

# ADDRESSING CLIMATE CHANGE IN MAURITIUS: FINANCING AND REFORM OPTIONS<sup>1</sup>

*This paper reviews the financing and reform options to address climate change adaptation and mitigation in Mauritius. It finds that there is a significant financing gap to meet the authorities' 2030 climate targets. The total financing gap represents 1.6 percent of GDP per year through 2030, with a higher share for adaptation than mitigation. Given Mauritius' limited fiscal space and elevated debt vulnerabilities, fully financing adaptation and mitigation will require a mix of external grants and concessional loans. However, donor financing has been limited and mostly directed to mitigation, despite adaptation being more critical in Mauritius. Mauritius could step up reforms to gain greater access to global climate funds and climate-related debt instruments, such as green bonds, which have recently seen growing demand including from small island states. Such reforms include, but are not limited to, improving the track record of planning, appraisal, execution, and reporting of climate-related projects, which is among the key eligibility criteria for climate financing. The paper discusses measures specific to Mauritius, with a focus at the government level.*

## A. Background

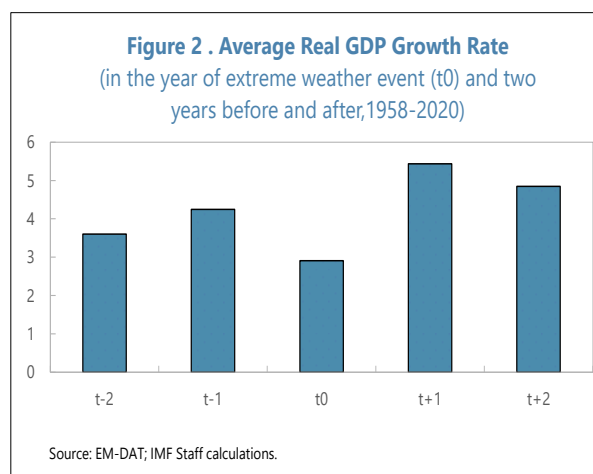
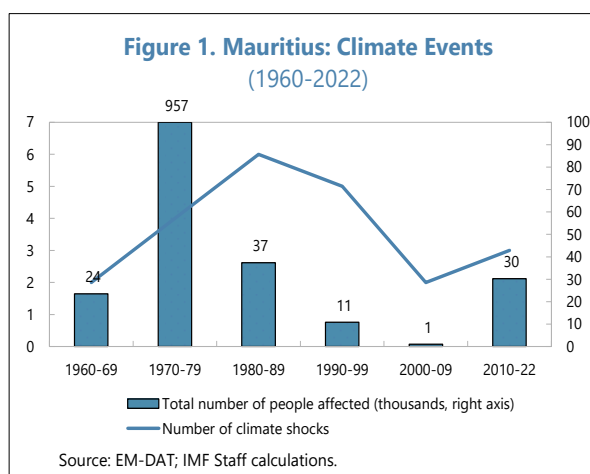
**1. Climate change has become a growing concern in Mauritius, threatening the prospects for long-term economic resilience.** Around 90 percent of Mauritius' households are aware of climate change, and a great majority perceives it as a threat, including to food and water security. The average sea level and mean temperature have increased over time. Climate-related shocks are frequent, with an average of four adverse events—predominantly tropical cyclones—taking place every 10 years. The last decade has seen a surge in the number of people affected by climate-related shocks in Mauritius, particularly in 2018 amid tropical storm *Berguitta* (Figure 1).<sup>2</sup> Calculations based on the Emergency Events Database (EM-DAT) show that, over the period 1960-2022, Mauritius experienced 22 extreme weather events, each causing socio-economic damage costing USD 160-245 million on average (1.5-2.3 percent of FY2021/22 GDP).<sup>3</sup> Real GDP growth in the years of extreme weather events was lower by 1.3 and 2.5 percentage points, on average, compared to one year before and after, respectively (Figure 2).<sup>4</sup> If unaddressed, climate shocks risk disrupting Mauritius' quest for social and economic resilience.

