



FIJI SOVEREIGN GREEN BOND

2020 Update

OVERVIEW

In 2020, Fiji marked the third anniversary of its Sovereign Green Bond issuance. The Bond was the first-ever capital market issuance of its kind by a developing country and only the third in the world.

Since 2017 the global green bond market has been on a strong upward trajectory as the value of issuances have risen from just over USD150 million to USD290 billion in 2020 as per statistics from [Climate Bond Initiative](#).

Fiji showed innovative financial foresight to invest early in green bonds and has set the foundations for exciting forthcoming capital market operations in the near future to finance its sustainable development agenda.

This 2020 Update of the Fiji Sovereign Green Bond (**FSGB**) will present the impact monitoring procedures and templates that the Fijian Government has used to report on the socio-economic benefits of the FSGB.

This Update is will also provide future insights and rationale for future capital market operations of the Fijian Government.

The entire sum of FJ \$100 million issued under the FSGB was utilised in the Fijian Government's 2017-2018 financial year. All financial utilisation, impact reporting and updates have been completed in the [2017-2018](#) and [2018-2019](#) FSGB update reports.



IMPACT REPORTING

Section 4 of the [Fiji Green Bond Framework \(FGBF\)](#) mandates the Fijian Government to produce an annual newsletter outlining implementation progress, use of proceeds and socio-economic impact reporting of the FSGB. While all obligations under Section 4 of FGBF have been satisfied, it is equally important for stakeholders to understand the monitoring and reporting mechanisms that were employed to ensure utmost transparency and accountability in handling FSGB proceeds. All reporting is done in accordance with the [2017 Green Bond Principles](#) of the International Capital Market Association (ICMA)



Project Evaluation Sheets

Each of the seven FSGB projects had an evaluation sheet that was completed by respective implementing Government agencies. This was done to build consensus on project objectives, key milestones and the appropriate amount of FSGB proceeds to allocate

STEP

1

Establish Monitoring Indicators

An overall indicator master list was created with experts from the International Finance Corporation (IFC). Upon finalisation of project scope and objectives, relevant indicators were assigned and data for each indicator gathered. These indicators became part of the evaluation sheets.

STEP

2

Estimate Future Impacts

While four out of the seven projects funded by the FSGB were adaptation projects with clear indication of immediate socio-economic and environmental impacts, the remain three projects were climate mitigation which required long term understanding of carbon mitigation potential and quantum of avoided untreated waste.

STEP

3

Impact Reporting Templates Set

A clear and concise scope of reporting and visualisation of impact data collected was established with guidance from the Green Bond Steering Committee and experts from the IFC. Two FSGB update reports have since been published in this regard.

STEP

4

Endorsement and Publication

Final FSGB update reports are reviewed and endorsed by the Green Bond Steering Committee and published on the [Ministry of Economy](#) and [Reserve Bank of Fiji](#) websites.

STEP

5

PROJECT EVALUATION SHEETS

The Project Evaluation Sheets (**PES**) were developed in accordance with the ICMA Harmonised Framework for Impact Reporting. The PES was developed to be a simple yet effective tool to collect key information about eligible green bond projects. A total of 31 projects were initially identified by the Green Bond Steering Committee, all of which had PES completed. These projects were then prioritised by ascertaining implementation capacity, budget utilisation and clear ability to track impacts

A familiarisation workshop was held with respective Government agencies to introduce them to the purpose of the FSGB, the Green Bond Principles and templates that would need to be completed. The Climate Change and International Cooperation Division (**CCICD**) of the Ministry of Economy worked with each Government agency to fill the PESs.

It must be noted that the PES was constantly improved as the list of appropriate indicators were finalised. An example of a completed PES is shown in Table 1, Completed PESs for all seven FSGB projects are at **Annex 1**.

