



CCRIF SPC
The Caribbean Catastrophe Risk Insurance Facility

Introduction to Disaster Risk Financing and CCRIF Parametric Insurance

Social Protection and Disaster Risk Financing

Prepared by: CCRIF SPC



Risk and Vulnerability

- The sources of risk are many, and all populations are susceptible to adverse shocks resulting from natural, health, social, economic, political, environmental and technological risks.
- Depending on the number of individuals or households that are simultaneously affected, risks are either idiosyncratic (individual) or covariate (aggregate).
- Idiosyncratic shocks are those that occur when only one or a few individuals or households in a community suffer losses – e.g. disability, old age, social shocks such as crime or domestic violence
- Covariate shocks affect a large number of households, entire communities, regions within a country or countries – e.g. natural disasters, health epidemics
- These risks are not evenly distributed among all men and women and hence people are not equally exposed.
- Certain individuals and groups have a much higher exposure to risk than others because of socio-demographic characteristics, economic status, physical or mental condition, age, lifestyle and so forth.
- Vulnerability = state of high exposure to certain risks, combined with a reduced ability to protect or defend oneself against those risks and cope with their negative consequences.





Identifying Some Vulnerable Groups

- Persons living in poverty – below the poverty line and immediately above the line
- Small scale farmers, fishers, seasonal tourism workers, day labourers, taxi drivers, construction workers etc...
- Micro and small business owners
- Women and girls
- Unattached youth
- Persons with Disabilities
- Rural populations
- LBGTQ+ Populations
- Children living in poverty, barrel children , children with disabilities, girls – including teenage girls, children in state care, unattached youth – including street children, and children living with HIV/AIDS
- Homeless persons



How can we support the most Vulnerable to cope with shocks?

- Making Social Protection Systems Shock Responsive and Adaptive
- Closing the Protection Gap – understanding the Role of Insurance in SP
- Making Microinsurance Mechanisms available to populations, and integrating it in national SP policy
- Using Sovereign Level DRF instruments