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<sup>2</sup> Climate change is a multidimensional phenomenon. While Figure 1 shows a declining number of extreme weather events between 1980 and 2009, the average temperature has increased consistently since 1961 (Figure 2), as well as the average sea level. The East Africa region has seen an increase in the number of extreme events, making this a risk for Mauritius.

<sup>3</sup> The lower average excludes the devastating cyclone *Gervaise* in 1975 that affected over 800 thousand people with a socio-economic damage estimated at over USD 1 billion. The monetary estimates are adjusted for inflation.

<sup>4</sup> The calculations are based on 12 (out of 22) extreme weather events during 1958-2020 selected such that the two years before and after the event do not coincide with another weather event shock. The analysis does not control for other potential factors that may have impacted growth along with weather shocks.



**2. To address climate change threats, the authorities have developed a policy framework and engaged in international initiatives.** A Climate Change Act entered into force in April 2021 aiming to ensure compliance with international climate change agreements and set national objectives and targets. In their 2021 *Nationally Determined Contribution* (NDC) document under the United Nations Framework Convention on Climate Change (UNFCCC) the authorities have set ambitious objectives to support climate change mitigation and adaptation. On mitigation, the key objectives by 2030 are to reduce the overall greenhouse gas (GHG) emissions by 40 percent, increase the share of energy generation from green sources to 60 percent, phase out the use of coal, and increase energy efficiency by 10 percent relative to 2019. On adaptation, the key objectives are to expand the knowledge base on climate change risks and their impact on communities and increase resilience of human activities by improving governance and enhancing disaster preparedness and response, notably for infrastructure. The adaptation framework also integrates policy interventions for Fisheries (Blue Economy), Tourism, Biodiversity, Forestry, Agriculture and Coastal Zone.

**3. While climate change entails multiple dimensions, *adaptation* is more critical for Mauritius.** UNFCCC data suggest that Mauritius accounts for only 0.01 percent of the global GHG emissions. Yet it is among the most exposed to natural disaster shocks and ranks low in terms of adaptive capacity (World Risk Index 2021). This calls for more urgent measures to strengthen adaptation to climate change. On average, adaptation accounted for around 78 percent of total budgetary climate change expenditure over the period 2011-14 and FY2017/18, while mitigation accounted for the remaining 22 percent. Nevertheless, Mauritius has implemented notable measures on mitigation.

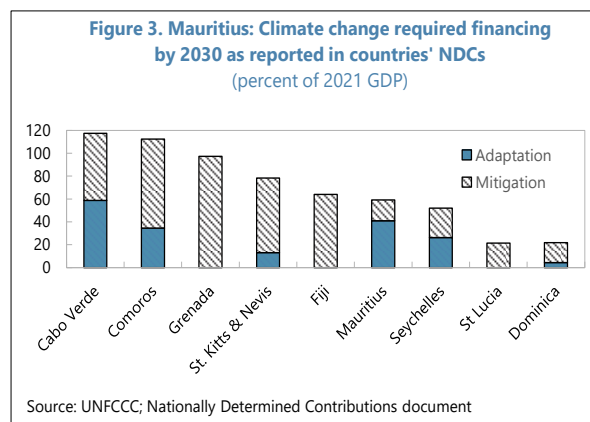
**4. The remainder of the paper is structured in three sections.** Section B discusses the financing gap and options to finance climate change adaptation and mitigation in Mauritius, with focus on accessing international climate funds. Section C discusses reforms to improve access to climate financing. Section D concludes.

## B. Financing Climate Change

### Assessing the Financing Gap

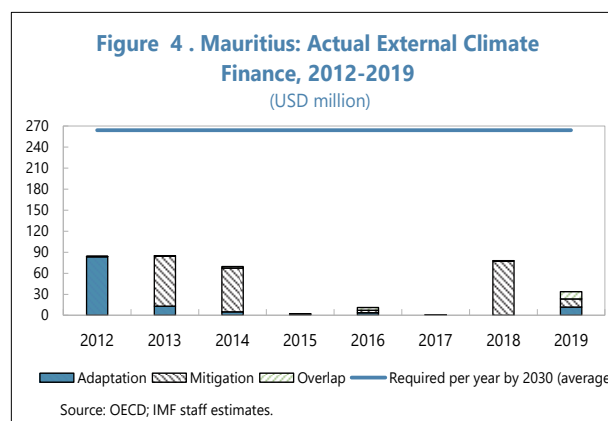
#### 5. Achieving authorities' climate goals will require significant financial resources, with adaptation taking the largest share.

