13 CLIMATE ACTION

GOAL 13
Take urgent action to combat climate change and its impacts

Context

For SIDS like Jamaica which are vulnerable to climate impacts, rapid shifts in key climatic variables, and heightened exposure of critical sectors and resources to climate impacts, underscore the urgency to act. Jamaica has been experiencing a warming trend in recent years with average minimum temperatures increasing faster than maximum temperatures (rate increase of 0.011 °C/year), and mean temperatures increasing at a rate of 0.008 °C/year (CSGM, 2021). Studies indicate a likely increase in the intensity of extreme weather events due to climate change and an increase in the Intensity of storms by 2.0 to 11.0 per cent with a shift in distribution toward higher wind speeds and potential damages (CSGM, 2021). The GOJ's efforts to mobilize resources for climate action, enhance institutional capacity to respond to climate change, and integrate climate and disaster risk management in all aspects of national planning, demonstrates that climate action is a priority.

Recent studies highlight the vulnerability of coastal and marine resources, water resources, human settlements and infrastructure, agriculture, tourism, human health and forests to climate change (FAO & GOJ, 2020; GOJ, n.d., 2020a). Economic modelling done to inform the development of Jamaica's Long-Term Low Carbon and Climate Resilient Strategy, shows that as climate change intensifies, the risks posed by different climate hazards will exacerbate Jamaica's economic vulnerability, particularly in coastal locations (World Bank, 2021). Jamaica's geography and high concentration of economic assets and activities in coastal areas heighten the risk posed, and actions over the current review period have sought to enhance resilience and disaster risk reduction through *inter alia* integration of climate change into national policy, strategies and plans. The financial risk to coastal areas is highlighted in the examples of Clarendon and Trelawny in Table 24.

TABLE 24: **THE PROJECTED ECONOMIC VALUE OF DAMAGE BY SELECT HAZARDS FROM CLIMATE CHANGE IN SELECT COASTAL AREAS OF JAMAICA.**

Climate Hazard	Economic Impact in select coastal areas of Jamaica
Hurricanes	A 1-in-100-year hurricane wind would cause between US $4.8 billion and US $5.9 billion in damages by 2050, depending on the climate change trajectory, up from US $3 billion today. The difference of 42.0 per cent is due to the increasing severity of storms rather than economic growth in exposed areas.
Coastal Flooding	Under a 2.4oC warming scenario, a 1-in-100-year coastal flood could cause US $329 million of damages in Clarendon and US $158 million of damages in Trelawny. In Clarendon, this level of damage is more than double the current expected damage from a coastal flood with the same return period (US $144 million).
Fluvial events	Damages from a 100-year fluvial event could reach as high as US $977 million under a 2.4oC scenario in Clarendon. This reflects the exposure of bauxite mining and agricultural processing industries in Clarendon, which is exposed to flooding both currently and in future scenarios. These damages again are more than double the current maximum expected damages from a 1-in-100-year fluvial event of US $415 million.

SOURCE: WORLD BANK & IBRD, 2021.

The review for the period 2018-2022 summarizes key achievements, issues and challenges concerning climate action.

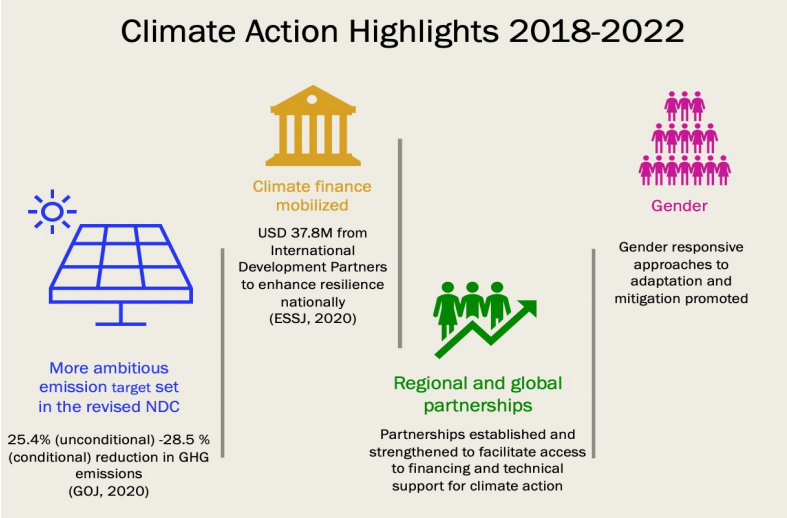

Figure 71: **Highlights, Climate Action 2018–2022**

Discussion

Target 13.1 Strengthening resilience and adaptive capacity to climate hazards and natural disasters

