

The Fiji Climate Finance Snapshot 2016-2019 was developed under the guidance of the Fijian Ministry of Economy with support from the World Resources Institute. This report received financial support from the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety.

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## **Table of Contents**

| Methodology  | 4  |
|--|----|
| Key Findings from Fiji Climate Finance Snapshot:<br>2016 to 2019     | 13 |
| Introduction   | 16 |
| National Trends  | 17 |
| Sectors with the Best Available Data                                 | 19 |
| The Disaster Risk Management Sector                                  | 20 |
| The Electricity Sector   | 24 |
| The Transportation Sector  | 28 |
| The Water and Sanitation Sector                                      | 32 |
| Sectors with Partial Data  | 35 |
| The Agriculture Sector   | 36 |
| The Blue Economy Sector (including fisheries and coastal ecosystems) | 39 |
| Policy and Governance  | 42 |
| The Forestry Sector  | 45 |
| The Housing Sector   | 48 |
| Emerging Priorities  | 51 |
| Climate-Induced Relocation   | 52 |
| Human Health and Climate Change                                      | 53 |
| Gender and Climate Change  | 54 |

## **Methodology**

This Climate Finance Snapshot compares the average annual climate finance in Fiji from 2016 to 2019 to the average annual identified climate finance needs, as laid out in Fiji's development and climate documents (see Table 1). It analyses 12 climate-vulnerable sectors, drawn from the priorities laid out in Fiji's strategy documents, and is based on data that was provided by the Fijian Government and external stakeholders from January 1, 2016 through December 31, 2019. The data does not allow for – and the Snapshot is not designed to provide – a complete, project-by-project style accounting of every climate-related expenditure that is either currently underway in Fiji or that Fiji needs to implement to combat climate change. Instead, this Snapshot aims to identify emerging trends and gaps in the recent climate finance landscape and identifiable cost estimates.

Table 1 | Fiji's Development and Climate Strategies Used in the Snapshot

| DOCUMENT TITLE   | PUBLISHING INSTITUTION  | PUBLICATION DATE | IMPLEMENTATION TIMEFRAME                                |
|--|---|------------------|---|
| Climate Vulnerability<br>Assessment (CVA)                              | The World Bank and the Fijian Ministry of Economy   | October 2017     | 10 years, roughly 2018 to 2028                          |
| 5-Year and 20-Year National<br>Development Plan (NDP)                  | Fijian Ministry of Economy  | November 2017    | 5 Year Plan: 2017 to 2021<br>20 Year Plan: 2017 to 2036 |
| National Adaptation Plan<br>(NAP)                                      | International Institute for<br>Sustainable Development<br>and the Fijian Ministry<br>of Economy | December 2018    | Five years, roughly 2019 to 2024                        |
| Low Emissions Development<br>Strategy (LEDS)                           | The Global Green Growth<br>Institute and the Fijian<br>Ministry of Economy                      | December 2018    | Through 2050, about 2018<br>to 2050                     |
| Nationally Determined<br>Contribution Implementation<br>Roadmap (NDCR) | The Global Green Growth<br>Institute and the Fijian<br>Ministry of Economy                      | March 2018       | Through 2030, roughly 2018<br>to 2030                   |

#### **DEFINING CLIMATE FINANCE**

This Snapshot includes more than 500 projects that benefit Fiji's climate efforts. These projects are funded by the Fijian Government and various United Nations agencies, multilateral development banks (MDB), bilateral development partners, foundations, and civil society organizations. It is primarily based on an annual assessment, conducted by the Climate Change Division in the Ministry of Economy, of the projects in Fiji's annual budget that are helping to address the country's climate needs. It also includes self-reported information from external partners regarding their climate-related support between 2016 and 2019 (see Table 2).

Although the activities of the private sector play a critical role in Fiji's economy and will be indispensable to Fiji's efforts to address climate change, this Snapshot does not include the investments of private financial institutions or businesses. Instead, the Snapshot focuses on the actions of publicly financed institutions. The decision to emphasize the public sector was driven by two factors. One, the Ministry of Economy requested this research to help it understand the current climate finance landscape supported by the Fijian Government and its development partners. Two, the relevant data regarding private sector activities is even more difficult to access than the same information from public sector institutions. However, it should be noted that there are certain economic sectors discussed in the Snapshot – namely energy, transport, agriculture, fisheries, and housing – in which the private sector comprises the majority of the financial investments and the public sector is primarily responsible for creating the right type of enabling environment to incentivize private sector behavior. Thus, although the Snapshot does not include investment data from the private sector, it does discuss the relationship between the public and private sectors, where relevant.

#### **COMPILING PUBLIC CLIMATE FINANCE FLOWS**

The available data on the known climate finance examined by the Snapshot came in different currencies, time frames, and geographic areas. To ensure an accurate comparison, the Snapshot uses a value called the "Snapshot Value," which is the average annual amount allocated by the project or donor in Fiji, converted to Fijian Dollars. For projects with budgets reported in a foreign currency (such as US Dollars, Euros, or Australian Dollars) the Snapshot converted the total budget to Fijian Dollars using the average annual exchange rate for the years in which the project occurred. For regional projects that included Fiji, the total project value was divided by the total number of countries. For projects covering more than one year, the total project value was divided by the total number of years. For example, the New Zealand Pacific Partnership on Ocean Acidification is a four-year project that was implemented from 2015 to 2019 in Fiji, Kiribati, Vanuatu, and Tokelau. The project has a total budget of EUR1.22 million, for four years and across four countries. The Snapshot value for this project is FJD\$181,507 (EUR\$76,400 per year, on average in Fiji, at an exchange rate of FJD\$2.38 per Euro).

Table 2 | External Funders Included in the Snapshot

| MULTILATERAL ORGANIZATIONS   | BILATERAL DONORS*   | FOUNDATIONS AND NGOS   | CLIMATE FUNDS   |
|--|---|--|---|
| Asian Development Bank   | Australian Department of Foreign<br>Affairs and Trade   | Australian Centre for International<br>Agricultural Research | Adaptation Fund   |
| European Investment Bank   | Australian Government and Bureau of Meteorology   | David and Lucile Packard<br>Foundation                       | Green Climate Fund  |
| United Nations Office of<br>Coordination of Humanitarian<br>Affairs    | European Union  | Duke of Edinburgh  | Global Environment<br>Facility  |
| Food and Agriculture<br>Organization                                   | Export-Import Bank of China   | Fiji Water Foundation  | Multilateral Fund for the<br>Implementation of the<br>Montreal Protocol |
| International Office on Migration                                      | Export-Import Bank of Malaysia  | Global Green Growth Institute                                |   |
| International Fund for<br>Agriculture Development                      | French Development Agency   | Gordon and Betty Moore<br>Foundation                         |   |
| United Nations Development<br>Program                                  | French Global Environmental<br>Facility   | Institute of Environmental<br>Science and Research Limited   |   |
| United Nations Educational,<br>Scientific and Cultural<br>Organization | German Federal Ministry of<br>Economic Cooperation and<br>Development                                 | International Atomic Energy<br>Agency                        |   |
| United Nations Environment<br>Program                                  | German Federal Ministry of Nature<br>Conservation, Environment, Building<br>and Nuclear Safety (BMUB) | International Tropical Timber<br>Organization                |   |
| United Nations International<br>Children's Emergency Fund              | Government of Canada  | Leonardo DiCaprio Foundation                                 |   |
| United Nations Office of Disaster<br>Risk Reduction                    | Government of Italy   | Waitt Foundation   |   |
| United Nations Women   | Government of Japan   | Secretariat of the Pacific Community                         |   |
| World Bank Group   | Government of Luxemburoug   | Secretariat of the Pacific Regional Environment Programme    |   |
| World Food Program   | Government of Switzerland   | The Energy and Resources<br>Institute                        |   |
| World Health Organization  | United States Agency for<br>International Development   | Wildlife Conservation Society                                |   |
|  | Japanese International Cooperation<br>Agency  |  |   |
|  | Korea International Cooperation<br>Agency   |  |   |
|  | Kuwait Fund for Arab Economic<br>Development  |  |   |
|  | New Zealand Ministry of Foreign<br>Affairs and Trade  |  |   |
|  | Prinicipality of Monaco   |  |   |
|  | People's Republic of China  |  |   |

<sup>\*</sup> Note on bilateral donors: The information on bilateral donors was provided by the Ministry of Economy. In some instances, the best available information listed a specific government agency. But in others, the aid was provided as part of a bilateral arrangement, where the donor country (and not a specific government agency) was the best available information.

Where possible, the Snapshot provides two figures for available climate finance: the average annual amount *allocated* to a project or sector by the Fijian Government and donor partners and the average annual amount actually *spent*. Both figures are provided to ensure maximum clarity as to the climate finance landscape in Fiji.

The average annual amount *allocated* provides an indication of the total amount of public climate finance that was available to be spent on the relevant activities. The data on total allocations is based on the total amount budgeted for a project, as provided in the National Budget Books of the Fijian Government and as reported by donors to the Ministry of Economy, through interviews, or in public documents. The figure represents the likely maximum amount of public climate finance available for the activity.

Actual expenditures represent the amount ultimately spent. The availability of data on actual expenditures varies significantly by funder. For example, the Ministry of Economy tracks the actual expenditures of all projects funded by the government budget or through official development assistance, so the Snapshot includes actual expenditure figures for all projects funded by these sources. Other funders, such as the UN agencies, foundations or NGOs, do not provide real time estimates of the actual expenditure for a given project on their websites or to the Ministry. A couple of external partners do make the financing data publicly available, but do not specify which dates these figures cover, thus making it difficult to assess how those figures fit into the timeframe covered by the Snapshot. Additionally, many projects in Fiji are also being implemented on a regional level and cover multiple countries, which can make it very difficult to untangle exactly how much of the project budget was spent on activities in Fiji. The figure on actual climate finance expenditures is thus limited to the projects financed by the Fijian Government and so does not include all the projects that were implemented. Given these data limitations, the figures provided on the average amount spent represent the minimum expenditure for the sector.

#### **DEFINING CLIMATE FINANCE**

The prevailing definition of climate finance comes from the UNFCCC Standing Committee on Finance, which defines climate finance as "finance that aims at reducing emissions, and enhancing sinks of greenhouse gases and aims at reducing vulnerability of, and maintaining and increasing the resilience of, human and ecological systems to negative climate change impacts." The breadth of this definition has spurred the development of several methodologies to provide clarity on which specific activities or types of projects count as climate finance. For example, the major multilateral development banks (MDBs) created the Joint Methodology on Climate Finance in 2010 to enable them to jointly report comparable numbers on their climate finance. The OECD Development Assistance Committee, in turn, has adopted the Rio Markers for Climate.

However, both the MDB methodology and the Rio Markers require a detailed analysis of whether the specific activities in each project help reduce either GHG emissions or the projected negative impacts of climate change. Such an assessment requires detailed information about the specific activities funded in a project. For this Snapshot, it would require an activity-level analysis of the 535 projects included in the Snapshot. This type of detailed analysis was not possible with the available project resources. Instead, the Snapshot uses domestic and international climate finance data as collected and provided by the Fijian Government and its external partners.

#### **Domestic Finance**

The data regarding Fiji's domestic climate finance investments comes from the Ministry of Economy's monthly accounting of all projects funded by the government that are related to climate change. The Ministry began this accounting in 2016, so the Snapshot uses its climate finance data from January 1, 2016 through December 31, 2019.¹ To tag climate-related expenditures, the Climate Change Division reviews the finalized government budget and tags each project by sector.² Even though the Ministry tracks the monthly allocation to each project, this Snapshot uses the total annual allocation.

#### **International Finance**

The data on international climate finance investments comes from several sources and includes grants and loans. The International Cooperation Division in the Ministry of Economy provided data regarding all current and historical flows of official development assistance (ODA) in Fiji. The ODA data was checked against the Climate Change Division's list of climate-related projects to verify that all climate projects funded by ODA were included. This Snapshot used the actual ODA amounts, as reported to the International Cooperation Division, from January 2016 through December 2019. The ODA data was available in Fijian Dollars.

Second, climate finance data provided by other institutions, but not captured in official ODA records was secured from a combination of public data and individual interviews. This includes funding from a variety of sources including multilateral institutions, NGOs, bilateral donors, and foundations.

#### **COMPILING CLIMATE FINANCE NEEDS**

The Snapshot draws Fiji's estimated climate finance needs from Fiji's climate and development strategies (see Table 1). The NDP guides all operational and budgetary decisions by the Ministry of Economy and forms the backbone of the Snapshot. The NDP lays out Fiji's development goals, policy priorities, strategies, and proposed projects for more than two dozen topical areas, ranging from energy to health. The NDP does not provide cost estimates for the policy goals or strategies. Table 3 provides an example of the information presented in the NDP.

<sup>&</sup>lt;sup>1.</sup> Budget years: 2016/2017; 2017/208; 2018/2019; 2019/2020. This is the same data that the Ministry of Economy uses to allocate and monitor its revenues from Fiji's Environmental and Climate Adaptation Levy (ECAL), and so the climate relevance of the projects was taken as given.

<sup>&</sup>lt;sup>2</sup> No additional analysis is currently conducted (e.g. to verify that infrastructure projects, such as road repairs, are climate resilient).

Table 3 | Matrix as found in National Development Plan (NDP)

|   |            | ELECTRICITY SECTOR  |                                 |
|---|------------|---|---------------------------------|
| GOAL  | POLICY     | STRATEGIES  | PROJECT                         |
| A resource- efficient, cost- effective, and  Increase share of electricity generation |            | Implement a research, data collection, and investment identification program to accelerate the renewable energy share in electricity generation   | New Hydro Generation<br>Sites   |
| environmentally<br>sustainable<br>energy sector                                       | ble energy | Establish a net-metering (or similar) mechanism to set out clear rules for small companies or households to feed excess electricity from renewables to the grid at a price fair to them and to FEA    | New Solar Generation<br>Sites   |
|   |            | Set economically justified feed-in tariffs or pricing framework (price differential system) including studies to provide incentives for production of electricity from various sources                | New Wind Generation<br>Sites    |
|   |            | Undertake a study and develop an Independent Power Producer (IPP) framework that addresses the issue of intermittent supply of power from IPPs  | New wave/tidal generation sites |
|   |            | Establish a transparent process for procurement of new large-scale capacity from IPPs, pricing, and other principles to be applied in all new power purchase agreements and grid connection standards | New geothermal sites            |

This Snapshot cross-references the NDP with the sectors covered by Fiji's four climate-specific policy documents (Fiji's LEDS, CVA, NDCR, and NAP) to develop a list of twelve priority sectors that support Fiji's development and climate objectives. Some sectors, such as agriculture, disaster risk management, and climate policy, are discussed in several chapters in the NDP. In these instances, the relevant policies, strategies, and projects listed in the NDP were compiled into one sector list for the Snapshot. Other sectors, such as coastal wetlands, relocation, and human health are widely discussed in the climate documents but covered sparsely in one chapter of the NDP. There are no sectors discussed in the climate documents that are absent from the NDP.

Although the NDP does not provide estimated costs, cost estimates are provided by Fiji's CVA, LEDS, and NDCR. The CVA provides all the cost estimates for adaptation and a few for mitigation efforts, while the LEDS and NDCR only provide estimates for mitigation. The CVA cost estimates are provided in Fijian Dollars and are cumulative over 10 years. Some cover actions that are already planned by the government while others cover new interventions. The LEDS provides estimated costs for four emissions reduction scenarios. This Snapshot uses the cost estimates for the business as usual-conditional scenario, in which Fiji reaches its conditional NDC target to reduce emissions by 30% by 2030. The LEDS cost estimates are cumulative, over various implementation timeframes from 2018 to 2050, and provided in US Dollars. The NDCR provides estimated costs in US Dollars for short-term (2017 to 2020), medium-term (2021 to 2025), and long-term actions (2026 to 2030). In instances where both the NDCR and LEDS provide estimated costs for the same action, the Snapshot uses an average. All cost estimates from the LEDS and NDCR were converted to Fiji Dollars and to an annual estimated cost.

#### THE CLIMATE FINANCE GAP ANALYSIS

As discussed above, this Snapshot compares the estimated annual available climate finance – in terms of both allocated amounts and actual expenditures – to the annual identified needs. For each sector, every relevant project and each costed action were matched with the most relevant action in the NDP. Table 4 provides an example of how the available climate finance data on available climate finance and identified climate finance needs is matched for one policy in the energy sector. To complete the matching, the available data on allocated or spent climate finance and/or cost estimates were aligned with the most detailed action possible from the NDP. At a minimum, all identified climate finance amounts or cost estimates were matched with a policy objective. After the matching was complete, a climate finance gap analysis was conducted for each sector (see Table 5). Most climate finance gaps are presented at the policy level, as the data often did not allow for a more detailed analysis.