Estimating the costs of climate adaptation and mitigation is a challenging exercise, mainly because there is no agreed quantitative adaptation target. There is a very wide range of estimates in the literature reflecting differences in targets, scenarios, assumptions, sector coverage, and investment periods (UN Adaptation Gap Report 2021).<sup>5</sup> The Mauritian authorities' own estimates stated in their NDC point to a required USD 2 billion and USD 4.5 billion for effective mitigation and adaptation, respectively, for a total of USD 6.5 billion by 2030. 35 percent of this amount would be covered by government resources and domestic private sector contributions, with the remainder covered by donors and other external sources. While Mauritius' required financing is among the highest in dollar terms across small islands states, it is significantly lower as a percentage of GDP (Figure 3).



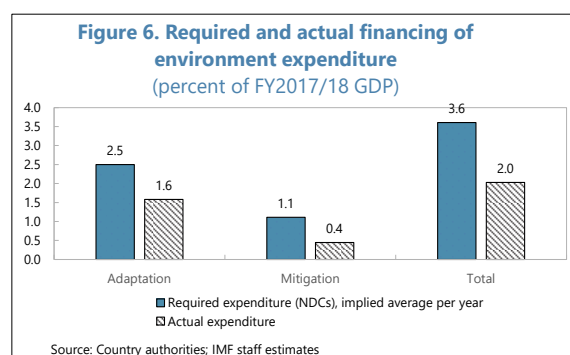
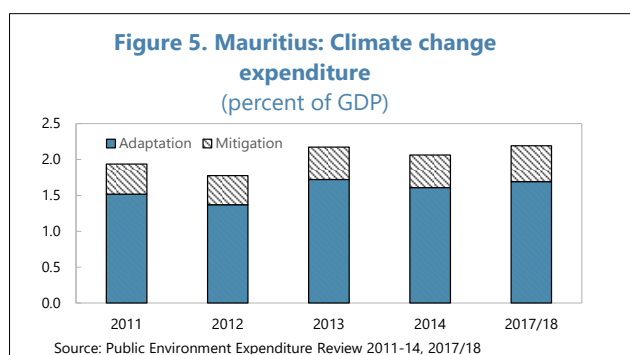
#### 6. External funds from bilateral donors can help fill the financing gap but have been limited relative to the authorities' expectations and mostly directed to mitigation.

If external donors were to finance 65 percent of total adaptation and mitigation needs as envisaged in the authorities' NDC—corresponding to USD 4.3 billion over FY2014/15–FY2029/30—this would require financing of USD 264 million on average per year, of which USD 183 and USD 81 million for adaptation and mitigation, respectively. However, actual external donor financing—mostly through grants and in a few cases through concessional loans—was significantly short of this threshold over 2012–2019, with combined disbursements for adaptation and mitigation peaking at around USD 85 million in 2013. Moreover, although adaptation is more critical than mitigation for Mauritius, adaptation received less disbursements over the period (Figure 4).



<sup>5</sup> For example, for developing countries, estimated total adaptation costs range from USD 155 to 330 billion per year by 2030 (UN Adaptation Gap Report 2021). For Pacific Island countries, average investment needs for climate-proofing infrastructure range from 6.5 to 9 percent of GDP annually. They are much higher for some countries such as Kiribati (over 25 percent of GDP) and Tuvalu (over 15 percent of GDP), as discussed in IMF (2021b) and IMF (2021c).

**7. Fully financing adaptation and mitigation will be nearly impossible without a mix of further external grants or concessional loans.** Actual total climate change expenditure in Mauritius is on average 2 percent of GDP per year, of which adaptation accounts for around 1.6 percent of GDP (Figure 5).<sup>6</sup> To achieve the NDC goals by 2030 (both adaptation and mitigation), staff estimates that the authorities would need to spend, on average, about 3.6 percent of GDP per fiscal year over the period 2014/15-2029/30 (Figure 6).<sup>7</sup> This leaves a potential financing gap of 1.6 percent of GDP per year on average (around USD 180 million per year). The financing gap for adaptation (0.9 percent of GDP) is higher than for mitigation (0.7 percent of GDP). Given Mauritius' limited fiscal space and elevated debt vulnerabilities, closing this gap will require a mix of grants and concessional loans.



