Report Number: ICRR0022263

1. Project Data

Project ID	Project Name
P155257	Pacific Resilience Program - RMI
Country	**Practice Area(Lead)**
Marshall Islands	Urban, Resilience and Land

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
IDA-D0790,IDA-D3770	30-Nov-2020	2,000,000.00
Bank Approval Date	**Closing Date (Actual)**	
19-Jun-2015	15-Jan-2020	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	1,500,000.00	0.00
Revised Commitment	1,973,744.44	0.00
Actual	2,000,000.00	0.00

Prepared by	Reviewed by	ICR Review Coordinator	Group
Katharina Ferl	Stephen Hutton	Victoria Alexeeva	IEGSD (Unit 4)

2. Project Objectives and Components

a. Objectives

According to the Project Appraisal Document (PAD) (p. xxiii) and the Financing Agreement of July 25, 2015 (p. 4), the original objective of the project was “to strengthen the financial protection of the Republic of Marshall Islands”.

When the project received Additional Financing in September 2018, the project’s objective was revised to “to strengthen the financial protection of the Republic of the Marshall Islands from natural disasters”.

The objective was modified when the project received Additional Financing. However, the project's scope was not changed, and the objective was only modified to provide more clarity. Therefore, this validation does not require a split rating.

This project was part of the first phase of the Pacific Resilience Program (PREP), a multi-phase and multi-country series of projects. The aim of the program is to: (i) strengthen early warning and preparedness; (ii) create a framework for stronger and prioritized investments in resilience and retrofitting of key-public assets to meet international recognized resilience standards; and (iii) improve the post-disaster response capacity through strengthened financial protection. The initial participants for Phase I of the PREP were Samoa, Tonga, the Republic of Marshall Islands (RMI), Vanuatu, the Pacific Islands Forum Secretariat and the Secretariat of the Pacific Community.

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

27-Sep-2018

c. Will a split evaluation be undertaken?

No

d. Components

Under this project, RMI participated in only a single component from the PREP.

Component 3: Disaster Risk Financing (appraisal estimate US$1.5 million, estimate under Additional Financing US$4.0 million, actual US$2.0 million):

This component was to support the Republic of the Marshall Islands' (RMI) continued participation in the Pacific Catastrophe Risk Insurance Facility (PCRAFI) by financing part of RMI's insurance premia for disaster risk financing or transfer products. This work would build on the previous Pacific Catastrophe Risk Insurance pilot, which offered technical assistance on public financial management of natural disasters to all Pacific Island Countries (PICs) and a parametric catastrophe risk insurance pool of five participating PICs, including RMI.

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

Project Cost: The project was estimated to cost US$1.5 million. The project received Additional Financing in the amount of US$2.5 million. Actual cost was US$2.21 million.

Financing: The project was financed by an IDA grant in the amount of US$1.5 million, which fully disbursed, and an IDA grant of US$2.5 million, of which US$500,000 disbursed.

Borrower Contribution: The Borrower was to contribute US$150,000. Actual contribution was US$210,000.

Dates: The project was restructured three times (level 2):

- On October 5, 2017 the project was restructured to: i) change the implementing agency; ii) change disbursement arrangements; iii) change legal covenants; iv) change institutional arrangements to allow the Republic of the Marshall Islands (RMI) (through its Ministry of Finance) to enter into a Risk Transfer Agreement or an Insurance Contract with the Pacific Catastrophe Risk Insurance Company (PCRIC) or other catastrophe risk insurance provider acceptable to the Bank; v) change financial management and procurement such as enabling the direct contracting of PCRIC on an exceptional basis; and v) change the implementing schedule.
- On September 27, 2018 the project was restructured to: i) receive Additional Financing in the amount of US$2.5 million for the payment of premia for catastrophe insurance coverage for an additional five years; ii) change the project's objective to "to strengthen the financial protection of the Republic of the Marshall Islands from natural disasters"; iii) change in components and costs; iv) change in legal covenants; and v) change in procurement. There was no change to the closing date of the original grant (November 30, 2020) and the closing date of the Additional Financing was October 31, 2023, in line with the additional five years of insurance coverage. The amendment to the Financing Agreement required a continued sliding scale of counterpart funding to partially fund the premia under the project on an annual basis from 2018 until closure.
- On January 9, 2020 the project was restructured to change the closing date to January 15, 2020 and cancel the unwithdrawn financing of approximately US$ 2 million due to the government re-evaluating the suitability of available catastrophe insurance products to the country's risk profile.

