic eruptions, cyclones, earthquakes, tsunamis, storm surges, coastal and river flooding, and landslides. Economically, the dispersed land area, combined with small population of 240,000, made it challenging for the country to expand its economic base by using economies of scale. Small-scale agriculture with relatively low

productivity was at the core of economic activities. It comprised of around 65 percent of Gross Domestic Product (GDP). It also supported livelihoods to rural population, which was around 80 percent of the total population. Limited financial and technical capacities of the Government made it difficult for them to address those issues effectively. This meant Vanuatu was one of the most vulnerable countries in the world, based on the ranking of 111 countries using the Commonwealth Vulnerability Index.

Sector Context. The country was affected by threats of natural disasters and climate variability. Rising sea levels, unstable rainfalls, and extreme weather events including cyclones, brought severe damage to the agriculture sector. On the small and remote islands, the majority of water resources were collected only in a wet season with limited storage capacities. Their food and water security was directly damaged by floods and droughts.

Relevance to Bank Strategies. At appraisal, the Project was in line with a policy and practice note for climate and disaster resilient development in the pacific islands region published by the Bank in 2012. The policy note emphasized an integrated DRR and CCA approach. At project closure, the Project remained relevant to the policy and practice note.

Relevance to Government Strategies. At appraisal, the original project objective was relevant to the National Adaptation Programme for Action (NAPA) published in 2007 under the United Nations Framework Convention on Climate Change (UNFCCC). The project objective aimed to support three of the country's immediate adaptation needs: agriculture, water resources, and coastal resources management. The original project objective was also in line with the Government's main development plan, the Priorities and Action Agenda (PAA) (2006-15). The PAA was revised in late 2011 to include a section on managing climate change and disaster risks. These frameworks and plans paved the way for fundamental institutional reforms and new operational structures with mandates to mainstream disaster risk reduction (DRR) and climate adaptation into the Government, and to ensure effective and efficient coordination between agencies through a multi-hazard approach. At project closure, the revised project objective was aligned with the government strategy to strengthen support to the communities severely affected by TC Pam in 2015.

Institutional Capacity and Realism. Vanuatu Meteorology and Geohazards Department (VMGD) was the Implementing Agency, being responsible for project management and the logistical support. At appraisal, the Government was in the middle of institutional restructuring to respond to the impending risks and need for adaptation associated with climate change. The Council of Ministers was about to approve the proposal to establish the National Advisory Board for Disaster Risk Reduction and Climate Change (NAB). The restructuring aimed to: (1) enable the Government to take integrated approaches to address CCA and DRR by combining functions of existing two separate agencies, the National Advisory Committee on Climate Change (NACCC) and the National Task Force for Disaster Risk Reduction and Disaster Management; and (2) strengthen the new agency's administrative capacity. The Project's implementation arrangements were designed to accommodate the planned restructuring, while enabling the project to get off to a good start, and subsequently fit seamlessly with the new structure. In this regard, under Component 1.1, the NAB was supported by a Secretariat/PMU located in VMGD.

Previous Sector Experience. The Project drew on the Bank's experience of similar projects and interventions in other Pacific Islands, such as the Kiribati Adaptation Project (P112615) and disaster risk reduction interventions in Samoa. Moreover, the Project reflected the experience gained in Indonesia under the Coral Reef Research Management Project (COREMAP).

Rating
High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

Sub-objective 1: Help increase the resilience of communities in the Recipient's territory to the impacts of climate variability and change and natural hazards on food security

Rationale

Theory of Change (TOC) for the Project: Strengthening the capacity of the PMU on project management and development of operational manuals was intended to provide a useful foundation for an operational response. Revising the NDMO Act and developing a DRR/CCA strategic plan and organizational structure would strengthen NDMO. Establishing provincial disaster coordination centers and multi-hazard real-time data communications network would strengthen the Recipient's EWS. In combination, strengthening the PMU, NDMO, and EWS would lead to improved capacities at national and provincial levels for climate change adaptation and disaster risk management. **Developing methods/processes/protocols on CCA&DRM** and **implementing pilot community-based activities (small grants)** was intended to lead to a reduction of climate and disaster risks. Producing improved plant genetic material with field testing and multiplication and distributing them would promote improved agricultural technologies for food production. It would lead to improvements in food security and livelihoods at the community level. Completing the national inventory of rural water systems, updating rural water supply standards, and installing rainwater catchment and storage systems would increase access to the water supply. It would lead to improvements in water security at the community level. Improvements in food security, water security, and livelihoods of communities would increase their resilience against the impact of natural hazards and climate variability and change. The critical assumptions were: (1) small grants were sufficiently implemented in terms of quality and quantity by grantees; (2) appropriate financial and human resources were secured to improve access to water supply, based on the completed national inventory of rural water systems and the updated rural water supply standards.

Implementation of the activities on small grants had not progressed much in the early years. At the restructuring, small grants activities were replaced with micro-projects.

Outputs:

- Estimated 5,200 farmers received planting materials and support to crop production practices that were more resilient to droughts and floods. This included 1,800 beneficiaries in the immediate aftermath of TC Pam (from distribution led by VARTC), and 3,934 through the demonstration plots included as micro-projects. The farmers received planting materials and support to food crop production practices such as mulching and multi-cropping, in order to increase resilience to droughts and floods.