Table 1: Example of Project Evaluation Sheet

		Eligible Sector
Name of Project	Rural Water Supply Programme	Water Efficiency and Wastewater Management
Description of the Project	<p>This project involves the provision of sustainable and safe quality drinking water supply systems and environmentally friendly waste water disposal system for the rural communities</p> <p>\$23,482,777 was allocated in the 2017-2018 national budget to undertake 179 rural water projects around Fiji expected to benefit more than 36,648 people living in rural communities.</p> <p>Moreover, 1,556,000 was allocated for the installation of 50 Ecological Purification Systems (EPS) and maintenance of existing 56 EPS systems (\$1,000 each).</p>	
Start Date	01-Aug-17	
Date of Commissioning*	Ongoing	
Capital Investment (FJD)	6,311,789	
Use of Proceeds to Date	6,311,789	
Project Eligibility		
Objective	Provide safe drinking water to rural communities/households as per national targets outlined in the National Development Plan.	A total of 36,548 customers (6,122 households) benefited from the PSIP 2017/2018 Rural EPS water supply programme.
Expected Project Results	Question	Focal Point
Rural households with access to treated water	How many households/people have access to treated drinking water?	36,548 people to benefit, 6,122 benefit from EPS
Adequate supply of treated water	What is the amount of treated water supply (meter cubed)	Average of around 20 meters cubed or 20,000L/day
Cost effective supply of water	How much would it cost to connect to reticulation system?	\$15,000.00 - \$250,000.00 depending on the scope
Technology Transfer	Were any community members trained in the process i.e water	Yes, the village WC
Co-benefits	How many people were employed to install schemes and EPS?	Schemes (5-7 per team), EPS (3 per team)



INDICATOR LIST

As the PESs were being completed, the Ministry of Economy worked with technical experts from IFC to develop a robust set of indicators that applied to the entire set of 31 projects initially shortlisted. The entire list of indicators is shown in Table 2.

These indicators were selected from the ICMA 2017 Harmonised Framework for Impact Reporting which provided sector-specific guidance on impact reporting. After the seven FSGB projects were shortlisted, relevant indicators were then discussed and selected with relevant Government agencies responsible for project implementation.

Following the indicator selection, CCICD led the compilation, assessment and verification of all indicator related data. Projected socio-economic benefits were calculated using average per household data generated from the 2007 Census and carbon mitigation benefits were calculated using the Resources and Energy Analysis Programme (**REAP**) model.