Table 4 | Example of the Structure of Sector Summaries

| CLIMATE-RELATED POLICIES  | SPECIFIC INTERVENTIONS                      | ESTIMATED<br>ANNUAL CLIMATE<br>FINANCE NEEDS**<br>(FJD PER YEAR) | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) |
|---|---|--|---|--|
| Access to affordable, reliable, modern and sustainable energy   | Grid Extension Power Supply<br>Program      | FJD 154,176,800  | FJD 63,319,099                                  | FJD 51,876,183                               |
| services for all Fijians  | New grid connections                        | FJD 9,000,000  | FJD 400,000                                     | FJD 283,446                                  |
|   | Rural Mini-grids and solar home systems     | FJD 400,000  | FJD 6,839,514                                   | FJD 263,645                                  |
| Increase share of electricity   | New Hydro Generation                        | FJD 116,500,913  | FJD 900,000                                     | FJD 8,000                                    |
| generation from renewable energy resources  | New Solar Generation                        | FJD 82,978,233   | FJD 12,686,523                                  | FJD 1,420,156                                |
|   | New Wind Generation                         | FJD 81,198,000   | FJD 0   | FJD 0  |
|   | New wave Generation                         | FJD 0  | FJD 0   | FJD 0  |
|   | New Geothermal Sites                        | FJD 57,602,000   | FJD 434,483                                     | FJD 222,783                                  |
|   | Maintain current renewable energy capacity  | FJD 0  | FJD 25,000                                      | FJD 5,005                                    |
|   | Clean Cook Stoves                           | FJD 0  | FJD 231,238                                     | FJD 0  |
| Reduce cost of petroleum imports  | Bio-fuel new plants                         | FJD 35,394,000   | FJD 1,905,943                                   | FJD 589,052                                  |
| and further develop biofuels for electricity and transport  | Rural Biogas new plants                     | FJD 371,786  | FJD 288,500                                     | FJD 82,868                                   |
| Improve energy efficiency in the electricity sector   | Expand Energy Efficiency<br>Initiatives     | FJD 24,022,009   | FJD 547,574                                     | FJD 453,380                                  |
| Increase private sector<br>participation in electricity supply<br>through reform of regulatory<br>aspects of the electricity sector | Reform regulation of the electricity sector | FJD 20,000   | FJD 839,260                                     | FJD 0  |
| TOTALS: ELECTRICITY SECTOR  |   | FJD 561,663,741  | FJD 88,417,134                                  | FJD 55,204,518                               |

<sup>\*</sup> Note: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not be secured for every project that was implemented.

<sup>\*\*</sup> Note: Cost estimates for the electricity sector are provided by the LEDS, NDCR, and CVA. These estimates cover investments that are the responsibility of the public sector, such as grid expansion, and investments that are the responsibility of the private sector, such as new renewable energy generation.

Table 5 | Example of the Climate Finance Snapshot for Electricity

| INTERVENTION            | AVAILABLE AND SPENT C   | LIMATE FINANCE                                  | <u>E</u> *                                   | CLIMATE FINANC   | CE NEEDS**                   |
|-------------------------|---|---|--|--|------------------------------|
| POLICY OR<br>STRATEGY   | PROJECT TITLE   | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) | ACTION IN CLIMATE<br>DOCUMENTS                           | ANNUALIZED COST<br>ESTIMATES |
| New Solar<br>Generation | Construction of Fiji Barefoot College   | FJD 2,294,118                                   | FJD 303,742                                  | Expansion of solar generation                            | FJD 7,920,000                |
|                         | "Support for IRENA's SIDS Lighthouses<br>Initiatives"   | FJD 72,503                                      | FJD 0  | Assessment of battery storage options for grid stability | FJD 20,000                   |
|                         | Fiji Rural Electrification Fund   | FJD 603,065                                     | FJD 0  | Diversification of renewable energy generation           | FJD 3,000,000                |
|                         | Solar Project   | FJD 419,691                                     | FJD 419,691                                  | New Solar Generation<br>(NDCR 2017 to 2020)              | FJD 40,252,000               |
|                         | Project for Climate Change Resilient<br>Renewable Eneregy (Korea)   | FJD 1,256,638                                   | FJD 0  | New Solar Generation<br>(NDCR 2021 to 2025)              | FJD 23,734,800               |
|                         | Climate Change Resilient Renewable Energy<br>Development Project - 1.55 MW Solar Project<br>in Taveuni        | FJD 794,697                                     | FJD 0  | New Solar Generation<br>(2026 to 2030)                   | FJD 35,810,400               |
|                         | Data Portal Setup of Grid Connect<br>Photovoltaic System  | FJD 16,667                                      | FJD 0  | LEDS Annualized Costs<br>BAU-C                           | FJD 88,485,000               |
|                         | Sustainable Energy Financing  | FJD 2,725,969                                   | FJD 0  | Not costed   | Not costed                   |
|                         | Clean and Renewable Energy Project (Taiwan)   | FJD 800,000                                     | FJD 0  | Not costed   | Not costed                   |
|                         | Regional Sustainable Energy Industry<br>Development Program   | FJD 5,150                                       | FJD 0  | Not costed   | Not costed                   |
|                         | Technical Asssistance - Pre-feasibility study<br>for 100% renewable Energy generation -<br>Ovalau and Taveuni | FJD 290,758                                     | FJD 0  | Not costed   | Not costed                   |
|                         | Feasibility study for Renewable Energy<br>Project in Tavueni  | FJD 412,806                                     | FJD 0  | Not costed   | Not costed                   |
|                         | Feasibility study for Renewable Energy<br>Project in Ovalau   | FJD 415,000                                     | FJD 0  | Not costed   | Not costed                   |
|                         | Pacific Renewable Energy Program  | FJD 379,241                                     | FJD 0  | Not costed   | Not costed                   |
|                         | Sustainable Energy Financing Project  | FJD 300,000                                     | FJD 0  | Not costed   | Not costed                   |
|                         | Sustainable Energy Financing Project (World Bank)   | FJD 494,118                                     | FJD 185,940                                  | Not costed   | Not costed                   |
|                         | Sustainable Energy Financing Project (World Bank)   | FJD 168,371                                     | FJD 168,371                                  | Not costed   | Not costed                   |
|                         | Fiji Renewable Energy Power Project (UNDP)  | FJD 200,000                                     | FJD 40,000                                   |  |                              |
|                         | Regional Sustainable Energy Industry<br>Development Program   | FJD 66,187                                      | FJD 0  | Not costed   | Not costed                   |
|                         | Regional Sustainable Energy Industry<br>Development Program   | FJD 36,622                                      | FJD 0  | Not costed   | Not costed                   |
|                         | Fiji Renewable Energy Power Project   | FJD 474,706                                     | FJD 0  | Not costed   | Not costed                   |
|                         | Fiji Renewable Energy Power Project   | FJD 100,000                                     | FJD 20,000                                   | Not costed   | Not costed                   |
|                         | Renewable Energy Development Projects   | FJD 360,216                                     | FJD 282,412                                  | Not costed   | Not costed                   |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

<sup>\*\*</sup> Note: Cost estimates for the electricity sector are provided by the LEDS, NDCR, and CVA. These estimates cover investments that are the responsibility of the public sector, such as grid expansion, and investments that are the responsibility of the private sector, such as new renewable energy generation.

Unfortunately, not all 12 sectors offer the same quality or supply of data (see Table 6). Only four of the 12 sectors (disaster risk management, energy, transport, and water and sanitation) have enough data to conduct a credible gap analysis. The data is partially sufficient for five sectors (agriculture, policy and governance, forests, blue economy, and housing). Three sectors – health, gender and climate-induced relocation – do not have enough data to conduct an accurate climate finance gap analysis.

Table 6 | Data Availability by Sectors in the Snapshot

| ECONOMIC SECTOR             | DOCUMENT*           | IS PUBLIC<br>SECTOR<br>COVERED? | IS PRIVATE<br>SECTOR<br>COVERED? | NOTES ON DATA AVAILABILITY AND THE COST ESTIMATES   |
|-----------------------------|---------------------|---------------------------------|----------------------------------|---|
| Agriculture                 | CVA                 | Yes                             | No                               | No data is available for subsistence agriculture, which accounts for 37% of Fiji's agricultural production  |
| Policy and Governance       | CVA                 | Yes                             | No                               | Very difficult to find data to estimate the costs of developing and enforcing policies  |
| Disaster Risk<br>Management | CVA                 | Yes                             | No                               | None  |
| Energy                      | CVA<br>LEDS<br>NDCR | Yes                             | Yes                              | None  |
| Blue Economy                | CVA<br>LEDS         | Yes                             | No                               | Very little data exists to estimate the costs of adapting to some climate-induced impacts on marine ecosystems, such as addressing ocean acidification or combatting sea level rise |
| Forestry                    | CVA<br>LEDS         | Yes                             | No                               | Difficult to find data on the costs of adaptation by the private sector   |
| Health                      | CVA                 | Yes                             | No                               | Very little data exists to estimate the costs of integrating climate considerations into the health sector  |
| Housing                     | CVA                 | Yes                             | No                               | Difficult to find data on the costs of adaptation by the private sector   |
| Relocation                  | None                | No                              | No                               | No data exists on the costs of climate-induced relocation   |
| Transport                   | CVA<br>LEDS<br>NDCR | Yes                             | Yes                              | None  |
| Water and Sanitation        | CVA<br>LEDS         | Yes                             | No                               | None  |

<sup>\*</sup>NOTE: The CVA provides cost estimates for some adaptation interventions to be implemented by either the Fijian Government or its development partners. The LEDS provides cost estimates for actions to be taken by both the public and private sectors for four decarbonization scenarios.

None of these documents, together or apart, provides a detailed, comprehensive accounting of the costs of creating a decarbonized, climate-resilient economy in Fiji.

The NDCR cover the public and private sector activities that support Fiji's NDC unconditional and conditional target.

## **Key Findings from Fiji Climate Finance Snapshot: 2016 to 2019**

- Current climate finance provides limited support for three core adaptation needs: coastal ecosystems, human health, and climate relocation. Fiji's climate documents and government policy positions have identified three core adaptation priorities that are largely unsupported by current funding flows.
  - a. Fiji's Blue Economy: Fiji's blue economy stems from its ocean resources, including mangroves and coral reefs, which support critical economic sectors, such as tourism and fisheries. Fiji's blue economy is under growing stress, caused in large part by climate change. This Snapshot finds that although an average of FJD\$72.3 million in annual climate finance was available to support the blue economy sector during 2016-2019, a minimum of 10% of all available finance, or FJD\$7.7 million, was spent. Nearly 36% of all available funding comes from Fiji GEF 5's Ridge to Reef project, being implemented by UNDP. The Snapshot finds few public policies aimed at protecting coastal ecosystems and few cost estimates for adaptation in the blue economy, making it difficult to accurately assess the additional levels of funding needed to enhance resilience in this sector.
  - b. Human Health: Fiji's National Adaptation Plan (NAP) and Climate Vulnerability Assessment (CVA) identify the health sector as both a critical point of climate vulnerability and a key opportunity to build resilience. Fiji's National Development Plan (NDP) calls for the integration of climate considerations into the health sector. However, it is difficult to understand from existing estimates how much it will cost to integrate climate into healthcare. Under the Snapshot, current allocated climate finance flows come from eight projects funded by external donors which come to a total of FJD\$11.3 million per year.
  - c. Climate-Induced Relocation: The Ministry of Economy estimates that up to 43 villages will need to be relocated in the coming decades due to sea level rise and other climate-related impacts. The Fijian Government has therefore adopted guidelines on climate relocation and launched a Relocation and Displaced People's Trust Fund. The Ministry of Economy has set aside FJD\$5 million from the Environment and Climate Adaptation Levy (ECAL) in seed funding for the trust fund and will continue to set aside a certain percentage of ECAL funding every year. In addition, the International Organization for Migration (IOM) spent on average FJD\$200,000 per year in Fiji. However, no cost estimates yet exist to cover climate-related relocation in Fiji.

2. A more comprehensive assessment of estimated costs is needed, particularly for adaptation. Fiji's CVA provides the only cost estimates for actions to adapt to climate change. These estimates are comprehensive for some sectors but not for others. As shown in Table 6, there is sufficient data available to conduct a credible gap analysis for only four of the 12 sectors analyzed. In some instances, these data gaps exist because the available

in Table 6, there is sufficient data available to conduct a credible gap analysis for only four of the 12 sectors analyzed. In some instances, these data gaps exist because the available cost estimates in sectors such as housing, forestry, agriculture, and the blue economy are focused on interventions that can be *implemented* by the public sector, while the main *investors* in these sectors are from the private sector. Additional research and analysis should be done to improve cost estimates for adaptation, to engage the private sector in valuing climate adaptation, and to close these data gaps. In addition, the Snapshot uses climate finance data as defined and provided by the Fijian Government and its external partners. As a result, the Snapshot relies on multiple definitions of climate finance,

particularly regarding adaptation finance. This exercise highlights the fragmented nature of Fiji's climate finance landscape and underscores the importance of refining the available methodologies to track and evaluate climate finance in Fiji.

3. Spending on disaster management is dominated by rebuilding the damage caused by Tropical

**Cyclone Winston.** For Fiji, climate change will magnify the intensity and frequency of tropical cyclones and floods, which pose a significant threat to Fiji's economy. The Snapshot finds that 73% of climate finance spent on disaster risk management, or more than FJD\$144 million annually since 2016, can be directly attributed to responding to or repairing damage from Tropical Cyclone Winston. The costs of rebuilding from Tropical Cyclone Winston, which wiped out one-third of the value of Fiji's GDP when it hit Fiji as a severe category 5 cyclone in February 2016, underscore that if severe natural disasters such as Winston were to

The Snapshot provides a sector-by-sector comparison between Fiji's estimated annual climate finance flows and Fiji's estimated annual climate finance needs. About FJD\$1.94 billion in domestic and international public climate finance was allocated to Fiji between 2016 and 2019.

occur regularly, they would pose an unsustainable threat to the government's financial stability. Climate change is projected to increase the intensity and frequency of extreme weather events in the region. Thus Fiji's best path to fiscal and economic resilience is to pre-emptively build its infrastructure and governing systems so that these systems can withstand severe storms when they arrive. However, this Snapshot finds that the remaining FJD\$53 million spent in public climate finance for non-Winston related disaster risk management between 2016 and 2019 falls about FJD\$131 million short of identified annual funding needs. This financing gap primarily pertains to actions aimed at integrating climate change projections into Fiji's built environment, including its buildings, infrastructure, and town planning processes.

- 4. Investments to reach the target of 100% renewable energy generation by 2036 are lagging. Fiji's first Nationally Determined Contribution Roadmap (NDCR) estimates that it will need to approach 100% renewable energy generation by 2030 (up from about 50% in 2019) to meet its goal to reduce emissions from electricity generation by 20% compared to business as usual (BAU). The Snapshot finds that only 16% of the public climate finance allocated to the electricity sector is going to support new renewable energy generation. Although Energy Fiji Limited, a private company, has started efforts to design several renewable energy projects, the completion of these projects has been delayed by an unfinished divestment process and the coronavirus pandemic. Most of the remaining funds are going to grid expansion. This leaves an investment gap of FJD\$336 million per year for renewable energy, including a shortfall of more than FJD\$81 million annually for solar expansion, based on the estimated annual actual expenditures of public climate finance.
- **5. Further investments are needed in low-carbon transport.** Ensuring resilient, lowemission transport by land, sea, and air is vital if Fiji is to meet its climate commitments. Fiji's NDC lists transportation as one of three sectors that will enable it to meet its goal of reducing total CO<sub>2</sub> emissions by 30% by 2030. Meanwhile, the CVA identifies transportation as the sector with "the largest investment needs for building the country's resilience." The Snapshot finds significant recent investments to restore and strengthen Fiji's transportation infrastructure. However, it also finds limited efforts in policies, regulations, or existing infrastructure projects to reduce emissions from Fiji's vehicle and vessel fleets. While most investments to reduce emissions from road transport will come from the private sector, the LEDS calls on the public sector to invest in "proof of concept" low carbon vessels for marine transport. The LEDS estimates that it would cost on average of FJD\$12 million annually to pilot low-carbon vessels for inter-island marine transport.

### Introduction

The intensifying impacts of climate change pose an urgent and grave threat to Fiji's development ambitions. As a small island nation of almost 900,000 people living across 110 islands, Fiji is exposed to significant climate risks, including severe flooding and tropical cyclones. Fiji's CVA estimates that tropical cyclones and floods currently inflict average losses of more than FJD\$500 million per year – an amount equal to 5% of Fiji's annual GDP.

Fiji's recent history shows that one of these events can lead to devastating damages. In February 2016, Tropical Cyclone Winston hit Fiji as a severe category 5 storm, which was so strong that it forced forecasters to consider adding a category 6 classification. In 36 hours, Winston inflicted damages of FJD\$2.9 billion, wiping out a third of the value of Fiji's GDP.

In the aftermath of Tropical Cyclone Winston, the Fijian Government has made addressing climate change a top government priority. The government is taking a multi-pronged approach to reach its long-term

goal of building a climate-resilient, net-zero carbon economy by 2050. First, Fiji has established a wide set of ambitious climate targets – including a target from its National Development Plan (NDP) to achieve 100% renewable energy generation by 2036. Second, Fiji is working to finalize policies such as a Climate Change Bill that will provide the legal and regulatory framework to meet these targets. Third, in October 2017, Fiji became the first developing country to successfully issue a sovereign green bond, which raised FJD\$100 million to fund climate projects. Fourth, Fiji raised more than FJD\$392 million between August 2017 and December 2019 from its Environmental and Climate Adaptation Levy, a consortium of taxes on specific goods, services, and income to fund domestic efforts to adapt to climate change. Finally, Fiji has published several comprehensive strategies that delineate the specific interventions Fiji could make to address climate change (see Table 7). These strategies are intended to assist the Ministry of Economy with thinking through how to mainstream climate considerations into its budgeting and planning decisions.

Table 7 | Fiji's Development Plans and Climate Strategies Used in the Snapshot

| DOCUMENT TITLE  | PUBLISHING INSTITUTION   | PUBLICATION DATE | IMPLEMENTATION TIMEFRAME                 |
|---|--|------------------|--|
| Climate Vulnerability Assessment (CVA)                              | The World Bank and the Fijian<br>Ministry of Economy   | October 2017     | 10 years, roughly<br>2018 to 2028        |
| 5-Year and 20-Year National<br>Development Plan (NDP)               | Fijian Ministry of Economy   | November 2017    | 2017 to 2021<br>2017 to 2036             |
| National Adaptation Plan (NAP)                                      | International Institute for Sustainable<br>Development and the Fijian Ministry<br>of Economy | December 2018    | Five years, roughly 2019 to 2024         |
| Low Emissions Development<br>Strategy (LEDS)                        | The Global Green Growth Institute and the Fijian Ministry of Economy                         | December 2018    | Through 2050,<br>about 2018 to 2050      |
| Nationally Determined Contribution<br>Implementation Roadmap (NDCR) | The Global Green Growth Institute and the Fijian Ministry of Economy                         | March 2018       | Through 2030,<br>roughly 2018 to<br>2030 |

Consistent with its commitment to build a climate resilient economy, the Fijian Ministry of Economy commissioned this Climate Finance Snapshot. This Snapshot provides a stock take of the current trends in domestic and international climate finance in Fiji. It examines flows from the Fijian Government, bilateral and multilateral organizations, foundations, and non-profit organizations. It covers allocations and expenditures from 2016 to 2019. The Snapshot does not consider investments from private financial institutions or businesses.