- Cultivation of kumala (sweet potato), taro, manioc, and yams were tested to improve food crop varieties. Particularly, kumala and manioc were multiplied in the demonstration plots and distributed to households and farmers.
- Twelve workshops/trainings were provided to farmers, field workers, extension officers, and NGO partners to maximize the benefits associated with the improved crop varieties
- Three interviews were conducted on national radio to promote new improved varieties of kumala and manioc and raise awareness of the benefits of adopting climate resilient food production practices.
- As part of the TC Pam recovery support, about US$300,000 worth of agriculture tools and trialed selected crops were distributed. The tools were distributed through the DARD agriculture extension network. According to the GoV's completion report, approximately 176,000 people accessed the tools which helped them build back their gardens after the cyclone.

Outcomes:

- There were 3,934 beneficiaries directly supported by the agriculture-related investments, exceeding the target of 1,000 (393.4 percent of the revised target). The beneficiaries were supported by demonstration plots under the micro-projects.
- An estimated 5,000-10,000 farmers benefited indirectly through distribution of material such as new food crops from households to households (and not directly from the project), according to observations by the PMU and NGO partners.

The original outcome indicator was revised at the restructuring to make it measurable. However, the revision caused the indicator to focus only on output-level achievements rather than outcome-level achievements that could sufficiently illustrate resilience. For example, the revised indicator measured the number of people supported, but not how their behaviors for CCA&DRM changed after the support.

On positive side, there were a certain number of beneficiaries who received direct or indirect support on climate resilient food production practices. On the other hand, there was not enough evidence whether the supported farmers adopted climate resilient food crop production practices. Thus, overall, achievements of Sub-objective 1 is rated modest.

Rating
Modest

OBJECTIVE 1 REVISION 1
Revised Objective
As above - no change.

Revised Rationale
As outlined earlier, nothing changed at the restructuring in delivering progress against Sub-objective 1. See detailed overview above.

Revised Rating
Modest

OBJECTIVE 2
Objective
Sub-objective 2: Help increase the resilience of communities in the Recipient's territory to the impacts of climate variability and change and natural hazards on water security

Rationale
Outputs:

- There were 9 water systems repaired, exceeding the target of 8 (112.5 percent of the original target). In the aftermath of TC Pam, the project helped to repair 4 water systems in Tongoa and 5 in Tanna Island and distributed 30 water tanks to the islands affected by TC Pam.
- In rural areas, 12,387 people were provided with access to improved water sources through micro-projects, achieving double of the target of 6,000 (206 percent of the original target). There were 37 new water-related micro-projects, consisting of 22 rainwater harvesting systems and 15 gravity-fed systems.
- Water inventories for Torba, Shefa and Penama provinces were completed to determine current coverage and future priorities.
- A water resource database was established. The database also included the number of direct and indirect gravity fed systems and hand pumps, to facilitate the future feasibility studies and delivery of water investments, thereby contributing to Outcome 3.2 of the GEF LDCF Strategy “enhanced enabling environment to support adaptation-related technology transfer”.
- Manuals and guidelines for rainwater harvesting systems were developed.

Outcomes:

- An estimated 21,843 people were provided with access to improved water sources, exceeding the target of 1,500 people (1,456.2 percent of the revised target). The number of beneficiaries consisted of 9,456 beneficiaries through repairs of existing water systems after TC Pam as well as 12,387 beneficiaries through new systems supported by micro-projects.

- The beneficiary survey conducted at the end of the project indicated that 89 percent of the respondents were satisfied/very satisfied with water quality, and 77 percent were satisfied/very satisfied with water quantity. All the water systems were in use at the time of the ICR and had reportedly been operating satisfactorily since their completion in 2018-early 2019. They were being maintained by community water committees and using the training received on operations and maintenance supported by the project.

Water-related investments, which included rehabilitated systems after TC Pam, were implemented with appropriate resilience and safety standards. First, the rainwater harvesting systems were designed with adequate storage to operate during drought periods. For example, an average of 7 liters/person/day was able to be stored in rainwater catchment systems, while gravity fed systems were designed to provide 50 liters/person/day. These allow beneficiaries to use 2-3 times more water than traditional sources. Second, the structures were designed to withstand the anticipated risks and damages of natural hazards. Third, the

structures were designed with the involvement of the community representatives to ensure regular checks and maintenance. Communities were trained in monitoring water quality and in regularly cleaning the structures. By providing water that is accessible on premises, available when needed, and free from contamination, the water micro-projects met the United Nations Children's Fund/World Health Organization (UNICEF/WHO) standards for safely managed water services. In addition, operation and maintenance plans for each of the micro-projects were prepared to ensure their sustainability. The DGMWR conducted community training on maintenance (including specialized plumber training), operating costs, roles and responsibilities of users, fees, and maintenance timelines.

The water provision structures were appropriately built in a way to strengthen resilience of communities. On this basis, the achievement of Sub-objective 2 is rated substantial.

Rating
Substantial

OBJECTIVE 2 REVISION 1
Revised Objective
As above - no change.

Revised Rationale
As outlined earlier, nothing changed at the restructuring in delivering progress against Sub-objective 2. See detailed overview above.

Revised Rating
Substantial

OBJECTIVE 3
Objective
Sub-objective 3: Help increase the resilience of communities in the Recipient's territory to the impacts of climate variability and change and natural hazards on livelihood

Rationale
Outputs:

- The all-weather access roads were established.
- Kumala and manioc were multiplied in the demonstration plots and distributed to households and farmers (Same as Sub-objective 1).
- The repair and replacement of water systems after TC Pam were conducted (Same as Sub-objective 2), which provided water for agricultural production.

