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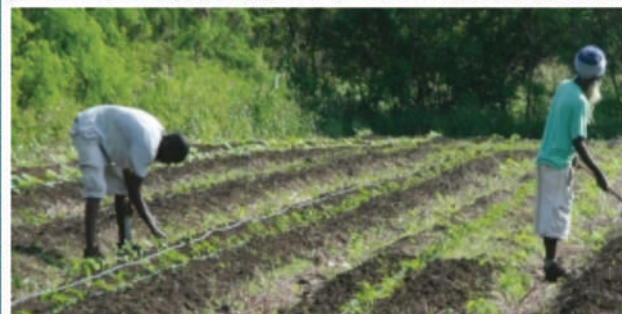


Federal Ministry for the  
Environment, Nature Conservation  
and Nuclear Safety

## POLICY BRIEF

# Linking Social Protection with Climate Resilience & Adaptation

An Example of how  
Weather-based Sovereign Risk  
Insurance and Microinsurance  
can Contribute to Effective  
Social Protection




International  
Labour  
Organization



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The “Climate Risk Adaptation and Insurance in the Caribbean (CRAIC)” project is led by the Munich Climate Insurance Initiative (MCII), in collaboration with CCRIF SPC (formerly the Caribbean Catastrophe Insurance Facility), DHI, ILO and Munich Re. The project is funded by the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMU).

This brief has been prepared by CCRIF SPC to contribute to the Climate Risk Adaptation and Insurance in the Caribbean project (CRAIC) Phase II.

*The views and opinions expressed herein are those of the authors and do not necessarily reflect those of the other CRAIC project consortium partners, including MCII, ILO, DHI, and the BMU.*



# EXECUTIVE SUMMARY

This briefing presents a set of policy recommendations to assist governments in the region to consider social protection from a climate change perspective and identify how ministries of social protection can contribute to increased resilience to the adverse impacts of climate change through the use of catastrophe risk insurance both at the sovereign and microinsurance levels – building on existing mechanisms such as CCRIF SPC (formerly the Caribbean Catastrophe Risk Insurance Facility) and the Climate Risk Adaptation and Insurance in the Caribbean project (CRAIC).

## Caribbean countries are highly vulnerable to climate risks

Countries in the Caribbean face a range of primary natural hazard risks, particularly earthquake and tropical cyclone risks, as well as secondary risks from flooding and landslides, storm surge and wave impacts, tsunamis and other climate-related risks such as excess rainfall and drought. It is expected that climate change will exacerbate the risks from hydrometeorological hazards and pose a significant threat to and drain on public resources in the region.

## Linking social protection and climate change adaptation

Currently, most social protection systems in Caribbean states are inadequately prepared to respond to emergencies such as natural disasters, resulting in a range of consequences for the poor and most vulnerable. It is important for social protection systems to recognize the risks arising from natural hazards and climate change and to address these dimensions as part of a holistic and more sustainable effort to reduce vulnerability. Linking climate risk insurance with social protection policies and strategies provides an opportunity for Caribbean governments to reduce the burden of publicly financing post-disaster activities, and to ensure access to resources by the most vulnerable to help them better cope with climate impacts.

## Climate risk insurance is an important tool for climate change adaptation

Caribbean governments are strengthening their comprehensive climate risk management programmes, which include risk identification and assessment as well as risk reduction/mitigation. However, risk mitigation actions can be expensive or politically difficult to implement. Consequently, a range of risk financing instruments is required to handle different layers of risk ranging from the frequent but less damaging events to the rare but catastrophic disasters. Low frequency high impact events such as hurricanes are best handled by transfer of risk through instruments like insurance or catastrophe bonds.

Climate risk insurance can play numerous roles – at the individual, community, country and regional levels – in providing security against the loss of assets and livelihoods from disasters. The incorporation of special-purpose climate risk insurance is particularly important in the Caribbean since the level of traditional insurance in the region is low. A study conducted in 2017 determined that there is potential demand for a microinsurance product for the fisheries sector. The results of the study can be extrapolated to provide a sense of how other vulnerable groups may view insurance as protection against climate risks.



### Key recommendations for governments to align social protection and climate adaptation strategies

Some key recommendations for governments to align social protection and climate adaptation strategies to advancing sustainable livelihoods are:

- Strengthen the design of social protection strategies to be more sustainable – these strategies should be inclusive and effective to protect individuals from a range of risks that may occur during the course of their life – such as life cycle risks (old age poverty, disability, temporary or permanent incapacity for work, death of a family member, pregnancy), health risks (illness, accidents, epidemics), economic risks (unemployment, price shocks) as well as natural and ecological risks (droughts, floods, tropical cyclones and earthquakes)
- At a national level, ensure that social protection policies and strategies are aligned with a country's overall climate adaptation response alongside interventions in such other sectors as agriculture, tourism, infrastructure, and disaster risk management among others
- Include ministries responsible for disaster management and climate change in the development of social protection policies and align poverty reduction and climate resilience objectives with the aim to unlock potentially powerful synergies to advance sustainable livelihoods of the poor and most vulnerable