The Snapshot is designed to provide a sector-by-sector comparison of the average annual public climate finance available in Fiji with the estimated climate finance needs. Where possible, the Snapshot includes an analysis of the estimated actual expenditures, but as discussed in the methodology above, there were significant barriers to securing expenditure data from external funders. The Ministry of Economy intends to incorporate the findings of this Snapshot into subsequent planning processes, including a forthcoming Climate Finance Country Program.

In this document, data on Fiji's domestic climate finance comes from the Climate Change Division in the Ministry of Economy, which maintains a monthly accounting of all projects funded by the government that the Ministry deems related to climate change. The data on international climate finance investments comes from several sources and includes grants and loans. Fiji's National Development Plan (NDP) guides all operational and budgetary decisions by the Ministry of Economy and therefore forms the backbone of the Snapshot. It lays out Fiji's development goals, policy priorities, strategies, and proposed projects for more than two dozen topical areas, ranging from energy to health. This Snapshot uses the climate-related policies and strategies in the NDP to determine the priority interventions for each sector. However, the NDP does not provide cost estimates. These are instead gathered from the NDCR, CVA and LEDS. Further details on the methodology are discussed above.

Roughly FJD\$1.94 billion in domestic and international public climate finance was allocated to Fiji annually during the Snapshot. About FJD\$781 million was spent annually. Both figures fall short of the FJD\$3.28 billion in annual identified climate finance needs.

## **National Trends**

Overall an estimated FJD\$1.94 billion in domestic and international public climate finance was allocated to Fiji annually between 2016 and 2019 (see Table 8). In the end, roughly FJD\$781 million of this allocated funding was spent annually. Both the total amount allocated and spent amounts fall short of the FJD\$3.28 billion in annual climate finance needs, as determined by available estimates. However, sizeable gaps in available cost estimates, especially for adaptation actions, mean that the full cost of meeting Fiji's climate goals is likely higher than the estimated needs identified in this Snapshot.

Current climate finance investments support a range of mitigation and adaptation interventions, from projects to increase Fiji's renewable energy generation capacity to projects aimed at relocating communities. Despite this breadth of activities, 85% of all spent public climate finance was concentrated in three sectors: disaster risk management, transport, and water and sanitation (see Table 8). The transport sector accounted for almost 50% of all estimated actual expenditures. Efforts to respond to and rebuild from Tropical Cyclone Winston account for FJD\$144 million, or almost 18% of all annual public climate finance spent since 2016.

Table 8 | Summary of Investments and Needs by Sector

| SECTOR                       | AVERAGE ANNUAL<br>ALLOCATED*<br>FUNDING<br>(FJD PER YEAR) | PERCENT OF<br>ESTIMATED<br>ALLOCATIONS | AVERAGE ANNUAL<br>EXPENDITURE*<br>(FJD PER YEAR) | PERCENT OF<br>ESTIMATED<br>EXPENDITURES* | TOTAL ESTIMATED<br>ANNUAL NEEDS**<br>(FJD PER YEAR) | PERCENTAGE OF<br>ANNUAL ESTIMATED<br>NEEDS** |
|------------------------------|---|--|--|--|---|--|
| Disaster Risk<br>Managements | FJD 779,784,007   | 40.18%                                 | FJD 197,340,721                                  | 25.24%                                   | FJD 275,870,000                                     | 8.39%  |
| Transport                    | FJD 636,150,348   | 32.78%                                 | FJD 383,434,761                                  | 49.04%                                   | FJD 2,259,277,427                                   | 68.75%                                       |
| Water and<br>Sanitation      | FJD 173,185,475   | 8.92%                                  | FJD 86,370,851                                   | 11.05%                                   | FJD 162,650,000                                     | 4.95%  |
| Electricity                  | FJD 88,417,134  | 4.56%                                  | FJD 55,204,518                                   | 7.06%                                    | FJD 561,663,741                                     | 17.09%                                       |
| Agriculture                  | FJD 74,060,965  | 3.82%                                  | FJD 32,681,315                                   | 4.18%                                    | FJD 1,247,429                                       | 0.04%  |
| Blue Economy                 | FJD 72,374,383  | 3.73%                                  | FJD 7,784,803                                    | 0.99%                                    | FJD 5,470,000                                       | 0.17%  |
| Policy and<br>Governance     | FJD 56,899,171  | 3.09%                                  | FJD 9,219,412                                    | 1.18%                                    | FJD 500,000   | 0.02%  |
| Housing                      | FJD 30,164,062  | 1.55%                                  | FJD 5,590,975                                    | 0.72%                                    | FJD 11,390,000                                      | 0.35%  |
| Health                       | FJD 11,308,348  | 0.58%                                  | FJD 0  | 0.00%                                    | FJD 130,000   | 0.00%  |
| Forests                      | FJD 10,138,681  | 0.52%                                  | FJD 4,221,067                                    | 0.54%                                    | FJD 7,789,663                                       | 0.24%  |
| Migration/<br>Relocation     | FJD 5,261,998   | 0.27%                                  | FJD 0  | 0.00%                                    | FJD 0   | 0.00%  |
| TOTAL                        | FJD 1,937,744,572   | 100.00%                                | FJD 781,848,423                                  | 100.00%                                  | FJD 3,285,988,260                                   | 100%   |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

Available cost estimates for mitigation and adaptation interventions are sufficient for an informative gap analysis in four of the 12 sectors in the Snapshot (disaster risk management, energy, transport, and water and sanitation). Data gaps in three sectors (health, gender and relocation) hinder a credible analysis of the climate

finance gaps. Finally, the available data for five sectors (agriculture, forestry, housing, policy and governance, and the blue economy) is partially sufficient (see Table 6). Further analysis for each sector is presented below, organized according to the quality of the data.

<sup>\*\*</sup> Note: Cost estimates are provided by the LEDS, NDCR, and CVA. The LEDS and NDCR provide cost estimates for mitigation efforts that could be led by either the public or private sectors. The CVA provides all the cost estimates for adaptation related interventions. It focuses on initiatives that could be implemented by the public sector.

# SECTORS WITH THE BEST AVAILABLE DATA

## The Disaster Risk Management Sector

#### **SYNOPSIS**

Climate change will magnify the intensity and frequency of tropical cyclones and floods, which pose a significant threat to Fiji's economy and development prospects. The CVA estimates that between 1970 and 2016, 130 disasters, including 110 tropical cyclones and major floods, hit Fiji and affected almost 3.3 million people. The CVA also estimates that losses from tropical cyclones and floods currently push an average of 25,700 Fijians into poverty every year and warns that this could rise to 32,800 by 2050. Tropical Cyclone Winston negatively impacted 540,000 people. It caused damages worth more than FJD\$2 billion – equal to roughly 33% of the value of Fiji's GDP.

Tropical Cyclone Winston inflicted a significant financial burden on the government's national budget - Fiji accepted more than FJD\$220 million in emergency loans from the World Bank and Asian Development Bank to ensure the Fijian Government had sufficient resources to pay for immediate disaster recovery initiatives, including rebuilding roads, schools, and villages. Roughly FJD \$144 million, or almost 18% of the annual budget, has been spent on rebuilding from the damage, including almost FJD \$68 million on rebuilding and upgrading schools so they can withstand future category 5 cyclones. This underscores that Fiji's fiscal stability is quite vulnerable to the unexpected costs incurred by severe external event, such as cyclones or a pandemic, both of which are projected to become more severe as the impacts of climate change intensify.

Fiji's recent experience with disasters shows that the social and economic damage of a disaster can be exacerbated or mitigated by several complex factors, such as the health of local ecosystems, the resilience of the built infrastructure, and the response and preparedness of the affected communities. Thus, efforts to integrate climate considerations into the other economic sectors discussed

in the Snapshot and to strengthen the capacity of these sectors to respond to external stressors also bolster Fiji's resilience to natural disasters. This analysis of the disaster risk management sector covers all projects and cost estimates that can be directly attributed to either preparing for a disaster or recovering from one. The available cost estimates for the sector are sufficient to conduct a gap analysis (see Table 6).

This Snapshot finds that an average of FJD\$779 million was allocated annually between 2016 and 2019 to disaster risk management and at least FJD\$197 million was spent. These actual expenditures fall short of the estimated annual needs of FJD\$275 million. The estimated annual needs focus on interventions like developing hazard maps and upgrading public infrastructure – in addition to what was affected by TC Winston – so it can withstand future storms. FJD\$144 million, or 73% of the actual expenditures, are tied to responding to the damage inflicted by Tropical Cyclone Winston.

#### **EXISTING ANALYSIS OF FINANCE NEEDS**

The only available cost estimates for disaster risk management are given by the CVA, which calls for FJD\$2.75 billion to be invested over 10 years to improve hazard management. The CVA identifies a range of projects that should be prioritized, from infrastructure projects to initiatives that strengthen Fiji's ability to integrate climate data into its disaster management strategies.

The NDP does not have a chapter with policy goals or strategies that are explicitly focused on disaster risk management. Instead, these policies are included in the chapters on "expanding the rural economy" and "sustainable cities and towns." This Snapshot compiles the relevant policies and strategies from those chapters to create the list of policies and strategies that Fiji has identified as priority areas to improve disaster risk management.

Table 9 | Climate Finance Snapshot - Disaster Risk Management

| GOVERNMENT POLICY OBJECTIVES   | ANNUAL CLIMATE<br>FINANCE NEEDS**<br>(FJD PER YEAR) | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) |
|--|---|---|--|
| Include vulnerability assessments and climate change and natural hazards impact projections in infrastructure and urban planning             | FJD 58,575,000                                      | FJD 70,049,767                                  | FJD 15,549,320                               |
| Develop an integrated policy, approach, and operational plan to effectively address disaster management                                      | FJD 695,000   | FJD 23,623,857                                  | FJD 1,095,053                                |
| National and subnational budgets include processes to plan for disaster events and include emergency funding to respond to natural disasters | FJD 10,000  | FJD 362,614,055                                 | FJD 57,475,994                               |
| Ensure rural community buildings are cyclone and flood resistant   | FJD 216,590,000                                     | FJD 323,496,328                                 | FJD 123,220,354                              |
| TOTAL: DISASTER RISK MANAGEMENT  | FJD 275,870,000                                     | FJD 779,784,007                                 | FJD 197,340,721                              |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

#### **CURRENT FUNDING FLOWS**

An average of FJD\$779 million annually was allocated to hazard management between 2016 and 2019 (see Table 9) and at least FJD\$197 million was actually spent. As mentioned above, this spending is heavily skewed toward investments related to responding to and recovering from Tropical Cyclone Winston, which accounts for 79%, or more than FJD\$616 million, of annual allocations and at least FJD\$144 million, or 73% of all actual spending in this sector (see Table 10).

This includes more than FJD\$220 million in emergency loans issued by the World Bank and Asian Development Bank to the Fijian Government. Additionally, more than FJD\$323 million was allocated to rehabilitate the schools, hospitals, and other public infrastructure that were damaged by Winston and at least FJD\$123 million was spent. The Fijian Government is also rebuilding all the damaged school buildings so that they meet the specifications required to withstand a category 5 cyclone to shield the country and its budget from the same scale of damage during the next Winston-like event.

<sup>\*\*</sup> Note: Cost estimates are provided by the CVA and cover interventions that could be implemented by the public sector.

Table 10 | Spending in Disaster Risk Management Attributed to Tropical Cyclone Winston

|  | PROJECTS IN<br>SNAPSHOT | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | PERCENT<br>OF ALL<br>ALLOCATIONS | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) | PERCENT<br>OF ALL<br>SPENDING |
|--|-------------------------|---|----------------------------------|--|-------------------------------|
| Non Tropical Cyclone<br>Winston Spending | 98                      | FJD 163,587,088                                 | 21%                              | FJD 53,132,219                               | 27%                           |
| Response to Tropical<br>Cyclone Winston  | 39                      | FJD 616,196,919                                 | 79%                              | FJD 144,208,502                              | 73%                           |
| TOTAL                                    | 137                     | FJD 779,784,007                                 | 100%                             | FJD 197,340,721                              | 100%                          |

<sup>\*</sup> NOTE: The average annual amount allocated provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual expenditures varies significantly by funder and could not been secured for every project that was implemented.

Between 2016 and 2019, FJD\$163 million was invested into projects that were not directly related to Tropical Cyclone Winston. These projects focus on a range of activities, from building cyclone-proof emergency shelters to upgrading or maintaining early warning and climate information systems. The Nadi River Flood rehabilitation project, currently in the initial stages of implementation, accounts for 9% of all non-Winston related planned spending in the sector. So far, roughly FJD\$0.63 million, or 0.32%, of the allocated funds have been spent.

Overall, external funders account for an estimated 68% of all allocated finance on disaster risk management (see Table 11). Almost half of the available external finance stems from the FJD\$220 million in emergency loans provided by the World Bank and Asian Development Bank to respond to Tropical Cyclone Winston. Aside from this, external donors are currently supporting a wide range of initiatives, including training on disaster preparedness and response, programs to improve access to and use of climate-related data, and projects to develop insurance products.

#### **Climate Finance Gaps**

The FJD\$53 million in annual expenditures on non-Winston-related disaster risk management actions identified in the Snapshot are 19% of the FJD\$275 million in annual needs identified in the CVA. In a comparison of the estimated needs to the actual spending levels, the Snapshot finds financing gaps for two policy objectives. One, there is a shortfall of FJD\$93 million for the policy objective to "ensure rural community buildings are cyclone and flood resistant." Two, there is a financing gap of FJD\$43 million for the policy objective to "include vulnerability assessments and climate change and natural hazards impact projections in infrastructure and urban planning."

Table 11 | Breakdown of Funders in the Disaster Risk Management Sector

|                   | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | PERCENT OF ALL<br>ALLOCATIONS | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) | PERCENT OF ALL<br>SPENDING |
|-------------------|---|-------------------------------|--|----------------------------|
| External Donors   | FJD 553,062,447                                 | 68%                           | FJD 22,893,686                               | 12%                        |
| Fijian Government | FJD 246,721,560                                 | 32%                           | FJD 174,447,035                              | 88%                        |
| All Spending      | FJD 779,784,007                                 | 100%                          | FJD 197,340,721                              | 100%                       |

#### **BREAKDOWN BY POLICY OBJECTIVE**

| Include natural hazards in planning   | Annual Budget<br>Allocations*   | Percent of All<br>Allocations                       | Annual Actual<br>Spending*  | Percent of All<br>Spending                     |
|---|---|---|---|--|
| External Donors   | FJD 25,833,211  | 37%   | FJD 108,511   | 1%   |
| Fijian Government   | FJD 44,216,556  | 63%   | FJD 15,440,809  | 99%  |
| All Spending  | FJD 70,049,767  | 100%  | FJD 15,549,320  | 100%   |
| Integrated policy and plan on DRM   | Annual Budget<br>Allocations*   | Percent of All<br>Allocations                       | Annual Actual<br>Spending*  | Percent of All<br>Spending                     |
| External Donors   | FJD 18,183,860  | 77%   | FJD 25,680  | 2%   |
| Fijian Government   | FJD 5,439,997   | 23%   | FJD 1,069,373   | 98%  |
| All Spending  | FJD 23,623,857  | 100%  | FJD 1,095,053   | 100%   |
|   |   |   |   |  |
| Budgets can absorb disaster events  | Annual Budget<br>Allocations*   | Percent of All<br>Allocations                       | Annual Actual<br>Spending*  | Percent of All<br>Spending                     |
| Budgets can absorb disaster events  External Donors   |   |   |   |  |
| -   | Allocations*  | Allocations   | Spending*   | Spending                                       |
| External Donors   | Allocations*<br>FJD 351,663,616   | Allocations<br>97%                                  | Spending*<br>FJD 22,759,495   | Spending<br>40%                                |
| External Donors Fijian Government   | Allocations*  FJD 351,663,616  FJD 10,950,439   | Allocations 97% 3%                                  | Spending* FJD 22,759,495 FJD 34,716,499   | Spending 40% 60%                               |
| External Donors  Fijian Government  All Spending  Buildings are cyclone and flood           | Allocations* FJD 351,663,616 FJD 10,950,439 FJD 362,614,055 Annual Budget               | Allocations 97% 3% 100%  Percent of All             | Spending* FJD 22,759,495 FJD 34,716,499 FJD 57,475,994 Annual Actual            | Spending                                       |
| External Donors  Fijian Government  All Spending  Buildings are cyclone and flood resistant | Allocations* FJD 351,663,616 FJD 10,950,439 FJD 362,614,055  Annual Budget Allocations* | Allocations 97% 3% 100%  Percent of All Allocations | Spending* FJD 22,759,495 FJD 34,716,499 FJD 57,475,994  Annual Actual Spending* | Spending 40% 60% 100%  Percent of All Spending |

<sup>\*</sup> NOTE: The average annual amount allocated provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual expenditures varies significantly by funder and could not been secured for every project that was implemented.

## The Electricity Sector

#### **SYNOPSIS**

Fiji's electricity sector offers clear opportunities to reduce Fiji's emissions and improve resilience. Fiji's NDP and NDC both set targets of almost 100% renewable energy by around 2030, up from about 50% in 2019. Fiji's NDC estimates that this will lead to a 20% reduction in CO<sub>2</sub> emissions from the electricity sector by 2030, compared to a BAU scenario. The NDP includes the additional goal of achieving 100% electrification, primarily through grid extension and rural electrification projects. Both the NDP and CVA call for prioritizing investments to ensure the electricity infrastructure is resilient to cyclones, floods, and other disasters. Potential investments, to be made by both the public and private sector, cover projects that can both reduce emissions and improve resilience, such as building additional transmission lines, adding new generation capacity, undergrounding distribution lines in targeted locations, and improving the uptake of rural mini-grids and solar home systems.