Table 2: 2017 Fiji Sovereign Green Bond Indicator List

Indicator No	Indicator	Unit	Description	Baseline
IN1	Electricity Generated from Renewable Resources	kwh	The amount of renewable energy generated by the new installation.	No project activity, no renewable energy generation
IN2	Electricity Saved	kwh	The amount of electricity saved	No project activity, no savings
IN3	CO2e Emissions Reduced	ton CO2e	GHG emissions (CO2e) reduced by the projects activity (renewable energy generation or abatement)	No project activity, energy used from conventional sources (Carbon Emission Factor)
IN4	Access to Clean and Safe Energy	Head count	People or households provided by safe and clean energy	People or households served with conventional energy
IN5	Employment Generated	Head count	Employment occurred due to project activity because of construction, operation, implementation	No new employment due to no project activity
IN6	Technology Transfer	Head count	Number of people trained and acquired new skills	No new occupational progress because there is no new technology
IN7	Co-benefits	USD	Assistance to locals in kind or other commercial transaction	No commercial transaction, no in kind aid due to no project activity
IN8	Balance of payments and investment	USD	Amount of decrease in import oil due to energy generation from local resources, TPE and unit price multiplied	No project activity, no local energy generation but oil imports
IN9	Early extreme weather action due to early warning	Case	Early action taken cases of extreme weather events due to early warning system	No early warning system, no early action
IN10	Early flood action due to early warning	Case	Early action taken cases of flooding due to early warning system	No early warning system, no early action
IN11	Amount of free fresh water provided	Lt	Amount of water provided, number of tanks multiplied by number of drought events and by 5000 Lt or 1,100 Lt	No tanks distributed, shortage of fresh water
IN12	Amount of agricultural land protected against flooding	Hectares	Agricultural land protected against flooding via drainage system and gates	No gates, no protection but flooding of agricultural land
IN13	Number of farmers trained	Head count	Farmers trained in agricultural techniques and in pesticide use	No training, poor practice of agriculture
IN14	Rehabilitation of school or health facilities	sqm	Amount of building area rehabilitated	No rehabilitation, poor school and health service
IN15	Developing climate change resilient crops	Number of	Climate change resilient crop varieties development	No research no new climate resilient varieties
IN16	Improved efficiency of transport network	to be determined	Efficiency improved due to database (travel time reduced?)	No data, conventional transport network management
IN17	Maintenance for climate change resilient roads	km	Roads maintained, rebuilt with standards of climate change resilience	No new roads, not functioning roads
IN18	Amount of agricultural land protected against drought	Hectares	Land protected against drought via watershed management	No watershed management, drought inflicted land
IN19	Amount of water saved via catchment	m3	Watercatchment saves water	Water wasted because there is no catchment
IN20	Residents with access to clean water	Head count	People provided with safe water via water supply improvement	No improvement, residents dont have access to clean water
IN21	Amount of clean water supplied	m3	People provided with safe water via water supply improvement	No improvement, residents dont have access to clean water
IN22	Water quality improvement	Turbidity (NTU) or pH	Water quality improved due to waste control	No project activity, decrease in water quality
IN23	Deforestation and forest degradation prevented	Hectares	Action for forest replenishment	No project activity, loss of forest area
IN24	Increase in forest carbon stock	tCO2e	Action for forest replenishment	No project activity, carbon stock decrease
IN25	Agricultural land generated	Hectares	Eradication of invasive species	No project activity, loss of land
IN26	Generation of new sources for biomass	tons	Eradication of invasive species	No project activity, no biomass source
IN27	Road access restored in the aftermath of disasters	km or mtrs	Road infrastructure made resilient	No rehabilitation, no access to certain communities
IN28	Access to bridges or bridge access restored	count	Road infrastructure made resilient	No rehabilitation, no access to certain communities
IN29	Improved drainage systems	km or mtrs	Road infrastructure made resilient	No rehabilitation, no access to certain communities

REPORTING MILESTONES REACHED AND NEXT STEPS

Over the past three years, the Fijian Government has worked closely with the Reserve Bank of Fiji to keep its FSGB investors updated on the economic, social and environmental impacts of their investments. This is in accordance with Core Component 4 of the CMA Green Bond Principles which reads as "issuers should make, and keep, readily available up to date information on the use of proceeds to be renewed annually until full allocation, and as necessary thereafter in the event of material developments".

An Impact Report was issued in 2018 entailing the utilisation of the entire FSGB proceeds followed by an Update Report in 2019. This 2020 Update Report will be the last annual publication produced for investors. Publications on the FSGB will be should there be material developments with the FSGB issuance.



Noting the critical need to maintain the momentum on climate action and sustainable development despite massive fiscal constraints caused by COVID-19, the Fijian Government seeks to mobilise innovative new and additional climate finance that catalyzes greater private sector involvement and reduces over-dependence on immediate fiscal resources.

The Fijian Government is working with the Government of the United Kingdom, the United Nations Development Programme and the United Nations Capital Development Fund to develop Sustainable Development Bond Framework (SDBF) that will enable Fiji to issue specialized bonds related to its sustainable development ambitions. The intention is to issue a Blue Bond – in line with SDG 14: Life Below Water – by the first quarter of 2022 under the ambit of the SDBF. Learnings and best practices from the issuance of the FSGB will be drawn upon as needed.