### Specific recommendations related to climate risk insurance

- Incorporate sovereign climate risk insurance as part of social protection policy and strategy in order to enable payouts that may be received after a natural disaster to assist the most affected individuals or communities and to reduce the vulnerability of economic sectors that are dependent on low-income vulnerable workers.
- Make a case for governments to purchase sovereign climate risk insurance and support access to microinsurance as part of their overall financial protection strategy – this will involve putting the necessary legislative and regulatory systems in place and laying the groundwork for the more specific alignment with social protection strategies. Under the Caribbean Oceans and Aquaculture Sustainability Facility (COAST), which was launched in 2019, governments purchase a parametric product that is akin to microinsurance for the fisheries sector. The product incorporates an adverse weather component that addresses interruption of fisherfolk's economic activity and a tropical cyclone component that addresses direct damages to fishing assets such as boats, gear etc. If either component of a country's policy is triggered, the funds will be provided by CCRIF to the Ministry of Finance, followed by a rapid transfer to the fisherfolk and other affected parties throughout the country's fishing industry – this is a clear example of how governments can participate in microinsurance for the most vulnerable
- Incorporate microinsurance as part of social protection strategy, for example, within local government departments that would allow them to purchase group policies and use payouts to assist the most affected individuals or communities

when the need arises. In the case of the Livelihood Protection Policy (LPP), offered under the Climate Risk Adaptation and Insurance in the Caribbean (CRAIC) Project, the purchase of group policies would enable effective scaling up of the LPP allowing for the low-cost and rapid expansion of both the number of beneficiaries and the policy's benefits when there is a need.

- Facilitate the organization and purchase of group or block policies by professional groups for their members, for example, fisher or farmer cooperatives, or community groups
- Provide an enabling environment to increase access to microinsurance by vulnerable persons, for example, by providing subsidies for policy premiums; waiving associated taxes on insurance premiums; incorporating microinsurance within existing government rebates and subsidies for the fisheries, agriculture and tourism sectors, focusing on low-income workers
- Include climate risk insurance requirements in policies covering areas such as fisheries, agriculture or MSMEs (micro-, small- and medium-sized enterprises) – for example, revise national policies to require purchase of microinsurance as part of the registration and licensing process for fishers and farmers etc. The Government of Jamaica is investigating this option in its efforts to upgrade the fisheries sector.
- Support the sensitization of vulnerable low-income persons to the role that insurance and particularly microinsurance products can play in reducing their vulnerability to climate- and weather-related events – this will involve overcoming the general perception that insurance is too expensive and increasing understanding of how these new and different products work. Education and sensitization, involving the government as well as non-governmental actors, is a critical part of CRAIC's promotion of the Livelihood Protection Policy.





## Purpose of this Policy Brief

The main purpose of this policy brief is to present a set of policy recommendations to assist governments in the Caribbean to consider linkages between social protection and climate change adaptation, and identify how social protection programmes can contribute to increased resilience to the adverse impacts of climate change through the use of catastrophe risk insurance at the sovereign and microinsurance levels. The paper also presents the case for how existing mechanisms such as the sovereign level catastrophe risk insurance offered by CCRIF SPC (formerly the Caribbean Catastrophe Risk Insurance Facility) and microinsurance products offered by the Climate Risk Adaptation and Insurance in the Caribbean project (CRAIC) can be employed as part of effective financial protection, social protection and poverty reduction strategies in the face of a changing climate.

## Caribbean Countries are Particularly Vulnerable to Climate Risks

Countries in the Caribbean face a range of primary natural hazard risks, particularly due to earthquakes and tropical cyclones, and to a lesser extent volcanic eruptions. The region also faces secondary risks from flooding and landslides, storm surge and wave impacts, tsunamis and other climate-related risks such as excess rainfall and drought. In addition, they have intrinsic economic, environmental and social vulnerability due to their small size, a limited natural resource base, a high level of dependence of major economic sectors on the natural environment, fragile ecosystems, and many have limited institutional capacity and low levels of insurance coverage to attenuate the financial impact.

In these small states, single catastrophes can have a disproportionate effect on both the national and regional

economies and, therefore, adequate consideration of catastrophe hazards is an important priority for governments in their pursuit of sustainable development.

The most significant natural hazard risk in the Caribbean is hurricane risk, particularly because of the high hurricane frequency and severity in the region, and also due to the possibly large span of territories that can be impacted by any single such event. Hurricanes have had an inordinate impact on the economies of Caribbean countries, many of which depend on tourism and agriculture as their main economic drivers.



**Hurricanes Irma and Maria caused billions of dollars in losses across the Caribbean in 2017**

During Hurricane Ivan in 2004, two Caribbean nations – Grenada and the Cayman Islands – each suffered economic losses, which totalled close to 200 per cent of their annual GDP and a further 7 countries were also severely impacted. Regional losses totalled over US\$6 billion for the event – reducing economic growth prospects and perpetuating a cycle of poverty. Similarly, 2017 was another defining moment for the Caribbean, which suffered devastation caused by two category 5 hurricanes within two weeks of each other.

Damage and loss due to these storms is being estimated at approximately US\$130 billion and affected 18 countries, including CARICOM (Caribbean Community) member countries, their populations and social and economic infrastructure. These catastrophic events

resulted in CARICOM declaring its ambition for the Caribbean to become the first climate-resilient zone in the world<sup>1</sup>.

The preliminary findings of the Caribbean Economics of Climate Adaptation Study, led by CCRIF in collaboration with other Caribbean institutions and supported by McKinsey & Company and Swiss Re, confirmed that the damage potential under current climatic and economic conditions is already high, with annual expected losses totalling up to 6 per cent of GDP in some countries. In a worst case scenario, climate change has the potential to increase these losses by 1 to 3 percentage points of GDP by 2030. For the countries in the region, this is comparable in scale to the impact of a serious

<sup>1</sup> At the "CARICOM-UN High-level Pledging Conference: Building a more Climate-Resilient Community" held in November 2017, CARICOM declared its goal of the Caribbean becoming the first climate-resilient region in the world (<https://news.un.org/en/story/2017/11/636862-new-and-better-deal-needed-climate-resilience-caribbean-un-chief-tells-donor>)

economic recession – but on an ongoing basis. Apart from the social and environmental disruption, the fiscal balance of these states is simultaneously severely undermined. At the national level this translates to cuts in revenue, an increase in spending needs, worsening public finances and increasing debt.