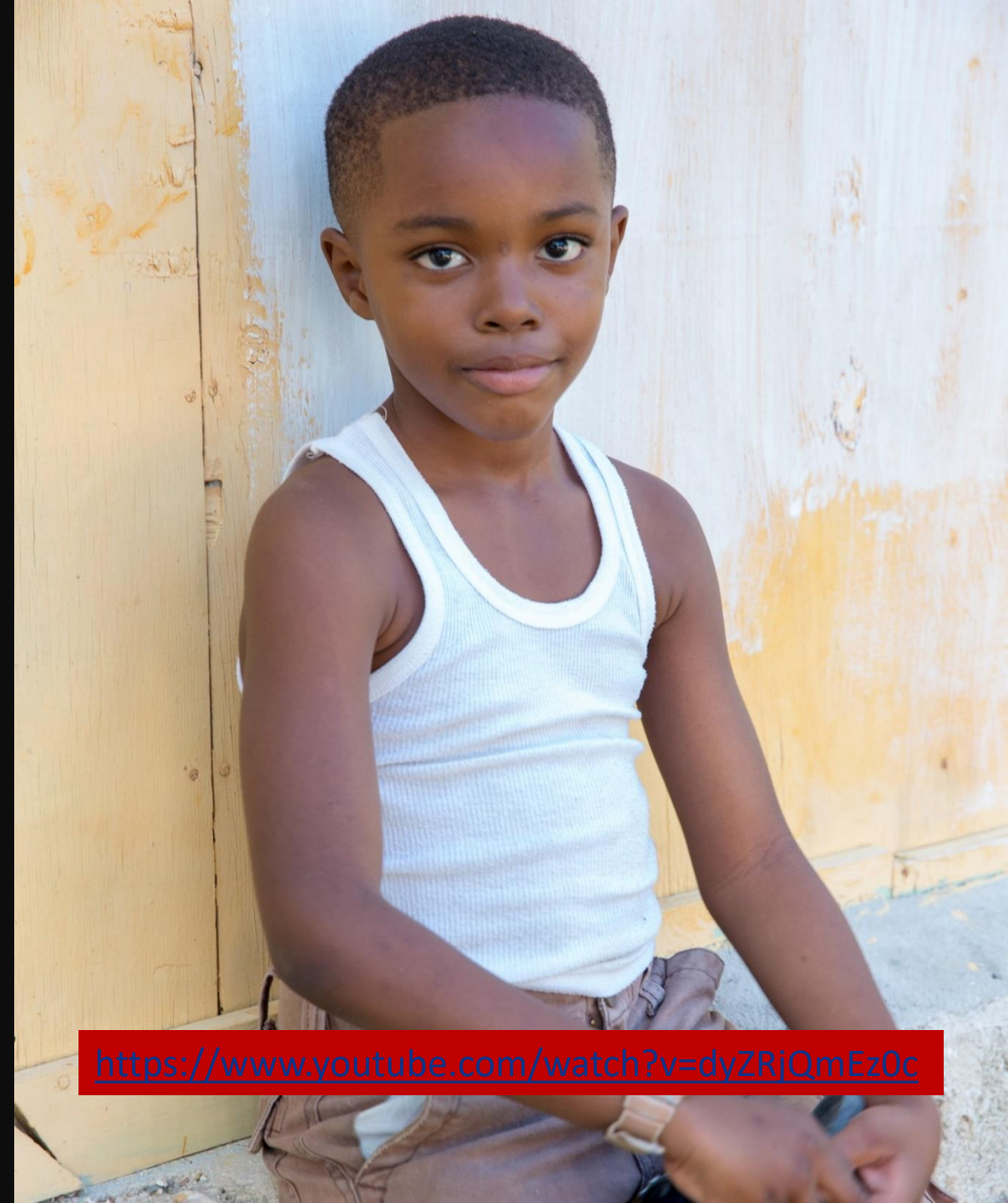
Understanding Social Protection



Understanding Social Protection



- A fundamental human right - Social protection is both an established human right and a central element in sustainable poverty reduction - it breaks the “vicious cycle” of poverty and vulnerability
- Social protection is a set of policies and programmes aimed at preventing or protecting all people against poverty, vulnerability and social exclusion throughout their lifecycle, with a particular emphasis towards vulnerable groups. (UNICEF)
- Social protection is defined by the ILO as the set of public measures that a society provides for its members to protect them against economic and social distress that would be caused by the absence or a substantial reduction of income from work as a result of various contingencies (sickness, maternity, employment injury, unemployment, invalidity, old age, and death of the breadwinner); the provision of health care; and the provision of benefits for families with children
- It encompasses a wide range of interventions – both contributory and non-contributory – serving different functions and objectives
- Social protection policies and programmes are most often designed to address typical risks faced by individuals and households along their lifecycle.
- Social protection systems enable societies to advance the well-being and security of their citizens by protecting them from vulnerability and deprivation so that they can pursue a decent life.
- Strengthening fiscal support for social protection also is key



<https://www.youtube.com/watch?v=dyZRjQmEz0c>

Understanding Social Protection

- Social protection both reduces poverty and prevents people from falling into poverty.
- With political will, sound design, costing and fiscal space analysis, as well as inclusive social dialogue social protection systems, including social protection floors, can be progressively established and strengthened.
- Social protection can help people address the risks they face, such as poverty, social exclusion, inequality and food insecurity, and protect the most vulnerable from shocks and stresses throughout their lives.
- More than half of the world's population does not benefit from any form of social protection.
- Social protection is linked with the principle of dignity since it gives people the right to live a decent life whatever adverse events afflict them. Social protection is not charity – because it integrates individuals in a process of exchange, where they have the right to receive and the obligation to give. Their dignity is recognized by allowing people the possibility to contribute.



Main Benefits of Social Protection



- Social protection is much more than a risk management instrument for individuals. It is a comprehensive, collective tool to reduce poverty, inequality and vulnerability.
- It promotes equity and solidarity through redistribution.
- It provides fair access to education, healthcare, income security and basic social services.

Misconceptions about SP



- SP is the answer to poverty
- SP programmes lead to misuse and dependency and this causes them not to want to work
- Creates a dependency syndrome - people start to expect continued assistance, which in turn undermines their self-reliance and motivation, thereby breeding laziness
- Poor persons waste cash transfers on demeritous goods such as alcohol
- The economy will do better if SP programmes are cut
- Reducing government assistance benefits will make people get a job
- Certain demographics make social safety nets benefit one group and disadvantage the rest
- Women on SP programmes have more children