ANNEX 1

P1: Rural Water Supply Programme

		Eligible Sector
Name of Project	Rural Water Supply Programme	Water Efficiency and Wastewater Management
Description of the Project	<p>This project involves the provision of sustainable and safe quality drinking water supply systems and environmentally friendly waste water disposal system for the rural communities</p> <p>\$23,482,777 was allocated in the 2017-2018 national budget to undertake 179 rural water projects around Fiji expected to benefit more than 36,648 people living in rural communities.</p> <p>Moreover, 1,556,000 was allocated for the installation of 50 Ecological Purification Systems (EPS) and maintenance of existing 56 EPS systems (\$1,000 each).</p>	
Start Date	01-Aug-17	
Date of Commissioning*	Ongoing	
Capital Investment (FJD)	6,311,789	
Use of Proceeds to Date	6,311,789	
Project Eligibility		
Objective	Provide safe drinking water to rural communities/households as per national targets outlined in the National Development Plan.	A total of 36,548 customers (6,122 households) benefited from the PSIP 2017/2018 Rural EPS water supply programme.
Expected Project Results	Question	Focal Point
Rural households with access to treated water	How many households/people have access to treated drinking water?	36,548 people to benefit, 6,122 benefit from EPS
Adequate supply of treated water	What is the amount of treated water supply (meter cubed)	Average of around 20 meters cubed or 20,000L/day
Cost effective supply of water	How much would it cost to connect to reticulation system?	\$15,000.00 - \$250,000.00 depending on the scope
Technology Transfer	Were any community members trained in the process i.e water	Yes, the village WC
Co-benefits	How many people were employed to install schemes and EPS?	Schemes (5-7 per team), EPS (3 per team)



P2: Rainwater Harvesting System

		Eligible Sector
Name of Project	Rainwater Harvesting System	Water Efficiency and Wastewater Management
Description of the Project	<p>The objective is to provide subsidies to households who install rainwater harvesting systems at their premises as a method of encouraging the use of such water conservation techniques.</p> <p>A total of 4,500,000 was allocated in the 2017-2018 national budget to subsidise 70% of the costs of installing rainwater harvesting systems in rural areas, particularly in the maritime division of Fiji.</p>	
Start Date	01-Aug-17	
Date of Commissioning*	Ongoing	
Capital Investment (FJD)	4,200,000	
Use of Proceeds to Date	3,757,471	
Project Eligibility		
Objective	Provide safe drinking water to rural communities/households as per national targets outlined in the National Development Plan.	The main aim is to provide customers around Fiji who faces problem with water cuts and dry spells with 5,000 litre of rain water harvesting tank.
Expected Project Results	Question	Focal Point
Rural households with access to water harvesting systems	How many households/people have access to water harvesting system?	Total of 8049 tanks was distributed for PSIP 2017/2018.
Adequate supply of treated water	What is the amount of treated water supply (meter cubed)	Depending on the rainfall, the rain water harvesting tank has 5000 litres capacity. The collected water can only be use for washing and drinking.
Cost effective supply of water	How much would it cost to connect to reticulation system?	The rain water harvesting system is a supplementary system for water reticulation. The cost associated in maintaining the system is only cleaning the
Technology Transfer	Were any community memebrs trained in the process i.e water commitees?	Members of the water committee are trained to clean guttering systems and tanks to safeguard against the water borne disease and infection.
Co-benefits	How many people were employed to install schemes and EPS?	Construction of guttering systems and tank base are made by the customers. WAF is responsible for the delivery of the tanks only.