## Linking Social Protection and Climate Change Adaptation

Just as small island developing states, such as those in the Caribbean, are disproportionately affected by the negative impacts of climate change, it is widely acknowledged that the poor within these countries will be particularly disadvantaged as they have less capacity for response and adaptation. Consequently they are at an increased risk of losing life, livelihoods and assets due to climate change impacts and often must rely on adverse coping mechanisms with long-term negative implications for human development, such as selling assets and living in unsafe environments. Furthermore, extreme weather shock will make it difficult for poor households to recover between increasingly frequent disasters. Efforts to reduce the vulnerability of communities and individuals are addressed through social protection systems, climate adaptation programmes and disaster risk reduction strategies.

In the Caribbean, social protection programmes typically include social insurance programmes that primarily provide pensions – contributory programmes with employer and employee contributions as well as non-contributory pensions that typically target the elderly poor; national health insurance; cash transfer programmes for the poor, including public assistance and conditional cash transfer schemes such as the Programme of Advancement through Health and Education (PATH) Programme<sup>2</sup> in Jamaica. Social investment funds and basic needs trust funds continue to play an important role in project financing and improving social protection policy for Caribbean states. However, most social protection systems in the Caribbean are inadequately prepared to respond to emergencies, such as natural disasters or long-term impacts from climate change, with particular consequences for the poor and vulnerable.

Therefore, social protection systems must recognize the risks arising from natural hazards and climate change, and address

**Social Protection** refers to policies and actions which enhance the capacity of poor and vulnerable people to escape from poverty and enable them to better manage risks and shocks. Social protection directly reduces poverty, stimulates the involvement of poor women and men in the economy and contributes to social cohesion and stability (adapted from OECD).

**Climate Change Adaptation** refers to actions taken to help communities and ecosystems cope with a changing climate through a reduction in harm or risk of harm associated with climate variability and climate change.

**Disaster Risk Reduction** aims to reduce the damage caused by natural hazards such as earthquakes, floods, droughts and cyclones, by addressing the factors that cause disasters, e.g. reducing exposure to hazards, lessening vulnerability of people and property, and improving preparedness for adverse events.

these dimensions as part of a holistic and more sustainable effort to reduce vulnerability. At the same time, existing climate adaptation strategies must incorporate increased focus on the poor and most vulnerable<sup>3</sup>.

Effective social protection programmes will now require coordination with new partners, such as agencies responsible for coordinating climate change and disaster risk management efforts, which are often not involved in developing social protection strategies and programmes. In planning these programmes, the costs of climate responsive social protection should be assessed against the costs likely very high, of not addressing vulnerability to the impacts of climate change.

Indeed, in the last few years, social protection mechanisms and strategies have been called upon to help communities affected by climate related shocks, oftentimes in the form of cash transfers and public works for the affected population. Following a natural disaster, there exists consensus amongst policy makers and the international development community, that during the recovery process, getting cash support to the affected population quickly has positively impacted people's sense of safety and security. It has been a prominent first sign of the government's support in a time of acute need. Studies have shown that social protection can be more cost-effective, transparent and rapid in delivering relief than traditional humanitarian aid delivery mechanisms<sup>4</sup>.

This implies that a social protection strategy and its associated mechanisms should be positioned to occupy a key space on the climate change adaptation agenda. This linkage will open up the possibilities for social protection programmes across the region to benefit from climate financing – from both bilateral and multilateral sources. By integrating climate and disaster risk considerations into the planning and design of social protection programmes, the sector can help prevent poor and vulnerable households from falling deeper into poverty, reduce their overall risk exposure, and contribute to long-term adaptation to climate change. At a national level, social protection should therefore form part of a country's overall adaptation response alongside interventions in other sectors as agriculture, tourism, infrastructure as well as disaster risk management.

## Climate Risk Insurance is an Important Tool for Climate Change Adaptation

Caribbean governments are strengthening their disaster and climate risk management programmes, which include risk identification and assessment as well as risk reduction/mitigation. Risk reduction or mitigation is aimed at reducing vulnerability to specific hazards, thereby reducing the physical impact associated with natural hazards and climate change. Whilst countries often view “preparing” as an expensive proposition, with subventions to the environment and disaster risk management sectors oftentimes being below optimal, countries need to be mindful that being inadequately prepared is far more costly when faced with a natural disaster. Indeed, governments in the region continue to invest in and implement a range of disaster risk mitigation strategies and actions including among others:

- Mainstreaming climate change issues into sectoral policies (e.g. tourism, agriculture, etc) at the national level and other decision-making processes

<sup>2</sup>The Programme of Advancement Through Health and Education is a conditional cash transfer (CCT) programme funded by the Government of Jamaica and the World Bank with the aim of delivering benefits by way of PATH cash and bursary grants to the most needy and vulnerable.

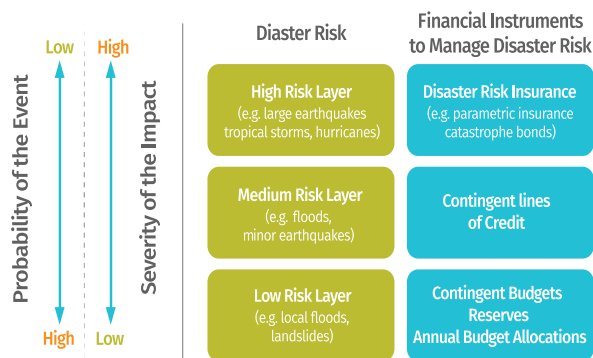
<sup>3</sup>World Bank 2013. Tailoring Social Protection to Small Island Developing States

<sup>4</sup>Dercon S, Clarke D. (2016) Dull Disasters: How planning ahead will make a difference, Oxford University Press.