### ***Filling the Financing Gap: The Role of Global Climate Funds and Bonds***

**8. Several international climate funds provide Mauritius with a tangible opportunity to raise additional climate financing.** There are several multilateral donor-funded climate funds worldwide committed to finance climate adaptation and mitigation through grants, concessional loans and guarantees. The most active includes the Adaptation Fund, the Global Environment Facility, and the Green Climate Fund (Table 1). *Climate Funds Update* tracks 27 climate funds as of January 2022, each aiming at different objectives and regions of focus. The combined amount of financing approved from such funds to several countries amounted to USD 3.5 billion and USD 3.7 billion in 2020 and 2021, respectively. However, the actual disbursements—USD 345 million and USD 84 million, respectively—fell significantly short of commitments.

<sup>6</sup> The precise figure was Rs10.3 billion (2.16 percent of GDP) in FY2017/18 according to the 2018 *Tracking Public Sector Environment Expenditure Assessment* under Mauritius' Ministry of Finance, Economic Development and Planning. In estimating the financing gap discussed next, given the lack of multi-year projection of climate change expenditure, it is assumed that actual expenditure will remain constant at 2 percent of GDP through FY2029/30.

<sup>7</sup> The annual average is computed by dividing the total adaptation and mitigation costs (stated in Mauritius' NDC) by the number of years in the period FY2014/15-FY2029/30. The ratio to GDP takes as a reference the nominal GDP in FY2017/18 which is the latest period for which data on annual climate change expenditure are available from PEER.

**Table 1. Mauritius: Selected Multilateral Climate Fund's Pledges, Approvals and Disbursements of Funds**

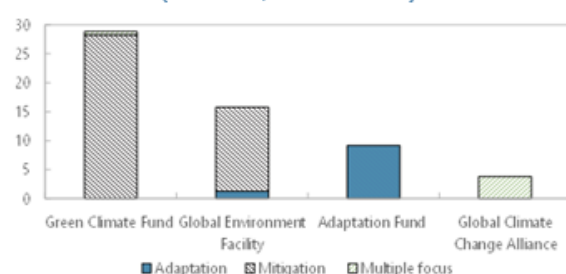
Fund	Fund focus	USD million			# of projects approved
		Pledge	Approval	Disbursement	
Adaptation Fund (AF)	Adaptation	1160.0	870.7	522.0	270
BioCarbon Fund Initiative for Sust. Forest Landscapes	Mitigation	367.4	98.3	0.0	5
Clean Technology Fund (CTF)	Mitigation	5783.2	5657.5	1806.2	166
Forest Carbon Partnership Facility - Readiness Fund	Mitigation	468.8	314.3	278.0	46
Forest Carbon Partnership Facility - Carbon Fund	Mitigation	874.5	0.0	0.0	0
Forest Investment Program (FIP)	Mitigation	748.6	617.7	276.1	53
Global Environment Facility (GEF4)	Multiple	1083.0	930.7	930.7	227
Global Environment Facility (GEF5)	Multiple	1152.4	825.9	485.9	233
Global Environment Facility (GEF6)	Multiple	1117.2	906.0	207.4	240
Global Environment Facility (GEF7)	Multiple	728.4	1559.4	0.0	180
Global Climate Change Alliance (GCCA)	Multiple	1652.8	891.4	540.1	107
Global Energy Efficiency and Renewable Energy Fund	Mitigation	281.5	223.6	89.1	19
Green Climate Fund IRM (GCF IRM)	Multiple	10322.1	9510.7	2332.9	641
Green Climate Fund (GCF-1)	Multiple	9999.2	833.0	92.3	31
MDG Achievement Fund	Adaptation	89.5	89.5	89.5	18
Partnership for Market Readiness	Mitigation	131.5	82.4	64.4	42
Pilot Program for Climate Resilience (PPCR)	Adaptation	1151.8	1021.9	734.7	106
Scaling Up Renewable Energy Program (SREP)	Mitigation	778.6	674.2	131.4	83
Special Climate Change Fund (SCCF)	Adaptation	379.8	284.0	180.7	72
UN-REDD Programme	Mitigation	344.9	342.0	336.5	39