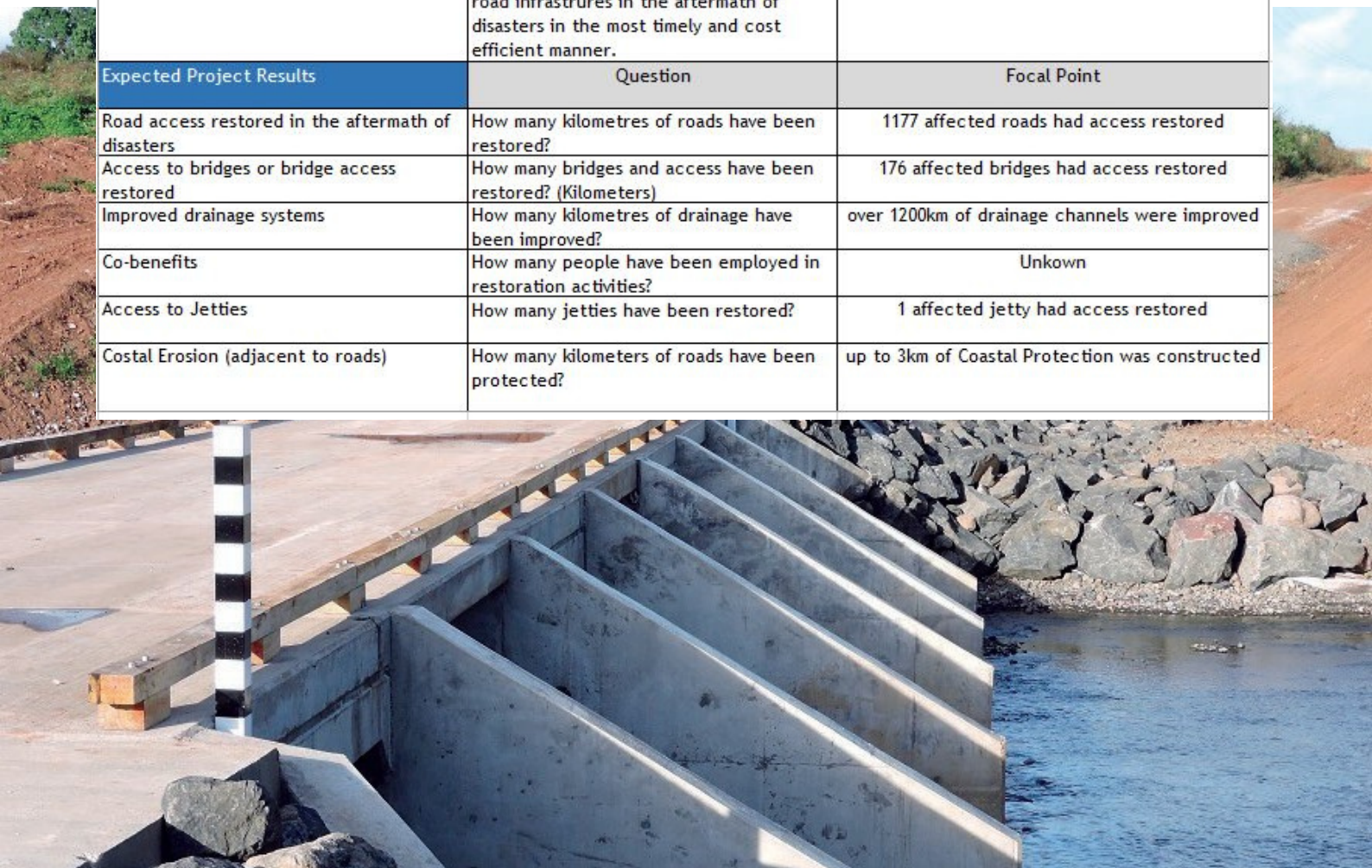
P3: Rehabilitation and Construction of Schools

		Eligible Sector
Name of Project	Ongoing Rehabilitation and Construction of Schools Damaged by TC Winston (R3 - R5)	Resilience to Climate Change for Highly Vulnerable Areas and Sectors
Description of the Project	<p>Amongst widespread damages to homes, infrastructure and livelihoods was the mammoth damage to over 196 (R3-R5) schools. Many Fijian children were left without access to education and a conducive learning environment resulting in massive hindrance to the education curriculum.</p> <p>In the 2017-2018 financial year FJ \$105.6 million has been used of which FJ \$45.91 million has been utilised from the Green Bond proceeds to fund the rebuild of 101 schools. Compared to other disaster rehabilitation efforts around the Pacific, Fiji garnered international acclaim for its fast response in rebuilding from TC Winston, particularly in rebuilding Fiji's schools.</p>	
Start Date	01-Aug-17	
Date of Commissioning*	Ongoing	
Capital Investment (FJD)	\$105.6 million	
Use of Proceeds to Date	45,906,073	
Project Eligibility		
Objective	Rebuild 196 schools using the "Build Back Better" principle to improve climate resilience of school infrastructure.	
Expected Project Results	Question	Focal Point
Rehabilitation of schools	What is the amount of building area rehabilitated (in square metres)	1283 School Blocks/Staff Quarters/ Dormitory/Ablution block/Dinning Hall is under the rehabilitation program
Students benefiting from resilient school infrastructure	How many students benefiting from resilient school infrastructure?	A total of 33,209 students have benefited from the rehabilitation program.
Building resilient to national building code	How many buildings are resilient to category 5 resilient standards?	352 buildings And how many to category 2 resilient standards? 930 buildings
Private sector involvement	How many private sector contractors have been involved in the 2017-2018 rebuild of schools?	17 Contractors
Co-benefits	How many structures can be used as evacuation centres during cyclones?	65 Evacuation Centres