<https://www.youtube.com/watch?v=0GGxQ3hdACO>

Concepts related to Social Protection



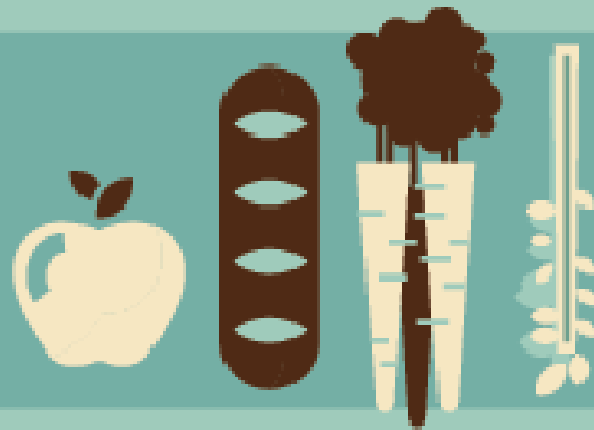
- **Social Security** - Article 22 of the Universal Declaration of Human Rights states: *“Everyone, as a member of society, has the right to social security”* .
- Social Security comprises social assistance and social insurance - Social assistance is defined as benefits in cash or in kind that are financed by the state (national or local). Social insurance is social security that is financed by contributions and is based on the insurance principle.
- **Social Inclusion**
- **Social Protection Floor**
- **Social Safety Net**
- **Social Justice**

SOCIAL SAFETY NETS KEEP MILLIONS OUT OF POVERTY

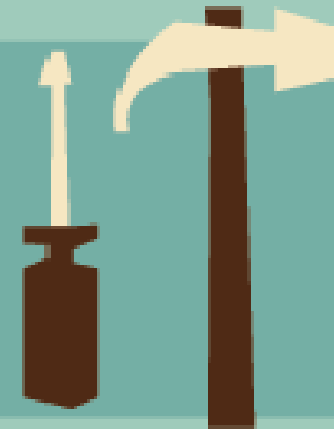
Social safety nets programs are targeted at poor and vulnerable households to protect them from economic shocks and natural disasters.



Conditional or unconditional cash transfers where families receive cash when their children attend schools and visit health clinics.



Nutritional feeding programs provide vitamin supplements for pregnant and nursing mothers, and school meals for children.



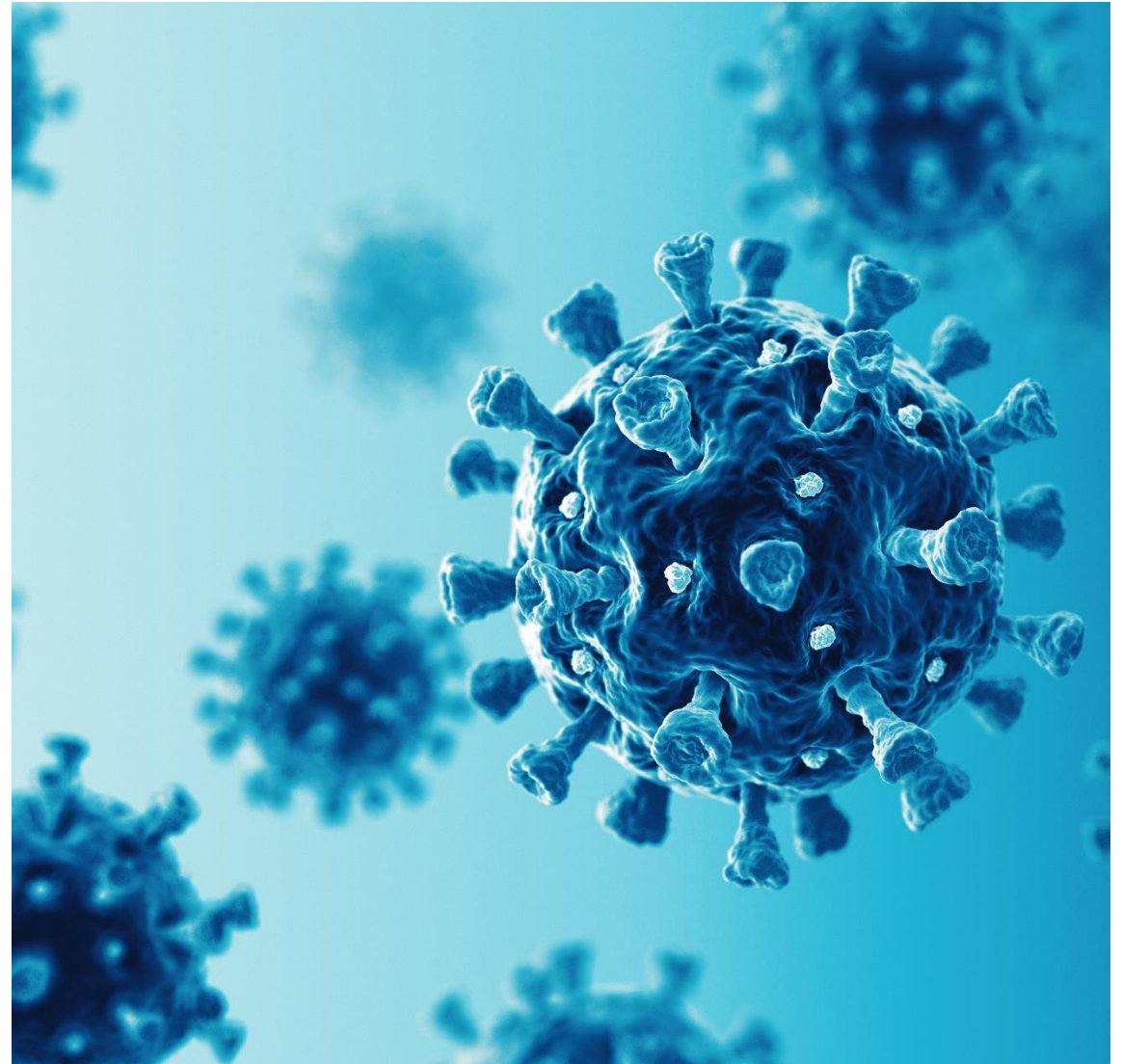
Public works programs generate temporary jobs and income.