The electricity sector is one of the sectors with sufficient data to conduct a climate finance gap analysis (see Table 6). Overall, the available public climate finance across all of the policy objectives in the electricity sector fell short of the identified annual needs (see Table 12). In the sector, 80% of all current allocated climate finance support two strategies: extending the grid (72%) and expanding solar home systems or rural mini grids (8%). Investments into new utility-scale renewable energy generation account for 14% of all available public climate finance. This is important since investments to expand the grid will increase emissions unless the electricity generated and transmitted across the grid comes almost exclusively from renewable sources. Most new generation projects are financed by Energy Fiji Limited (EFL), a privately held corporation, whose efforts to develop new renewable energy generation projects have been delayed indefinitely by both some internal organizational changes and the global coronavirus pandemic. This underscores that achieving Fiji's

goals to both decarbonize and improve resilience in its electricity sector will require support from both the public sector, which can create the enabling environment and build essential infrastructure, and the private sector, which is currently the main investor in Fiji's generation capacity.

#### **EXISTING ANALYSIS OF FINANCE NEEDS**

Cost estimates for the electricity sector come from the LEDS, NDCR, and CVA and include investments that could be led by either the public or private sectors. The LEDS and NDCR include cost estimates for projects that would expand Fiji's renewable energy generation and would be led by private investors. As with other sectors, the CVA focuses on interventions that should be led by the public sector. There are some discrepancies among these documents that had to be reconciled for this analysis. For example, the NDCR estimates that extending and improving the grid will require a total investment of roughly FJD\$1.5 billion from 2017 to 2030. Meanwhile, the CVA estimates it will cost roughly FJD\$466 million to implement five grid extension projects over 10 years. It is unclear whether these five projects are the same ones covered by the NDCR. The Snapshot takes an average of these annual estimates.

Across the entire electricity sector, the LEDS, NDCR, and CVA identify FJD\$561 million annually in potential investments that could help Fiji achieve its two top policy objectives for the sector: 100% renewable energy in electricity generation (estimated to cost FJD\$338 million per year) and universal electrification (estimated to cost FJD\$163 million per year) (see Table 12). Expanding hydro generation accounts for roughly one-third (FJD\$116 million) of the estimated annual costs to achieve 100% renewable energy (see Table 14). Grid expansion is estimated to cost about FJD\$154 million annually, while about FJD\$81 million annually is needed to add new generation from wind and solar. Roughly FJD\$24 million per year should be invested to improve energy efficiency.

Table 12 | Climate Finance Snapshot - Electricity Sector

| GOVERNMENT POLICY OBJECTIVES   | ANNUAL CLIMATE<br>FINANCE NEEDS**<br>(FJD PER YEAR) | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) |
|--|---|---|--|
|  |   |   |  |
| Access to affordable, reliable, modern and sustainable energy services for all Fijians                                     | FJD 163,576,800                                     | FJD 70,558,613                                  | FJD 52,423,274                               |
| Increase share of electricity generation from renewable energy resources   | FJD 338,279,146                                     | FJD 14,277,244                                  | FJD 1,655,944                                |
| Reduce cost of petroleum imports and further develop biofuels for electricity and transport                                | FJD 35,765,786                                      | FJD 2,194,443                                   | FJD 671,920                                  |
| Improve energy efficiency in the electricity sector  | FJD 24,022,009                                      | FJD 547,574                                     | FJD 453,380                                  |
| Increase private sector participation in electricity supply through reform of regulatory aspects of the electricity sector | FJD 20,000  | FJD 839,260                                     | FJD 0  |
| TOTAL: ELECTRICITY SECTOR  | FJD 561,663,741                                     | FJD 88,417,134                                  | FJD 55,204,518                               |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

#### **CURRENT FUNDING FLOWS**

Nearly 80% of the finance from budget allocations in the electricity sector (almost FJD\$71 million) and nearly 95% of the annual actual spending (or FJD\$52.4 million) went to support projects to expand the grid and improve electrification (see Table 12). This amounts to just under half of the total finance needed to deliver reliable electricity services to all Fijians. An expanded grid may improve the resilience of villages on many outlying islands. It may also provide some reduction in GHG emissions since, while nearly 50% of Fiji's current grid-connected electricity is from renewable energy, most off-grid generation is provided by emissionintensive sources such as diesel generators and kerosene lamps. However, grid expansion alone will not allow Fiji to meet its climate goals, which can only occur if the country reaches its goal of near 100% renewable energy by 2030. To this end, Energy Fiji Limited has initiated efforts to develop several new hydro and solar generation projects, though the timeline for completing these projects is unclear. As shown in Tables 12 and 14,

FJD\$14.2 million in annual public climate finance was allocated to projects to develop new renewable energy sources, with allocated finance for new solar generation accounting for FJD\$12.6 million, or more than 89% of all available climate finance for new renewable energy sources. The Snapshot found that actual investments in new renewable energy generation were about 12%, or FJD\$1.65 million per year, of the available climate finance.

As shown in Table 13, 77% of all available public climate finance in the electricity sector came from the Fijian Government, with external funders accounting for the remaining 23%. Moreover, 98% of all actual expenditures (FJD\$53.9 million) came from the Fijian Government and 2% (FJD\$1.2 million) came from external partners. External funders financed 49% of projects to increase renewable energy generation and 32% to improve energy efficiency. The Fijian Government accounted for all actual spending to implement the other policy objectives.

<sup>\*\*</sup> Note: Cost estimates for the electricity sector are provided by the LEDS, NDCR, and CVA. These estimates cover investments that are the responsibility of the public sector, such as grid expansion, and investments that are the responsibility of the private sector, such as new renewable energy generation.

Table 13 | Breakdown of Funders in Electricity Sector

| ALL ELECTRICITY SECTOR PROJECTS | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | PERCENT OF ALL<br>ALLOCATIONS | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) | PERCENT OF ALL<br>SPENDING |
|---------------------------------|---|-------------------------------|--|----------------------------|
| External Donors                 | FJD 20,327,129                                  | 23%                           | FJD 1,211,568                                | 2%                         |
| Fijian Government               | FJD 68,090,005                                  | 77%                           | FJD 53,992,950                               | 98%                        |
| All Spending                    | FJD 88,417,134                                  | 100%                          | FJD 55,204,518                               | 100%                       |

#### **BREAKDOWN BY POLICY OBJECTIVE**

| Expanding access to electrification                    | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
|--|-------------------------------|-------------------------------|----------------------------|----------------------------|
| External Donors  | FJD 8,450,403                 | 12%                           | FJD 250,425                | 0%                         |
| Fijian Government                                      | FJD 62,108,210                | 88%                           | FJD 52,172,849             | 100%                       |
| All Spending   | FJD 70,558,613                | 100%                          | FJD 52,423,274             | 100%                       |
| Increase new renewable energy generation               | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors  | FJD 9,846,761                 | 69%                           | FJD 814,002                | 49%                        |
| Fijian Government                                      | FJD 4,430,483                 | 31%                           | FJD 841,942                | 51%                        |
| All Spending   | FJD 14,277,244                | 100%                          | FJD 1,655,944              | 100%                       |
| Further develop biofuels for electricity and transport | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors  | FJD 1,088,608                 | 50%                           | FJD 0                      | 0%                         |
| Fijian Government                                      | FJD 1,105,835                 | 50%                           | FJD 671,920                | 100%                       |
| All Spending   | FJD 2,194,443                 | 100%                          | FJD 671,920                | 100%                       |
| Improve energy efficiency in the electricity sector    | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors  | FJD 102,097                   | 19%                           | FJD 147,141                | 32%                        |
| Fijian Government                                      | FJD 445,477                   | 81%                           | FJD 306,239                | 68%                        |
| All Spending   | FJD 547,574                   | 100%                          | FJD 453,380                | 100%                       |
| Reform regulatory aspects of the electricity sector    | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors  | FJD 839,260                   | 100%                          | FJD 0                      | 0%                         |
| Fijian Government                                      | 0                             | 0%                            | 0                          | 0%                         |
| All Spending   | FJD 839,260                   | 100%                          | FJD 0                      | 0%                         |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

External funding comes from foundations, bilateral aid, and multilateral institutions. External funding accounts for almost 23% (FJD\$20.3 million annually) of all available climate finance in the electricity sector and 2% of all spent climate finance. These expenditures are split between expanding electrification (FJD\$250,000 per year) and support for new renewable energy generation (FJD\$814,000 per year).

Multilateral agencies, including the World Bank, Asian Development Bank, UN Agencies, and Global Environment Facility, account for 7% of all available climate finance provided by external partners. These agencies are supporting three policy objectives: access to electrification, expanding renewable energy generation, and reforming regulatory aspects of the electricity sector.

#### **CLIMATE FINANCE GAPS**

Current climate finance flows to increase renewable energy generation are falling short of the identified needs. As shown in Table 14, the CVA, LEDS, and NDCR estimate that up to FJD\$338 million, on average per year, should be invested by public and private actors into new hydro, wind, solar and geothermal generation projects so Fiji can decarbonize its electricity sector by 2050. New generation from wind and solar is estimated to require roughly FJD\$81 million per year each, mostly from the private sector. But the available public climate finance between 2016 and 2019 amounted to roughly FJD\$1 million in new hydro generation, FJD\$12.6 million in new solar, and zero in new wind projects (see Table 14). Although EFL has started efforts to design new renewable energy projects, these projects had been halted at the time of this writing due to other priorities from EFL's governance and the global coronavirus pandemic.

Actual expenditures in the electricity sector were about 62% of the allocated levels. The Snapshot found gaps of about FJD\$324 million for annual allocated climate finance and FJD\$336 million in climate finance spent on new renewable energy.

Actual expenditures in the electricity sector were about 62% of the allocated levels. All told, there was a gap of about FJD \$324 million per year in allocated climate finance for renewable energy and a gap of FJD \$336 million in expenditures. When it comes to allocated climate finance, this gap breaks down to more than FJD \$115 million annually for hydro generation, FJD \$70 million annually for new solar, and FJD \$81 million annually for new wind generation (see Table 14). Less than FJD \$548,000 per year was available to increase energy efficiency, far short of the roughly FJD \$23.4 million in identified needs.

Table 14 | Climate Finance Snapshot - Electricity Sector

| GOVERNMENT POLICY OBJECTIVES  | SPECIFIC INTERVENTIONS                      | ANNUAL CLIMATE<br>FINANCE NEEDS**<br>(FJD PER YEAR) | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) |
|---|---|---|---|--|
| Access to affordable, reliable, modern and sustainable energy   | Grid Extension Power Supply<br>Program      | FJD 154,176,800                                     | FJD 63,319,099                                  | FJD 51,876,183                               |
| services for all Fijians  | New grid connections                        | FJD 9,000,000                                       | FJD 400,000                                     | FJD 283,446                                  |
|   | Rural Mini-grids and solar home systems     | FJD 400,000   | FJD 6,839,514                                   | FJD 263,645                                  |
| Increase share of electricity   | New Hydro Generation                        | FJD 116,500,913                                     | FJD 900,000                                     | FJD 8,000                                    |
| generation from renewable energy resources  | New Solar Generation                        | FJD 82,978,233                                      | FJD 12,686,523                                  | FJD 1,420,156                                |
| -   | New Wind Generation                         | FJD 81,198,000                                      | FJD 0   | FJD 0  |
|   | New Wave Generation                         | FJD 0   | FJD 0   | FJD 0  |
|   | New Geothermal Sites                        | FJD 57,602,000                                      | FJD 434,483                                     | FJD 222,783                                  |
|   | Maintain current renewable energy capacity  | FJD 0   | FJD 25,000                                      | FJD 5,005                                    |
|   | Clean Cook Stoves                           | FJD 0   | FJD 231,238                                     | FJD 0  |
| Reduce cost of petroleum imports  | Bio-fuel new plants                         | FJD 35,394,000                                      | FJD 1,905,943                                   | FJD 589,052                                  |
| and further develop biofuels for electricity and transport  | Rural Biogas new plants                     | FJD 371,786   | FJD 288,500                                     | FJD 82,868                                   |
| Improve energy efficiency in the electricity sector   | Expand Energy Efficiency<br>Initiatives     | FJD 24,022,009                                      | FJD 547,574                                     | FJD 453,380                                  |
| Increase private sector<br>participation in electricity supply<br>through reform of regulatory<br>aspects of the electricity sector | Reform regulation of the electricity sector | FJD 20,000  | FJD 839,260                                     | FJD 0  |
| TOTAL ELECTRICITY   |   | FJD 561,663,741                                     | FJD 88,417,134                                  | FJD 55,204,518                               |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

## The Transportation Sector

#### **SYNOPSIS**

Ensuring a resilient, low-emission transport sector by land, air, and sea is vital if Fiji is to meet its climate commitments under the Paris Agreement. Fiji's first NDC lists transportation as one of three sectors that will allow the country to meet its goal of reducing CO<sub>2</sub> emissions by 30% by 2030. Meanwhile, the CVA identifies transportation as the sector with "the largest investment needs for building the country's resilience." The CVA, LEDS, and NDCR include extensive discussions and cost estimates for the types of interventions from the public and private sectors that will be required for Fiji to both decarbonize its vehicle and shipping fleets and to boost the resilience of the transport infrastructure.

<sup>\*\*</sup> Note: Cost estimates for the electricity sector are provided by the LEDS, NDCR, and CVA. These estimates cover investments that are the responsibility of the public sector, such as grid expansion, and investments that are the responsibility of the private sector, such as new renewable energy generation.

When it comes to decarbonizing and adapting Fiji's transport sector, the Fijian Government has two roles to play: one, it will be a key funder of public goods such as roads, bridges, and jetties; two, it must set the proper enabling environment, through tax incentives, emissions standards, and other policies, that will incentivize the private sector to invest in low-emission and climate-resilient transport options. Overall, a key policy priority for Fiji is to expand the rural road network so that it can withstand frequent floods and landslides. Fiji's rural road network is primarily unsealed roads that sustain significant damage in the aftermath of typical rainstorms, floods, or tropical cyclones, and remain a critical source of economic and social vulnerability.

The Snapshot finds significant recent investments to restore and strengthen Fiji's transportation infrastructure. Although there are limited investments in projects to reduce emissions from Fiji's vehicle fleet, the cost estimates provided in the climate documents forecast that many of these purchases will be handled by the private sector and private sector investments are not covered in the Snapshot. Overall, spending in the transport sector is concentrated on one policy objective: to maintain, upgrade, and expand the road network to meet international standards.

#### **EXISTING ANALYSIS OF FINANCE NEEDS**

The LEDS and NDCR estimate the costs of reducing emissions from marine and land transport. The NDCR suggests roughly FJD\$2.5 billion is required for a vehicle replacement and scrappage program. The LEDS states that it would cost about FJD\$750 million, cumulative between 2019 and 2050, to promote hybrid electric cars, taxis and buses. The LEDS also calls for investments of roughly FJD\$18 to FJD\$22 million to expand public transport. The LEDS estimates that it will cost between FJD\$10 million and FJD\$100 million, cumulative by 2035 and depending on the scenario, to begin implementing a 30-year strategy to replace Fiji's shipping vessels for inter-island transport with low-emission options.

The CVA provides the only available cost estimates to promote adaptation in Fiji's transportation sector. It identifies FJD\$4.3 billion in investments to upgrade

Fiji's roads, bridges, river landings, and jetties over a 10-year period. This estimate includes four packages, valued at FJD\$1.24 billion, that are the "climate upgrade portion" of other infrastructure projects. The CVA does not explain which activities are included in the climate upgrade portions but not included in the other infrastructure packages.

#### **CURRENT FUNDING FLOWS**

The current annual climate finance expenditures in the transport sector exceed FJD\$383 million (see Table 15). More than FJD\$320 million, or 83% of all expenditures, was spent annually to upgrade, expand, and improve the standards of infrastructure such as roads, bridges, and jetties so that the infrastructure can withstand growing climate impacts. In the rural areas, Fiji Roads Authority is building low-lying river crossings, which function as bridges when the weather is clear and rivers are stable but can then be submerged, without breaking, when heavy rains cause the rivers to flood. These crossings are cheaper than conventional bridges and allow Fiji Roads Authority to reduce its flood-related reconstruction costs.

Annual climate finance spending for land, maritime, and air transport was FJD\$383 million, well below the FJD\$2.23 billion in identified needs. The actual expenditures to decarbonize marine transport are FJD\$17 million per year less than the identified needs.

Table 15 | Climate Finance Snapshot - Transportation Sector

| TRANSPORT<br>SUBSECTOR | GOVERNMENT POLICY OBJECTIVES   | ANNUAL CLIMATE<br>FINANCE NEEDS**<br>(FJD PER YEAR) | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) |
|------------------------|--|---|---|--|
| Land<br>Transport      | Further development of full road network<br>to international standards with a greater<br>emphasis on maintenance, rehabilitation, and<br>upgrading | FJD 468,160,000                                     | FJD 517,944,143                                 | FJD 320,060,438                              |
|                        | Expansion of the rural road network  | FJD 30,000  | FJD 75,598,358                                  | FJD 29,198,964                               |
|                        | Ensure safe, efficient (including reducing traffic congestion) and affordable transportation services  | FJD 643,000   | FJD 31,348,410                                  | FJD 28,113,966                               |
|                        | Ensure environmentally sustainable transportation for all Fijians based on the principles of the Green Growth Framework                            | FJD 1,694,219,683                                   | FJD 435,889                                     | FJD 263,656                                  |
| Maritime<br>Transport  | Development of the domestic shipping industry.   | FJD 6,845,708                                       | FJD 6,208,012                                   | FJD 3,060,279                                |
|                        | Increase shipping services to uneconomical routes.   | FJD 297,429   | FJD 2,762,081                                   | FJD 2,071,595                                |
|                        | Development of maritime infrastructure.  | FJD 15,691,544                                      | FJD 1,853,455                                   | FJD 665,863                                  |
|                        | Ensure safe, efficient, affordable, environmentally sound and sustainable interisland transportation services.                                     | FJD 795,621   | FJD 0   | FJD 0  |
| Air<br>Transport       | Promote sustainable development through application of world environmental best practices in all ports.  | FJD 72,594,441                                      | FJD 0   | FJD 0  |
| TOTAL: TRANS           | SPORTATION   | FJD 2,259,307,426                                   | FJD 636,150,348                                 | FJD 383,434,761                              |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

The Fijian Government accounts for 96%, or FJD\$369.5 million, of all annual spending in the sector while external funders account for the remaining 4%. Almost all investments (FJD\$11.9 million) from external funders

are allocated to projects aimed at further developing Fiji's roads and bridges. Less than FJD\$2 million spent by external funders has gone to expand rural roads or to enhance transport options.

