



## Pacific Resilience Program (P154840)

EAST ASIA AND PACIFIC | Tonga | Urban, Resilience and Land Global Practice |  
IBRD/IDA | Investment Project Financing | FY 2015 | Seq No: 18 | ARCHIVED on 19-Feb-2024 | ISR59784 |

Implementing Agencies: Kingdom of Tonga, Ministry of Environment, Energy, Climate Change, Disaster Mgmt, Meteorology, Information and Comms

**Key Dates****Key Project Dates**

Bank Approval Date: 19-Jun-2015

Effectiveness Date: 18-Sep-2015

Planned Mid Term Review Date: 29-Mar-2019

Actual Mid-Term Review Date: 25-Mar-2019

Original Closing Date: 30-Nov-2020

Revised Closing Date: 30-Apr-2025

**Project Development Objectives**

Project Development Objective (from Project Appraisal Document)

The objective of the Project is to strengthen early warning, resilient investments and financial protection of Tonga.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

**Components Table**

Name

Component 1: Strengthening Early Warning and Preparedness:(Cost \$15.74 M)

Component 2: Risk Reduction and Resilient Investments:(Cost \$15.50 M)

Component 3: Disaster Risk Financing:(Cost \$5.40 M)

Component 4: Project Management:(Cost \$2.25 M)

**Overall Ratings**

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Risk Rating	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate

**Implementation Status and Key Decisions**

The project is making good progress towards strengthening early warning systems with the two Emergency Operation Centers (EOCs) in Ha'apai and Vava'u complete and operational, and other key activities to support Multi Hazard Early Warning Systems well advanced. All works in schools, including classrooms and Water, Sanitation, and Hygiene facilities are now complete. All payments have been made for the Annual Disaster Insurance premiums.



## Risks

### Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	☐ Moderate	☐ Low	☐ Low
Macroeconomic	☐ Moderate	☐ Moderate	☐ Moderate
Sector Strategies and Policies	☐ Substantial	☐ Moderate	☐ Moderate
Technical Design of Project or Program	☐ Substantial	☐ Substantial	☐ Substantial
Institutional Capacity for Implementation and Sustainability	☐ Substantial	☐ Substantial	☐ Substantial
Fiduciary	☐ Substantial	☐ Substantial	☐ Moderate
Environment and Social	☐ Moderate	☐ Moderate	☐ Moderate
Stakeholders	☐ Moderate	☐ Low	☐ Low
Other	--	☐ Moderate	☐ Moderate
Overall	☐ Substantial	☐ Moderate	☐ Moderate

## Results

### PDO Indicators by Objectives / Outcomes

Strengthen early warning				
▶ Direct Beneficiaries of enhanced Multi-Hazard Early Warning System (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	24,000.00	25,000.00	25,000.00	73,500.00
Date	19-Jun-2015	22-Jun-2023	02-Feb-2024	30-Apr-2025
Comments:	This indicator is intended to measure the direct beneficiaries of Component 1 which is estimated at 70% of the total population of Tonga (105,000) which is 73,500. With the AM Transmitter and two Emergency Operating Centers in Ha'apai and Vava'u now complete, a significant milestone has been achieved towards putting the infrastructure in place to ensure that timely hazard forecasts and warning messages can be disseminated to the public. With the additional strengthening of Early Warning Systems under Component 1, the next step will be developing clearer/improved warning messages and training the public on how to act on them. The end target remains achievable.			
☐ Female beneficiaries of enhanced Multi-Hazard Early Warning System (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	9,600.00	12,765.00	12,765.00	29,400.00
Date	19-Jun-2015	22-Jun-2023	02-Feb-2024	30-Apr-2025



Strengthen resilient investments				
▶ School children to benefit from increased resilience to their school (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	9,026.00	9,026.00	9,000.00
Date	12-Feb-2018	22-Jun-2023	02-Feb-2024	31-Oct-2023
Comments:	Works are complete in schools and WASH facilities. A total of 9,026 students have benefited from the completed works in 27 schools (25 with rebuilt/repared/retrofitted classrooms and two schools with only WASH facilities). This figure is based on the total number of children on the school rolls at the relevant schools upon completion of the works.			