Fee waivers assist with the costs of housing, health care and education.

How has the Caribbean Incorporated Social Protection Strategies to Cope with COVID-19?

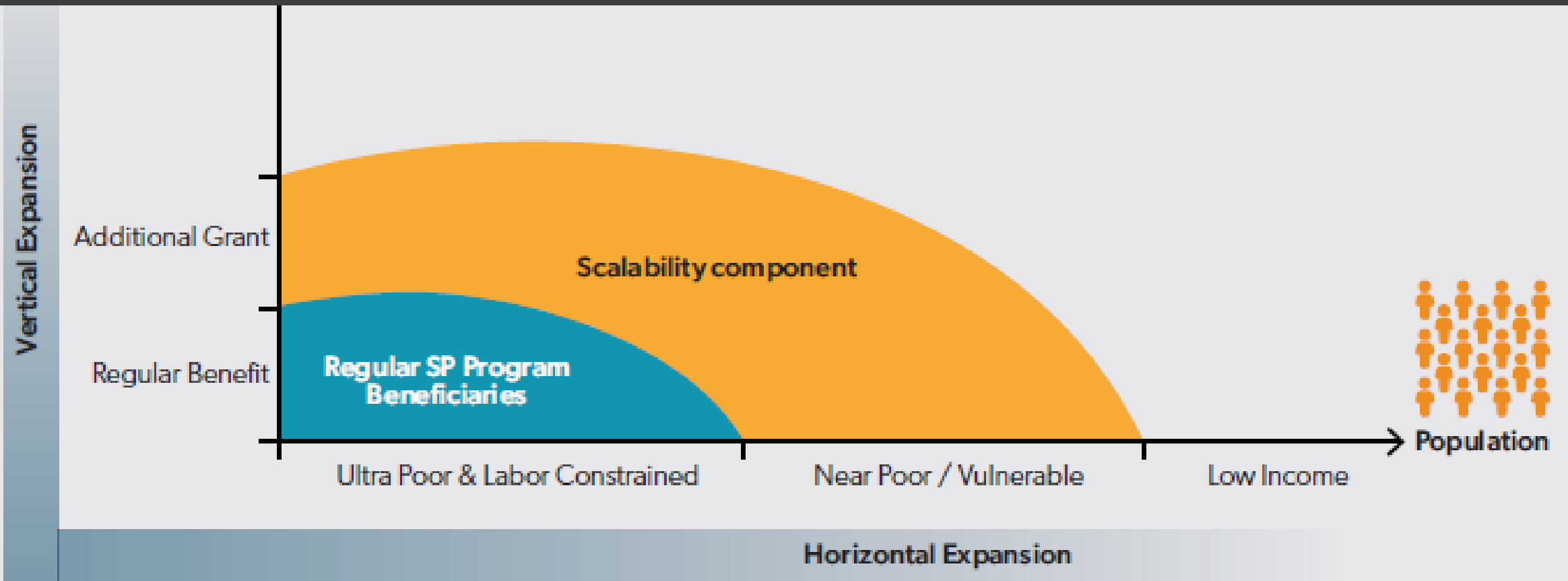
- Vertical expansion: Several countries have topped-up cash transfer benefits, including Anguilla, Argentina, Barbados, Belize (planned), Brazil, Colombia, Costa Rica, Dominican Republic, Guatemala, Jamaica, Paraguay, Trinidad and Tobago, and Uruguay.
- Horizontal expansion: Countries have expanded coverage of cash transfer programs in Anguilla, Brazil, Dominican Republic (DR), St Kitts and Nevis, and Trinidad and Tobago - Cash transfers to children with disabilities for examples
- Stimulus packages - Introduction of new cash transfer (one-off or temporary): New cash transfers have primarily been introduced to (i) support poor and vulnerable not receiving cash benefits (Belize, DR, Jamaica, Montserrat, St Vincent and the Grenadines (SVG)); or (ii) informal and/or formal workers who have lost their jobs or have reduced income due to the crisis (Bahamas, Belize, Bermuda, Dominica Jamaica, St Maarten, St Lucia, SVG, Trinidad and Tobago, Turks and Caicos. Anguilla, Barbados, Guatemala, Haiti,