<sup>\*\*</sup> Note: Cost estimates for the transport sector are provided by the LEDS, NDCR, and CVA. These estimates cover investments that are the responsibility of the public sector, such as upgrading and rehabilitating roads, bridges and jetties. These also include cost estimates for actions that are the responsibility of the private sector, such as upgrading the vehicle and shipping fleets to low-emissions transport options.

Table 16 | Breakdown of Funders in the Transportation Sector

| ALL TRANSPORT SECTOR<br>PROJECTS | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR)* | PERCENT OF ALL ALLOCATIONS | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) | PERCENT OF ALL<br>SPENDING |
|----------------------------------|--|----------------------------|--|----------------------------|
| External Donors                  | FJD 178,166,835                                  | 28%                        | FJD 13,886,472                               | 4%                         |
| Fijian Government                | FJD 457,983,513                                  | 72%                        | FJD 369,548,289                              | 96%                        |
| All Spending                     | FJD 636,150,348                                  | 100%                       | FJD 383,434,761                              | 100%                       |

#### **BREAKDOWN BY POLICY OBJECTIVE**

| Further development of road network  | Annual Budget<br>Allocations*   | Percent of All<br>Allocations                           | Annual Actual<br>Spending*  | Percent of All<br>Spending                        |
|--|---|---|---|---|
| External Donors  | FJD 176,176,249   | 34%   | FJD 11,895,886  | 4%  |
| Fijian Government  | FJD 341,767,894   | 66%   | FJD 308,164,552   | 96%   |
| All Spending   | FJD 517,944,143   | 100%  | FJD 320,060,438   | 100%  |
| Expand rural road network  | Annual Budget<br>Allocations*   | Percent of All<br>Allocations                           | Annual Actual<br>Spending*  | Percent of All<br>Spending                        |
| External Donors  | FJD 1,990,586   | 3%  | FJD 1,990,586   | 7%  |
| Fijian Government  | FJD 73,607,772  | 97%   | FJD 27,208,378  | 93%   |
| All Spending   | FJD 75,598,358  | 100%  | FJD 29,198,964  | 100%  |
|  |   |   |   |   |
| Ensure safe, efficient and affordable road transport   | Annual Budget<br>Allocations*   | Percent of All<br>Allocations                           | Annual Actual<br>Spending*  | Percent of All<br>Spending                        |
|  |   |   |   |   |
| affordable road transport  | Allocations*  | Allocations   | Spending*   | Spending  |
| affordable road transport  External Donors   | Allocations* FJD 0  | Allocations 0%  | Spending*<br>FJD 0  | Spending 0%                                       |
| affordable road transport  External Donors  Fijian Government  | Allocations* FJD 0 FJD 31,348,410   | Allocations 0% 100%                                     | Spending*<br>FJD 0<br>FJD 28,113,966                                  | Spending<br>0%<br>100%                            |
| affordable road transport  External Donors  Fijian Government  All Spending  Ensure environmentally                            | Allocations* FJD 0 FJD 31,348,410 FJD 31,348,410 Annual Budget              | Allocations  0%  100%  100%  Percent of All             | Spending* FJD 0 FJD 28,113,966 FJD 28,113,966 Annual Actual           | Spending  |
| affordable road transport  External Donors  Fijian Government  All Spending  Ensure environmentally sustainable transportation | Allocations* FJD 0 FJD 31,348,410 FJD 31,348,410 Annual Budget Allocations* | Allocations  0%  100%  100%  Percent of All Allocations | Spending* FJD 0 FJD 28,113,966 FJD 28,113,966 Annual Actual Spending* | Spending  0%  100%  100%  Percent of All Spending |

#### **BREAKDOWN OF POLICIES FOR MARINE TRANSPORT**

| Development of the domestic shipping industry     | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
|---|-------------------------------|-------------------------------|----------------------------|----------------------------|
| External Donors                                   | FJD 0                         | 0%                            | FJD 0                      | 0%                         |
| Fijian Government                                 | FJD 6,208,012                 | 100%                          | FJD 3,060,279              | 100%                       |
| All Spending                                      | FJD 6,208,012                 | 100%                          | FJD 3,060,279              | 100%                       |
|   |                               |                               |                            |                            |
| Increase shipping services to uneconomical routes | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
|   |                               |                               |                            |                            |
| uneconomical routes                               | Allocations*                  | Allocations                   | Spending*                  | Spending                   |

Table 16 | Breakdown of Funders in Transport (cont.)

| Development of maritime infrastructure                    | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
|---|-------------------------------|-------------------------------|----------------------------|----------------------------|
| External Donors   | FJD 0                         | 0%                            | FJD 0                      | 0%                         |
| Fijian Government   | FJD 1,853,455                 | 100%                          | FJD 665,863                | 100%                       |
| All Spending  | FJD 1,853,455                 | 100%                          | FJD 665,863                | 100%                       |
|   |                               |                               |                            |                            |
| Ensure safe, affordable, and sustainable marine transport | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| •   |                               |                               |                            |                            |
| sustainable marine transport                              | Allocations*                  | Allocations                   | Spending*                  | Spending                   |

#### **BREAKDOWN OF POLICIES FOR AIR TRANPSORT**

| Apply environmental best practices in ports | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
|---|-------------------------------|-------------------------------|----------------------------|----------------------------|
| External Donors                             | FJD 0                         | 0%                            | FJD 0                      | 0%                         |
| Fijian Government                           | FJD 0                         | 0%                            | FJD 0                      | 0%                         |
| All Spending                                | FJD 0                         | 0%                            | FJD 0                      | 0%                         |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

#### **CLIMATE FINANCE GAPS**

Compared to estimates in the CVA, the actual annual climate finance spending for land, maritime, and air transport identified in the Snapshot stood at FJD\$383 million, which fell short of the FJD\$2.23 billion in identified needs (see Table 16). In land transport, the largest gaps occur in programs to replace roads, bridges, and jetties. When it comes to marine transport, the actual expenditures for replacing the inter-island shipping fleet with decarbonized vessels fall about FJD\$17 million per year short of the identified needs.

In the 2019-2020 budget, the government enacted a 10% ECAL tariff on all vehicles. The tariff was imposed to help curb growing traffic congestion, accidents, and infrastructure damage. There are ongoing conversations between Fiji Roads Authority, the Global Green Growth Institute, the Ministry of Economy, and the Ministry of Infrastructure and Transport about how Fiji can upgrade the vehicle fleet, but no concrete projects have been funded with public climate finance. When it comes to marine transport, no funding was either allocated to

or spent on projects to support the policy to "ensure safe, affordable, and sustainable marine transport." To fill this gap, a coalition of stakeholders has partnered with the Fijian Government to begin designing the Pacific Blue Shipping Partnership, which aims to build a decarbonized shipping network in the Pacific by 2030 at an estimated cost of FJD\$500 billion. External funding supports the policy priorities aimed at further developing the road network and upgrading the network to meet international standards.

## The Water and Sanitation Sector

#### **SYNOPSIS**

The NAP and CVA identify water infrastructure as a critical focal point for bolstering climate resilience. Sealevel rise will inundate groundwater tables on a scale that could affect in-ground septic and sewer pumping

systems. Changing precipitation patterns could hinder the reliability of water supplies. And extreme climate events, such as cyclones and flooding, pose substantial risks to the water distribution infrastructure. Fiji's NDP sets the goals to provide access to clean water in 85% of rural communities by 2021, up from 75% in 2017, and to connect 40% of the total population to the central sewerage system by 2021, up from 25% in 2017. These goals can be achieved with significant investments in water and sanitation infrastructure.

The CVA identifies roughly FJD\$162 million per year in investments to boost the resilience of the sector. The Snapshot finds that, overall, current investments in the sector are on par with the identified needs (see Table 17). The cost estimates for the water and sanitation sector are among the most comprehensive of the reviewed sectors (see Table 6).

#### **EXISTING ANALYSIS OF FINANCE NEEDS**

All cost estimates for the water and sanitation sector come from the CVA, which provides estimates for improving water resource management, and the LEDS, which provides estimates for improving waste management. The CVA identifies 26 interventions at an estimated cost of FJD\$1.62 billion over ten years, or about FJD\$162 million per year. All interventions

identified in the CVA – from system-wide retrofitting to the adoption of new resilience indicators – are consistent with the policy goals in the NDP, which focus on strengthening water management, expanding access to water and sanitation, and ensuring the long-term sustainability of freshwater resources.

#### **CURRENT FUNDING FLOWS**

On average per year, from 2016 to 2019, more than FJD \$173.2 million was allocated to projects in the water and sanitation sector but roughly 50% of that, or FJD \$86 million, was actually spent (see Table 17). These flows are concentrated in a handful of projects. Ninetyfour percent (FJD \$162.8 million) of the allocated public climate finance went to support the policy objective "to expand access to water and sanitation services for all Fijians." Fiji's Green Climate Fund (GCF) project to improve the climate resilience of Suva's waste supply and wastewater management system accounts for just over 42% (FJD\$72.1 million) of this allocated annual spending. According to the GCF website, as of November 29, 2019, roughly FJD\$36.4 million had been disbursed by the GCF and paid directly to ADB. The remaining 6% of funding (FJD\$10.3 million) in annual allocations investments have gone to support the NDP policy objective to strengthen the sustainable management of water resources (see Table 17).

Table 17 | Climate Finance Snapshot - Water and Sanitation

| GOVERNMENT POLICY OBJECTIVES  | ANNUAL CLIMATE<br>FINANCE NEEDS**<br>(FJD PER YEAR) | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) |
|---|---|---|--|
| Strengthen water policy planning and sustainable resource management  | FJD 6,400,000                                       | FJD 9,559,870                                   | FJD 5,885,471                                |
| Expand access and work towards ensuring equity in the provision of water and sanitation services to all Fijians | FJD 156,150,000                                     | FJD 162,853,918                                 | FJD 80,313,583                               |
| Ensure long-term sustainability in the provision of freshwater resources and catchment security                 | FJD 100,000   | FJD 771,687                                     | FJD 171,797                                  |
| TOTAL: WATER AND SANITATION SECTOR  | FJD 162,650,000                                     | FJD 173,185,475                                 | FJD 86,370,851                               |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

<sup>\*\*</sup> Note: Cost estimates for the water and sanitation sector are provided by the CVA and the LEDS. The CVA estimates focus on interventions that are the responsibility of the public sector, such as improved resource management and river protection programs. The LEDS provides cost estimates to improve waste management and sanitation outcomes, which are also in the jurisdiction of the public sector.

As shown in Table 18, the Fijian Government accounts for 80% of all allocated funding for the water and sanitation sector and external funders account for 20%. When it comes to actual expenditures for the duration of the Snapshot, the Fijian Government accounts for 99%, or FJD\$85.1 million. Due to difficulties in tracing and confirming where the disbursed GCF funding has been spent, it is not included in the actual spending data for the sector. Additionally, we were not able to secure information on actual expenditures by other external donors in the water and sanitation sector. Funding from both the Fijian Government and external funders has

primarily focused on expanding access to water and sanitation services. The GCF project makes up 77% of allocated funding by external partners.

#### **CLIMATE FINANCE GAPS**

The available public climate finance in the water and sanitation sector has exceeded the funding needs as assessed in the CVA, while actual expenditures stand at FJD\$86.3 million, or 53% of the identified needs (see Table 17). The FJD\$162.8 million per year that was allocated to enhancing access to water and sanitation is almost the same as the needs estimated in the CVA.

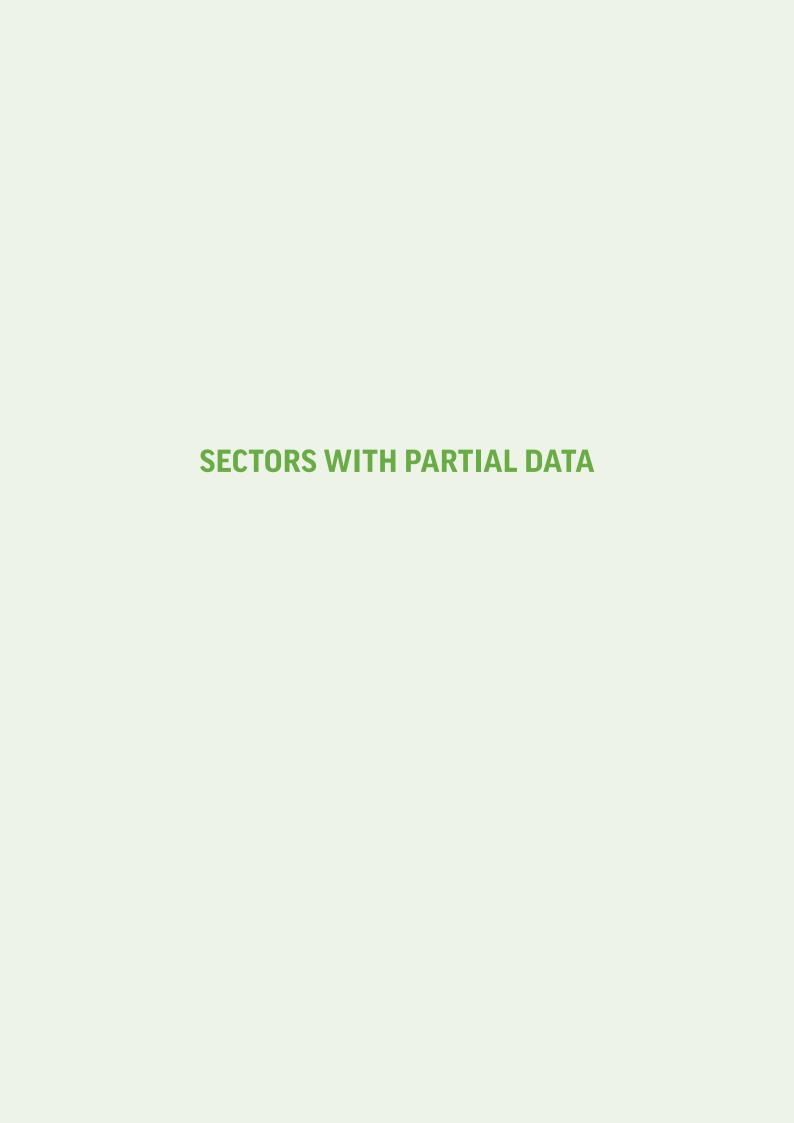
Table 18 | Breakdown of Funders in the Water & Sanitation Sector

| ALL PROJECTS BY FUNDER | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | PERCENT OF ALL<br>ALLOCATIONS | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) | PERCENT OF ALL<br>SPENDING |
|------------------------|---|-------------------------------|--|----------------------------|
| External Donors        | FJD 35,124,476                                  | 20%                           | FJD 1,200,615                                | 1%                         |
| Fijian Government      | FJD 138,060,999                                 | 80%                           | FJD 85,170,236                               | 99%                        |
| All Spending           | FJD 173,185,475                                 | 100%                          | FJD 86,370,851                               | 100%                       |

#### **BREAKDOWN BY POLICIES**

| Strengthen water policy planning | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
|----------------------------------|-------------------------------|-------------------------------|----------------------------|----------------------------|
| External Donors                  | FJD 1,653,619                 | 17%                           | FJD 0                      | 0%                         |
| Fijian Government                | FJD 7,906,251                 | 83%                           | FJD 5,885,471              | 100%                       |
| All Spending                     | FJD 9,559,870                 | 100%                          | FJD 5,885,471              | 100%                       |
| Expand access and ensure equity  | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors                  | FJD 33,051,114                | 20%                           | FJD 1,200,615              | 1%                         |
| Fijian Government                | FJD 129,802,804               | 80%                           | FJD 79,112,968             | 99%                        |
| All Spending                     | FJD 162,853,918               | 100%                          | FJD 80,313,583             | 100%                       |
| Ensure long-term sustainability  | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors                  | FJD 419,743                   | 54%                           | FJD 0                      | 0%                         |
| Fijian Government                | FJD 351,944                   | 46%                           | FJD 171,797                | 100%                       |
| All Spending                     | FJD 771,687                   | 100%                          | FJD 171,797                | 100%                       |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.



## The Agriculture Sector

#### **SYNOPSIS**

The agriculture sector accounts for 8% of Fiji's GDP and provides income to 37% of Fijians, including to almost half of those living below the poverty line. Fiji's CVA estimates that each 1% reduction in income from agricultural productivity would push an additional 1,000 Fijians into poverty. The initial impacts of climate change are already adversely impacting the sector by altering the predictability of rainfall, raising temperatures, introducing new pests, and contributing to saltwater intrusion from sea-level rise.

Fiji's recent experience with floods and cyclones shows that both events can lead to significant damages in the agriculture sector. In the 16 years prior to Tropical Cyclone Winston, floods and cyclones caused more than FJD\$791 million in agricultural damages. Tropical Cyclone Winston meanwhile brought agricultural damages of FJD\$208.3 million. The NAP estimates that climate change could increase the annual costs from flooding by 100 to 300 percent. Additionally, a combination of saltwater intrusion and increasingly unpredictable rainfall patterns is eroding soil quality and reducing the productivity of Fiji's smallholder farmers, in part because Fiji's agriculture sector has limited irrigation capacity and is largely dependent on regular and robust rain falls.