Source: Climate Funds Update

**9. Mauritius has received some financing from climate funds, but the amounts have been small relative to the potential available and disproportionately aimed at mitigation.**

Mauritius has had slightly higher access to climate funds compared to many small island states. However, approved financing—only USD 58 million grant during the whole period 2008-20—is small given the potential available.<sup>8</sup> Moreover, only half of the approved amount was disbursed, possibly reflecting challenges in meeting disbursement conditionalities. In addition, while the authorities' NDC points to higher financing needs for adaptation, disbursed funds have disproportionately financed mitigation (Figure 7) which tends to be a permanent feature of most climate funds.

**Figure 7. Mauritius: Financing from Climate Funds by area of intervention (2008-20, USD million)**



Source: Climate Funds Update; IMF staff estimates

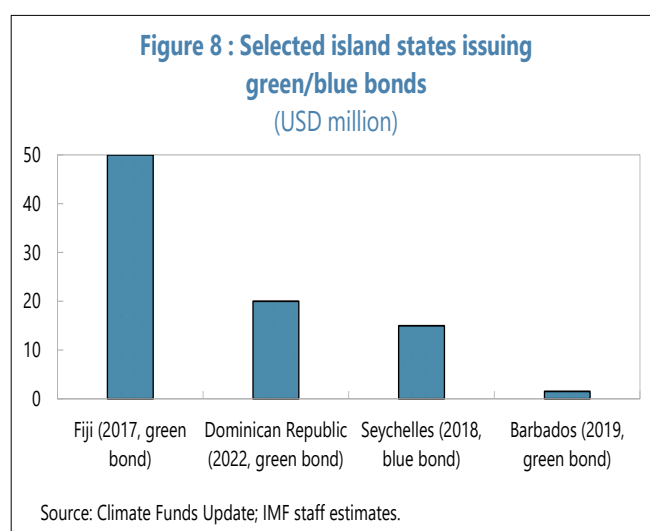
**10. To secure greater access to climate funds, Mauritius could explore a *direct access* modality which will require a process of *accreditation* by climate funds.** Almost all climate funds' disbursements to Mauritius during 2008-20 were made through indirect access modality whereby non-government multilateral agencies were the implementing actors of the underlying

<sup>8</sup> Financing for Mauritius during 2008-20 was approved by Green Climate Fund (USD 28.8 million), Global Environment Facility (USD 15.8 million), Adaptation Fund (USD 9.2 million) and Global Climate Change Alliance (USD 3.8 million), all in form of grants.

projects on behalf of the Government.<sup>9</sup> To broaden *direct* access, the authorities could step up efforts to secure Mauritius' *accreditation*, a process that enables countries to receive and manage funding directly without the need of an intermediating accredited agency.<sup>10</sup> This direct access modality would be a complement, not a substitute for, indirect access. However, accreditation is a lengthy, onerous, and complex process that requires countries to demonstrate a strong track record of planning, appraisal, execution, and reporting of climate-related funds, projects, and data.<sup>11</sup>

**11. Climate- and environment-related bonds are another alternative to mobilize financing with flexibility to address debt service shocks, but they are still at an infant stage in Mauritius.**

The so-called *green* and *blue* sovereign bonds are issued to finance climate- and ocean-related projects, respectively, often with some tax incentives to investors. While green bonds have mostly been issued by the World Bank and advanced countries, they are also trending among small island states like Mauritius (Figure 8).<sup>12</sup> For example, Fiji became the first developing economy to issue a USD 50 million sovereign



green bond in 2017 to finance projects related to crop resilience, flood management, and reforestation. Barbados and Grenada have also issued sovereign bonds with natural disaster clauses. Under the Barbados version, when an independent agency makes the declaration of a natural disaster, there is an immediate 2-year suspension of debt-servicing, and the bond maturity is automatically extended for two years (Barbados' NDC 2021; Ho and Fontana 2021; Anthony and others 2020). This allows access to financing, while providing space to respond to climate shocks that can impair the ability to service the bond. Another example is Seychelles, which issued the world's first sovereign blue bond in 2018, raising USD 15 million to finance marine projects, with a World Bank guarantee, and a loan from the Global Environmental Fund to cover interest payments (World Bank Press Release, 2018). Mauritius' green bond frameworks—the last of which released in