How has the Caribbean Incorporated Social Protection Strategies to Cope with COVID-19?



- **In-Kind Transfer Responses to COVID-19 in LAC**
- *Expansion of in-kind transfers (coverage or benefit):* Countries have scaled up provision of in-kind relief to additional categories of households and eligible groups. For instance, Jamaica is providing food and other relief items to persons in quarantine, elderly, and other vulnerable groups. Other countries that have scaled-up in-kind transfers include Antigua and Barbuda, Argentina, Dominican Republic, Montserrat, Paraguay, St Maarten, Trinidad and Tobago, and Uruguay.
- *Introduction of new in-kind benefit (one-off or temporary):* New in-kind benefits including food, utility waivers, and other in-kind relief have been introduced in Barbados, Belize, British Virgin Islands (BVI), Cayman Islands, Colombia, Costa Rica, Grenada Guatemala, Haiti, Honduras, Mexico Montserrat, St Lucia, St Kitts and Nevis and Turks and Caicos.
- Distribution of tablets and laptops for education
- Food packages



**Understanding Vertical
and Horizontal
Expansion in SP**

Costs of No Social Protection



- Costs and the impact of neglecting social protection are borne by society
 - Increasing poverty and vulnerability
 - Productive loss to the economy
 - Health related issues
 - Loss of human capital as a lack of investment in public benefits and services means a decrease in life expectancy, health, education and skills, and a lack of investment in the younger generation. Hence the current and future stock of a country's human capital is diminished.
 - Loss of social capital – social trust etc
 - Loss of political capital

Social protection is integral to the dynamic development of modern, open economies and societies; and it brings cumulative benefits through time. Social protection can be considered as an investment and consequently as a productive factor. Poor countries cannot afford not to invest in social protection if they want to break the vicious circles of poverty and underdevelopment and begin to contribute positively to local, national, regional and global development.

Microinsurance – A Risk Financing and Social Protection Mechanism at the Individual Level

- Microinsurance refers to insurance services offered primarily to clients with low income and limited access to mainstream insurance services and other means of effectively coping with risk.
 - Microinsurance is the protection of low-income people against specific perils/risks in exchange for premium payments proportionate to the likelihood and cost of the risk involved
 - Factors such as financial illiteracy, lack of education, poverty prevent many from properly mitigating this risk – making them perpetually poor.
 - Microinsurance helps to shield vulnerable people with inadequate earnings against certain risks such as death of family members, accidents, diseases and natural disasters.
 - Today, microinsurance is recognized as a means of providing financial security and enable lower income families to access insurance against natural disasters and other exogenous shocks
 - A key component of country's financial inclusion policy
 - Microinsurance can be considered as an effective risk transfer mechanism and an integral part of an overall disaster risk management strategy.
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Some Examples of Linking Social Protection and Insurance in the Caribbean and Central America

- Sovereign product with microinsurance features developed for fishers under COAST Project with support from governments – CCRIF
- Climate Risk Adaptation and Insurance in the Caribbean (CRAIC) Project (Livelihood Protection Policy - LPP) – CCRIF, MCII, ILO
- MiCRO – The Microinsurance Catastrophe Risk Organisation



Microinsurance - Climate Risk Adaptation and Insurance in the Caribbean project

The Livelihood Protection Policy

- 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).
- Essentially, the livelihood protection policy is designed to reduce vulnerability and sustain the livelihoods of low-income communities... towards closing the protection gap



International Labour Organization's Impact Insurance Facility, DHI with support from the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).