Fiji's CVA and NAP identify seven specific interventions to increase climate-resilience in the sector, but only the CVA provides cost estimates. As with other sectors, the CVA cost estimates are focused on interventions that the Fijian Government could undertake to boost resilience in the sector but do not cover interventions, such as planting specific crops, that fall under the jurisdiction of the private sector. As a result, the available data examined in this Snapshot does not cover either the role of the private sector or the entire range of activities that will be needed to boost the resilience of Fiji's agriculture sector (see Table 6). Of the allocated climate finance for agriculture, 73% went to policy objectives that do not have a corresponding cost estimate. Additional research is needed to provide a comprehensive assessment of the estimated costs to adapt the agriculture sector to climate change.

The climate finance picture for agriculture is murky. The sector has incomplete data on climate-related cost estimates, so a reliable gap analysis cannot be completed. The Snapshot found that roughly 44% of all allocated spending was actually spent annually. The Fijian Government accounted for 60% of all allocated climate finance to agriculture.

#### **EXISTING ANALYSIS OF FINANCE NEEDS**

Fiji's CVA identifies nine interventions that the Fijian Government and its donor partners could take to boost the sector's resilience to climate change. Two of the nine costed interventions (improving disaster preparedness and mitigating flood risks) are included in the disaster risk management section of this document instead. This leaves seven interventions, estimated to cost roughly FJD \$1.3 million per year, which aim to improve knowledge on climate change or to implement specific actions, such as increased crop insurance. Efforts to improve the climate expertise within the Ministry of Agriculture are particularly crucial, as the Ministry currently does not have much expertise in this area. The NDP also includes seven policy objectives related to enhancing resilience in the agricultural sector. The NDP and CVA actions do not entirely overlap, so three NDP policy objectives do not have cost estimates (see Table 19). Additionally, much of Fiji's agricultural productivity comes from subsistence farmers, whose overall productivity depends on the nutritional quality of the soil and other inland ecosystems. However, the CVA does not provide cost estimates for either subsistence farmers or the private sector, meaning the Snapshot does not have cost estimates for two critical components of the agricultural sector.

Table 19 | Climate Finance Snapshot - the Agriculture Sector

| GOVERNMENT POLICY OBJECTIVES  | ANNUAL CLIMATE<br>FINANCE NEEDS**<br>(FJD PER YEAR) | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) |
|---|---|---|--|
| Develop a national food and nutrition security policy or framework  | FJD 200,000   | FJD 1,939,444                                   | FJD 643,279                                  |
| Raise more awareness on the importance of food and nutrition security   | Not costed in any documents                         | FJD 1,986,832                                   | FJD 4,892                                    |
| Encourage the better implementation of food and nutrition security priorities in agriculture, fisheries, and other sectors            | FJD 550,000   | FJD 10,836,874                                  | FJD 1,398,502                                |
| Continue broad-based support to agriculture as a key driver to economic growth and poverty alleviation                                | Not costed in any documents                         | FJD 22,786,689                                  | FJD 4,243,798                                |
| Provide targeted support to selected commodities  | FJD 200,000   | FJD 5,087,805                                   | FJD 3,913,121                                |
| Empower farms through agriculture land use practices and improved farm efficiency that promote sustainability in resource utilisation | FJD 297,429   | FJD 2,355,496                                   | FJD 8,040                                    |
| Enhance the growth of the sugar industry  | Not costed in any documents                         | FJD 29,067,825                                  | FJD 22,469,683                               |
| TOTAL: AGRICULTURE SECTOR   | FJD 1,247,429                                       | FJD 74,060,965                                  | FJD 32,681,315                               |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

### **CURRENT FUNDING FLOWS**

Based on the limited but available cost estimates, at a quick glance, the activities in the agricultural sector appear to be receiving sufficient allocated support. However, a deeper analysis shows that the incomplete estimates of the sector's climate-related financial needs make it very difficult to draw definitive conclusions about the true scope of the agricultural sector's climate-finance needs.

The Fijian Government provides significant support to the agricultural sector. It accounts for 60% of all allocated climate finance to the sector (see Table 20). The remaining 40% of allocated funding comes from external actors. The external support is provided through bilateral aid, and the UN agencies, including the International Fund for Agricultural Development. This Snapshot found that only 44 % of the total allocated resources, or FJD\$32.6 million, was actually spent between 2016 and 2019.

<sup>\*\*</sup> Note: Cost estimates for the agriculture sector are provided by the CVA. The CVA cost estimates focus on interventions that fall under the jurisdiction of the public sector, such as promoting climate resilience farming practices and expanding research and development into climate-resilient seed varieties.

Table 20 | Breakdown of Funders in the Agriculture Sector

| Table 20   Breakdown of Funders in the Agriculture Sector |  |                               |  |                            |  |
|---|--|-------------------------------|--|----------------------------|--|
| ALL POLICIES - AGRICULTURE                                | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR)* | PERCENT OF ALL<br>ALLOCATIONS | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) | PERCENT OF ALL<br>SPENDING |  |
| External Donors   | FJD 29,635,892                                   | 40%                           | FJD 134,713                                  | 0%                         |  |
| Fijian Government   | FJD 44,425,073                                   | 60%                           | FJD 32,546,602                               | 100%                       |  |
| All Spending - Agriculture                                | FJD 74,060,965                                   | 100%                          | FJD 32,681,315                               | 100%                       |  |
|   | BREAKDOWN BY                                     | POLICY OBJECTIVE              |  |                            |  |
| Policy to enhance food and nutrition security             | Annual Budget<br>Allocations*                    | Percent of All<br>Allocations | Annual Actual<br>Spending*                   | Percent of All<br>Spending |  |
| External Donors   | FJD 357,476                                      | 5%                            | FJD 0  | 0%                         |  |

| Policy to enhance food and nutrition security                 | Annual Budget Allocations*    | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
|---|-------------------------------|-------------------------------|----------------------------|----------------------------|
| External Donors   | FJD 357,476                   | 5%                            | FJD 0                      | 0%                         |
| Fijian Government   | FJD 1,581,968                 | 95%                           | FJD 643,279                | 100%                       |
| All spending  | FJD 1,939,444                 | 100%                          | FJD 643,279                | 100%                       |
| Awareness food and nutrition security                         | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors   | FJD 1,903,499                 | 96%                           | 0                          | 0%                         |
| Fijian Government   | FJD 83,333                    | 4%                            | FJD 4,892                  | 100%                       |
| Total Spending - Awareness                                    | FJD 1,986,832                 | 100%                          | FJD 4,892                  | 100%                       |
| Encourage implementation                                      | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors   | FJD 5,216,862                 | 48%                           | FJD 0                      | 0%                         |
| Fijian Government   | FJD 5,620,012                 | 52%                           | FJD 1,398,502              | 100%                       |
| All spending  | FJD 10,836,874                | 100%                          | FJD 1,398,502              | 100%                       |
| Broad-based support to agriculture                            | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors   | FJD 14,477,134                | 64%                           | FJD 126,673                | 3%                         |
| Fijian Government   | FJD 8,309,555                 | 36%                           | FJD 4,117,125              | 97%                        |
| All spending  | FJD 22,786,689                | 100%                          | FJD 4,243,798              | 19%                        |
| Support to selected commodities                               | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors   | 0                             | 0%                            | 0                          | 0%                         |
| Fijian Government   | FJD 5,087,805                 | 100%                          | FJD 3,913,121              | 100%                       |
| All spending  | FJD 5,087,805                 | 100%                          | FJD 3,913,121              | 100%                       |
| Enhance sustainability in resource utilisation in agriculture | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors   | FJD 2,355,496                 | 100%                          | FJD 8,040                  | 100%                       |
| Fijian Government   | FJD 0                         | 0%                            | FJD 0                      | 0%                         |
| All spending  | FJD 2,355,496                 | 100%                          | FJD 8,040                  | 100%                       |
| Enhance growth of sugar industry                              | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors   | FJD 5,325,425                 | 18%                           | 0                          | 0%                         |
| F::: C  | 1 10 0,020,420                |                               |                            |                            |
| Fijian Government   | FJD 23,742,400                | 82%                           | FJD 22,469,683             | 100%                       |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

# The Blue Economy Sector (including fisheries and coastal wetlands)

### **SYNOPSIS**

The blue economy refers to the use of ocean resources to support ecosystem health, economic growth, and improved livelihoods. Fiji's ocean resources come from its coastal ecosystems, including mangroves, seagrass, and coral reefs, and support vital economic sectors, such as fisheries, shipping, and tourism. Almost 60% of Fiji's population live on the coasts and derive their livelihoods from the oceans, while the tourism sector accounts for roughly 17% of Fiji's GDP and nearly 40% of annual government revenues. Coastal ecosystems also provide several other climate services, including protection against natural disasters and the potential to sequester carbon. The LEDS estimates that the sequestration capacity of Fiji's mangroves is valued at approximately FJD\$4,000 per hectare per year.

However, Fiji's ocean resources are under substantial environmental stress and are severely threatened by climate change. The CVA estimates that mangrove coverage in Fiji declined by 25% between 2003 and 2013, because very few mangrove areas are protected. Fiji's Locally Managed Marine Area Network was established to help promote conservation, but only 17% of coral reefs are protected. Fiji's oceans are also heavily polluted due to a fuel-intensive marine transport fleet (see Transport sector) and there are insufficient waste collection systems in Fiji's cities and coastal villages.

Fiji's fishing industry is directly vulnerable to the growing impacts of climate change. For example, Tropical Cyclone Winston inflicted more than FJD\$165.9 million in damages to the fisheries sector; 98% of these losses hit the private sector, including more than FJD\$119.7 million in lost value from subsistence fisheries and more than FJD\$45 million in losses to commercial fishing operations. The Tropical Cyclone Winston Post-Disaster Needs Assessment estimates that it will take at least 12 years for the commercial and subsistence fisheries to return to their pre-Winston production levels.

Overall, climate finance in the blue economy sector is shaped by two trends that are common in the other sectors: allocated spending concentrated in a couple of projects and a limited number of cost estimates for the sector. Total allocated public climate finance in the blue economy is just over FJD\$72 million per year, including almost FJ\$16 million on fisheries and FJ\$58 million on coastal ecosystems (see Table 21). When it comes to actual and identified spending, the Snapshot finds that just over 10% of this funding, or FJD\$7.7 million, was actually spent. Furthermore, significant gaps in the available cost estimates make it difficult to conduct a more detailed gap analysis into Fiji's blue economy (see Table 6).

#### **EXISTING ANALYSIS OF FINANCE NEEDS**

There are two factors that make it difficult to conduct an accurate gap analysis. First, the NDP does not include a separate chapter or policy goal on oceans or coastal ecosystems. Instead, the only discussion of coastal ecosystems in the NDP comes under a list of strategies to achieve the overarching policy goal to "support inshore/coastal fisheries through sustainable fisheries management and development." One strategy under this policy goal is to "support the revitalization and conservation of mangroves and corals."

Second, there are only a few cost estimates applicable to specific interventions in the blue economy. For example, the CVA identifies and provides cost estimates for six interventions regarding fisheries but three of these focus on disaster risk management in fishing communities, so are included in the disaster risk section (see above). This leaves three activities in the fisheries sector with cost estimates: strengthening of community-based fisheries management, training on sustainable fishing practices, and a small-scale fisheries and aquaculture activities insurance scheme (see Table 21).

Table 21 | Climate Finance Snapshot - the Blue Economy Sector

| GOVERNMENT POLICY OBJECTIVES  | ANNUAL CLIMATE<br>FINANCE NEEDS**<br>(FJD PER YEAR) | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) |
|---|---|---|--|
| Sustainably manage the benefits from offshore fisheries resources   | Not costed in any documents                         | FJD 4,288,729                                   | FJD 294,167                                  |
| Support inshore coastal fisheries through sustainable fisheries management and development                        | FJD 1,140,000                                       | FJD 9,229,373                                   | FJD 4,174,228                                |
| Expand the restoration, revitalization, and conservation of coastal ecosystems, such as mangroves and coral reefs | FJD 4,030,000                                       | FJD 57,158,524                                  | FJD 2,682,255                                |
| Support growth of aquaculture industries  | FJD 300,000   | FJD 1,697,757                                   | FJD 634,153                                  |
| TOTAL: BLUE ECONOMY SECTOR  | FJD 5,470,000                                       | FJD 72,374,383                                  | FJD 7,784,803                                |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

The CVA provides six interventions tied to improving environmental health. Four of these combine actions for forest ecosystems with those for ocean ecosystems. For example, the CVA calls for FJD\$17 million across ten years (FJD\$1.7 million per year) to strengthen the management and monitoring of ecosystems, including mangroves, coral reefs, and inland forests. The NDP, however, dedicates specific sections to forests and fisheries, while briefly mentioning coastal ecosystems. To ensure consistency with the NDP, the Snapshot splits these cost estimates evenly between the forestry and blue economy sectors. Furthermore, the CVA and LEDS cost estimates are focused on interventions that could be implemented by the Fijian Government and/ or its development partners but they do not provide cost estimates for actions that private sector actors in relevant economic sectors such as tourism, fishing, or marine transport, should take to ensure Fiji maintains a vibrant blue economy amid a changing climate. Thus, the total annual climate finance needs in the blue economy are likely much higher than the FJD\$5.47 million included in this Snapshot.

### **CURRENT FUNDING FLOWS**

Based on this approach, the total available public climate finance for Fiji's blue economy from 2016 to 2019 was estimated at FJD\$72.3 million annually, including FJD\$15.2 million on fisheries and almost FJD\$58 million on coastal ecosystems (see Table 22). The Fijian Government provided roughly 46% of the funding for the fisheries sector, primarily through investments in new ice machines and upgrades to the Levuka fishery plant. Nearly one-third of the allocated public climate finance for fisheries comes from a Global Environmental Facility project to implement global oceans treaties. As stated above, the private sector is the main investor in Fiji's fisheries sector, but their actions are not covered by the Snapshot.

<sup>\*\*</sup> Note: Cost estimates for the blue economy sector are provided by the CVA and the LEDS. The CVA cost estimates focus on interventions that fall under the jurisdiction of the public sector, such as strengthening community-based fisheries management and strengthened managing and monitoring of coastal ecosystems. The LEDS provides cost estimates on interventions to protect and revitalize Fiji's mangroves, seagrass, and other sources of blue carbon sequestration.

Table 22 | Breakdown Funders in the Blue Economy Sector

| TOTALS - BLUE ECONOMY | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | PERCENT OF ALL<br>ALLOCATIONS | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) | PERCENT OF ALL<br>SPENDING |
|-----------------------|---|-------------------------------|--|----------------------------|
| External Donors       | FJD 50,993,643                                  | 70%                           | FJD 753,349                                  | 10%                        |
| Fijian Government     | FJD 21,380,740                                  | 30%                           | FJD 7,031,454                                | 90%                        |
| All Spending          | FJD 72,374,383                                  | 100%                          | FJD 7,784,803                                | 100%                       |

### **BREAKDOWN BY POLICY OBJECTIVE**

| All Spending   | FJD 9,229,373  | 100%  | FJD 4,174,228   | 100%  |
|--|--|---|---|---|
| Rehabilitate coastal ecosystems  | Annual Budget<br>Allocations*  | Percent of All<br>Allocations                       | Annual Actual<br>Spending*  | Percent of All<br>Spending                    |
| Rehabilitate coastal ecosystems  External Donors   |  |   |   |   |
| External Donors  | Allocations*<br>FJD 43,746,759   | Allocations 77%                                     | Spending*<br>FJD 753,349  | Spending 28%                                  |
| External Donors Fijian Government  | Allocations* FJD 43,746,759 FJD 13,411,765   | Allocations 77% 23%                                 | Spending*<br>FJD 753,349<br>FJD 1,928,906                                 | Spending<br>28%<br>72%                        |
| External Donors  | Allocations* FJD 43,746,759 FJD 13,411,765 FJD 57,158,524                            | Allocations 77% 23% 100%                            | Spending* FJD 753,349 FJD 1,928,906 FJD 2,682,255                         | \$\text{Spending} 28\times 72\times 100\times |
| External Donors Fijian Government  | Allocations* FJD 43,746,759 FJD 13,411,765 FJD 57,158,524 Annual Budget              | Allocations 77% 23% 100% Percent of All             | Spending* FJD 753,349 FJD 1,928,906 FJD 2,682,255 Annual Actual           | \$pending 28% 72% 100% Percent of All         |
| External Donors  Fijian Government  All Spending  Growth of aquaculture                  | Allocations* FJD 43,746,759 FJD 13,411,765 FJD 57,158,524 Annual Budget Allocations* | Allocations 77% 23% 100% Percent of All Allocations | Spending* FJD 753,349 FJD 1,928,906 FJD 2,682,255 Annual Actual Spending* | Spending 28% 72% 100% Percent of All Spending |
| External Donors  Fijian Government  All Spending  Growth of aquaculture  External Donors | Allocations* FJD 43,746,759 FJD 13,411,765 FJD 57,158,524 Annual Budget              | Allocations 77% 23% 100% Percent of All             | Spending* FJD 753,349 FJD 1,928,906 FJD 2,682,255 Annual Actual           | \$pending 28% 72% 100% Percent of All         |
| External Donors  Fijian Government  All Spending  Growth of aquaculture                  | Allocations* FJD 43,746,759 FJD 13,411,765 FJD 57,158,524 Annual Budget Allocations* | Allocations 77% 23% 100% Percent of All Allocations | Spending* FJD 753,349 FJD 1,928,906 FJD 2,682,255 Annual Actual Spending* | Spending 28% 72% 100% Percent of All Spending |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

As shown in Table 22, the Fijian Government accounts for 30% of the available climate finance and external funders account for the remaining 70%. Based on the data that could be verified, the Fijian Government accounts for FJD\$7.03 million, or 90% of all actual spending in the sector, and external partners account for the remaining 10%. As stated above, the data on actual spending levels from external donors was very difficult to confirm – this 10% captures the amount reported to the Ministry of Economy as official development assistance.