Disaster Risk Reduction

In 2019, droughts and related fires affected a number of parishes across Jamaica, with losses totalling over $60 million (PIOJ, 2020). Extreme rainfall events and resultant flash floods were a stark reminder of the country's disaster risk. Jamaica's progress towards reducing risks from climate-related hazards and natural disasters covered key areas, such

as strengthening telecommunication infrastructure, expanding the availability of data and decision-making tools and policy development. For example, through the National Risk Information Platform which is currently being developed, stakeholders will have access to hazard information (vulnerable locations, maps of hazard areas). The development of a National Vulnerability Ranking Index Tool and Platform is in its early stages. When completed, it will inter alia, allow users to examine vulnerability by sectors and regions. The National Risk Information Platform and the National Vulnerability Ranking Index Tool and Platform will support decision-making around the risks associated with climate change, an integral element of adaptive capacity.

The UNDP has assisted the Government towards meeting its obligation under the Vienna Convention for the Protection of the Ozone Layer, the Montreal Protocol on Substances that Deplete the Ozone Layer and the London Amendments (March, 1993) to which it is a signatory. Additionally, Jamaica ceded to the Copenhagen Amendment (November, 1997) and the Montreal and Bejiing Amendments (September 2003). In relation to these protocols, Jamaica has had the assistance of the UNDP in completely phasing out Chlorofluorocarbons (CFCs) and embarked on the phasing out of Hydro Chlorofluorocarbons (HCFC's) through the project, HCFC Phase Out Management Plan. Under Phase II, the country will address strategic areas related to local consumption of HCFCS.

Other achievements include:

- Cabinet's approval for the development of a **Disaster Risk Financing Policy** that seeks to create an enabling framework for mainstreaming disaster risk financing in resilience. If successfully implemented, the policy would improve Jamaica's ability to manage the economic burdens associated with disasters.

- Establishment of a US$285 million **Contingent Credit Facility for Disaster Risk Emergencies (CCF) with the Inter-American Development Bank** to widen and diversify the post-disaster risk financing options and strengthen Jamaica's effort toward resilience to natural disasters.

- **Bush Fire Warning Index** is being developed as a predictive tool that will allow for greater accuracy in locating and extinguishing bush fires. Increased occurrence of droughts makes the need to effectively address risks associated with bush fires critical, reducing loss of forests, lives and livelihoods.

- The transfer **of $2 billion to the Contingencies Fund in 2019** and the raising of the aggregate ceiling of the Fund from $100 million to the $10 billion.

- The signing of a **Memorandum of Understanding (MOU) between the GOJ and the USAID committing US$5 million** to assist the GOJ in funding its Disaster Risk Financing Initiative (2019)

- Launch of **the Green Bond Project (2021)** which seeks to raise funds on the domestic and regional debt capital markets to finance the implementation of climate-related or environmentally sustainable activities locally. These include engagements targeting energy efficiency; clean transportation; pollution prevention; sustainable agriculture, fisheries and forestry; protection of aquatic and terrestrial ecosystems; clean water; and sustainable water management

- **Issuance of a Catastrophe Risk Bond (2021**) which will provide the GOJ with financial protection of up to the US $185 million against losses from named storms for three Atlantic tropical cyclone seasons ending in December 2023. The GOJ was the first of any SIDS to independently sponsor such a bond (MOFPS, 2021).

Adaptation

Jamaica made notable gains in climate adaptation for the period under the review. The multi-year Technological Needs Assessment (TNA) Project, for example, which commenced in 2019, is a key initiative that supported Jamaica to craft a comprehensive strategy for adaptation and mitigation. It identifies the technologies that may be adopted to expand adaptation and mitigation in the agriculture, coastal resources, water and energy sectors at various levels and outlines approaches to promote uptake for select sectors (GOJ, 2020). Additionally, the Barrier Analysis and Enabling Framework (BAEF) of the TNA outlines the economic, social and political barriers to technology adoption and the enabling framework necessary for wider uptake nationally (GOJ, 2021a). Jamaica's TNA Roadmap also identifies renewable technologies as a key area. Success in this area will contribute to reduced emissions and the achievement of SDG 7.