Pilot countries: Belize, Grenada, Jamaica, Saint Lucia, and Trinidad & Tobago

The LPP

It is a parametric weather index-based insurance product

It combines risk reduction and insurance for low-income groups

It covers high rainfall and high winds

It is intended to provide policy holders with funds within a short period of time – 10 to 14 days

It provides individual payouts that are tied to a series of thresholds for wind speed and rainfall

It uses an information system that uses mobile text messages to inform clients quickly if a policy is triggered



**CLIMATE RISK INSURANCE IN
THE CARIBBEAN:**

**20 lessons learned from the Climate
Risk Adaptation and Insurance
in the Caribbean (CRAIC) project**

20 Lessons Learned in Microinsurance in the Caribbean

<http://www.ccrif.org/publications/technical-paper/20-lessons-learned-craic-project>

The Microinsurance Catastrophe Risk Organisation (MiCRO)

- The Microinsurance Catastrophe Risk Organisation (MiCRO) is a specialized reinsurance company providing coverage for business interruption losses from excess rainfall, severe drought and earthquakes.
- It is a socially oriented commercial enterprise focused on Latin America. Countries available – Nicaragua, Guatemala, El Salvador, Colombia, Mexico
- The catastrophic risk index insurance policy is triggered automatically by predetermined events that are verified by objective data sources, including NASA satellites. The stronger the event, the greater the payout to the beneficiaries.
- Main target group – agriculture and small business sector
- Policyholders also receive disaster risk reduction training through national coordinating bodies.





- A parametric insurance product providing quick payouts
- Supports the livelihoods of fishers and others in the fisheries industry
- Designed to support governments' efforts to rapidly put money into the hands of those impacted by extreme weather, providing them with **immediate** economic relief.
- Policy includes mechanism for disseminating payout to beneficiaries in the fisheries sector
- Promotes a culture of building back better to enhance coastal community resilience after an extreme weather event
- The insurance policy and payouts are based on full transparency and accountability



C|O|A|S|T



In force since July 1st, 2019

In Grenada and Saint Lucia

Closing the Protection Gap... The Role of Inclusive Insurance for Vulnerable Groups... Shock Responsive SP Strategy

- **The protection gap = Economic losses - Insured losses**
= Uninsured losses
- The protection gap is getting wider due to varying exogenous shocks
- “Inclusive insurance” encompasses many different approaches to reaching the unserved, underserved, vulnerable, or low-income populations in emerging markets with appropriate and affordable insurance products.
- These range from microinsurance for people with very little disposable income to new products and services for an emerging middle class around the globe who have not been served by traditional insurance (e.g. for housing).
- Most are parametric based as opposed to being indemnity based insurance products



Introduction to Integrated/Sovereign Risk Management and All Hazards Risk Policy Frameworks

Prepared by: CCRIF SPC



MY NAME IS RISK
CYNDI CELESTE

<https://www.youtube.com/watch?v=2ChxmWbMqQg&t=310s>

Risk Management and the Risk Landscape in the Caribbean

- Apart from natural hazard risks, Caribbean countries are also subject to a myriad of other risks.
- These risks oftentimes do not stop at individual island national borders but are part of a complex globally interconnected system – for example the risks associated with climate change are borderless.
- Adaptation to this compendium of risks places enormous pressure on regional governments who are charged with the responsibility of maintaining critical infrastructure while balancing lives and economic livelihoods under increasing budgetary constraints.
- Within this context prioritising risks and the actions necessary for effective adaptation becomes a point of concern.