Outcomes:

- The improved food crops of kumala and manioc contributed to provision of cash income to the population. Sale of the improved food crops in large quantities were observed by World Vision, an NGO partner, in markets in Tanna and Port Vila. It also contributed to Outcome 3.1 of the GEF LDCF Strategy “successful demonstration, deployment and transfer of relevant adaptation technology in targeted areas”.

- The all-weather access roads contributed to enhanced livelihoods through improved access to markets. Several beneficiaries confirmed that the access roads had contributed to a more stable income and for many, increased income throughout the year. Based on interviews with beneficiaries of both access roads and water-related micro-projects, the incremental revenues derived from these market sales ranged 3-68 percent of the average monthly income for rural Tafea, where Tanna was located.
- The time saved by the improved roads and water systems contributed to income diversification. The interview results showed that some beneficiaries started to engage in additional activities to gain incomes, such as rearing pigs in pens, cultivating tomatoes (high value crop) to be sold in Port Vila, making handicrafts, and making food for sale at local bus stops. More time would be required to see how much these activities contributed to generate additional incomes.

Improved food crops, water systems, and roads contributed to achievement of Sub-objective 3 through providing cash income, improving market access, and saving time for travel and water collection. On the other hand, quantitative evidence on the achievements of outcomes could have been more comprehensive. For example, the wide range of incremental revenues in rural Tafea did not fully explain significance of the achievement. It would be better if a weighted average of the incremental avenue was presented. Likewise, the evidence on the contribution to cash income and income diversification provided some positive cases, but did not provide a big picture on the achievements. Despite of these minor shortcomings on the evidence on the achievements of outcomes, overall, the achievement of Sub-objective 3 is rated substantial.

Rating
Substantial

OBJECTIVE 3 REVISION 1
Revised Objective
As above - no change.

Revised Rationale
As outlined earlier, nothing changed at the restructuring in delivering progress against Sub-objective 3. See detailed overview above.

Revised Rating
Substantial

OBJECTIVE 4

Objective

New Objective Post Restructure

Rationale

See detail on achievement outlined below.

Rating

Not Rated/Not Applicable

OBJECTIVE 4 REVISION 1

Revised Objective

New Objective Post Restructure - Sub-objective 4: Strengthen disaster risk management systems to increase the resilience to the impacts of natural hazards and climate variability and change

Revised Rationale

TOC for the Project (changed after restructuring were in bold): Providing goods and consultants to: (1) the Secretariat/PMU in NAB on project management and development of operational manuals, (2) NDMO on revision of NDMO Act and development of DRR/CCA strategic plan and organizational structure, (3) the Recipient's EWS on establishment of provincial disaster coordination centers and multi-hazard real-time data communications network, would strengthen the capacities of the Secretariat/PMU in NAB, NDMO, and EWS. This would lead to **strengthened disaster risk management systems** for climate change adaptation and disaster risk management. **Implementing microprojects and supporting climate-resilient community investments would lead to strengthened disaster risk management systems and pilot investments in select villages. Through micro-projects**, producing improved plant genetic material with field testing and multiplication and distributing improved plant materials and agricultural technologies would encourage **pilot investments in selected villages** to promote improved technologies for food production. It would lead to improvements in food security and livelihoods at the community level. Through micro-projects, completing the national inventory of rural water systems, updating rural water supply standards, and installing rainwater catchment and storage systems would be delivered through **pilot investments in selected villages** and thus increase access to the water supply. It would lead to an improvement in water security at the community level. Improvements in food security, water security, and livelihoods of communities would increase their resilience against the impact of climate variability and change and natural hazards.

Critical assumptions included: (1) improving food and water security and livelihoods would contribute to the revised PDO outcome, and (2) implementing microprojects and supporting climate-resilient community investments would lead to strengthened disaster risk management systems and pilot investments in select villages.

Both the original and revised PDOs aimed to strengthen resilience of communities against the impacts of (1) climate variability and change and (2) natural hazards. The main difference was that the revised PDO put more emphasis on the latter and strengthened resilience of the communities affected by TC Pam.

Outputs:

- The NDMO's institutional capacity was strengthened through establishing the NDMO Act and two provincial disaster centers in Tafea and Torba provinces. The two provincial disaster centers were fully equipped and operational, meeting the target of two (100 percent of the revised target).
- The institutional structure and capacity to deliver climate-resilient investments at provincial and local levels were strengthened from the baseline of Low to the actual achievement of High, fully meeting the target (100 percent of the revised target).
- Nine early warning system stations (eight newly established stations and one repaired station) were operationalized, exceeding the target of eight stations (112 percent of the original target). These stations helped VMGD to increase the coverage and monitor and act on seismic risks.
- A hundred percent of data communication links were established to volcano monitoring sites, meeting the target.
- Two Operational Manuals providing procedures / protocols for Climate Change adaptation & Disaster management projects/programs were developed, meeting the target of two (100 percent of the revised target). These were: (1) the project operations manual and (2) a micro-project appraisal manual which was being further developed by the DLA as a guide to implement community-level projects.
- Three guidelines/manuals/tools based on good local and international practices were developed for guiding CBA in Vanuatu, meeting the target of three (100 percent of the revised target). These were: (1) the project operations manual; (2) a trainer of trainers' manual for community development programs which has reportedly been used widely; and (3) the micro-project appraisal manual. This IR indicator was redundant with the IR indicator above.
- Sixty-seven villages received climate and disaster resilient investments, exceeding the target of 65 (103 percent of the revised target). The villages (or communities) are those affected by TC Pam as well as those in Ambrym affected by a cyclone, landslide and volcanic eruption. The project supported a total of 67 micro-investments, which consisted of: 18 agriculture, 22 rainwater harvesting, 15 gravity fed systems, 6 multi-purpose centers, and 6 feeder roads.