Overall, 79% of all allocated public climate finance in the blue economy is to conserve coastal ecosystems (FJD\$57 million per year). Of this funding, nearly 45% can be attributed to the Ridge to Reef project (funded by the Fijian Government, the Global Environmental Facility, United Nations Development Program, and other stakeholders) and another 23% comes from the government-funded Coastal Erosion Protection Works project.

Based on the data on actual spending that could be verified, total spending in the blue economy is roughly FJD\$7.7 million, or roughly 10% of the allocated spending. More than half of this actual spending, or FJD\$4.17 million was spent by the Fijian Government to upgrade public infrastructure in the fisheries sector. As mentioned above, actual spending data from external donors is very difficult to confirm, and it is very likely this limitation with the data is primarily responsible for the low spending levels identified by external partners.

As shown in Table 22, external funders accounted for 79% of all available climate finance to improve Fiji's climate policies and governance. Although external partners allocated climate finance relatively evenly across the policy objectives, a Global Environmental Facility project aimed at building capacity to combat invasive species accounts for 55% of the FJD\$12.9 million allocated annually to improve the enforcement of climate legislation. As stated above, the available data on actual spending levels is very limited for external partners. Actual spending from the Fijian Government stood at FJD\$ 8 million, or roughly 62% of the Fijian Government's allocated funding. Of this spending, 90% supports two policy goals: to develop an integrated climate policy (FJD\$6.6 million per year) and to enforce climate legislation (FJD\$0.59 million per year).

### **Policy and Governance**

#### **SYNOPSIS**

Climate change poses significant consequences for nearly every sector of the Fijian economy, and the NDP, CVA and NAP call for improved efforts to mainstream climate considerations into all relevant government policies and institutions and to strengthen enforcement of existing legislation. Robust and ambitious climate governance is essential for creating the policy incentives, institutional systems, and enabling environments that will facilitate Fiji's transition to a climate-resilient economy. One critical component of strengthening Fiji's climate governance will be to mainstream climate expertise throughout the education system and sector ministries, so that Fiji can build the requisite domestic capacity to successfully adapt to a changing climate.

This Snapshot finds significant ongoing investments to improve climate governance, such as through the enforcement of existing environmental and climate policies, and the development of more robust policies on climate change, oceans, and fisheries. Although the CVA does provide a handful of cost estimates on interventions to strengthen climate governance, the CVA authors concluded that the costs of developing new policy frameworks tends to be minimal, particularly compared to other interventions discussed in this Snapshot. Additionally, the more pertinent costs of a new policy are those required to implement and/or enforce the policies – and those costs are very difficult to quantify. Thus, these constraints with cost estimates limit the conclusions that can be drawn from a climate finance gap analysis (see Table 6).

### **ANALYSIS OF EXISTING FINANCE NEEDS**

The NDP does not have a chapter that is explicitly focused on improving climate governance. Instead, such policies are included in the chapters on "expanding the rural economy" and "sustainable cities and towns." This Snapshot compiled the relevant policies and strategies from these chapters to create a list that reflects the government's priorities for improving climate governance. This list was cross-referenced against the NAP, which identifies 21 measures to mainstream climate considerations into Fiji's national and subnational governing instruments.

Table 23 | Climate Finance Snapshot - Policy and Governance

| GOVERNMENT POLICY OBJECTIVES   | ANNUAL CLIMATE<br>FINANCE NEEDS**<br>(FJD PER YEAR) | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) |
|--|---|---|--|
|  |   |   |  |
| Develop an integrated policy, approach, and operational plan to effectively address climate change                                     | No cost estimates<br>available                      | FJD 10,116,622                                  | FJD 6,652,752                                |
| Strengthen understanding of the impacts of climate change and disasters in order to better plan for recovery and long-term development | No cost estimates<br>available                      | FJD 4,868,997                                   | FJD 848,473                                  |
| Resourcing and adaptation become part of the national and subnational development planning and budgetary process                       | No cost estimates available                         | FJD 16,586,057                                  | FJD 396,666                                  |
| Strengthen partnerships at all levels for building resilience to climate change  | No cost estimates available                         | FJD 4,967,729                                   | FJD 252,191                                  |
| Strengthen and enforce planning permits and environmental legislation  | FJD 500,000   | FJD 23,359,766                                  | FJD 1,069,330                                |
| TOTAL: POLICY AND GOVERNANCE   | FJD 500,000   | FJD 59,899,171                                  | FJD 9,219,412                                |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

Although these measures are widely shared across Fiji's climate documents, only the CVA provides cost estimates. The CVA estimates that it will cost a total of FJD\$77 million over 10 years (FJD\$7.7 million per year) to "adequately strengthen and enforce planning permits and environmental legislation" through a series of interventions. These interventions include FJD\$50 million into community-level investments for improved ecosystem resilience; FJD\$17 million for improved monitoring and management of ecosystems; and FJD\$4.5 million for waste minimization. However, these interventions are more closely aligned with the NDP policy objectives in the forestry, blue economy, and water and sanitation sectors. So, these cost estimates are used in those chapters. As a result, only the intervention on "strengthening and enforcement of planning and environmental legislative and institutional frameworks," estimated to cost FJD\$5 million over 10 years, is included here (see Table 23). There are no available cost estimates

on actions to mainstream climate considerations into the existing national and/or sub-national planning and policy development processes.

### **CURRENT FUNDING FLOWS**

The NDP sets out five policy priorities to strengthen Fiji's climate governance (see Tables 23 and 24). Across these policies, more than FJD \$59 million per year in public climate finance was allocated between 2016 and 2019 to strengthening climate governance. Of this, 67% (FJD \$39 million) was allocated annually to support two policy objectives: "integrating adaptation into the planning and budgetary processes" and "strengthening and enforcing planning permits and environmental legislation." The second policy objective includes activities such as the phase out of harmful chemicals (methyl bromide and HFCs). Of the allocated climate finance, roughly 15 % was spent over the course of the Snapshot.

<sup>\*\*</sup> Note: Cost estimates for the policy and governance sector are provided by the CVA. The CVA estimates that it will cost roughly FJD\$5 million over 10 years to strengthen and enforce planning and environmental legislative and institutional frameworks.

Table 24 | Breakdown of Funders in the Policy and Governance Sector

| ALL CLIMATE GOVERNANCE  | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR)* | PERCENT OF ALL<br>ALLOCATIONS | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) | PERCENT OF ALL<br>SPENDING |
|-------------------------|--|-------------------------------|--|----------------------------|
| External Donors         | FJD 44,065,769                                   | 79%                           | FJD 1,204,245                                | 13%                        |
| Fijian Government       | FJD 12,833,402                                   | 21%                           | FJD 8,015,167                                | 87%                        |
| Totals - Climate Policy | FJD 56,899,171                                   | 100%                          | FJD 9,219,412                                | 100%                       |

### **BREAKDOWN BY POLICY OBJECTIVES IN CLIMATE GOVERNANCE**

| Climate change policy      | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
|----------------------------|-------------------------------|-------------------------------|----------------------------|----------------------------|
| External Donors            | FJD 0                         | 0%                            | FJD 0                      | 0%                         |
| Fijian Government          | FJD 10,116,622                | 100%                          | FJD 6,652,752              | 100%                       |
| All Spending               | FJD 10,116,622                | 100%                          | FJD 6,652,752              | 100%                       |
| Climate impacts & planning | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors            | FJD 2,994,099                 | 61%                           | FJD 125,967                | 15%                        |
| Fijian Government          | FJD 1,874,898                 | 39%                           | FJD 722,497                | 85%                        |
| All Spending               | FJD 4,868,997                 | 100%                          | FJD 848,473                | 100%                       |
| Integrate adaptation       | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors            | FJD 16,514,824                | 100%                          | FJD 354,088                | 89%                        |
| Fijian Government          | FJD 71,233                    | 0%                            | FJD 42,578                 | 11%                        |
| All Spending               | FJD 16,586,057                | 100%                          | FJD 396,666                | 100%                       |
| Strengthen partnerships    | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors            | FJD 4,865,108                 | 98%                           | FJD 250,952                | 100%                       |
| Fijian Government          | FJD 102,621                   | 2%                            | FJD 1,239                  | 0%                         |
| All Spending               | FJD 4,967,729                 | 100%                          | FJD 252,191                | 100%                       |
| Enforce legislation        | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors            | FJD 22,691,738                | 97%                           | FJD 473,229                | 44%                        |
| Fijian Government          | FJD 668,028                   | 3%                            | FJD 596,101                | 56%                        |
| All Spending               | FJD 23,359,766                | 100%                          | FJD 1,069,330              | 100%                       |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

As shown in Table 24, external funders accounted for 79% of all available climate finance to improve Fiji's climate policies and governance. Although external partners allocated climate finance relatively evenly across the policy objectives, a Global Environmental Facility project aimed at building capacity to combat invasive species accounts for 55% of the FJD\$12.9 million allocated annually to strengthen enforcement of climate legislation. Of the Fijian Government's FJD \$8 million total spending in the sector, 82% supports one policy goal: to develop an integrated climate policy (FJD \$6.6 million per year).

### **The Forestry Sector**

#### **SYNOPSIS**

Forests currently account for roughly 60% of Fiji's total land area. Healthy forests provide essential services, including the fertile soils that are essential for Fiji's smallholder farmers to remain productive. The stable hillsides and riverbanks provide Fiji's villages with protection against flooding, landslides, and other disaster events. Additionally, healthy forests can help sequester carbon and so could play a critical role in helping Fiji meet its domestic climate targets. Although healthy forests are indispensable to Fiji's food security and protection against natural disasters, 40% of all forests in Fiji are being degraded.

The NDP establishes a goal to strengthen sustainable forest management through climate change mitigation and adaptation efforts, including promoting forest conservation and sustainable forest harvesting practices. Fiji's NDC states that Fiji's REDD+ program will be used to promote mitigation efforts. The NAP, CVA, and NDCR identify several actions, such as the planting of native trees and restoration of degraded forests that can promote climate adaptation in Fiji's forests. Overall, limitations in the available cost estimates hinder an accurate gap analysis of climate finance for forests.

The actual expenditure levels were FJD\$4.22 million, about 45% of the FJD\$10.2 million allocated. The Ministry of Forestry calls for an annual budget of FJD\$16 to FJD\$20 million to build towards the sustainable, climate-resilient management of Fiji's forests. These needs are more than double the annual cost estimates identified in the LEDS and CVA.

### **EXISTING ANALYSIS OF FINANCE NEEDS**

The LEDS is the only document that provides cost estimates for actions specific to the forestry sector. The identified needs in the LEDS include reducing logging emissions (FJD\$59,000 to FJD\$84,000 per year, depending on the scenario), reducing deforestation (roughly FJD\$1.5 million), increased plantation productivity (FJD\$74,000 to FJD\$200,000 per year), and afforestation (FJD\$2.5 million per year).

The CVA provides cost estimates for adaptation-related activities, but these include activities that stretch across several ecosystems, including inland forests, coral reefs, and mangroves. For example, the CVA calls for FJD\$50 million over 10 years to be invested in two phases of community-level resilience investments that "use ecosystem approaches and small coastal protection infrastructure for improved resilience of land and coastal environments." For this Snapshot, these cost estimates are averaged equally across the forestry and blue economy sectors, which indicates approximately FJD\$2.5 million per year in needed investments.

Table 25 | Climate Finance Snapshot - Forestry Sector

| NDP POLICY<br>OBJECTIVES                  | SPECIFIC PROGRAMS  | ANNUAL CLIMATE<br>FINANCE NEEDS*<br>(FJD PER YEAR) | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) |
|---|--|--|---|--|
| Strengthen                                | New Regulatory Framework for native &                                      | Not costed in any                                  | FJD 292,683                                     | FJD 237,805                                  |
| Sustainable Forest                        | pine forests   | documents  | , ,,,,,   | , ,,,,,                                      |
| Management                                | Establish total area under long-term conservation                          | FJD 3,350,000                                      | FJD 2,477,141                                   | FJD 311,850                                  |
|   | Monitoring of permanent sample plots                                       | FJD 148,714  | FJD 713,402                                     | FJD 585,613                                  |
|   | Reforestation of degraded forests  | FJD 2,498,400                                      | FJD 2,774,735                                   | FJD 1,762,681                                |
|   | Drafting of Emissions Reduction Program Document (REDD+)                   | FJD 1,721,120                                      | FJD 3,880,720                                   | FJD 1,323,118                                |
| Encourage Private<br>Sector Participation | Preparation of plantation policy   | FJD 71,429   | Not in active projects                          | Not in active projects                       |
| in Plantation<br>Development              | Fire Management Strategic Plan   | Not costed   | Not in active projects                          | Not in active projects                       |
| Encourage the growth of timber            | Training and Development (upgrade Nasinu sawmill)                          | Not costed   | Not in active projects                          | Not in active projects                       |
| product                                   | Upgrade Tropik Wood Industries Limited's<br>Sawmill, Kiln and Boiler Coils | Not costed   | Not in active projects                          | Not in active projects                       |
|   | Upgrade of Tropik Wood Industries Limited's Wairiki wood chipping facility | Not costed   | Not in active projects                          | Not in active projects                       |
|   | Upgrade of Fiji's Forest Industry Limited<br>Plant Machinery               | Not costed   | Not in active projects                          | Not in active projects                       |
| TOTAL: FORESTRY                           | SECTOR   | FJD 7,789,663                                      | FJD 10,138,681                                  | FJD 4,221,067                                |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

### **CURRENT FUNDING FLOWS**

The NDP lays out three policy objectives for the forestry sector, but only the policy to "strengthen sustainable forest management" was supported with allocated public climate finance between 2016 and 2019 (see Table 25). This policy's implementation is supported by programs to expand areas for forest conservation, to advance implementation of Fiji's REDD+ implementation program, and to reforest degraded areas. These programs are consistent with a broader pivot within the Ministry of Forestry away from managing Fiji's forests as an extractive resource towards managing Fiji's forests as a

vital resource that must be conserved to support other sectors of the economy, namely reduced flood risks and improved agricultural productivity. To this end, in 2017, Fiji pledged to plant 4 million trees in 4 years and in 2019 revised this pledge to plant 30 million trees in 15 years.

Although the FJD\$10.13 million in available public climate finance identified in the Snapshot exceeded the identified needs in the CVA and the LEDS, the actual expenditure levels were estimated to be around FJD\$4.22 million, about 54% of the identified needs from the LEDS and CVA. Furthermore, the Ministry of Forestry (2017 to 2023) strategic plan estimates annual budget needs of

<sup>\*\*</sup> Note: Cost estimates for the forestry sector are provided by the CVA and the LEDS. The CVA provides cost estimates for interventions that the public sector could take to strengthen the resilience and health of Fiji's forests. The LEDS provides cost estimates for some actions that are likely to be implemented by the public sector, such as reducing deforestation and others that would fall under the purview of the private sector, such as improved plantation productivity. The Ministry of Forestry strategic plan from 2017 to 2023 projects an annual budget of between FJD\$16 million and FJD\$19 million in operating and capital expenses.

almost FJD\$16 million to FJD\$20 million in operating and capital expenses. These budget estimates are not broken out by strategic goal and so this Snapshot cannot provide a more detailed analysis of how the identified available public climate finance compares to the Ministry's own identified climate finance needs. Nonetheless, the projected budget needs presented by the Ministry of

Forests greatly exceed the cost estimates presented in the LEDS and CVA.

Of the roughly FJD\$10 million available in public climate finance for the forestry sector, nearly two-thirds comes from external donors and one third from the Fijian Government (see Table 26).

Table 26 | Breakdown of Funders in the Forestry Sector

| ALL FORESTRY      | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | PERCENT OF ALL<br>ALLOCATIONS | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) | PERCENT OF ALL<br>SPENDING |
|-------------------|---|-------------------------------|--|----------------------------|
| External Donors   | FJD 6,435,835                                   | 63%                           | FJD 1,203,129                                | 29%                        |
| Fijian Government | FJD 3,702,846                                   | 37%                           | FJD 3,017,938                                | 71%                        |
| All Spending      | FJD 10,138,681                                  | 100%                          | FJD 4,221,067                                | 100%                       |

#### STRATEGIES UNDER THE POLICY TO STRENGTHEN FOREST MANAGEMENT

| New regulatory framework         | Annual Budget                 | Percent of All                | Annual Actual              | Percent of All             |
|----------------------------------|-------------------------------|-------------------------------|----------------------------|----------------------------|
| External Donors                  | Allocations*                  | Allocations 0%                | Spending*<br>FJD 0         | Spending<br>0%             |
|                                  |                               |                               |                            |                            |
| Fijian Government                | FJD 292,683                   | 100%                          | FJD 237,805                | 100%                       |
| All Spending                     | FJD 292,683                   | 100%                          | FJD 237,805                | 100%                       |
| Establish long-term conservation | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors                  | FJD 2,048,778                 | 83%                           | FJD 0                      | 0%                         |
| Fijian Government                | FJD 428,363                   | 17%                           | FJD 311,850                | 100%                       |
| All Spending                     | FJD 2,477,141                 | 100%                          | FJD 311,850                | 100%                       |
| Monitor permanent sample plots   | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors                  | FJD 0                         | 0%                            | FJD 0                      | 0%                         |
| Fijian Government                | FJD 713,402                   | 100%                          | FJD 585,613                | 100%                       |
| All Spending                     | FJD 713,402                   | 100%                          | FJD 585,613                | 100%                       |
| Reforest degraded forests        | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors                  | FJD 955,822                   | 34%                           | FJD 221,135                | 13%                        |
| Fijian Government                | FJD 1,818,913                 | 66%                           | FJD 1,541,546              | 87%                        |
| All Spending                     | FJD 2,774,735                 | 100%                          | FJD 1,762,681              | 100%                       |
| REDD+ document                   | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors                  | FJD 3,431,235                 | 88%                           | FJD 981,994                | 74%                        |
| Fijian Government                | FJD 449,485                   | 12%                           | FJD 341,124                | 26%                        |
| All Spending                     | FJD 3,880,720                 | 100%                          | FJD 1,323,118              | 100%                       |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

Allocated external funds went towards REDD+ (FJD\$3.4 million), or other initiatives focused on long-term forest conservation (FJD\$2.1 million) or forest restoration (FJD\$0.86 million). The government allocated roughly one third of its forest-related funds (FJD\$1.05 million) to the restoration of degraded forests, while the remainder was divided relatively equally among other initiatives to enhance forest management. The actual climate finance expenditures in the forestry sector stood at FJD\$4.22 million on average per year and were primarily used to support the reforestation of degraded forests.