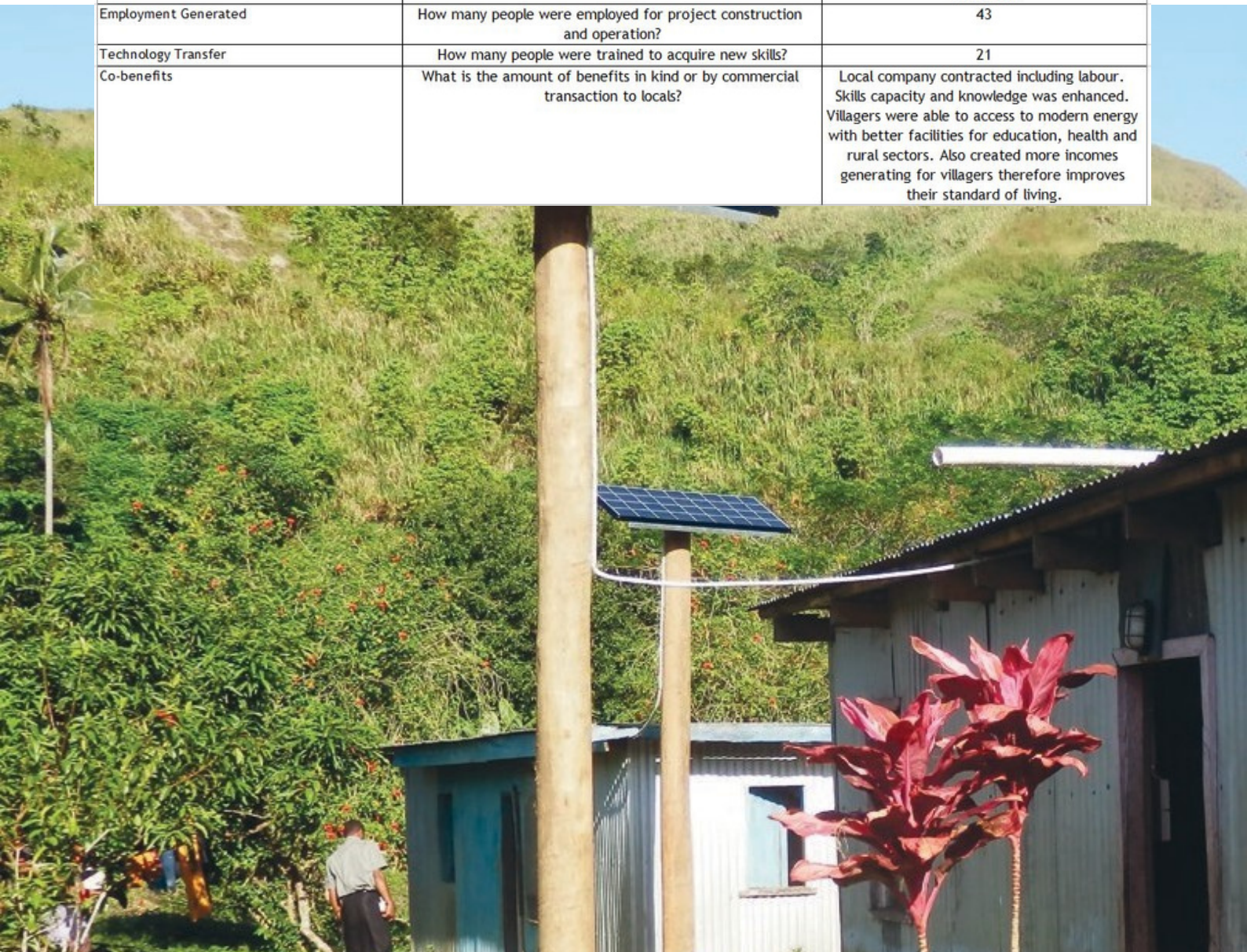
P4: Emergency Works

		Eligible Sector
Name of Project	Emergency Works	Resilience to Climate Change for Highly Vulnerable Areas and Sectors
Description of the Project	<p>This project includes the immediate restoration works as required following events and then the designed and programmed works completed to rectify larger structures. The majority of the work can be completed by the maintenance contractors but additional specialist contractors may be required from time to time.</p> <p>\$15,614,658 was requested for 2017-2018 Budget for the following activities:</p> <ul style="list-style-type: none"> • Emergency Maintenance (Contingency): Professional Services (\$1,184,000), Physical Works - Emergency Response and Restoration (\$6,730,658), Physical Works - Slips (\$2,000,000) • Kasavu Slip 2 Emergency Rectification (\$5,700,000) <p>Additional \$23,960,000 is requested as rollover works from 2016-2017 budget for the projects: Jetties (\$2.0m), Coastal erosion (\$15.0m), Slips (\$0.4m), Culverts (\$60,000), Cyclone Kofi (TD15F) (\$3.8m), and Lomaloma Slip (\$2.7m).