Outcomes:

- Total of 28,829 beneficiaries were directly supported by the project, exceeding the target of 3,000 (960 percent of the revised target), which include the beneficiaries of Sub-objective 4.
- Disaster risk management systems to increase the resilience to the impacts of natural hazards and climate variability and change were strengthened.

There was no PDO outcome indicator designed for Sub-objective 4, as discussed in Section 9.b. The revised PDO indicator on the total number of direct project beneficiaries included the beneficiaries of Sub-objective 4; however, the number of beneficiaries provided evidence for an output-level achievement rather than an outcome-level achievement. There was no explicit evidence regarding to what extent the DRM systems were strengthened. Overall, the achievement of Sub-objective 4 is rated modest.

Revised Rating

Modest

OBJECTIVE 5

Objective

New Objective Post Restructure

Rationale

See detail on achievement outlined below.

Rating

Not Rated/Not Applicable

OBJECTIVE 5 REVISION 1

Revised Objective

New Objective Post Restructure - Sub-objective 5: Pilot investments in select villages in the Recipient's territory to increase the resilience to the impacts of natural hazards and climate variability and change

Revised Rationale

Outputs:

- Sixty-seven villages received climate and disaster resilient investments, exceeding the target of 65 (103 percent of the revised target). The villages (or communities) are those affected by TC Pam as well as those in Ambrym affected by a cyclone, landslide, and volcanic eruption. The project supported a total of 67 micro-investments, which consisted of: 18 agriculture, 22 rainwater harvesting, 15 gravity fed systems, 6 multi-purpose centers, and 6 feeder roads.
- Nine investments in post TC Pam recovery needs were made, exceeding the target of eight.

Outcomes:

- There were 12,378 beneficiaries from water-related investments, exceeding the target of 1,800 (687 percent of the revised target). There were 3,934 beneficiaries from agriculture-related investments, exceeding the target of 1,000 (393 percent of the revised target). Though these indicators were included in the revised outcome indicators, the numbers of beneficiaries were output-level indicators as these did not measure to what extent the beneficiaries increased the resilience to the impacts of natural hazards and climate variability and change.
- Beneficiary satisfaction for the micro-projects was high in general. All respondents expressed satisfaction for Rainwater Catchment (RWC) micro-projects, all respondents expressed satisfaction (Very Satisfied: 74 percent; and Satisfied: 26 percent). For Gravity-Fed Systems (GFS) and Multipurpose Centers (MPCs), 73 percent of respondents expressed satisfaction. For Feeder Roads (FRs), 72 percent expressed satisfaction. For Agriculture Demonstration plots (AGRIC), there were only four respondents, which were insufficient to derive any meaningful conclusions.

Climate and disaster resilient investments were piloted sufficiently, with the beneficiaries' high satisfaction. On this basis, achievement of Sub-objective 5 is rated substantial.

Revised Rating
Substantial

OVERALL EFFICACY
Rationale
The achievement of Sub-objective 1 was modest, mainly due to the lack of evidence regarding the farmers who adopted climate resilient food crop production practices. The achievement of Sub-objective 2 was substantial, due to the successful provision of water structures which supported communities to strengthen resilience. The achievement of Sub-objective 3 was substantial, due to the adequate proxy evidence on the Project's contribution to enhanced livelihoods. Consolidating Sub-objectives 1-3, overall efficacy in Phase I is rated substantial.

Overall Efficacy Rating

Substantial

OVERALL EFFICACY REVISION 1
Overall Efficacy Revision 1 Rationale
Description of the achievements of Sub-objective 1-3 were the same as above. The achievement of Sub-objective 4 was modest, due to the insufficient outcome-level evidence on the Project's contributions to strengthen the DRM system. The achievement of Sub-objective 5 was substantial, due to the successful pilot investments. Consolidating Sub-objective 1-5, overall efficacy in Phase II is rated substantial.

Overall Efficacy Revision 1 Rating

Substantial

5. Efficiency
Economic Analysis: At appraisal, an ex-ante economic analysis was not conducted; because, household level data were not available to quantify the project benefits associated with climate change adaptation measures (PAD, p.12). At completion, the ICR (p.63) included an ex-post cost-benefit analysis on the early warning system (Component 1.3) and on community micro-projects (Components 1.1, 2, 3, and 4 after restructuring). The results showed that Economic Internal Rate of Return (EIRR) was 19.1 percent, covering 57.6 percent of the project costs, as well as Net Present Value (NPV) was US$2.7 million equivalent, with a 10 percent discount rate.

Cost Effectiveness Analysis: The cost-effectiveness of the micro-projects was assessed by comparing actual unit costs with an engineering original estimate, and in the case of gravity-fed systems, that of comparable sized

schemes under the Department of Water Resources. The micro-projects were generally cost-effective, with unit costs 10-63 percent below the original estimate and comparable unit costs (ICR, Table 4.6, Annex 4). The exception was feeder roads, where the actual cost per linear meter (VT 29,751) was slightly higher (3 percent) than the PWD engineering estimate (VT 28,880) but this is considered reasonable given that many of these roads were in remote and steep areas of Tanna Island.