Adaptation planning is central to building adaptive capacity. Jamaica received grant funding of US$1.1 million from the Green Climate Fund (GCF) to commence the preparation of its first National Adaptation Plan (NAP) (Spence, 2021). The NAP builds on outputs of the Pilot Programme for Climate Resilience (PPCR), comprised of a series of investment projects which collectively have supported resilience building through a web of adaptation initiatives. The NAP will include a private sector engagement strategy, a finance strategy, an investment plan for adaptation, and will promote gender equality in line with the UNFCCC's Gender Action Plan. In 2011, the UN Capital Development Fund initiated the LoCAL (Local Climate Adaptive Living) Facility to deliver climate finance solutions for local governments in developing countries (OpenAid, n.d.). At the local level, the initiative seeks to strengthen the capacity of municipal corporations to integrate climate action through capacity building and financing opportunities (Dawkins, 2021).

Through the PPCR, stakeholders now have a range of equipment and adaptation solutions to better respond to climate change; these include automatic weather stations, aquaponic systems in rural communities, and communal greenhouses that adopt a climate-smart design. Other capacity-building initiatives designed to strengthen individuals' and institutions' adaptive capacity included Soil Moisture Probe Operations Training for technical staff in select agencies, training in Disaster Risk Management and Climate Change for community members and training of Policy Analysts in climate-proofing for national policies (Change Focal Point Network Reports, 2021). These initiatives have strengthened institutional capacity for climate data collection, processing and information dissemination for the attainment of Target 13.1.

Enabling Climate Action: critical capabilities and resources

Skills and Networks

- Persons trained: climate-smart agriculture practices; and applying weather and climate services to agriculture
- Farmers' groups established.

Infrastructure

- Micro-check dams to manage water flow and reduce soil erosion during extreme rainfall events installed.
- Distribution networks expanded to strengthen rainwater harvesting systems
- Weather radar installed

Planning

- Annotto Bay Community Disaster Risk Management (CDRM) Plan revised to a Comprehensive Disaster Risk Management and Climate Change Adaptation Plan to enable stakeholders to better address communities' risks.

Highlights taken from three key initiatives focused on building adaptive capacity at the individual and institutional levels: 1) Improving Climate Data and Information Management Project; 2) GOJ/Adaptation Fund Programme and 3) Accelerating the Uptake of Climate Smart Agriculture in ACP Countries Project.

BOX 7: **ENABLING CLIMATE ACTION: CRITICAL CAPABILITIES AND RESOURCES**

Other achievements include the adaptation stocktake where over 150 existing adaptation initiatives were identified at the national and local levels. The stocktake serves as a baseline of adaptation strategies/tools nationally to inform actions that may be up scaled. The stocktake exercise will assist in understanding the current landscape of climate change adaptation initiatives to identify gaps and opportunities for further action. One specific intended use is to position Jamaica to better leverage climate finance (IISD, 2022) to support resilience building.

Target 13.2 Integrating climate change measures into national policies, strategies, and plans. Mobilizing climate finance and empowering national stakeholders to participate in climate action were among the key initiatives

Jamaica uses an integrated approach to national development planning. Climate change adaptation and mitigation are important cross-cutting elements for all sectors. Efforts are made to mainstream hazard risk reduction, sustainable land and natural resource management in national development planning, strategies and programmes. At the sector level, key achievements in selected sectors for the period under review are described in Table 25.