</p> <p>Allocated budget for 2017-2018 is \$21,660,000 for the following projects:</p> <ul style="list-style-type: none"> • Rollover Projects from 2016-2017 - \$19,660,000 - Jetties (\$2.0m), Coastal erosion (\$10.0m), Slips (\$0.4m), Culverts (\$60,000), Cyclone Kofi (TD15F) (\$3.8m), and Lomaloma Slip (\$2.7m) • Emergency Response and Restoration for 2017-2018 - \$2,000,000 • Kasavu Slip Permanent Solution - deferred to 2018/19. 	
Start Date	01-Aug-17	
Date of Commissioning*	Ongoing	
Capital Investment (FJD)	34,583,500	
Use of Proceeds to Date	34,583,501	
Project Eligibility		
Objective	Restore and maintain access to critical road infrastructures in the aftermath of disasters in the most timely and cost efficient manner.	
Expected Project Results	Question	Focal Point
Road access restored in the aftermath of disasters	How many kilometres of roads have been restored?	1177 affected roads had access restored
Access to bridges or bridge access restored	How many bridges and access have been restored? (Kilometers)	176 affected bridges had access restored
Improved drainage systems	How many kilometres of drainage have been improved?	over 1200km of drainage channels were improved
Co-benefits	How many people have been employed in restoration activities?	Unknown
Access to Jetties	How many jetties have been restored?	1 affected jetty had access restored
Costal Erosion (adjacent to roads)	How many kilometers of roads have been protected?	up to 3km of Coastal Protection was constructed