<sup>9</sup> Ten out of twelve disbursements during 2008-20 were directed to projects for which the implementing agencies were international non-government actors such as the UNDP and UNEP. It is important to align these projects with national authorities' priorities.

<sup>10</sup> Mauritius' Ministry of Environment, Solid Waste Management and Climate Change is currently in the process of becoming accredited as a National Implementing Entity under the Adaptation Fund. The Mauritius Renewable Energy Agency has expressed interest in getting accredited as a Direct Access Entity under the Green Climate Fund.

<sup>11</sup> Requirements for accreditation also include macroeconomic stability and availability of good climate data and knowledge. Mauritius is well positioned in these areas relative to most countries.

<sup>12</sup> Green bonds can also be issued by private corporations.

December 2021—are relatively new.<sup>13</sup> Making green and blue bonds more popular among potential issuers and investors in Mauritius could benefit from reforms.

## C. The Way Forward: Reforms to Expand Access to Climate Financing

### 12. Mauritius could secure higher financing through climate funds and green bonds by achieving accreditation and improving climate-related public investment management.

Successfully applying to climate financing is a complex process that requires countries to demonstrate a strong track record of planning, appraisal, execution, and reporting of climate-related funds, projects, and data. The authorities could consider setting up a detailed roadmap towards (i) securing accreditation to climate funds and (ii) strengthening the existing green financing framework to generate interest among potential green and blue bond issuers and investors.<sup>14</sup> This roadmap could entail several reforms. Below we focus on those concerning climate-related public investment management (PIM), which are more relevant in cases of government-led climate projects.

**13. While Mauritius' public infrastructure governance framework has steadily strengthened in recent years, further improvements would be helpful.** Following the 2017 *Public Investment Management Assessment* (PIMA), several PIM measures were introduced to strengthen institutional arrangements, procedures, and practices underpinning public infrastructure projects. In 2021 the authorities agreed to participate in a pilot of the *Climate Change Public Investment Management Assessment* (Climate PIMA), which yielded useful insights on how to further improve Mauritius' infrastructure governance to make it more resilient to the impact of climate change. The 2021 Climate PIMA identified several PIM practices and procedures that should be strengthened along the planning, allocation, and implementation phases of the public investment cycle.

**14. Specific regulations need to be fully developed to further support planning and coordination of climate-related investment projects.** National and sectoral strategies and plans for public investment are consistent with the government's climate objectives and targets, but they are mainly focused on adaptation. The *Disaster Risk Reduction Strategic Framework* and related action plan provides centralized guidance for ministries, departments, and agencies (MDAs) to plan climate change-related projects. Yet, there are neither central nor subnational government regulations, nor land-use or building codes that address potential climate concerns for infrastructure projects.

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<sup>13</sup> The Financial Services Commission of Mauritius issued Guidelines for the issue of Corporate and Green Bonds in Mauritius in December 2021. The Guidelines supplement the Guide to Sustainable Bond Issuance issued by the Bank of Mauritius in June 2021. These instruments provide an overview of the requirements and process for the issuance of green bonds.

<sup>14</sup> A green financing framework is a document created by the recipient of funds or issuer of bonds that clearly articulates the proposed financing and use of proceeds. For example, some principles and criteria of public climate finance are discussed by Climate Funds Update (2022). Also, voluntary best practice guidelines called the "Green Bond Principles" are discussed by the International Capital Market Association (ICMA 2021).

**15. Strong climate-change considerations need to be incorporated into the project appraisal and selection methodologies and criteria.** Large infrastructure projects are subjected to appraisal, including environmental impact analysis. However, the appraisal methodologies are neither standardized nor published, and they do not include climate change specific provisions. Similarly, there are no climate change specific criteria used for their selection.