Aspects of Design and Implementation that Influenced Efficiency: The Project had experienced procurement delay for 3 years since its start. The delay was caused by limited experience in the PMU, and the impacts of TC Pam. Project management costs amounted to 31 percent of the total project costs, exceeding the original estimate of 22 percent at appraisal. The project management costs were also high compared to similar projects; for example, PMU costs were about 20 percent and 15 percent for the Solomon Islands RDP (P089297) for the São Tomé and Príncipe Adaptation Project (P111669), respectively. In addition, the Second Kiribati Adaptation Project (P089326) accounted 21 percent of total costs as administrative costs. However, it should be noted that some items were incorrectly accounted against Component 1.1. After adjusting the mistake, project management costs amounted to about 26 percent of the total project costs.

The project management costs were relatively high because of the following reasons. First, the limited expertise in-country and within VMGD required international advisors and experts during project initiation for areas such as monitoring and evaluation, project management, and procurement and financial management. Second, the original project design, which involved multiple technical agencies and complex plans, caused additional coordination and financial management support. Third, the Project had to be adjusted due to TC Pam. Fourth, travel and training costs in remote parts of Vanuatu, such as Tanna, Shepherds, and Ambrym, were costly. These costs were considered necessary expense under the special circumstances of island countries, including remote and scattered project sites and insufficient human resources.

On the positive side, after the project restructuring, implementation of micro-project was accelerated. The start of bulk procurement for micro-projects contributed to the acceleration. It took an average of 4 months from design to delivery, and 11 months from design to completion. The restructuring enhanced efficient use of micro-project funds, as micro-projects supported 28,800 beneficiaries at a cost of US$4.0 million, compared to the appraisal estimate of 20,000-22,000 beneficiaries at US$7.2 million.

On balance, the EIRR and the unit costs of micro-projects were at reasonable rates, while the project management costs were relatively high compared to similar projects. In sum, the efficiency was rated as substantial.

Efficiency Rating

Substantial

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		0	0 ☐ Not Applicable
ICR Estimate	✓	19.10	57.60 ☐ Not Applicable

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

6. Outcome

The relevance of objectives was high. The efficacy was substantial with shortcomings on the insufficient evidence for outcome-level achievements. For the original objective, the achievement of one out of the three sub-objectives was modest. For the objective after restructuring, the achievement of two out of five sub-objectives were modest. Thus, overall, the achievements of the original objective and the objective after restructuring are both rated moderately satisfactory. The efficiency was substantial.

Calculation of overall outcome rating is summarized in the table below.

Rating Dimension	Original Objective	Objective after Restructuring
Relevance of Objectives	High	
Efficacy	Substantial	Substantial
Efficiency	Substantial	
Outcome Rating	Moderately Satisfactory	Moderately Satisfactory
Outcome Rating Value	4	4
Amount Disbursed (US$ million)	6.89	3.04
Disbursement (%)	69%	31%
Weight Value	4*0.69 = 2.76	4*0.31 = 1.24
Overall Outcome Rating	**Moderately Satisfactory** (2.76 + 1.24 = 4)	

a. Outcome Rating

Moderately Satisfactory

7. Risk to Development Outcome

1. Sustainability risk for maintenance of the structures built through the micro-projects: There would be a sustainability risk for securing funding for maintenance of the outputs of the micro-projects, particularly for feeder roads and gravity fed systems where maintenance costs are significant. The risk would be increased under the country's high disaster risks. Heavy rainfall and potential landslide would require maintenance of the structures every two years. It would raise a risk that the Public Works Department (PWD), responsible for maintenance of all roads, would not receive sufficient fund allocations at national level, which would negatively affect fund availabilities at provincial level. The agreed exit strategy at hand-over was that communities would be fully responsible for maintenance, except in the case of feeder roads. However, despite extensive training (e.g. for gravity fed systems), maintenance may become a challenge for communities that lack capacity, cash resources, or organizational skills to access province or

national government support. According to the beneficiary survey, 64 percent of the respondents were optimistic that the micro-projects would continue to operate in the near future, despite the fact that the semi-subsistence communities would have limited finances. However, about 26 percent of the respondents stressed that sustainability would depend on capacities and responsibilities of communities and committees on fundraising and maintenance.

To mitigate the sustainability risk, for the feeder roads, the GoV tasked the Tanna-based staff of ongoing projects do regular site visits. It was aimed to ensure maintenance to be completed by local contractors and/or communities. In addition, communities made commitments, as part of the handover, to regularly clear debris and weed from the roads to prevent damages from heavy rainfall. For the gravity-fed systems, to mitigate the risk, the provincial government allocated VT 1 million annually. The Department of Water also showed strong commitment for the maintenance of the gravity-fed systems. The ICR (page 35) also empathized the importance of continuing to accompany the micro-projects after their completion.

2. Institutional risk to sustain outcome of Sub-objective 4: There would be an institutional risk in regard to disaster risk management systems. To mitigate the institutional risk, the draft Disaster Risk Management Bill was approved by the Cabinet in October 2019 and the NDMO plan was revised. GoV and the World Bank would also establish a Disaster Risk Management Development Policy Grant with Catastrophe Deferred Drawdown Option (Cat-DDO) under IDA18. The Grant's intention was to enhance dialogue on DRM and early warning systems, as well as necessary institutional capacities at national, provincial, and municipal levels.

3. Financial risk to maintain the early warning systems: To mitigate the financial risk, the necessary maintenance budget for VMGD was confirmed by the Government in June 2019. Prior to that, GoV had already committed funds for recruiting the Provincial Disaster Officers to improve performances of the provincial centers. The beneficiary survey internal and external to the Project showed that the expansion of mobile phones and radio communication to remote communities improved early warning. The achievements contributed to incentivize the Government to continue providing institutional support and funding for a strengthened disaster risk management system.