3. Relevance of Objectives

Rationale

According to the PAD (p. 57), the RMI is one of the world's smallest, most isolated and vulnerable nations. The RMI is vulnerable to occasional typhoons and is beginning to feel the effects of climate change through sea level rise and more frequent typhoons/cyclones and droughts. Its 370 kilometers coastline is especially vulnerable to extreme waves and high tides. Catastrophic risk modeling indicates that the RMI is expected to experience, on average, US$3 million per year in losses due to earthquakes and tropical cyclones. The PAD further states that in the next 50 years, the RMI has a 50 percent probability of experiencing a loss exceeding US$53 million (as compared to 2013 GDP of US$190 million), and a 10 percent probability of experiencing a loss exceeding US$160 million, not taking into account the effects of climate change which may further exacerbate cyclone risks. Catastrophic losses of this magnitude would be overwhelming, hence the need for financial protection including risk transfer. RMI also faces risks of drought affecting critical food crops such as breadfruit, banana, and taro.

The government developed the National Action Plan for Disaster Risk Management (2008 to 2018) and the 2011 National Climate Change Policy Framework to respond to disaster and climate risks.

According to the ICR (p.11), the project's objective supported the government's National Strategic Plan (2020 to 2030) by improving the country's resilience to disasters and strengthening disaster preparedness. Also, the project supported the government's National Action Plan for Disaster Risk Management (2008 to 2018) by enhancing the government's capacity for emergency preparedness and response.

Furthermore, the project's objective was in line with the Bank's most recent Regional Partnership Framework (FY17–FY 21) and its focus area 3 "protecting incomes and livelihoods".

The Bank had previously supported financial protection in RMI as a pilot member country of the Pacific Catastrophe Risk Assessment and Financing initiative, under which RMI had previously received $850,000 to support catastrophe insurance. Thus, the project was continuing existing support rather than introducing a brand new initiative.

Rating

Substantial

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To strengthen the financial protection of the Republic of the Marshall Islands from natural disasters.

Rationale

Theory of Change

The fundamental strategy of the project was to improve financial disaster risk management by transferring disaster risk from the RMI to international markets. The project's theory of change envisioned that the project's activity of financing part of the RMI's premia for disaster risk financing or transfer product would enable the RMI to participate in a regional catastrophe risk insurance program, thus transfer its risk from cyclones to the international markets. Under the insurance coverage, the RMI would receive payment within a month of the occurrence of a major cyclone. By participating in a regional insurance program, RMI received access to an insurance instrument that did not otherwise exist and faced lower premia than a simulated price for individual insurance. These short-term outcomes were to result in the objective strengthening the financial protection of the RMI from natural disasters.

Though it is difficult to be definitive within the scope of this validation, the available insurance instrument may not have been a strong fit to the RMI's risk profile. The instrument had been developed under the PCRAFI to suit the broader Pacific Islands region. It concentrated on cyclone and earthquake/tsunami risks, because these were the main disaster risks for the region as a whole, and also because they are more insurable risks, with a long history of data and advanced modeling that allowed for reasonable estimation of the risks and with established market appetite for holding these risks. It did not cover drought, which was perhaps the largest disaster risk for RMI, and whose cyclone risk was not as severe as some other Pacific Island countries because of its location.

The scale of the insurance contract was significant but would provide only partial protection against catastrophic losses. The instrument was designed to cover disaster losses that had a 2 percent to 10 percent probability of occurring in each year; that is, it was aimed against both relatively frequent disasters as well as infrequent severe events. RMI's contract offered a maximum payment of US$10.2 million, which would not fully cover the severe disasters identified in the catastrophic risk modeling, but would provide significant protection, up to roughly 5 percent of GDP. In addition, RMI might expect other assistance in the event of a severe catastrophe, including from bilateral sources especially under a compact with the United States.