TABLE 25: **EXAMPLES OF INTEGRATION OF CLIMATE CONSIDERATIONS INTO POLICIES, STRATEGIES AND PLANS AND RELATED ADAPTATION INTERVENTIONS**

Sector	Result
Health	A Climate Action Plan for Health for Caribbean Countries was developed to build awareness of stakeholders in the health sector and strengthen actions in the sector regionally.
Water	1810 MICRO check dams were installed in the Upper Rio Minho Watershed Area (URMWA) as part of land management and erosion control.
Transport	The National Transport Policy to include climate change considerations; and the development of a proposal to procure electric vehicles to promote mitigation efforts was revised.
Meteorology	Commenced development of early warning systems for bush fires due to more severe droughts because of climate change.
Tourism	Risk assessments were conducted to develop risk profiles and risk maps for resort areas across the island and expansion of approach to climate resilience in the tourism sector.

SOURCE: CLIMATE CHANGE FOCAL POINT NETWORK REPORTS (2021)

The Climate Change Policy Framework which governs national climate planning underpins these and other actions to support resilience building. Coordination will be critical to the successful implementation of the climate change policy and other related policies. The Climate Change Focal Point Network[137] publishes CC-Connect, a bi-annual electronic newsletter that shares information about the climate-related initiatives being undertaken by the government and its partners. The publication is a useful tool for keeping implementers informed and highlighting opportunities for collaboration.

Jamaica submitted its updated Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC) in June 2020. The related NDC Implementation Plan was launched in 2021 and outlines the

137 The CCFPN has representation from all ministries and relevant departments and agencies (MDAs). The focal points are responsible for coordinating, monitoring, evaluating and reporting on the development of their sectoral climate action.

strategies to achieve targets in the NDC. The sectoral scope of this NDC was broadened to include emission reduction targets in the energy, forestry, and land-use sectors. The addition of the land-use sectors and forests is significant given the critical role they play in climate change adaptation and mitigation. The revised targets for 2030 are ambitious—1.8 to 2.0 $MtC0_2e$[138], up from 1.1 to 1.5 $MtC0_2e$ in the last NDC, representing a 25.4 per cent reduction relative to business-as-usual emissions in 2030 without international support (unconditional)[139] and 28.5 per cent reduction relative to business-as-usual emissions in 2030 conditional[140] upon international support (GOJ, 2020b). The updated NDC prioritizes gender-responsiveness and is subject to all relevant laws, guidelines, policies and programmes that are designed to increase inclusiveness and fairness, including the National Policy for Gender Equity (GOJ, 2020b).

Jamaica benefited from the NDC Partnership Climate Action Enhancement Package (CAEP) and completed consultations to inform the implementation of 11 sub-projects. Activities under this initiative included an assessment of climate expenditure analysis and modelling to support the introduction of climate-responsive budgeting and the preparation of the Long-term Low Emissions and Climate Resilient Development Strategy (2050 Pathway Strategy), which will also support Jamaica in achieving its NDC targets. Jamaica's Integrated Resource Plan for the Electricity Sector was also revised in 2020 and proposes the integration of renewables to save costs and reduce emissions.

In 2018, Jamaica initiated the revision of the Climate Change Policy Framework (CCPF); it was approved as a Green Paper in 2021. The framework presents strategies to effectively respond to climate change impacts up to 2030 (GOJ, 2021b). The updated policy expands on the framing of gender in climate planning nationally and highlights its integration as important for gender-equitable development, in line with the Vision 2030 Gender Sector Plan and the National Policy for Gender Equality (GOJ, 2021b). Key agents of implementation include the Climate Change Focal Point Network (CCFPN) through the various ministries, departments and agencies (MDAs) represented and the Policy Analyst Network (PAN)[141]. The PAN leads the policy development and analysis process whereas the FPN members shape policy through research and facilitate implementation at the institutional level.

Climate Leadership

Jamaica further strengthened its commitment to climate action through key leadership roles globally and regionally; these include Co-chair of the Nationally Determined Contribution Partnership, a global coalition of 193 members including countries and institutional partners; Co-chair of the UN Climate Change Financing Initiative with France, a political initiative to mobilize climate financing to support the implementation of the Paris Agreement, and in the last financial year, Jamaica assumed the Chair of the Board of Governors of the Caribbean Community Climate Change Centre (CCCCC). Jamaica's leadership in climate action in the Caribbean was also demonstrated in the country's pioneering of several initiatives in the region - the development of a financing risk policy, the launch of a Green Bond Project and the first to submit its updated NDC.

138 Metric tonne of carbon equivalent.

139 Unconditional contribution is what countries could implement based on their own resources and capabilities.

140 Conditional contribution" is one which countries would undertake if international means of support are provided, or other conditions are met.