8. Assessment of Bank Performance

a. Quality-at-Entry

Strategic relevance and the approach were thoroughly considered to align with the Government's priorities. The project design considered GoV's relative inexperience with project implementation, the lack of oversight arrangements, and the costs and burden of implementing large projects in remote islands, reflecting on the learnings from the Bank's projects in the other Small Islands Developing States (SIDS) countries. The task team at entry had the appropriate mix of technical expertise. Of the main aspects in project design, technical and procurement arrangements were adequately considered, given the results obtained from ongoing and previous national programs at the time of appraisal.

On the other hand, institutional and financial aspects were not sufficiently considered to develop the project design. Regarding institutional aspects, the PAD's assessments on risks and relevant risk mitigation measures overestimated the GoV's capacities. For example, the lack of familiarity of the main implementing agency (VMGD) with the Bank procedures delayed the project approval by the Board for

two and a half years (ICR, para.78). Although limitations on capacity and human resources were mentioned throughout in the PAD, the project results, geographic influence, and implementation plans did not adequately account for these constraints. The design was complex, involving seven agencies and many sub-components. The original components were sectoral with few synergies or complementarities. The risks were expected to be mitigated through strong technical assistance support for institutional strengthening. However, this design complexity proved to be difficult for the PMU to manage during the early stages of implementation.

Regarding financial aspects, the project had three funding sources, four separate ledgers, and two fiduciary agencies (VMGD and VARTC). There was little information on implementation arrangements for the small grant mechanism in the PAD. In addition, the selection process for beneficiary communities was not outlined, which created early challenges in delivering community investments (see also Bank Performance: Quality at entry for more details). Moreover, on financial management, there were two shortcomings in recording funds in the Bank's system. First, at appraisal, the project preparation grant (TF95486) was included in the approved amount for the Project. Second, the EU grant (TF13869) was double counted, as both the original estimate (US$2.77 million equivalent) and the actual commitment (US$2.04 million) were recorded as separate items and included in the approved amount. It caused a confusing situation to monitor disbursement status through the Bank's system.

On balance, strategic, technical, and procurement aspects were well considered, while institutional and financial aspects would have benefitted from more comprehensive and detailed arrangements at project entry. On this basis, the Quality of Entry was rated moderately satisfactory.

Quality-at-Entry Rating
Moderately Satisfactory

b. Quality of supervision

The Bank’s task team for lending and implementation had a good mixture of expertise and manpower, as shown in the ICR, Annex 2, page 47-48. The task team conducted supervision missions frequently, to accelerate implementation, advise the implementing agencies on financial, procurement, and safeguards issues, and ensure sustainable outcomes and smooth hand-over of the Project. A total of 12 Implementation Status and Review (ISR) reports were filed periodically during implementation, except for a period of one year preceding and succeeding the occurrence of TC Pam. No ISR or Aide Memoire were filed as it was challenging to assess the adequacy of supervision during this period. Both the Bank team and the PMU provided recovery supports.

The project restructurings and funds reallocation were conducted in a timely manner. At appraisal, the Project put more emphasis on institutional strengthening than services deliveries to the communities, causing substantial delays in implementation of field activities. The Level 1 restructuring simplified the project design by shifting the focus to delivering support to the communities heavily affected by TC Pam. This contributed to refining targets of investments in these areas which aimed to meet the communities’ basic development needs while simultaneously reducing disaster and climate risks.

Regarding financial management, the errors in recording funds in the Bank's system discussed in Section 8.a. were not corrected. It caused inaccurate figures to be included in datasheet of the ICR (page 2), which was automatically generated by the Bank's system.

The GoV mostly expressed satisfaction to the quality of support provided by the Bank team, especially during the last two years preceding the project closing. The Task Team Leader of the Bank team was changed twice, causing some discontinuity but the handovers were considered well-managed. The PMU was dissatisfied with insufficient consultations, especially regarding the discussion on changes in implementation arrangements. In addition, the PMU indicated the need for the Bank to be more flexible with training to secure a talent pool which consisted of nationals familiar with Bank rules and procedures.

On balance, the Bank team appropriately initiated the restructurings and funds allocation which accelerated implementation, while the funds management in the Bank's system and the coordination with the PMU on implementation changes and training could have been improved. On this basis, the Quality of Supervision was rated moderately satisfactory.

Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The M&E design was weak in terms of providing stakeholders with guidance to effectively measure progress towards outcomes. The M&E design had the following shortcomings that were inter-related: (1) some indicators in the results framework were not measurable, (2) the roles and responsibilities of the PMU in the M&E plan exceeded its actual capacity, and (3) the mitigation measures at project preparation were not sufficient to address the anticipated constraints, such as remoteness, lack of data, and limited presence outside the capital.