- Adopting best practices for climate change adaptation
- Creating and strengthening national platforms for hazard risk reduction
- Modernizing legal frameworks to address hazard risk reduction and vulnerability
- Establishing measures to incorporate hazard risk reduction in land use practices and the development of human settlements
- Implementing modern building codes
- Putting in place the necessary infrastructure such as sea walls to protect coastlines etc.
- Conducting vulnerability impact assessments of communities and determining best practices and actions to reduce future vulnerability

But the question is - Is risk mitigation enough? In the face of a changing climate the answer is no. And as we seek to better protect our populations, economic assets, economic growth prospects and advance to a more sustainable future we must take into account risk transfer and financial protection strategies. Consequently, a range of risk financing instruments is being introduced in countries to handle different layers of risk ranging from the frequent but less damaging events, to the less frequent but catastrophic disasters. Low frequency-high impact events such as hurricanes are best handled by transfer of risk through instruments such as parametric insurance or catastrophe bonds, whilst medium frequency-medium impact events can be better addressed through contingent lines of credit or contingent credit facilities. Today in the region, many countries are developing disaster risk financing policies and strategies as part of their overall risk management strategy. Such strategies allow governments to reduce their budget volatility through a combination of self-retention (such as dedicated domestic reserve funds) and risk transfer instruments (such as insurance that CCRIF provides).

Governments are therefore investing in disaster risk financing strategies as a means of better protecting their financial response capacity in the aftermath of disasters and reduce their economic and fiscal burden. Left unchecked, the economic impact of disasters can generate large losses that disrupt long-

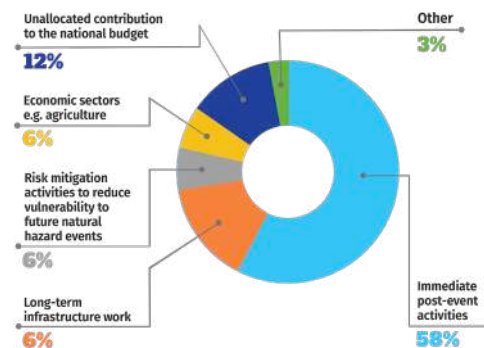


**The Different Layers of Financial Instruments for Consideration in Disaster Risk Financing Strategy<sup>5</sup>**

run economic growth trajectories, and by extension, our pathway to a sustainable future. To some extent, one can compare natural disasters to financial crises – both are typically exogenous events that represent covariate shocks across a country and households. Economic damages from natural hazards can jeopardize the health of national economies at a level comparable to or greater than that of financial crises. But natural disasters also destroy human and physical capital stocks of countries – something that financial crises do not.

Climate risk insurance can play numerous roles – at the individual, community, country and regional levels – in providing security against the loss of assets and livelihoods from disasters, providing certainty for weather-affected public and private investments, easing disaster-related poverty and spurring economic development.

At the sovereign level, 19 countries in the Caribbean – and 3 in Central America – are members of CCRIF and each year purchase tropical cyclone, and/or earthquake and/or excess rainfall parametric insurance policies from the Facility. Since its inception in 2007, CCRIF has made 41 payouts totalling US\$152 million to 13 of its 22 member governments, all within 14 days of the event. These payouts support governments to in turn assist their populations – communities, businesses and key sectors such as education, tourism agriculture etc. after a natural disaster (see chart below for how payouts during the period 2007 - 2017 have been used).



**Uses of Payouts by Category for all Countries**

A rough assessment of the direct and indirect beneficiaries of these payouts show that over 2.5 million persons in the Caribbean

**Climate Risk Insurance** is insurance that provides coverage against damage or losses caused by extreme weather events, whose frequency and intensity is increasing due to climate change. In direct insurance schemes, individuals are insured and obtain payouts when their policies are activated. In indirect schemes, a number of countries join together to form risk pools and insure each other against climate risks. If a country's policy is triggered, the government then uses the payouts to benefit citizens.

<sup>5</sup> From Caribbean and Central American Partnership for Catastrophe Risk Insurance, World Bank, 2014

and Central America have benefitted from these payouts after a disaster. Use of payouts over the years has included providing food, shelter and medicine for affected persons; stabilizing drinking water plants; providing building materials for persons to repair their homes; repairing critical infrastructure such as roads and bridges as a means of enabling movement and access in and out of communities; payment of government salaries for critical first responders to facilitate the injured being cared for; and support for the agriculture sector among others.

The incorporation of climate risk insurance is particularly important in the Caribbean since the level of traditional insurance in the region is particularly low. According to MunichRe, more than 40 per cent of the direct losses from natural disasters are insured in developed countries. At the same time, MunichRe estimates that less than 10 per cent of losses are covered by insurance in middle-income countries, and less than 5 per cent are covered in low-

income countries. Climate risk insurance, such as that provided by CCRIF at the sovereign level and climate risk microinsurance such as the Livelihood Protection Policy (LPP) provided under CRAIC, is important to increase access to insurance to hedge against the adverse impacts of natural disasters in the small island and coastal states of the Caribbean and Central America.

Linking climate risk insurance with social protection policies provides another unique opportunity for Caribbean governments to reduce the burden of publicly financing post-disaster activities, while at the same time facilitating access by the most vulnerable citizens to resources that can reduce their vulnerability and help them cope with climate impacts. An example of this linkage is the Caribbean Ocean and Aquaculture Sustainability Facility (COAST) which has been introduced by CCRIF and the World Bank to allow Caribbean countries – in the first instance Saint Lucia and Grenada – to benefit from access to parametric insurance in the fisheries sector. The

### Climate Risk Insurance at the Sovereign Level

#### CCRIF SPC

In 2007, the Caribbean Catastrophe Risk Insurance Facility was formed as the first multi-country risk pool in the world. It was designed as a regional catastrophe fund for Caribbean governments to mitigate the short-term cash flow problems and limit the financial impact of devastating hurricanes and earthquakes by quickly providing financial liquidity when a policy is triggered. Now restructured as a segregated portfolio company, CCRIF SPC offers parametric policies for earthquakes, tropical cyclones and excess rainfall to 21 Caribbean and Central American governments. In 2019, CCRIF in collaboration with the World Bank and the US State Department introduced coverage for the fisheries sector in two member countries – Saint Lucia and Grenada.