141 The Policy Analyst Network (PAN) is a group of approximately 30 to 40 officials in the various Ministries, Departments and Agencies of the Government of Jamaica dedicated to sharing best practises in policy analysis. The PAN was formally launched by the Prime Minister of Jamaica on June 13, 2001 at Jamaica House, Kingston, Jamaica.

Climate Finance

Jamaica accessed climate finance through channels such as the Green Climate Fund (GCF), the Global Environment Facility and the Clean Development Mechanism, as well as through bilateral agreements with partners such as Canada, Japan, the United Kingdom and Germany. From its collaboration with the GCF, Jamaica prepared the Country Programme for Engagement and the GCF approved three readiness projects. The projects, valued at US$2.1 million, are aimed at, inter alia, strengthening Jamaica's institutional capacity to plan, access and deliver climate finance (PIOJ, 2020).

Through the GCF Readiness Facility, Jamaica accessed funding support for the development of the country's National Adaptation Plan (NAP). In addition, Jamaica is also spearheading innovative financial tools to fund climate action, such as the development of the Green Bond Project with Stock Exchange (GOJ, 2020a) - an initiative pioneered in the Caribbean by Jamaica. These actions are complemented by Jamaica's preparation of its National REDD+ Readiness Strategy; key outputs to date include the gap analysis of the legislative, policy and institutional frameworks governing sectors relevant to reducing emissions from deforestation and forest degradation. These actions point primarily to the integration of climate change in national policies and strategies toward target 13.2.

ODA accessed through bilateral and multilateral arrangements further strengthened the country's response to climate impacts with total funding support of $442.9 million (US $3.3 million) (PIOJ, 2020). There was an increase in the funding to the environment and climate change from bilateral arrangements with Canada (72.0 per cent), along with increases in funding from FAO and the GEF Small Grants Programme of 47.0 per cent and 39.0 per cent respectively. Jamaica joined the Coalition of Finance Ministers for Climate Action, which was launched in April 2019. The coalition was designed to accelerate climate action in economic and financial policies through collaborative strategies (World Bank, 2021). Jamaica was the first country in the English-speaking Caribbean to join the coalition.

Partnerships

Other key partnerships that provided the financial and technical support to advance climate action included the NDC Partnership Economic Advisory Programme, the Coalition of Climate Resilience Investment (CCRI) and the UNICEF Partnership**.** Through the UNICEF Partnership, Jamaica completed a climate landscape analysis for children. Those initiatives complemented the ongoing bilateral and multilateral arrangements with the United Nations Environment Programme (UNEP), the United Nations Development Programme (UNDP), and Global Affairs Canada (GAC) that provided the funding support to strengthen the enabling framework for climate action through policy development.

Regarding private sector engagement, in 2019, the Climate Change Division coordinated a regional study, "Barriers to Private Sector Investment and Capital Mobilization for Climate Change Mitigation and Adaptation in Jamaica". The results support Jamaica's efforts to engage the private sector actors in climate action and mobilize domestic finance to address climate change. The strategy also supports a cross-cutting approach to development planning across SDGs (GOJ, 2020a).

Jamaica commenced discussions with the Coalition of Climate Resilience Investment (CCRI) as a potential public sector partner. Under the CCRI**,** which brings together global private sector companies, governments and multilaterals, stakeholders pledged that 70.0 per cent of the US$90.0 trillion, expected to be invested in infrastructure globally between 2019 and 2030, will go to low and middle-income countries exposed to climate risks.

Cross-cutting Issues and interlinkages with other SDGs

Youth engagement

Youth are key stakeholders in climate action. Research on youth climate activism in Jamaica suggests that there is great potential for youth to amplify efforts to address climate change locally (Daze, 2021; Swaby, 2020). Additionally, given that youth is a cross-cutting priority of the SDGs, efforts to engage youth in climate planning will be beneficial to other SDGs and will support the sustainability of current efforts at resilience building (UNICEF, 2020). Recent efforts by agencies such as the Climate Change Division indicate a growing awareness of the value of youth participation and leadership for advancing Goal 13. Examples of youth engagement during the review period include the appointment of Climate Change Youth Ambassadors, the designation of a Youth Ambassador to the NDC process and the hosting of a Post COP Youth Consultation in 2019 (GOJ, 2021b). The Climate Change Division (CCD) also continued its engagement with the Jamaica Climate Change Youth Council, the youth arm of the Jamaica Climate Change Advisory Board.