Outputs:

- The project paid for cyclone insurance as expected. The RMI's insurance premium rate under the project was 50 percent cheaper on average compared to the simulated market price the RMI would have had to pay if it had sought insurance individually outside the program (The price was simulated as no market insurance existed and pricing would have depended on negotiations with an insurer).

Outcomes:

- RMI received financial protection from cyclones during the project period. No disaster event insured by the project took place during the implementation period. However, the other PICs experienced events that were insured by the project and all received payments within 10 days of the occurrence of the insured event; this suggests that the financial protection was genuine, and the insurance would have paid out had a disaster occurred.
- However, the government's decision to discontinue purchase of catastrophe insurance means that this financial protection will not be sustained. The government chose to seek financial protection from IDA funds through other instruments, including a CERC that would allow the remainder of the IDA envelope to be utilized within the period, and potentially a Cat DDO in the future. This decision was not unreasonable given that the government felt that the specific insurance instrument was not a good fit to their risk profile, and given the large IDA envelope for RMI compared to its size meant that the CERC and Cat DDO instruments might also provide financial protection of similar orders of magnitude.
- According to the project team, as a consequence of the project and associated policy dialog, the government has increased their capacity to consider their financial disaster risk and has become a more sophisticated consumer of financial disaster risk management products. The government remains engaged on financial disaster risk issues and may purchase insurance again in future if a product is available that meets their needs. However, little evidence was collected on this improved capacity.

Rating
Substantial

OVERALL EFFICACY

Rationale

The project outcomes were achieved in a narrow sense within the project lifetime, but the cancellation of the insurance contract means that the project has limited impact. This constitutes a moderate shortcoming.

Overall Efficacy Rating

Substantial

5. Efficiency

Economic Efficiency

A traditional economic analysis (which concentrates on expected values and implicitly assumes risk neutrality) does not capture well the efficiency of a project on insurance, financial protection, and risk transfer.

The PAD (p. 16) for the PREP did not include an economic analysis for this project. Its analysis covered only components 1 and 2 of the Pacific Resilience Program. Component 3, which this project financed, was not included. Due to the lack of an ex-ante economic analysis the ICR (p. 14) did not conduct an ex post economic analysis either – but an ex post analysis of insurance would not have been meaningful (else it would incorrectly conclude that any insurance contract that did not pay out was a poor return).

However, during the 2018 restructuring, an economic analysis was conducted for this project to calculate the return from disaster risk insurance coverage under the regional pool over a five-year period. The forecast Economic Internal Rate of Return (EIRR) under the case where a disaster occurred ranged from 133 percent (given a 16 percent probability of one severe disaster taking place) to 226 percent or more (given a 10 percent probability of at least one extreme disaster taking place). In the case that no disaster was to take place (a 59 percent probability), there was not to be any payout. The analysis calculated on a long-term average an EIRR of 23 percent. An average Net Present Value (NPV) of US$0.1 million (ranging from US$ negative 2.3 million if no disaster took place to US$9.4 million if one extreme disaster took place) was calculated using a discount rate of 10 percent, indicating that this project was at least marginally worthwhile on strict expected value terms, which does not capture the benefits from risk transfer.

Operational Efficiency

The project did not encounter any implementation delays and the Central Implementation Unit within the Division of International Development Assistance (DIDA) at the Ministry of Finance was responsible for the yearly transactions. However, during the 2020 restructuring, the unwithdrawn financing of the original grant (US$33,736.32) and the additional grant (US$1.99 million) were cancelled due to the government re-evaluating the suitability of available catastrophe insurance products to the country’s risk profile given that no insured event took place during project implementation.