Unlike indemnity insurance, CCRIF's parametric insurance products are insurance contracts that make payments based on the intensity of an event (for example, hurricane wind speed, earthquake intensity, and volume of rainfall) and the amount of loss calculated in a pre-agreed model caused by these events. Parametric insurance enables payouts to be made very quickly after a hazard event. CCRIF's rapid payouts help members finance their initial disaster response and maintain basic government functions after a catastrophic event.

Since inception, the facility has made 41 payouts to 13 member governments totalling US\$152 million including a total of US\$62 million to 10 member countries during the 2017 Atlantic Hurricane Season. All payments were made within 14 days of the event.

### Climate Risk Insurance at the Individual Level (Microinsurance)

#### The Climate Risk Adaptation and Insurance in the Caribbean project (CRAIC)

CRAIC addresses climate change, adaptation and vulnerability by promoting climate risk insurance as an instrument to manage and transfer risk. It is being implemented in Jamaica, Grenada, Saint Lucia, Belize and Trinidad and Tobago.

The project developed a parametric microinsurance product called the Livelihood Protection Policy (LPP). Targeted at individuals, the LPP is designed to help protect the livelihoods of vulnerable low-income individuals such as small farmers, tourism workers, fishers, market vendors and day labourers, by providing quick cash payouts following extreme weather events (specifically, high winds and heavy rainfall). The livelihood protection policy is designed to reduce vulnerability and sustain the livelihoods of low-income communities. Policyholders (mainly small farmers) in Jamaica and Saint Lucia have received payouts allowing them to get back on their feet and realize concrete earnings as soon as possible. For example, following Hurricane Matthew in 2016, thirty-one individuals in Saint Lucia received payouts totalling US\$102,000 on their Livelihood Protection Policies.

Project partners are the Munich Climate Insurance Initiative (MCII), CCRIF SPC, International Labour Organization (ILO) Impact Insurance, DHI and local insurance and financial institutions. Funding for the project is provided by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. (BMU) under the International Climate Initiative (IKI).





COAST insurance policies provide coverage for fisherfolk and other players in the fisheries industry to enable them to recover quickly after weather-related events.

Climate risk insurance and weather-index insurance instruments can help governments, individuals and communities to plan in advance for severe weather events and agree on rules and processes for securing and disbursing budget funds before a natural disaster occurs.

Three examples of catastrophe/disaster risk financing and climate risk insurance are central to these efforts in the Caribbean: CCRIF SPC at the sovereign level; the Climate Risk Adaptation and Insurance in the Caribbean project (CRAIC) at the individual level (microinsurance) and COAST, which is a sovereign product that provides coverage at the individual level (akin to microinsurance). These initiatives support the efforts led by the G7 InsuResilience Initiative to promote and design the implementation of climate risk transfer solutions to build resilience. The overall intent is to increase the number of

people worldwide with access to direct or indirect climate risk insurance coverage by up to 400 million by 2020 in vulnerable developing countries as a means of managing climate change-related disaster risk through insurance<sup>6</sup>.

The parametric nature of both types of policies provided by CCRIF and CRAIC allows policymakers on one hand, and vulnerable persons on the other hand, to have access to a set of risk transfer programmes which could be rolled out precisely when they are needed by the affected population.

Payouts to LPP holders provide some stability to the financial situation of these persons after storms through the injection of quick liquidity, thereby allowing them to avoid adopting coping strategies that could lead them deeper into poverty and also helping them, when their livelihoods are affected, without them having to wait for help from “external” sources like the Government. In other words, it enables farmers, for example, to have a source of immediate funding to undertake activities such as replanting, draining fields and reconstructing irrigation systems. This innovative insurance coverage is a clear example of proactive planning for climate adaptation at the individual level and augers well during these severe fiscal challenges that Caribbean countries are facing.

#### Parametric (or index-based) insurance

Parametric (or index-based) insurance products are insurance contracts that make payments based on the intensity of an event (for example, hurricane wind speed, earthquake intensity, volume of rainfall) and the amount of loss calculated in a pre-agreed model caused by these events. Therefore payouts can be made very quickly after a hazard event. This is different from traditional insurance settlements that require an on-the-ground assessment of individual losses after an event before a payment can be made.

**Microinsurance** is the protection of low-income people against specific perils in exchange for regular premium payments proportionate to the likelihood and cost of the risk involved. Weather-indexed microinsurance refers to policies typically designed for low-income populations which pay out after pre-determined triggers, such as excess rainfall or high wind speed, have been met. These payouts are free to be used for repairing damage to physical assets or to help individuals compensate for losses in livelihood.

#### Demand for Microinsurance by the Most Vulnerable for Climate-Related Events

While the LPP is available in the region and available for individuals to purchase directly, there are a number of challenges. Chief among these are: the weak insurance tradition among individuals, making it difficult to sell insurance products to low-income persons; and the lack of in-depth understanding about the LPP and microinsurance among the institutions selling the products as well as potential consumers. This alone presents a case for

<sup>6</sup> G-7 Mandate, 2015

governments to participate in microinsurance schemes as a means of closing the protection gap and ensuring access to insurance by the most vulnerable.

A study conducted by CCRIF in 2017 in Saint Lucia and Jamaica assessed the demand for the Livelihood Protection Policy and microinsurance in general amongst fishers and other stakeholders in the fisheries industry, and examined possible avenues for Governments and organizations such as cooperatives to facilitate access to microinsurance.