First, most of the 16 indicators did not describe how they would be measured. Of which, 3 out of the 4 outcome indicators were later dropped at restructuring. Second, the M&E plan overestimated the capacity of the PMU when it allocated M&E responsibilities to them. At appraisal, the PMU's M&E capacity was intended to be enhanced by a dedicated M&E specialist, who was to design reporting formats enabling the various implementing agencies (VARTC, Department of Agriculture, NDMO, NGOs, DHMWR) to provide timely reports to the Secretariat/PMU. During implementation, this coordination proved difficult, resulting in early inconsistencies and delays in reporting key indicators. Third, the mitigation measures were not sufficient to overcome the constraints on M&E, including remoteness, lack of data, and limited presence outside the capital. The constraints were identified in the PAD, which proposed to use existing vulnerability and adaptation assessments, in order to guide micro-project identification and to conduct a participatory

baseline survey. However, the PAD's mitigation measures were unable to appropriately address the M&E constraints commonly observed in the SIDS countries.

b. M&E Implementation

At the Level 1 restructuring in 2017, of 16 original indicators (4 outcome and 12 intermediary), 7 indicators were deleted, 5 indicators were revised, and 4 indicators remained the same. New 3 indicators were added. As a result, there were 12 indicators (2 outcome and 10 intermediary), as summarized in Table 2 in the ICR. A large part of the weaknesses in M&E design, including specification of indicators, were identified and corrected at the Level 1 restructuring. Nevertheless, the revised results framework had no indicator to measure one of the key statements in the revised PDO, which was "increased resilience to the impacts of natural hazards and climate variability and change" (Sub-objective 4). This was caused by the methodological challenge in measuring climate resilience, which was commonly observed. In addition, the revised PDO indicator on the number of direct project beneficiaries from water-related investments was redundant with the intermediary indicator on benefits from water supply.

For M&E implementation of micro-projects, the Project had the following constraints. First, a baseline survey to initiate community micro-projects started 3 years after the approval and it excluded some priority communities such as Shepherds and Ambrym. Second, the originally planned monitoring tool, a GIS-database, was out of the capabilities of the PMU. As the Bank's mission team recommended, simple Excel sheets which linked micro-project completion with the procurement plan and budget became a more practical tool for the PMU. Third, collecting accurate M&E data on the micro-projects became a challenge due to the ambiguous settlement boundaries and names, as well as emerging priorities posed by other disasters.

Due to these constraints, the targets of the indicators on the number of beneficiaries proved to be set too low. The targets were set modestly at the restructuring; because, population data was insufficient due to the incomplete baseline survey and capacity was overstretched due to the TC Pam response. Contrary to expectations, accelerated implementation during the last years and higher-than-expected number of beneficiaries for the gravity fed systems and feeder roads increased the number of beneficiaries. As a result, the actual achieved number of beneficiaries largely exceeded the targets.

To complement the lack of outcome indicator on increasing resilience, a beneficiary survey was conducted preceding the project closing, aiming to measure beneficiaries' perceptions of acquired resilience capacity. Moreover, the survey assessed beneficiaries' level of satisfaction with the micro-projects and collected their opinions on implementation. Although the survey data was not comparable with the baseline, the survey contributed to strengthen the results framework of the project by filling in the gap of key information.

c. M&E Utilization

M&E findings were communicated to various stakeholders, including national, provincial, and local stakeholders. However, for local stakeholders, the use of M&E data was limited to the scope of their micro-projects partly because of the tight schedule on implementation after TC Pam. M&E data informed strategic redirection and resource reallocation, including the Level 1 restructuring in 2017. The MTR and the PMU's annual reports proposed simplifying the project design by better linking project components,

clarifying geographical focus, and refocusing on community-based activities, which were materialized in the restructuring. The micro-projects were improved based on findings from the site visits. For example, the March-April 2019 technical mission advised adding solar panels to multi-purpose centers. Collected data was mainly used to inform progress of intermediary indicators, except for the beneficiary survey which aimed to measure the outcome-level achievements. The beneficiary survey and lessons learned from the Project informed subsequent GoV interventions in rural communities, as well as the design of new World Bank community resilience projects in the Pacific Island region.

Overall, there were significant weaknesses in the design of the M&E system, making it somewhat difficult to assess the achievement of the stated objectives. The unmeasurable M&E indicators, the unbalance between the PMU's capacity and responsibilities on M&E, and the insufficient mitigation measures to the anticipated M&E constraints at project design affected efficacy of the Project, especially before the restructuring.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

At appraisal, the Environmental Assessment Category was rated as Category B and the safeguard policy OP/BP 4.01 on Environmental Assessment was triggered. This was justified by its focus on capacity building and limited piloting of community activities, whose environmental and social impacts were expected to be minimal and localized. An Environmental and Social Management Framework (ESMF) and a Land Acquisition Framework (LAF), which were disclosed on March 23, 2012, informed the requirements listed in the Project Operation Manual. Training was provided by the Bank's safeguard officer to the PMU and community stakeholders in 2013 and to the communities in Tanna in 2014.

At the Level 1 restructuring in 2017, the category rating remained the same, while a new safeguard, OP/BP12 on Involuntary Resettlement, was added due to the expanded nature, and more diverse types of micro-projects. Following a disclosure of a Resettlement Policy Framework on June 6, 2017, the ESMF and Project Operation Manual were revised to reflect the new priorities. The GoV recruited Community Outreach Support and Safeguards Officer for the PMU in 2017. The safeguard procedures were also strengthened. Safeguard screening forms were signed by key stakeholders of all micro-projects, seismic stations, and rainwater tanks. Mitigation plans were established to serve different types of the micro-projects. The Safeguards Officer conducted Environmental Preliminary Assessments and secured environmental permits, coordinating with the Department of Environmental Protection and Conservation (DEPC). As a result of the assessments, no micro-project required a full Environmental Impact Assessment (EIA), Environmental and Social Management Plan (ESMP), or Resettlement Action Plan.