**16. Portfolio management and oversight of public investment need to be strengthened.** All infrastructure projects are included in the budget, but their climate-related outputs and outcomes are not clearly identified, monitored, or reported. Although not fully operational yet, the government is implementing a new system for *Tracking Public Sector Environmental Expenditures* (TPSEE), as well as upgrading the Public Sector Investment Plan information technology system (i.e., e-PSIP) to monitor delivery progress of all infrastructure projects. The 2020 *Climate Change Act* introduces reporting mechanisms and a climate change database system to enable the assessment, monitoring and reporting of infrastructure projects related to climate change. However, ex-post reviews on infrastructure projects are not systematically conducted, except for externally financed projects. In addition, the methodologies for estimating maintenance needs of infrastructure assets do not address the impact of climate change.

**17. The impact of climate change risks on public infrastructure needs to be systematically assessed and monitored in the budget.** The *National Disaster Risk Management Strategy* (NDRMS) does not estimate the impact of climate change on infrastructure assets and does not include a plan to mitigate and respond to risks. The budget includes a relatively small contingency allocation to manage the impact of natural disasters on infrastructure assets, and the government does not publish any fiscal risk analysis.

**18. Based on this assessment, the following recommendations could be part of a framework to improve Mauritius' eligibility and access to climate financing:** (i) review and revise the regulations on land-use and building codes to incorporate provisions related to climate change; (ii) improve, within the new public investment manual, the templates for project appraisal and selection to further elaborate on climate change provisions; (iii) implement an expenditure classification and coding system to identify, monitor, and report climate change public sector expenditure, both current and capital,<sup>15</sup> (iv) strengthen the capacity of MDAs to implement systematic ex-post reviews of major infrastructure projects, particularly those with climate change implications; (v) develop maintenance manuals and guidelines for all MDAs involved in delivering and maintaining major infrastructure projects, including climate change provisions; and (vi) develop and publish a fiscal risk statement in the budget, including a chapter identifying climate-related risks.

## D. Conclusions

**19. Mauritius has a significant financing gap to meet its 2030 targets to address climate change adaptation and mitigation.** The total financing gap is estimated at 1.6 percent of GDP per

<sup>15</sup> The TPSEE is a step in the right direction, but it should be revised to better incorporate infrastructure investment



year by 2030, and it is higher for adaptation (0.9 percent of GDP) than for mitigation (0.7 percent of GDP). Given Mauritius' limited fiscal space and elevated debt vulnerabilities, fully financing climate change action will require external grants and concessional loans. Donor financing has been limited and, despite adaptation being more critical in Mauritius, financing has mostly been directed to mitigation. Mauritius could step up reforms to gain greater access to global climate funds and climate-related debt instruments, such as green bonds, which have recently seen growing demand, including from small island states. Such reforms could aim at improving the track record of planning, appraisal, execution, and reporting of climate-related projects, which is among the key eligibility criteria for climate financing. In the case of Mauritius, specific measures could include reviewing the regulations on land-use and building codes to incorporate climate change-related provisions; improving project appraisal and selection to further elaborate on climate change provision; implementing a tracking system to identify, monitor and report climate change spending; strengthening the capacity to implement ex-post reviews of major climate-related infrastructure projects; developing guidelines for all MDAs involved in delivering and maintaining major infrastructure projects, including climate change provisions; and developing and publishing a fiscal risk statement in the budget, including a chapter identifying climate-related risks.