Gender Equality

Jamaica acknowledges that gender equality and empowerment of women and girls are central to the linkages between population and development, and the achievement of the SDGs (PIOJ, 2020). Regarding climate change, gender is prioritized in the climate change agenda through the UNFCCC, in fulfilment of its obligations under the Convention and to implement the Gender Action Plan (GAP), Jamaica took concrete steps to make gender considerations an essential element of climate action. These include:

- Capacity building initiatives targeted at Gender Focal Points and members of the Climate Change Focal Point Network to provide tools and guidelines on addressing the intersection of climate and gender in policymaking and policy implementation.
- Preparation of a gender analysis of the Climate Change Policy Framework (commissioned by the Climate Change Division), the results of which were used to identify gaps and entry points for gender integration in national-level climate action.
- Submission of a readiness proposal, *Facilitating a Gender Responsive Approach to Climate Change Adaptation and Mitigation in Jamaica*, to facilitate gender-responsive approaches to climate change adaptation and mitigation (GOJ, 2020a).
- Preparation of Protocol and Guidelines to Mainstream Gender in Disaster Risk Management and Change Adaptation (2021).

Challenges and Lessons Learnt

Stakeholders acknowledge that climate change, though not a new or emerging issue remains an urgent concern for Jamaica. The Climate Change Policy Framework highlights key challenges:

- **High incidence of poverty** and related social issues may undermine the whole-of-society approach to climate action (World Bank, 2020). Poverty enhances some communities' exposure to negative climate impacts and diminishes their adaptive capacity. Reducing Jamaica's poverty

rate (12.6 per cent in 2018)[142], therefore, is integral to Jamaica's capacity to manage climate change impacts. There is a great need for financial support to improve the lives of Jamaicans experiencing poverty which exacerbates climate vulnerability (FAO and GOJ, 2020)

- **Limited financial resources:** Competing national priorities limit the availability of domestic finance for climate action. While Jamaica has received support from global funding mechanisms such as the GCF and GEF, more sustainable sources of finance are needed to bolster the national capacity to address climate change (UNFPA, 2021). Additionally, Jamaica's limit to taking on additional debt will have implications for the types of instruments employed for projects (GOJ, 2020a).

- **Gaps in policy and legislative frameworks:** The data suggests that gaps in the policy framework for mitigation will hamper efforts to increase emission targets for the country. The existing legal framework for climate action needs to be modernized and supporting regulations put in place to allow for adjustments required nationally to meet adaptation and mitigation targets (GOJ, 2021b).

- **Limited research capacity and technological development***:* Significant progress has been made to strengthen research capacities nationally; however, capacity and information gaps remain a challenge (GOJ, 2020a). In the forestry sector for example, gaps remain in areas such as identification and propagation of drought-resilient species, mitigating against the increase in forest fires due to drier temperatures; research on crop species that can adapt to fires (stakeholder consultation).

- **The COVID-19 Pandemic***:* Challenges and delays in procurement and rollout of planned activities and fewer opportunities for stakeholder consultations affected short-term implementation targets over the period 2020–2022. The pandemic also highlighted weaknesses across several areas of the supply chain; this has implications for the movement of supplies in an emergency and the scarcity of supplies.

Key lessons learned over the review period include:

- **Data integration:** Increased use of climate data and information including climate scenarios in development planning, specifically the preparation of local-level development orders, local sustainable development plans and disaster risk management plans. The availability of real-time climate data and information is also being used to improve forecasting, disaster response and early warning systems.

- **Climate responsive budgeting:** Increased recognition by the government of the need to integrate climate change considerations into national financial management. Several policies, such as the Transport Policy, and plans are currently being updated/revised to include climate change and resilience-building considerations. These will be underpinned by the development of the National Adaptation Plan (NAP).