In sum, spending in the forestry sector is almost half of the estimated needs and it is likely that the available cost estimates do not provide a comprehensive accounting of Fiji's forest-related funding needs.

### **The Housing Sector**

#### **SYNOPSIS**

The CVA highlights that a large number of informal settlements in Fiji are extremely vulnerable to climate and disaster risks. The Fijian Government is responsible

for creating the proper enabling environment – through building standards and similar policies – to encourage the construction of climate resilient houses, as most building units are financed and built by the private sector. Roughly 20% of Fijian families had their homes and personal belongings destroyed by Tropical Cyclone Winston. The CVA, NDP, and NAP identify increasing both the amount of available quality housing and the resilience of the housing supply as top development priorities. The NAP and CVA identify several actions to improve the resilience of the sector. These include integrating climate considerations into land-use planning, upgrading informal settlements, strengthening and enforcing the building code, and developing a housing insurance mechanism.

As shown in Table 27, none of the three policy objectives are sufficiently supported compared to the identified climate needs. Moreover, the available data on cost estimates for the housing sector is only partially complete, which limits a definitive conclusion about the state of climate finance in housing.

Table 27 | Climate Finance Snapshot - Housing Sector

| GOVERNMENT POLICY OBJECTIVES   | ANNUAL CLIMATE<br>FINANCE NEEDS**<br>(FJD PER YEAR) | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) |
|--|---|---|--|
| Provide affordable and safe housing to all, especially low-income earners          | FJD 3,450,000                                       | FJD 5,887,126                                   | FJD 669,777                                  |
| Upgrade informal settlements   | FJD 7,740,000                                       | FJD 20,737,626                                  | FJD 4,924,854                                |
| Strengthen Govt-NGO partnerships in the provision of housing and land for the poor | FJD 200,000   | FJD 3,539,310                                   | FJD 0  |
| TOTAL: HOUSING SECTOR  | FJD 11,390,000                                      | FJD 30,164,062                                  | FJD 5,594,631                                |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

<sup>\*\*</sup> Note: Cost estimates for the housing sector are provided by the CVA. The CVA provides cost estimates for interventions that the public sector could take to strengthen the enabling environment so that the private sector expands its investments in climate resilient housing units. In a 2013 study on adaptation options for Lami Town (population 20,000) SPREP estimated that it would cost at least FJD\$18 million over 10 years or more than FJD\$24 million over 20 years to implement a series of interventions that would help Lami Town adapt to climate change, such as replanting mangroves and stream buffers, reducing inland logging and coral extraction, and building sea walls.

#### **EXISTING ANALYSIS OF FINANCE NEEDS**

All cost estimates for the housing sector are provided by the CVA, which identifies 12 interventions that could boost the resilience of the housing stock by improving the enabling environment through a series of interventions – such as strengthening the building code and expanding microloans to facilitate housing upgrades – that would incentivize Fiji's private sector to build more climate resilient housing. Six of these are estimated to cost around FJD\$114 million over 10 years. They are directly aligned with the housing-related goals of the NDP, while the other six focus on repairing roads and bridges and reducing flood risks – actions that are more closely aligned to the NDP policies discussed in the transport and disaster risk management sections, and so are included under those sections.

Of the six interventions unique to housing, investments aimed at upgrading informal settlements account for 68% of the total estimated costs, or FJD\$7.7 million annually. The other estimated costs cover interventions to improve land affordability, promote town planning for economic growth, and improve access to microloans to upgrade existing houses.

It is likely that the CVA interventions are a partial estimate of the total costs of boosting the resilience of Fiji's housing stock. For example, a 2013 analysis by the Secretariat of the Pacific Regional Environment Programme (SPREP) into adaptation options for Lami town (population nearly 24,700), estimates it would cost between FJD\$18 million over 10 years and FJD\$24 million over 20 years to reduce Lami's exposure to climate impacts. The analysis also determines that flooding from rivers and coastal storms presents a persistent threat to Lami's residential housing sector and that certain actions should be taken to reduce these risks. Given that Lami's population is 2% of Fiji's, it is likely that total annual costs of ensuring the national housing stock is resilient to climate change will be higher than the FJD\$11.3 million per year costed in the CVA.

### **CURRENT FUNDING FLOWS**

The Fijian Government accounted for 75% of all available public climate finance in the housing sector (see Table 28). Within the housing sector, the available public climate finance from external partners comes from bilateral funders or the Adaptation Fund, which has provided grant funding to increase the resilience of

At least FJD\$5.59 million annually was spent in the housing sector, roughly half the cost estimates provided in the CVA. The CVA covers only public sector actions, but the private sector is the main investor. Above all, the ultimate question is whether all housing investments are designed to withstand the projected impacts of climate change.

informal urban settlements in Nadi, Sigatoka, Lami, and Lautoka. Overall, at least FJD\$5.59 million annually was spent in the housing sector.

#### **CLIMATE FINANCE GAPS**

Overall, spending in the housing sector is nearly half the cost estimates provided in the CVA, and the funded activities are mostly consistent with the interventions identified and costed in the CVA (see Table 28). For example, the policy goal to "provide affordable and safe housing to all, especially low-income earners," is supported by three initiatives with allocated budgets of FJD\$1.24 million to expand insurance protection for homes, FJD\$1.75 million for rural housing assistance, and FJD\$1.1 million to expand the Koroipita Town Model project, which provides cyclone-proof housing, education, and community development programming to low-income Fijians, to roughly 580 additional Fijians. That said, the CVA likely provides only a partial estimate of the costs required to ensure all Fijians have climateresilient housing, which means that current funding flows probably do not satisfy actual needs. Above all, the critical question is whether all investments in the housing sector, including new units and upgrades of existing units, are designed to withstand the fierce winds, flooding, and changes in sea level that are projected to come from climate change.

Table 28 | Breakdown of Funders in the Housing Sector

| ALL HOUSING SECTOR | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | PERCENT OF ALL<br>ALLOCATIONS | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) | PERCENT OF ALL<br>SPENDING |
|--------------------|---|-------------------------------|--|----------------------------|
| External Donors    | FJD 7,445,409                                   | 25%                           | FJD 107,670                                  | 2%                         |
| Fijian Government  | FJD 22,718,653                                  | 75%                           | FJD 5,483,305                                | 98%                        |
| All Housing        | FJD 30,164,062                                  | 100%                          | FJD 5,594,631                                | 100%                       |

### **BREAKDOWN BY POLICY OBJECTIVE**

| Affordable housing    | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
|-----------------------|-------------------------------|-------------------------------|----------------------------|----------------------------|
| External Donors       | FJD 1,589,048                 | 5%                            | FJD 0                      | 0%                         |
| Fijian Government     | FJD 4,298,078                 | 95%                           | FJD 669,777                | 100%                       |
| Totals - Affordable   | FJD 5,887,126                 | 100%                          | FJD 669,777                | 100%                       |
| Informal settlements  | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors       | FJD 3,022,933                 | 15%                           | FJD 107,670                | 2%                         |
| Fijian Government     | FJD 17,714,693                | 85%                           | FJD 4,817,184              | 98%                        |
| Totals - Informal     | FJD 20,737,626                | 100%                          | FJD 4,924,854              | 100%                       |
| Govt-ngo partnerships | Annual Budget<br>Allocations* | Percent of All<br>Allocations | Annual Actual<br>Spending* | Percent of All<br>Spending |
| External Donors       | FJD 2,833,428                 | 80%                           | FJD 0                      | 0%                         |
| Fijian Government     | FJD 705,882                   | 20%                           | FJD 0                      | 0%                         |
| Totals - Partnerships | FJD 3,539,310                 | 100%                          | FJD 0                      | 0%                         |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.



### Emerging Priorities: Climate-induced Relocation, Human Health, and Gender

Three sectors – climate-induced relocation, human health, and gender – have emerged as key government policy priorities tied to climate adaptation. However, none of these sectors has either the same structured policy guidance or same types of financing data as the other sectors. This is in part because experts are just beginning to understand which interventions would be most effective to facilitate effective climate adaptation in climate-induced relocation, human health, and gender. However, because these sectors are vital to Fiji's adaptation pathways, what is known about these sectors is discussed below.

### **Climate-Induced Relocation**

With roughly 110 inhabited islands and tens of thousands of residents living along the coasts, climate-induced sea level rise is already forcing Fijians to relocate – a trend that will only accelerate in the coming decades. In the last couple years, the Fijian Government has developed

and launched several initiatives, including the Planned Relocation Guidelines and the Relocation and Displaced People's Trust Fund, to help establish the processes and resources that will guide all decisions about how to address climate-induced relocation.

### STATE OF IDENTIFIED NEEDS AND CLIMATE FINANCE TRENDS

In addition to developing the relocation guidelines, the Ministry of Economy has identified roughly 43 villages that will need to be relocated in the coming decades due to sea level rise and other climate-related impacts. The NDP section on "Expanding the Rural Economy" includes a strategy to "provide capacity building to communities that have been identified as vulnerable to rising sea levels and in need of relocation." These initiatives underscore the growing pressure on the government to address climate-induced relocation, which the government views as an option of last resort.

To support these initiatives, the Fijian Government launched the Relocation and Displaced People's Trust Fund and provided FJD\$5 million in seed funding to meet the country's relocation needs. However, there are no estimates provided that shed light on the total estimated costs to address Fiji's relocation needs (see Table 29).

Table 29 | Climate Finance Snapshot - Climate-Induced Relocation

| GOVERNMENT<br>POLICY<br>OBJECTIVES   | PROJECT TITLE  | ANNUAL CLIMATE<br>FINANCE NEEDS**<br>(FJD PER YEAR) | ANNUAL BUDGET<br>ALLOCATIONS*<br>(FJD PER YEAR) | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) |
|--|--|---|---|--|
| Provide capacity<br>building to<br>communities that<br>have been identified<br>as vulnerable to<br>rising sea levels<br>and in need of<br>relocation | "Regional Meeting on Global Compact for<br>Migration"          | Not costed  | FJD 42,475                                      | Not available                                |
|  | "National Migration Profile with Fiji<br>Bureau of Statistics" | Not costed  | FJD 31,856                                      | Not available                                |
|  | NDMO - Planned Relocation Project                              | Not costed  | FJD 60,242                                      | Not available                                |
|  | Relocation Trust Fund  | Not costed  | FJD 5,000,000                                   | Not available                                |
|  | Regional Capacity Building on Human<br>Mobility                | Not costed  | FJD 127,425                                     | Not available                                |
| TOTAL: CLIMATE-INDUCED RELOCATION  |  | Not costed  | FJD 5,261,998                                   | Not available                                |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

<sup>\*\*</sup> None of the climate documents provide cost estimates on climate-induced relocation.

### RELOCATION NEEDS AND TOPICS FOR ADDITIONAL RESEARCH

As the Fijian Government has moved to build out its approach to climate-induced relocation, it has also become increasingly clear about the scale and complexities of the challenge. When the Fijian Government released its Relocation Guidelines at COP23, the Fijian Government clarified its approach to the challenge, stating:

"Planned relocation in Fiji is a relatively new response to the effects of climate change, and it is only viewed as a last resort. Relocation is a complex process and can be traumatic for those involved. It is not just a case of economics and physical structures, there are a number of complex, non-tangible aspects associated with relocation, which can include challenges to identity, as well as various psychological, social, emotional, and culture damages."

Thus, although the Snapshot did not identify the total estimated finance costs for Fiji to meet its climate-induced relocation needs, the Snapshot does find that Fiji will need assistance with a range of challenges related to climate-induced relocation. Although Fiji will need help meeting both the economic and logistical challenges presented by relocation, it will also need assistance in addressing the cultural, emotional, and psychological challenges that will emerged through the relocation process.

## Human Health and Climate Change

Fiji's NDP, NAP, and CVA recognize the link between human health and climate change, but the available data is insufficient to conduct an accurate gap analysis. The CVA estimates that climate change will negatively affect long-term health outcomes in the Pacific in a couple of ways. First, natural disasters will exacerbate vector- and water-borne diseases such as dengue fever and diarrhea. Meanwhile, higher temperatures are likely to lead to an increase in non-communicable diseases, such as cardiovascular problems and respiratory diseases. Above all, the impacts of climate change will exacerbate the underlying stresses or gaps in Fiji's healthcare system.

### STATE OF IDENTIFIED NEEDS AND CLIMATE FINANCE TRENDS

One of the NDP policies in the section on health and medical services seeks to "improve and integrate services targeting communicable diseases, environmental health, and emergency preparedness, response, and climate resilience." A strategy identified to implement this policy is to "improve a multi-sectoral approach to risk management and resilience for communicable diseases, health emergencies, climate change, and natural disasters." Although the policy priority is clear, both the current support for implementation and the available cost estimates are limited (see Table 30).

The CVA provides several cost estimates that could pertain to the health sector. However, the CVA puts "health and education infrastructure" under the same umbrella and many of these cost estimates cover actions that will help health and education infrastructure to become more resilient to disaster events. Such actions are included in the disaster risk management section of this Snapshot, but this leaves only two cost estimates that are unique to the health sector. These aim to build the capacity of the Ministry of Health and Medical services (Table 30). In total, according to available data, Fiji needs FJD\$130,000 in climate finance annually for the health sector and had FJD\$11.3 million available. However, these numbers cannot be taken as accurate reflections of needs and spending.

#### **TOPICS FOR ADDITIONAL RESEARCH**

Fiji's climate documents underscore that climate change will act as a stress multiplier on human health. That is, for those who are already vulnerable, who are without access to health care, or who are battling chronic health conditions, climate change will compound these existing vulnerabilities. Through several research efforts, the Fijian Government and the World Health Organization have identified, at a high level, how the impacts of climate change will introduce new infectious diseases, inflict new emotional and psychological traumas due to increased disaster events, and further strain an already underresourced healthcare system.

During consultations for this Snapshot, several key stakeholders emphasized that despite the existing research, additional research needs to be undertaken to identify who is uniquely vulnerable to the various climate impacts and what changes are needed to expand the

Table 30 | Climate Finance Snapshot - Adaptation and Human Health

| INTERVENTION<br>FROM THE CVA   | PROJECT TITLE  | ANNUAL CLIMATE<br>FINANCE NEEDS**<br>(FJD PER YEAR) | CURRENT ANNUAL<br>ALLOCATIONS*<br>(FJD PER YEAR) | ANNUAL ACTUAL<br>SPENDING*<br>(FJD PER YEAR) |
|--|--|---|--|--|
| Support the climate change and disaster management units within the Ministry of Health and Medical Services and Ministry of Education, Heritage and Arts | Climate Change and Health linkages under COP23                     | FJD 80,000  | FJD 75,463                                       | Not available                                |
|  | Strengthening Health Response Competency to Climate Change in Fiji |   | FJD 1,008,333                                    | Not available                                |
|  | "Health Systems Strengthening and Climate<br>Resilience"           |   | FJD 74,376                                       | Not available                                |
|  | Fiji Health Sector Improvement Programme                           |   | FJD 9,169,033                                    | Not available                                |
| Build capacity and<br>capability of the<br>Ministry of Health<br>and Medical Services<br>to manage health<br>infrastructure assets                       | Water, Sanitation and Hygiene Programme                            | FJD 50,000  | FJD 236,599                                      | Not available                                |
|  | Volunteer Scheme   |   | FJD 568,265                                      | Not available                                |
|  | Wash in Health Care Facilites (WHO)                                |   | FJD 45,902                                       | Not available                                |
|  | Wash in Health Care Facilites (UNICEF)                             |   | FJD 130,377                                      | Not available                                |
| TOTAL: ADAPTATION A  | AND HUMAN HEALTH   | FJD 130,000   | FJD 11,308,347                                   | Not available                                |

<sup>\*</sup> NOTE: The annual budget allocation provides an indication of the total possible amount of public climate finance that was available to the relevant activities and from all known funders. The availability of data on actual spending varies significantly by funder and could not been secured for every project that was implemented.

capacity of Fiji's healthcare system so that it can absorb the new health-related needs likely to be brought about by climate change. These outstanding research questions – which portions of the population are most vulnerable and how to adapt the capacity of the public health sector – are also critical to understanding and estimating Fiji's total climate finance needs for the health sector.

### **Gender and Climate Change**

Fiji's National Adaptation Plan prioritized the identification and integration of gender and human rights issues because:

"it is well established and accepted that exposure and sensitivity to climate change, as well as the capacity to adapt, vary substantially across social and economic groups. Additionally, it is well established and accepted that this is due to non-climatic factors and existing inequalities. Therefore, vulnerability to climate change cannot be comprehensively addressed without also addressing these underlying vulnerabilities."

The NAP also emphasizes supporting the welfare of women and girls, by ensuring their full, equal, and meaningful participation and access to opportunities is instrumental in maximizing their potential as agents of change and as drivers of climate-resilient development. Conversely, climate change will compound the existing economic, health, and environmental limitations that Fijian women are currently facing.

That being said, this Snapshot found very little data that shed light on how the current flows of climate finance are, or are not, supporting and empowering women in the face of growing climate impacts. Additional research should be done in this area, so as to inform the continued implementation of Fiji's National Adaptation Plan.

<sup>\*\*</sup> NOTE: Although the CVA provides several cost estimates on rehabilitating or upgrading hospitals, there are such significant data limitations that prevented the CVA from estimating the costs of integrating climate data into the healthcare system, expanding treatment for climate-induced diseases, and similar interventions identified in Fiji's NAP.