Though a Grievance Redress Mechanism (GRM) was not originally planned, it was later included in the revised Operational Manual. Grievances were resolved timely by the Safeguards Officer or the supervising engineer, and recorded on a GRM tracking system. For instance, a vandalism related to the installation of seismic stations near the Yasur Volcano in Tanna Island was resolved in March 2018, by mediating provincial authorities and the Nikoletan Council of Chiefs. After the ICR completion, it was anticipated that

additional safeguard issues would arise as the beneficiary survey revealed some beneficiaries' dissatisfaction with the micro-projects' coverage areas. The Communications and Safeguards Officer in the GoV was expected to continue resolving grievances and implementing mitigation actions.

b. Fiduciary Compliance

Procurement: Procurement was conducted in line with the procurement procedures in its Grant Agreements, the Procurement Plan, and the Procurement and Consultant Guidelines in general, though the Project experienced capacity constraints in early stages. No indications of fraud or corruption were reported.

In 2014, VARTC awarded agricultural goods of US$1,825 equivalent to a single supplier. It was found by the PMU Procurement Officer and the Bank team as an irregularity on distribution of goods during the implementation support mission within the same year. VARTC subsequently left its role of a fiduciary agency at restructuring.

For the first three years, procurement delays negatively affected project implementation. Based on the best practice from Solomon Islands and Kiribati, and given the smallness of the markets, limited number of reputable suppliers, and the communities' remoteness, the PMU adopted bulk procurement of materials as described in PAD, in order to accelerate micro-project implementation, while communities remained responsible for local materials and in-kind labor. After restructuring and the start of bulk procurement by the PMU, there were only minor delays on materials for feeder roads and gravity-fed systems for micro-projects implementation. Some procurement shortcomings were further identified during the Bank's post review missions in December 2014, February 2017, and April 2018. For example, documentation, consultant contract management (in terms of time claimed versus deliverables), and monitoring had weak points. Moreover, some minor inconsistencies among the procurement plan, the budget, and the work plan were found and corrected by the time of project closing.

The Bank team provided support to the PMU to strengthen procurement capacity and procedures. As a result, procurement performance had substantially improved by June 2017. To address implementation challenges, procurement post-reviews and regular teleconferences with the PMU were constantly held since June 2016. The PMU's procurement capacity was reinforced with two local procurement officers, who received procurement training abroad, and were supported by a part-time senior procurement advisor. During the restructuring, procurement monitoring was also reinforced by linking the procurement plan with the project's budget and work plan, developing an asset register, and adopting an improved contract monitoring system.

Financial Management and Disbursement: Financial agreements were followed adequately in general, although there were delays in submission of Interim Unaudited Financial Report (IFR) after 2017 and of most of the external audits. For example, the 2018 audit was delayed for up to 9 months. Financial management had a number of shortcomings, as described below. From 2013 to 2016, separate external audits were carried out for each of the two fiduciary agencies (VMGD and VARTC). After VMGD became responsible for all project fiduciary functions, a single annual audit was conducted in 2017.

All VMGD annual audits (from 2013 to 2018) were free of qualified opinions with only minor issues. On the other hand, three audits for VARTC from 2013 to 2015 included qualified opinions from the external

auditors because the quantities and condition of the inventory and biological assets were not adequately assured and the expenditures of VT 362,036 (approx. US$3,400) were unjustified. The financial management reviews from 2014 to 2019 pointed out irregular payments to consultants, such as excessive amount of per diem, delays in travel advances payment and repayment, and significant expenditures for non-project activities (VT 4 million, or US$35,600 equivalent). To resolve these issues, the Financial Advisor, the accounting software designer, and a qualified accountant supported VMGD and the Department of Climate Change.

c. Unintended impacts (Positive or Negative)

There was no unintended impact that occurred outside of the stated objectives.

d. Other

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11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	
Quality of M&E	Modest	Modest	
Quality of ICR	---	High	

12. Lessons

1. Complex project designs that do not match local capacities on implementation would negatively affect achievements of outcomes. Before restructuring, the implementation of activities was delayed due to the complex project design with multiple implementing agencies, which initially overwhelmed local capacity. It was reflected in the pre-restructuring achievements of outcomes. After restructuring, the responsibilities for implementation and coordination were unified to be under a single agency, while ensuring the commitment and oversight from other sectoral agencies and provinces. In addition, international experts were placed to support local technical officers in pairs. These contributed to the improvement in the post-restructuring achievements of outcomes.

2. PDO and indicators on community resilience without focus on specific aspects of resilience nor clear guidance on measuring methods would cause uncertainties in development goals and implementation procedures. The broad scope of the original and revised PDO statements and outcome indicators caused confusion during implementation.

Articulating the Project's focus on a specific aspect of resilience, such as community adaptive capacity, would have supported the project implementation. Additional analysis would be needed regarding methods to design and measure indicators that capture multiple dimensions of resilience as well as impacts of projects on long-term resilience goals.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR provides a thorough overview of the project with a concisely and well written narrative, which is structured around the project development objective and supports the ratings. The ICR fills in gaps in evidence by conducting the beneficiary survey and providing proxy data. In addition, the ICR includes a clear and informative figure describing the project's results chain and offers a detailed description of the implementation challenges, of how they were addressed, and of the restructurings that modified the results framework. Furthermore, the ICR includes a candid discussion of Bank and Borrower performance. Overall, the quality of the evidence and of the analysis is solid, though the ICR could have done a more thorough job of reducing mistakes in reported figures (e.g. Para. 50 reported 3,394 beneficiaries of agricultural micro-projects, while Table 3 reported 3,934 beneficiaries). Notwithstanding these minor shortcomings, the quality of the ICR is rated high.

a. Quality of ICR Rating

High