Fisherfolk expressed deep interest in the concept of insurance for their livelihoods – as provided by the LPP – as opposed to traditional life insurance and asset insurance, with which they were more familiar but in which they were not necessarily interested, and typically did not purchase. Furthermore, in general, fishers are usually unable to secure life or asset insurance as insurance companies feel they are high risk clients. Perceived benefits of the LPP as identified by the fisherfolk included the quick LPP payouts and low cost, as well as the flexibility in how the funds can be used once a payout is received. Parametric insurance policies are less expensive than regular insurance as they avoid many of the transaction costs associated with providing a large number of very small insurance contracts in the traditional manner. The LPP would benefit fishers who do not own assets since it is aimed at covering losses to livelihoods. Also, the LPP could be used as collateral to obtain a bank loan – a benefit of the policy, even in the absence of it triggering a payout.

The study also was able to illustrate the expressed interest of governments in both sovereign climate risk insurance and microinsurance specifically for the fisheries sector, which is characterized by a large number of artisanal fishers operating in small boats. In addition, there are large numbers of people employed by spin-offs from the fishing industry such as gear making and repair, engine repairs, boat building, fish processing workers, and fish vendors and middlemen. Although the contribution to GDP is relatively low, this sector sustains the livelihood of many families especially in rural communities.

## How Government Can Play an Enabling Role in Incorporating Climate Risk Insurance within Social Protection Strategies

Governments can formalize the allocation of funds from national climate risk insurance to social protection if they opt to pre-determine either through their fiscal policy framework, or through their disaster risk management strategies, the percentage of a payout that could be apportioned to those most affected by the natural hazard and align this with the country's social protection strategies and programmes. While insurance payouts are made at the national level, the ultimate impact on beneficiaries depends significantly upon the availability and quality of mechanisms to transfer and translate those funds into rapid assistance. This pre-disaster planning is a core requirement of the African Risk Capacity (ARC), a multi-country risk pool for

### Contingency Planning at the African Risk Capacity

Member countries must develop an operational plan for how the funds will be used in the event of a payout. Contingency plans focus on leveraging existing programmes (such as a social cash transfer) that can be scaled up in the event of a disaster. There is a concerted effort to integrate ARC's plans within the national contingency plans, where they exist, to ensure that ARC is embedded within the national programmes and emergency response.







African countries (modelled on the CCRIF example) in which members must develop an operational plan for how the funds will be used in the event of a payout<sup>7</sup>.

In the Caribbean, governments have used payouts received under their CCRIF policies within the context of social protection by assisting the most affected individuals or communities. For example, following the passage of Hurricane Matthew, the Government of Haiti reported that it was able to help 1.4 million persons affected by the event with nearly 50 per cent of the CCRIF payout, which totalled US\$23.4 million. Uses of the payouts by recipient countries over the years have included:

- Provision of food and shelter to displaced persons
- Purchase of tarpaulins for houses
- Purchase of medication
- Providing support to the agriculture sector – for example, Saint Lucia used its payout of US\$3.7 million following Hurricane Matthew to provide resources to small farmers to strengthen and rebuild, thereby supporting the country's agriculture sector
- Rebuilding of schools, as was the case of the Turks and Caicos Islands following Hurricane Maria in 2017

While these interventions have been aimed at vulnerable persons in these countries, CCRIF member governments are not required to indicate the specific strategies used to target the beneficiaries.

In addition to providing assistance to individuals or households, governments can use payouts from sovereign insurance products to benefit economic sectors that include highly vulnerable workers. For example, payouts could be used for overarching interventions after a severe weather event, such as clearing and rehabilitating fishing beaches to enable fishers to resume their work. An actual example also mentioned above is the Government of Saint Lucia, which used its payout of US\$3.7 million following Matthew to strengthen and rebuild the agriculture sector.

Governments should also consider the inclusion of microinsurance in its social protection strategies, for example, by purchasing group policies (or blocks of policies) and using those policy payouts to assist the most affected persons or communities. By purchasing a group policy, a government can determine which communities and individuals therein could receive payouts. This would be based on pre-determined criteria for selection of communities/individuals and the levels of damage after an event. Severe storms and tropical cyclones can inflict varying degrees of damage or loss on individuals depending on their location, or the path the weather system travelled. One key benefit is the speed with which the payout is received – typically within one to two weeks. The requirement of governments and other aid agencies to address various priorities means that delays in emergency funding result in severe delays for helping individuals and providing a humanitarian response. These delays can cause individuals to resort to undesirable management strategies, such as selling income-generating assets or borrowing at high interest rates. A group LPP policy can provide a basic level of immediate assistance for individuals to help them with their most urgent needs.