Strengthen financial protection of Tonga				
▶ Government of Tonga recieved payment within a month of the occurrence of a covered (insurance) event. (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	100.00	100.00	100.00
Date	19-Jun-2015	22-Jun-2023	02-Feb-2024	31-Oct-2023
Comments:	Two insurance payouts have been provided under the scheme, both of which were issued within one month of the event. No insured events occurred during July 2022 to June 2023.			
▶ Time taken to trigger the contingency emergency response component (CERC) for an eligible emergency (Weeks, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	6.00	6.00	6.00
Date	19-Jun-2015	22-Jun-2023	02-Feb-2024	30-Apr-2025
Comments:	The CERC was triggered once during the life of the project thus far (following Tropical Cyclone Gita in February 2018). The target of six weeks was met.			

### Intermediate Results Indicators by Components

Component 1: Strengthening Early Warning and Preparedness				
▶ Number of TMD/NEMO/NRD staff trained to support the MHEWS (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	37.00	37.00	35.00
Date	06-Aug-2015	22-Jun-2023	02-Feb-2024	30-Apr-2025
Comments:	A total of 37 staff from TMD, NEMO and NRD have been trained to date to support the MHEWS. These trainings are in line with the PMU's Training Plan.			



► MHEWS Policy developed and adopted (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	06-Aug-2015	22-Jun-2023	02-Feb-2024	30-Apr-2025
Comments:	The MHEWS Policy is currently being developed by TMS and is expected to be adopted by project close.			
► Number of Early Warning dissemination systems developed and operational (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	1.00	3.00
Date	06-Aug-2015	22-Jun-2023	02-Feb-2024	30-Apr-2025
Comments:	This indicator relates to Early Warning dissemination systems developed and operational under Component 1. The marine coast radio system, AM transmitter, cell broadcasting system and TV broadcasting system are examples of systems which may be operational by project close.			
► Number of climate and disaster resilient emergency operations centres are established to support warning and emergency operations on Tongatapu and Outer Islands (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	2.00	2.00	3.00
Date	06-Aug-2015	22-Jun-2023	02-Feb-2024	30-Apr-2025
Comments:	Climate and disaster resilient emergency operations centers have been completed in Ha'apai and Vava'u. The design and bid documents were released to the market on June 2, 2023. The works package closed on July 13.			
► Number of seismic and volcano observation stations established to support MHEWS (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	8.00
Date	06-Aug-2015	22-Jun-2023	02-Feb-2024	30-Apr-2025
Comments:	This indicator relates to seismic and volcano observation stations established under Component 1. The project intends establish five seismic stations, one volcano station and two tide gauges for seismic observations from tsunamis (i.e., a total of eight stations). The end target is expected to be met by project close.			
► Number of Impact-based forecasting and warning systems products established and delivered to users (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	3.00
Date	06-Aug-2015	22-Jun-2023	02-Feb-2024	30-Apr-2025
Comments:	The end target relates to three IBFW products, which are expected to be established by project close. Each product will relate to a separate hazard on the IBFW system (e.g., cyclone, tsunami, wind). The procurement of the IBFW is underway and will be completed by project close.			



► Number of people who have received IBFWs Products and Services Awareness programs (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	5,000.00
Date	06-Aug-2015	22-Jun-2023	02-Feb-2024	30-Apr-2025
Comments:	Once the IBFW products have been procured, TMS and NEMO will use radio and television broadcasting to raise awareness of these services in the community. The intended reach is the entire population (i.e., 105,000 people) so the end target of 5,000 people is expected to be exceeded.			
► Number of participants in annual emergency drills (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	10,000.00
Date	06-Aug-2015	22-Jun-2023	02-Feb-2024	30-Apr-2025
Comments:	NEMO have prepared a workplan and the NEMO Technical Committee is expected to approve this by August 2023. Following this the NEMO team will prepare 5-7 drills for separate regions before the project close. The total number of participants in the drills is expected to be 10,000 which is expected to be met by project close. Some of the work also includes updating emergency warning signs (e.g., tsunami signs) that will be used in the drills.			