142 Jamaica Survey of Living Conditions 2018

Way Forward

Jamaica's approach to combating climate change has been strategic, collaborative, integrated, inclusive and ambitious. Initiatives that strengthen policies, enhance integration across actors and sectors, facilitate stakeholders' participation and build their capacity, are in keeping with the principle of sustainable development.

Target 13. 1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Notable achievements focused on continued capacity building of key institutions, mobilizing climate finance and identifying the technologies needed to support climate resilience. Also, Jamaica created avenues to include the youth's voice in the climate response. A draft Comprehensive Disaster Risk Management Policy and Action Plan was prepared in 2020, and regulations were instituted to enable the Disaster Risk Management (DRM) Act to provide an opportunity to fully integrate climate change adaptation and DRM activities nationally and locally. This initiative also provides for the development of standard guidelines and tools to screen for disaster risks and climate change issues in the development approval process, as well as preparation of continuity of governance plans.

As part of the strategy for improving emergency response capacity under the Vision 2030 Jamaica—National Development Plan the GOJ intends to train volunteers to support disaster emergency response. The volunteers will work in tandem with volunteers from the Jamaica National Voluntary Program for Disaster Risk Management to serve in the pre-and post-impact phases of a disaster (Artica, 2022).

Target 13.2 Integrate climate change measures into national policies, strategies and planning

The country's climate ambition is evident in the revised NDC and the progress made in the development of the NAP—both of which are an indication of strong global commitment and national priorities. Progress towards revising the Climate Change Policy Framework (CCPF) and preparing the 2050 Long-term Low Emissions and Climate Resilient Development Strategy are important milestones for ensuring climate measures become standard practice in development planning. The application of the Systematic Risk Assessment Tool (SRAT) which was developed by the Coalition of Climate Resilience Investment (CCRI) will facilitate the mapping of Jamaica's assets to ensure risk assessment data is integrated into national planning systems.

Resource requirements

To advance climate action, Jamaica will need resources in four key areas: sustained financial support for adaptation and mitigation measures, data to inform adaptation planning, data management infrastructure and technical expertise as seen in Figure 70.

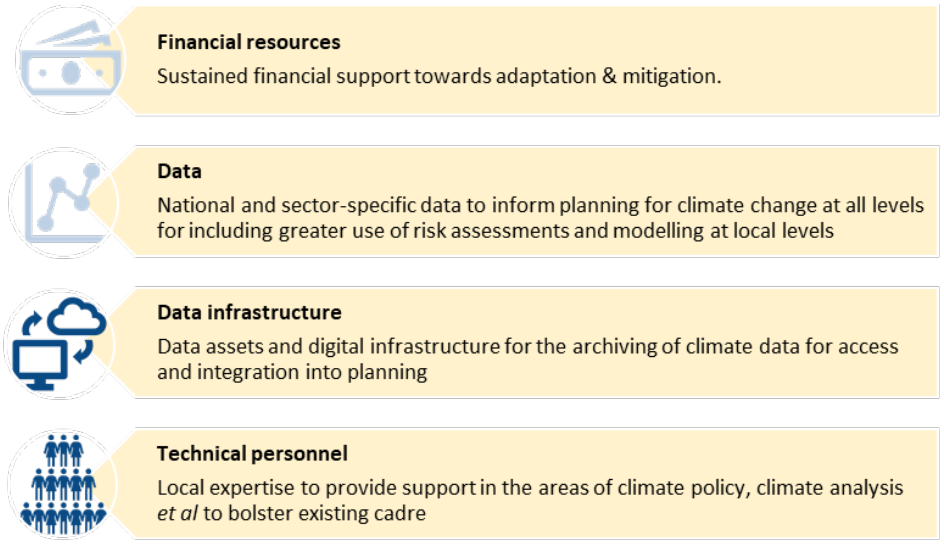

FIGURE 72: **RESOURCE REQUIREMENTS TO ADVANCE CLIMATE ACTION IN JAMAICA**

Regarding technical expertise, stakeholders identified that there is a need for more robust climate change analysis to be done within the government's ministries, departments and agencies. Most training initiatives, they note, are largely at the introductory level. Suggestions are that individuals trained at the tertiary level and recruited and retained in the public sector would enhance Jamaica's capacity to develop and implement national-level actions and meet global commitments (GOJ, 2020).