The Hazard Landscape in the Caribbean

- **Vulnerable to storms, tropical cyclones, flooding, landslides, earthquakes, tsunamis etc.**
- **Intrinsic economic, environmental and social vulnerability, limited natural resource base, significant competition between different kinds of land use, a high level of dependence on major economic sectors that rely on the natural environment, fragile ecosystems, limited institutional capacity and low levels of insurance coverage**
- **High concentration of people and infrastructure located in the coastal zones, further increasing vulnerabilities to hydro-meteorological events and climate change**
- **Multi-hazard environment**

Natural Hazards	Manmade Hazards	Biological/Health Related Hazards
<p>Meteorological and Hydrological:</p> <ul style="list-style-type: none"> • Tropical cyclones (tropical storms and hurricanes) • Rainfall, including severe rainfall events • Lightning • Extreme heat and increasing temperatures • Floods • Drought • Sea-level rise <p>Geohazards:</p> <ul style="list-style-type: none"> • Earthquakes • Mud Volcanoes • Tsunamis • Submarine volcanic eruptions <p>Environmental:</p> <ul style="list-style-type: none"> • Land degradation • Coastal erosion/Coastal inundation • Soil erosion • Landslides • Sahara dust • Sargassum • Coral reef degradation 	<p>Chemical:</p> <ul style="list-style-type: none"> • Oil spills • Transboundary movement of hazardous materials/ wastes <p>Technological</p> <ul style="list-style-type: none"> • Road, aviation, and nautical accidents • Industrial accidents • Infrastructure Failures • Fires (bush and forest fires) • Burning dumpsites and landfills <p>Societal:</p> <ul style="list-style-type: none"> • Fires • Terrorism • Cybercrimes/cyber security gaps • Societal unrest 	<p>Biological:</p> <ul style="list-style-type: none"> • Human disease outbreaks, epidemic pandemics • Animal (livestock) and plant (agricultural) epidemics • Other biological/physical hazards such as poisoning, eutrophication, air pollution

Global Risks by Severity over the Short and Medium Term

- The risks that are likely to be most severe in two years, and risks that are likely to be most severe in 10 years.
- Assess how each of these risks might impact your country and the implications for growth
 - Essentially it would be important for countries to undertake a thorough examination of their current situation as well as be constantly aware of the ever-changing risk landscape, which offers insight into opportunities and mechanisms which can be used to anticipate, adapt to and mitigate against present and future risks.