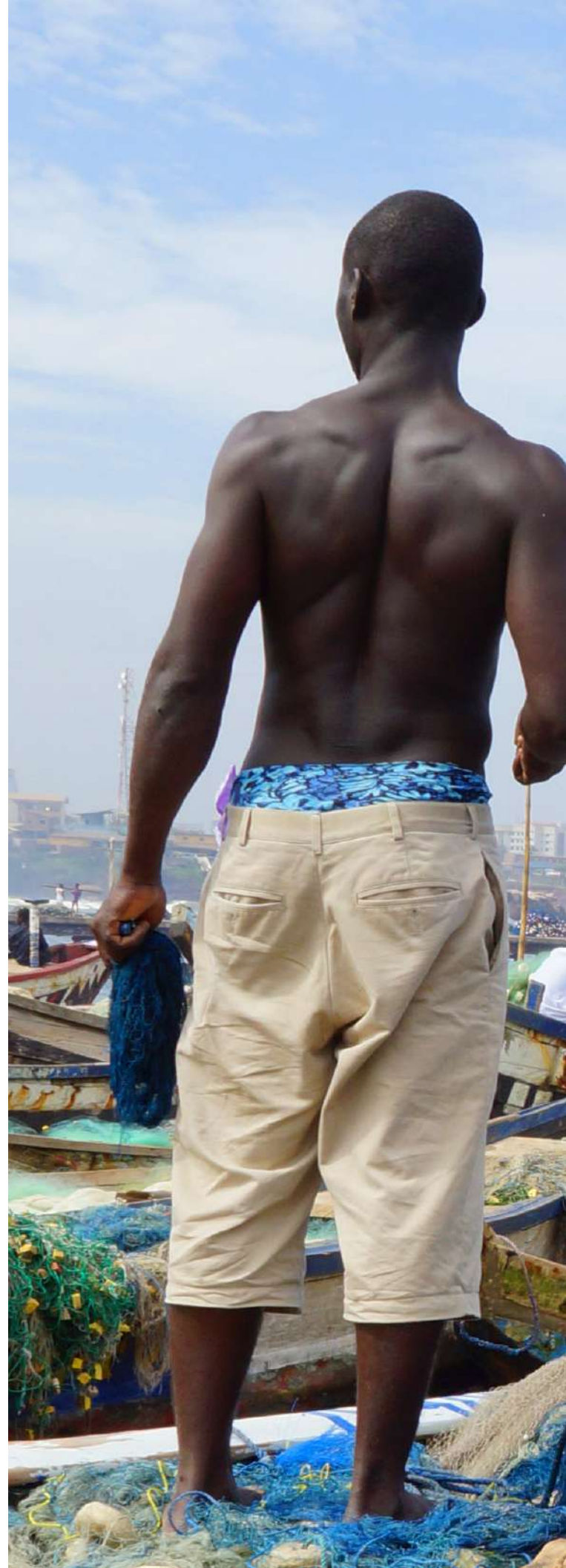
## **Towards Advancing Sustainable Livelihoods - Key Recommendations for Governments to Align Social Protection and Climate Adaptation Strategies**

Globally, policy responses, such as those aligned to social protection that aim to address the underlying causes of poverty and vulnerability and are able to reduce the increasing risk of climate shocks and the impoverishing effects of disasters, are increasingly gaining traction. Climate adaptation strategies include both risk reduction and risk transfer options such as insurance. Some key recommendations for government action to link social protection systems and climate adaptation are presented below, with an emphasis (for the purpose of this paper) on climate risk insurance as a key component of climate adaptation. Many of these recommendations were suggested by participants (government representatives and other individuals) in the study that assessed the demand for microinsurance in Jamaica and Saint Lucia.

- Strengthen the design of social protection strategies to be more sustainable – that is, these strategies should be inclusive and effective to protect individuals from a range of risks that may occur during the course of their life – such as life cycle risks (old age poverty, disability, temporary or permanent incapacity for work, death of a family member, pregnancy), health risks (illness, accidents, epidemics), economic risks (unemployment, price shocks) as well as natural and ecological risks (droughts, floods, tropical cyclones and earthquakes).
- At a national level, ensure that social protection policies and strategies are aligned with a country's overall climate adaptation response, alongside interventions in such other sectors as agriculture, tourism, infrastructure, and disaster risk management among others.
- Include ministries responsible for disaster management and climate change in the development of social protection policies, and align poverty reduction and climate resilience objectives with the aim to unlock potentially powerful synergies to advance sustainable livelihoods of the poor and most vulnerable.

### **Specific Recommendations Related to Climate Risk Insurance**

- Incorporate sovereign climate risk insurance as part of social protection policy and strategy, to enable payouts that may be received after a natural disaster to assist the most affected individuals or communities, and to reduce the vulnerability of economic sectors that are dependent on low-income, vulnerable workers.
- Make a case for governments to purchase sovereign climate risk insurance, and support access to microinsurance as part of their overall financial protection strategy – this will involve putting the necessary legislative and regulatory systems in place, and will lay the groundwork for the more specific alignment with social protection strategies. Under the Caribbean Oceans and Aquaculture Sustainability Facility (COAST), which was launched in 2019, governments purchase a parametric





product that is akin to microinsurance for the fisheries sector. The product incorporates an adverse weather component that addresses interruption of fisherfolk's economic activity, and a tropical cyclone component that addresses direct damages to fishing assets such as boats, gear etc. If either component of a country's policy is triggered, the funds will be provided by CCRIF to the Ministry of Finance, followed by a rapid transfer to the fisherfolk and other affected parties throughout the country's fishing industry – this is a clear example of how governments can participate in microinsurance for the most vulnerable.

- Include climate risk insurance requirements in policies covering areas such as fisheries, agriculture or MSMEs (micro-, small- and medium-sized enterprises) – for example, revise national policies to require purchase of microinsurance as part of the registration and licensing process for fishers and farmers etc. The Government of Jamaica is investigating this option in its efforts to upgrade the fisheries sector.
- Incorporate microinsurance as part of social protection strategy, for example, within local government departments purchasing group policies and using payouts to assist the most affected individuals or communities. The purchase of group policies for LPP would enable effective scaling up of the LPP allowing for the low-cost and rapid expansion of both the number of beneficiaries and the policy's benefits when there is a need.
- Provide an enabling environment to increase access to microinsurance by vulnerable persons, for example, by providing subsidies for policy premiums; waiving associated taxes; incorporating microinsurance within existing government rebates and subsidies for the fisheries, agriculture and tourism sectors, and focusing on low-income workers.
- Facilitate the organization and purchase of group or block policies by professional groups for their members, for example, fisher or farmer cooperatives, or community groups.
- Support the sensitization of vulnerable low-income persons to the role insurance, and particularly microinsurance, products can play in reducing their vulnerability to climate- and weather-related hazards – this will involve overcoming the general perception that insurance is too expensive, and increasing understanding of how these new and different products work. Education and sensitization, involving the government as well as non-governmental actors, is a critical part of CRAIC's promotion of the Livelihood Protection Policy.