Component 2: Risk Reduction and Resilient Investments				
► Number of school buildings rebuilt to improved resilience standards (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	54.00	54.00	50.00
Date	06-Aug-2015	22-Jun-2023	02-Feb-2024	31-Oct-2023
Comments:	The project has exceeded the target with 33 classroom buildings (88 classrooms) completed and 21 WASH facilities completed.			
► Number of school buildings repaired or retrofitted to improved resilience standards (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	10.00	10.00	10.00
Date	06-Aug-2015	22-Jun-2023	02-Feb-2024	31-Oct-2023
Comments:	The target of 10 schools buildings repaired and strengthened to improved resilience standards has been met. The 10 buildings include 37 upgraded classrooms.			
► Schools with gender appropriate resilient WASH facilities (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target



Value	0.00	100.00	100.00	100.00
Date	12-Feb-2018	22-Jun-2023	02-Feb-2024	31-Oct-2023
Comments:	The target has been met. New WASH facilities have been delivered for 21 schools, in keeping with the schools identified by the Design Firm analysis on schools which required upgrades to their WASH facilities.			
► Principals and/or head teachers of project schools that feel project investments reflect their needs (of which 50% are female) (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	86.00	86.00	80.00
Date	06-Aug-2015	22-Jun-2023	02-Feb-2024	30-Apr-2025
Comments:	Beneficiary Assessment Surveys have been completed for all schools and 86% percent of all respondents indicated that the project investments reflected their needs.			

Component 3: Disaster Risk Financing				
► The premiums are lower than the simulated price for a comparable coverage purchased individually in the market (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	Yes	Yes	Yes
Date	06-Aug-2015	22-Jun-2023	02-Feb-2024	31-Oct-2023
Comments:	The target has been met. Total premium payment is US\$590,000 to provide coverage totaling US\$6 million which is lower than the simulated price for a comparable coverage purchased individually in the market.			

Component 4: Project Management				
► Issues and complaints raised in the project's feedback and grievance redress mechanism addressed within 21 calendar days (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	75.00	100.00	100.00	75.00
Date	30-Apr-2022	22-Jun-2023	02-Feb-2024	30-Apr-2025
Comments:	Zero grievances were received during the period Jan-July 2023.			