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		0	0 ☐ Not Applicable

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

6. Outcome

Relevance of the objective was substantial given its alignment with the Bank's most recent Country Partnership Strategy (FY17-21). Efficacy was substantial but with moderate shortcomings as the financial protection provided by the insurance contract may not have been a strong fit to RMI's disaster risk profile, and as the protection was not continued following the government's cancelation of the project and cessation of the insurance contract. Efficiency was rated substantial. Taking everything together, the overall outcome rating is Moderately Satisfactory.

a. **Outcome Rating**
Moderately Satisfactory

7. Risk to Development Outcome

The financial protection offered under the project will not be sustained, as the government chose not to continue with the regional insurance mechanism. However, the government remains committed to other forms of disaster risk management. According to the ICR (p. 21), the RMI continues to work with the Bank in the second phase of the PREP where it will implement activities related to integrating governance of disaster and climate change management, institutional strengthening, improving early warning systems for outer islands and developing a roadmap and implementing priority improvements to modernize the National Disaster Management Office’s facilities. In addition, the RMI continues to be a member Council Member of PCRIC. This position allows the RMI to advocate for the development of post-disaster financing instruments that are a better fit for the RMI.

8. Assessment of Bank Performance

a. Quality-at-Entry

According to the ICR (p. 20), the project design took into account lessons learned from the Caribbean Catastrophic Risk Insurance Facility (CCRIF), the world's first multi-country risk pool and insurance program. The ICR (p. 17) stated that these lessons pointed out the importance of offering an integrated financial protection strategy beyond parametric insurance, and the need for avoiding fragmentation and ensuring clear project oversight and/or coordination by the Ministries of Finance. Also, lessons learned found that catastrophe risk insurance cannot cover all disaster losses and should be combined with other financial solutions as part of a wide package for financial protection against natural disasters. While there was no "written" financial protection strategy, the government has been combining Contingent Emergency Response Component (CERCs) in a number of different Investment Project Financings (IPFs) in the portfolio with retention instruments under the Compact with the U.S. and the Catastrophe-Deferred Drawdown Option (CAT-DDO) (being currently, prepared) to ensure financial protection against natural disasters. Also, the Ministry of Finance has been in charge for overseeing any projects or decisions in this area and therefore has been avoiding fragmentation.

The project benefitted from country-specific risk modeling to inform the design and pricing of the parametric insurance products, which were offered by the re-insurance companies and later PCRIC.

The project design was simple and given its nature only included a limited amount of activities. However, the ICR (p. 18) stated that the RMI's involvement in the first phase of the program provided the opportunity to expand the scope of engagement in the second phase. The selection of catastrophe risk insurance was appropriate for ensuring a rapid payout following a natural disaster and for transferring risk to international markets. RMI benefitted from the regional pooling of countries in terms of being able to communicate and learn from other PICs.

The Bank team included relevant expertise such as a disaster risk specialists. According to the ICR (p.17), the Bank facilitated dialogue across the region, which enhanced coordination among the different governments. Also, the project was ready for implementation when it became effective resulting in the first disbursement being made two weeks after project effectiveness.

The Results Framework did not include the right mix of indicators to measure project outcomes (see section 9a for more details).

Quality-at-Entry Rating

Satisfactory

b. Quality of supervision

According to the ICR (p. 21), the Bank team included experts from relevant areas including disaster risk management, financial protection and fiduciary and safeguards specialists. The project had three different Task Team Leaders during a six-year implementation period. However, the ICR (p. 21) stated that these changes did not negatively affect project implementation due to the Bank team's proactivity to address implementation bottlenecks. When the government requested Additional Financing, the project was restructured and received the Additional Financing within a month the request was received. The Bank team prepared regular Implementation Status and Results Reports (ISRs) and key project ratings were rated Satisfactory throughout implementation.

Quality of Supervision Rating

Satisfactory

Overall Bank Performance Rating

Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The project's objective was clearly specified, and the theory of change was adequate. The selected indicators measured whether participating PIC's have received payment within a month of the occurrence of the insured event and if the premiums are lower than coverage bought individually in the market.