### Alignment with 2030 Agenda for Sustainable Development

When properly designed and executed, social protection strategies and interventions can offer versatile coping mechanisms for climate shocks and natural disasters. Social

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1 NO POVERTY



protection is a powerful tool to protect populations at greater risk of climate-related impacts and those adversely affected, and can support efforts to transition countries to advance more sustainable livelihoods and practices in support of the Sustainable Development Goals.

Caribbean governments have signalled their commitment to the 2030 Agenda for Sustainable Development and its central premise of “leaving no one behind” by aligning the Sustainable Development Goals with national development plans. This provides a framework for strengthening social protection programmes through incorporating climate risk insurance, which specifically supports Goals #1 “End poverty in all its forms everywhere” and #13 “Take urgent action to combat climate change and its impacts.”

This emphasis will directly contribute to achieving the following targets:

- By 2030, build the resilience of the poor and those in vulnerable situations, and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
- Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- Integrate climate change measures into national policies, strategies and planning
- Fits in with new the focus of CARICOM to make the Caribbean region the first climate-resilient zone in the world

## CONCLUSION

Caribbean countries are highly vulnerable to climate-related hazards such as hurricanes, excess rainfall (and associated risks of landslides and flooding) and drought – all of which are expected to have increased negative impacts due to climate change. Additionally, these small island and coastal states continue to grapple with issues related to macroeconomic stability, reducing poverty levels, improving international competitiveness and debt sustainability.

Countries rely on their social protection systems to enable poor and vulnerable people to better manage economic, social and environmental risks and shocks in an attempt to escape from poverty. While most states have some level of social protection – typically focusing on pensions, health and public assistance – most social protection systems in the Caribbean are inadequately prepared to respond to emergencies such as natural disasters or long-term impacts from climate change, with particular consequences for the poor and vulnerable.

Therefore, social protection and climate adaptation mechanisms must be linked to effectively provide assistance to communities affected by climate-related shocks.

Caribbean governments are strengthening their disaster and climate risk frameworks and have recognized that risk transfer options are a critical part of their disaster risk management frameworks. For example, 19 Caribbean governments are now members of CCRIF SPC, which provides parametric insurance coverage for tropical cyclones, earthquakes and excess rainfall. At the same time, some countries in the region are promoting a microinsurance solution to low-income, vulnerable citizens to protect their livelihoods against weather-related hazards. Thus, climate risk insurance is emerging as a key component of climate change adaptation.

Governments can take a proactive role in linking social protection mechanisms with climate change adaptation measures in general, and incorporate climate risk insurance in particular. This can be done with sovereign level insurance where governments can pre-determine the percentage of a policy payout that could be apportioned to those most affected by the natural hazard and align this with their social protection strategies and programmes. Governments can also increase access to microinsurance by the most vulnerable through creating an enabling environment to keep costs of policies low, and sensitize potential policyholders to its benefits. The state can also consider purchasing blocks of policies, or support organizations such as cooperatives and workers groups and unions to do the same – where payouts would be used to assist the most affected persons or communities.







## REFERENCES

- At the “CARICOM-UN High-level Pledging Conference: Building a more Climate-Resilient Community” held in November 2017, CARICOM declared its goal of the Caribbean becoming the first climate-resilient region in the world (<https://news.un.org/en/story/2017/11/636862-new-and-better-deal-needed-climate-resilience-caribbean-un-chief-tells-donor>)
- CCRIF SPC. 2018. Use of CCRIF Payouts 2007 – 2018 (<https://www.ccrif.org/publications/use-ccrif-payouts-2007-2018>)
- CCRIF SPC, World Bank. 2019. COAST-The Caribbean Oceans and Aquaculture Sustainability Facility ([https://www.ccrif.org/sites/default/files/publications/CCRIFSPC\\_COAST\\_Brochure\\_July2019.pdf](https://www.ccrif.org/sites/default/files/publications/CCRIFSPC_COAST_Brochure_July2019.pdf))
- CCRIF SPC. 2019. CCRIF Training Manual. Understanding Ex-Ante Disaster Financing, CCRIF Parametric Policies and the Relationship with Fiscal and Economic Policy
- Clarke, Daniel J., and Stefan Dercon. “Dull Disasters? How planning ahead will make a difference.” (2016): 116-119.
- G-7 Mandate. (2015) G7 initiative on Climate Risk Insurance. [Online] [Accessed on 4th November 2019] [https://www.bmz.de/g7/en/Entwicklungspolitische\\_Schwerpunkte/Klimawandel/index.html](https://www.bmz.de/g7/en/Entwicklungspolitische_Schwerpunkte/Klimawandel/index.html)
- The Programme of Advancement through Health and Education is a conditional cash transfer (CCT) programme funded by the Government of Jamaica and the World Bank with the aim of delivering benefits by way of PATH cash and bursary grants to the most needy and vulnerable.
- Scott, Zoë, Claire Simon, Jesse McConnell, and Paula Silva Villanueva. “Independent Evaluation of African Risk Capacity (ARC).” (2017).
- Williams, Asha, Timothy Cheston, Aline Coudouel, and Ludovic Subran. “Tailoring Social Protection to Small Island Developing States.” Lessons Learned from the Caribbean. Social Protection and Labor. Proposición para debate 1306 (2013).
- World Bank. 2014. Caribbean and Central American Partnership for Catastrophe Risk Insurance: Pooling Risk to Safeguard against Catastrophes Generated by Natural Events. Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/18635>.