## Performance-Based Conditions

### Data on Financial Performance

#### Disbursements (by loan)

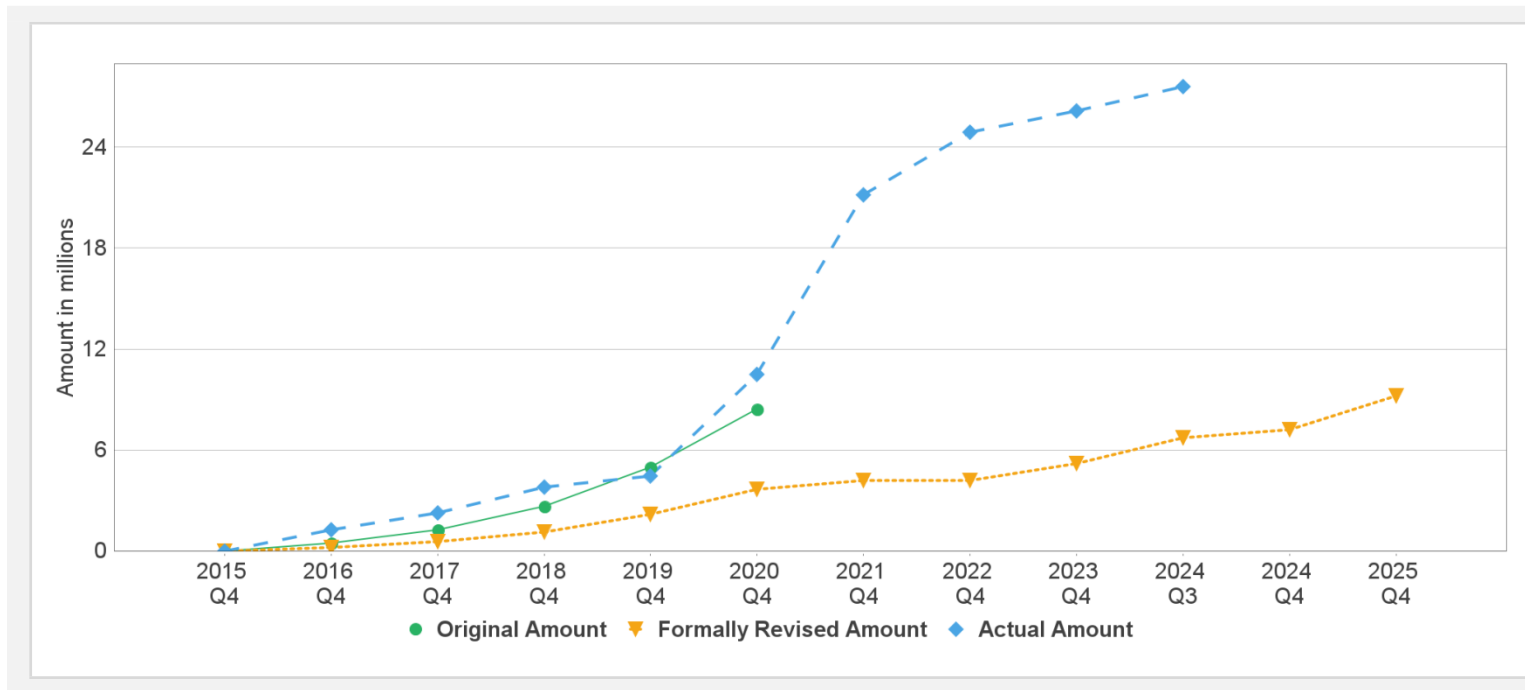


Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P154840	IDA-56890	Effective	USD	8.25	8.25	0.00	4.20	4.00	51%
P154840	IDA-D0780	Effective	USD	2.25	2.25	0.00	2.40	0.00	100%
P154840	IDA-D3590	Effective	USD	14.95	14.95	0.00	14.83	0.00	100%
P154840	IDA-E0570	Effective	USD	5.00	5.00	0.00	0.49	4.61	9.6%
P156334	TF-A0900	Effective	USD	4.58	4.58	0.00	2.21	2.37	48%
P154840	TF-A1232	Closed	USD	1.50	1.50	0.00	1.50	0.00	100%
P154840	TF-A7818	Closed	USD	1.96	1.96	0.00	1.96	0.00	100%

**Key Dates (by loan)**

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P154840	IDA-56890	Effective	19-Jun-2015	30-Jun-2015	18-Sep-2015	30-Nov-2020	30-Apr-2025
P154840	IDA-D0780	Effective	19-Jun-2015	30-Jun-2015	18-Sep-2015	30-Nov-2020	30-Apr-2025
P154840	IDA-D3590	Effective	18-Jul-2018	16-Aug-2018	17-Oct-2018	31-Oct-2023	30-Apr-2025
P154840	IDA-E0570	Effective	24-Jun-2022	12-Sep-2022	26-Oct-2022	30-Apr-2025	30-Apr-2025
P156334	TF-A0900	Effective	19-Jun-2015	18-Nov-2015	09-Dec-2015	30-Nov-2020	30-Apr-2025
P154840	TF-A1232	Closed	19-Jun-2015	18-Nov-2015	09-Dec-2015	30-Jun-2020	30-Jun-2020
P154840	TF-A7818	Closed	18-Jul-2018	16-Aug-2018	17-Oct-2018	31-Oct-2023	31-Oct-2023

**Cumulative Disbursements**



**Restructuring History**

Level 2 Approved on 05-Oct-2017 ,Level 2 Approved on 24-Sep-2020 ,Level 2 Approved on 26-Oct-2022

**Related Project(s)**

P156334-Pacific Resilience Program ,P167166-Additional Financing for the Pacific Resilience Project under the Pacific Resilience Program ,P178847-Additional Financing to the Pacific Resilience Project in Tonga ,P178848-Additional Financing to the Pacific Resilience Project in Tonga