However, the project's M&E did not include a qualitative assessment and indicators on several other aspects such as: i) measuring the government's gradually increase in annual contribution; ii) showing that the RMI has effective insurance coverage; and iii) measuring capacity strengthening.

b. M&E Implementation

The Ministry of Finance/DIDA and PCRIC monitored the insurance payouts of participating countries and annual premia.

c. M&E Utilization

According to the ICR (p.19), the project monitored the amount and time of insurance payouts in other countries to assess the performance of the regional risk pool and to inform continual refinement of insurance products and coverage.

M&E Quality Rating

Substantial

10. Other Issues

a. Safeguards

The first phase of the PREP was classified as category B and triggered OP/BP 4.01 (Environmental Assessment), OP/BP 4.04 (Natural Habitat), OP/BP 4.36 (Forest), OP/BP 4.09 (Pest Management), OP/BP 4.11 (Physical Cultural Resources), OP/BP 4.10 (Indigenous People), and OP/BP 4.12 (Involuntary Resettlement). The Bank prepared an Environmental and Social Management Framework (ESMF), which was disclosed locally in Samoa, Tonga, Fiji and the Bank InfoShop. However, none of the safeguard policies were triggered by this project because it supported only insurance and had no physical footprint or potential negative effects.

b. Fiduciary Compliance

Financial Management

The ICR (p. 20) reports that the project complied with the Bank's Financial Management requirements. Also, the Ministry of Finance kept adequate accounting records of all transactions with PCRIC. Furthermore, the Ministry of Finance established a Division of the International Development Assistance to build technical capacity and to fulfill the project's fiduciary requirements, which resulted in the project's fiduciary risk being reduced from substantial to moderate in August 2019. The ICR stated that Interim Financial Reports were not required for this project since the project's only activity was a single transaction for the payment of insurance premia every year. The project was audited as part of the National Government accounts and received unqualified opinions.

Procurement

The ICR stated that the Ministry of Finance prepared a timely and adequate Project Procurement Strategy for Development and the project's procurement rating was satisfactory throughout implementation. The PCRIC was directly contracted on an exceptional basis as the provision of catastrophe risk insurance is form of ex ante contract, which provides support in the event of a natural disaster. According to the ICR (p.19), the project used a direct payment approach, which resulted in not needing a designated account.

c. Unintended impacts (Positive or Negative)

NA

d. Other

---

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Moderately Satisfactory	Efficacy was substantial but with moderate shortcomings leading

			to the overall MS rating, given substantial relevance and efficiency.
Bank Performance	Satisfactory	Satisfactory	
Quality of M&E	Substantial	Substantial	
Quality of ICR	---	Substantial	

12. Lessons

The ICR drew several lessons based on the project experience, including:

- **Establishing a regional catastrophe insurance pool can have financial benefits and allows for knowledge exchange between countries.** In this project, RMI was able to obtain insurance at a lower premium due to participating in an insurance pool rather than obtaining insurance individually. In addition, RMI was able to share its experience with- and learn from- other countries in a similar situation resulting in re-evaluating the suitability of available catastrophe insurance products.

- **It is difficult to assess the contribution of a project on disaster financing instruments without some system for capturing evidence on this**. In this project, capacity building goals were not captured well by either the results framework or other qualitative evidence.

IEG also finds that:

- **Traditional economic analysis is not very effective for assessing the efficiency of instruments that offer financial protection.** The Bank could investigate alternative metrics for demonstrating project efficiency.

- **Even after experience with the instrument, governments may conclude that disaster insurance is not the right mechanism for disaster financial risk management.** The RMI government was not willing to sustain support for the insurance mechanism, in part on the grounds that no disaster occurred during the project period and no payout was made. But this is in conflict with the goal of catastrophic insurance, which is precisely to cover events that are low probability but high risk.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR provided an adequate overview of project preparation and implementation. Also, the ICR is internally consistent and concise and provided useful lessons, which can be applied to similar projects. The ICR would have benefitted from making clear judgements about whether there was a design failure in terms of supporting an instrument that was not a good fit to RMI’s risk context or not.

a. Quality of ICR Rating
Substantial