P5: Solar Home System New Installations

		Eligible Sector
Name of Project	Solar Home System New Installations	Renewable Energy and Energy Efficiency
Description of the Project	The project involves the purchase and installation of solar home systems to 2,635 rural households. \$10,400,000 was allocated in the 2017-2018 national budget for this project of which \$6.28 million has been utilised from the Green Bond proceeds.	
Start Date	01-Aug-17	
Date of Commissioning*	30-Nov-18	
Capital Investment (FJD)	10,400,000	
Use of Proceeds to Date	6,280,998	
Project Eligibility		
Objective	Installation of 2,635 Solar Home Systems	Reduction of xx tCO2e annually 1,394,573.75 kWh / year
Expected Project Results	Question	Focal Point
Renewable Energy Generated	What is the amount of renewable energy generated?	3,820.75 kWh / day
CO2e Emissions Reduced	What is the amount of CO2e reduced?	1,038 tCO2e per year
Access to Clean and Safe Energy	How many households/households access to clean energy?	13,175 for an average of 5 people per household
Employment Generated	How many people were employed for project construction and operation?	43
Technology Transfer	How many people were trained to acquire new skills?	21
Co-benefits	What is the amount of benefits in kind or by commercial transaction to locals?	Local company contracted including labour. Skills capacity and knowledge was enhanced. Villagers were able to access to modern energy with better facilities for education, health and rural sectors. Also created more incomes generating for villagers therefore improves their standard of living.




P6: REDD Plus

		Eligible Sector
Name of Project	Reducing Emissions from Deforestation and Forest Degradation (REDD plus)	Sustainable Management of Natural Resources
Description of the Project	The Fiji REDD+ project started in 2012 with the objective to support Fiji's participation in the Carbon Financing mechanism under the World Bank funded REDD+ initiative. The aim of REDD+ is to provide developing countries with a financial incentive to reduce their levels of deforestation and forest degradation and to increase their forest carbon stocks. About 7,347ha of primary forests belonging to Mataqali Emalu (Navosa) is the pilot site for demonstrating REDD+ intervention activities.	
Start Date	01-Aug-17	
Date of Commissioning*	Ongoing	
Capital Investment (FJD)	500000 (government funding to the REDD+ Project is \$400,000 and not \$500,00)	
Use of Proceeds to Date	308,542	
Project Eligibility		
Objective	Demonstrate the viability of REDD+ by conserving approximately 7,347 hectares of forests.	Reduction of xx tCO ₂ e sink. Sinking 1,883,000 tCO ₂ e [Estimated carbon stock for Emalu pilot site forest area]
Expected Project Results	Question	Focal Point
New trees planted	What is the number of trees planted under the programme in 2017-2018?	2001 trees planted including native and exotic species
CO ₂ e Emissions Reduced	What is the amount of tCO ₂ e reduced?	The current estimate for carbon credits to be offered to the Carbon Fund is 2,960,500 tCO ₂ e from 2019 to 2024. This is at national level scale through FCPF funding.
Employment Generated	How many people were employed for project construction and operation?	4 officers paid from the government funding. 3 full time consultants paid from the FCPF REDD+ readiness funding
Technology Transfer	How many people were trained to acquire new skills?	35
Co-benefits	What is the amount of benefits in kind or by commercial transaction to locals?	\$10,050.00

P7: Construction of Naboro Landfill - Stage 2

		Eligible Sector
Name of Project	Construction of Naboro Landfill - Stage 2	Reducing Pollution and Greenhouse Gas Emissions
Description of the Project	This project involves the transition of the Naboro Landfill Stage 1 to stage 2 which looks at the construction phase of the landfill to provide future space.	
Start Date	01-Aug-17	
Date of Commissioning*	Ongoing	
Capital Investment (FJD)	2,851,628	
Use of Proceeds to Date	2,851,629	
Project Eligibility		
Objective	Increase the solid waste handling capacity of Naboro Landfill and introduce climate and environmentally conscious waste management.	
Expected Project Results	Question	Focal Point
More waste management capacity	What is the Additional Tonnes of waste managed?	500,000
Methane capture storage	Amount of methane capture (tonnes captured)	N/A
Employment Generated	How many people were employed for project construction and operation?	N/A
Technology Transfer	How many people were trained to acquire new skills?	N/A
Co-benefits	What is the amount of benefits in kind or by commercial transaction to locals?	Approximately 300,000 Fijians will benefit from safe and sanitary disposal of waste. Moreover, business also stand to benefit as their downstream value chain will have much lower environmental impact.





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