## References

- Anthony, M., Impavido, G., and Selm, B., 2020, "Barbados's 2018-19 Sovereign Debt Restructuring—A Sea Change?". International Monetary Fund. IMF Working Paper 20/34.
- Climate Funds Update, 2022, "The Principles and Criteria of Public Climate Finance—A Normative Framework". February 2022. Available at: [https://climatefundsupdate.org/wp-content/uploads/2022/03/CFF1-Normative-CF-Framework\\_ENG-2021.pdf](https://climatefundsupdate.org/wp-content/uploads/2022/03/CFF1-Normative-CF-Framework_ENG-2021.pdf) (accessed in April 2022).
- Ho, Sui-Jim, Fontana, S., 2021, "Sovereign Debt Evolution: The Natural Disaster Clause". Emerging Markets Restructuring Journal. Issue No. 11—Spring 2021.
- International Capital Market Association (ICMA), 2021, "Green Bond Principles: Voluntary Process Guidelines for Issuing Green Bonds". June 2021.
- International Monetary Fund (IMF), 2021a, "Mauritius: Tax Policy for a Changing World". Fiscal Affairs Department. Technical Assistance Report.
- International Monetary Fund (IMF). 2021b. "Fiscal Policies to Address Climate Change in Asia and the Pacific." IMF Departmental Paper, Washington, DC.
- International Monetary Fund (IMF). 2021c. "Unlocking Access to Climate Finance for Pacific Island Countries." IMF Departmental Paper, Washington, DC.
- International Monetary Fund (IMF), 2021d, "Mauritius: Climate Change Public Investment Management Assessment (PIMA-CC)". Desk Study.
- Parry, I, 2011, "Reforming the Tax System to Promote Environmental Objectives: An Application to Mauritius". International Monetary Fund. Working Paper 11/124.
- Republic of Barbados, 2021, "Update of the First Nationally Determined Contribution (NDC)". Available at <https://www4.unfccc.int/sites/NDCStaging/Pages/All.aspx> (accessed in March 2022).
- Republic of Mauritius, Ministry of Finance and Economic Development, 2018, Tracking Public Sector Environment Expenditure (TPSEE). Final Report. April 2018.
- Republic of Mauritius, Ministry of Finance and Economic Development, 2016, Public Environment Expenditure Review (PEER) 2011-14. Final Report. March 2016.

Republic of Mauritius, 2021, "Update of the Nationally Determined Contribution (NDC) of the Republic of Mauritius". Port Louis. October 2021. Available at <https://www4.unfccc.int/sites/NDCStaging/Pages/All.aspx> (accessed in March 2022).

United Nations Environment Programme (2021). Adaptation Gap Report 2021: The gathering storm – Adapting to climate change in a post-pandemic world. Nairobi.

World Bank, Press Release: "Fiji Issues First Developing Country Green Bond, Raising \$50 Million for Climate Resilience". October 2017. Link: <https://www.worldbank.org/en/news/press-release/2017/10/17/fiji-issues-first-developing-country-green-bond-raising-50-million-for-climate-resilience> (accessed on April 1, 2022).

World Bank, Press Release: "Seychelles launches World's First Sovereign Blue Bond". October 29, 2018. Link: <https://www.worldbank.org/en/news/press-release/2018/10/29/seychelles-launches-worlds-first-sovereign-blue-bond> (accessed on April 1, 2022).

World Risk Report, 2021. Bündnis Entwicklung Hilft. Available at [www.WorldRiskReport.org](http://www.WorldRiskReport.org) (accessed on April 4, 2022)

### Data sources

Climate Funds Update 2022. Available at <https://climatefundsupdate.org/publications/climate-finance-regional-briefing-sub-saharan-africa-2020/> (accessed in March 2022).

EM-DAT, 2017, "EM-DAT: International Disaster Database," Centre for Research on the Epidemiology of Disasters (CRED), Université Catholique de Louvain, Brussels, Belgium. Available at [ww.emdat.be](http://ww.emdat.be).

Food and Agriculture Organization Corporate Statistical Database (FAOSTAT. Publicly available through GISTEMP data from the National Aeronautics and Space Administration Goddard Institute for Space Studies (NASA GISS): <https://data.giss.nasa.gov/gistemp/>

OECD Climate Finance Database. Available at <http://oe.cd/development-climate> (accessed in March 2022).

Statistics Mauritius, "Digest of Environment Statistics". 19<sup>th</sup> issue. Available at [https://statsmauritius.govmu.org/Pages/Statistics/ESI/Environment/Env\\_Yr20.aspx](https://statsmauritius.govmu.org/Pages/Statistics/ESI/Environment/Env_Yr20.aspx) (accessed in March 2022).