2 years



10 years



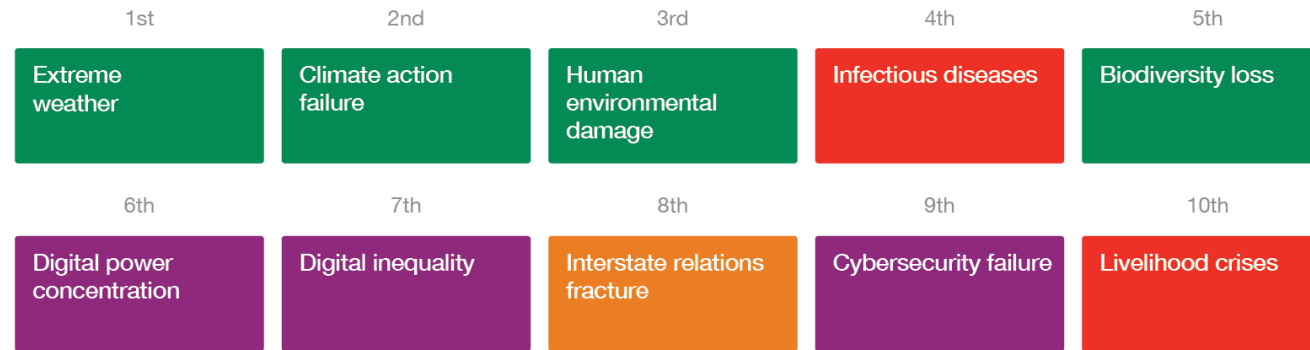
Risk categories

■ Economic
 ■ Environmental
 ■ Geopolitical
 ■ Societal
 ■ Technological

Global Risks Landscape 2021



Top Global Risks by Likelihood



Top Global Risks by Impact

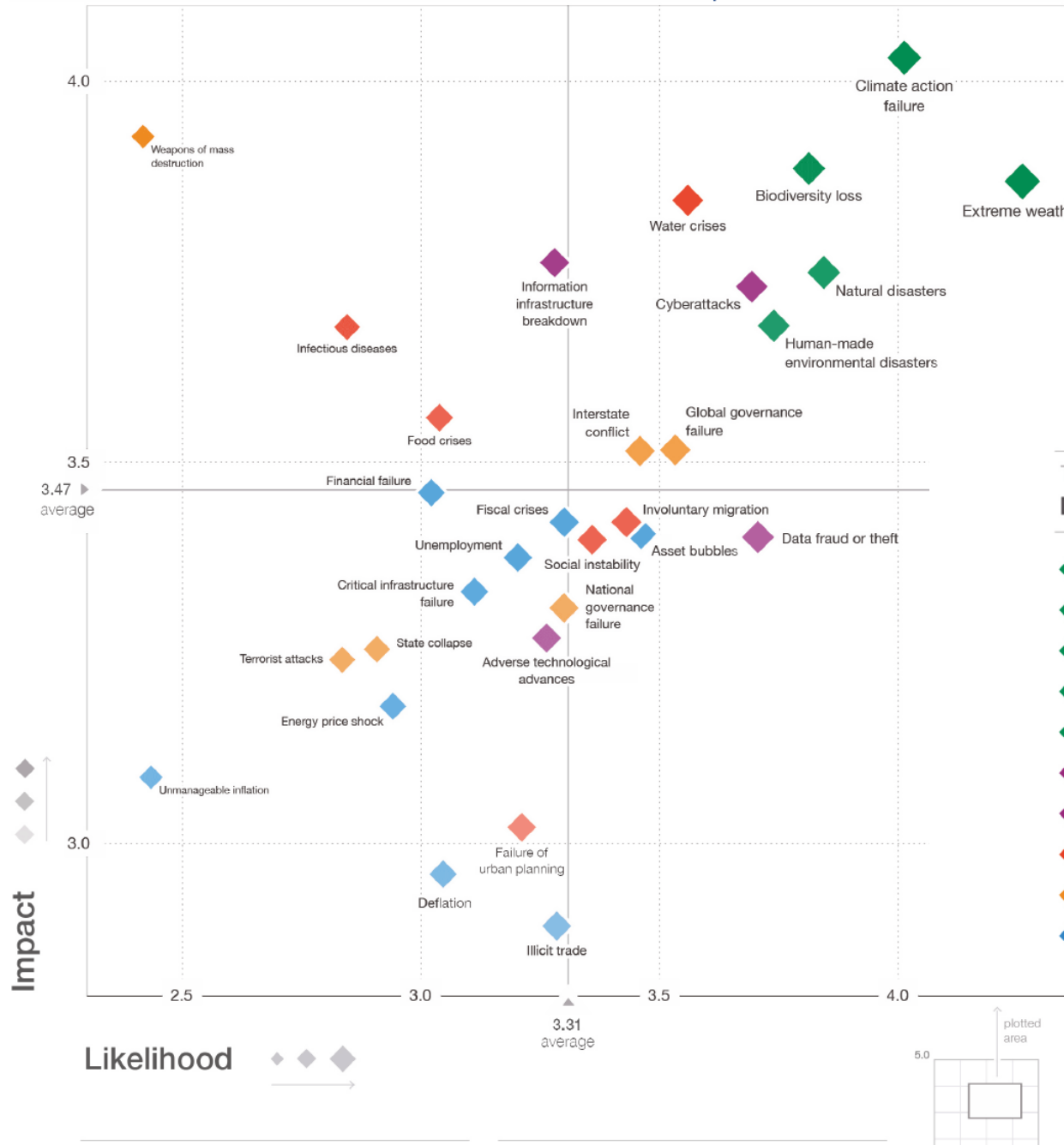


■ Economic ■ Environmental ■ Geopolitical ■ Societal ■ Technological

Risk Maps

- **Developing the Risk Map is the next step in the process**
- **The Risk Map provides an overview of the possible risk scenarios and their likelihoods and severities or impacts**
- **Useful tool for decision makers especially within the context of limited resources for competing uses and needs**
- **Risk map helps decision makers to determine which risks are acceptable or not and the resources needed to reduce the risk or transfer it**
- **And if a catastrophic event occurs to put in place actions to reduce impacts**

The Global Risks Landscape



Example of a Risk Map –
Global Risk Landscape - WEC

Top 10 risks in terms of Likelihood

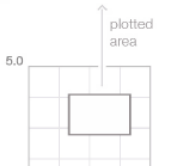
- 1 Extreme weather
- 2 Climate action failure
- 3 Natural disasters
- 4 Biodiversity loss
- 5 Human-made environmental disasters
- 6 Data fraud or theft
- 7 Cyberattacks
- 8 Water crises
- 9 Global governance failure
- 10 Asset bubbles

Top 10 risks in terms of Impact

- 1 Climate action failure
- 2 Weapons of mass destruction
- 3 Biodiversity loss
- 4 Extreme weather
- 5 Water crises
- 6 Information infrastructure breakdown
- 7 Natural disasters
- 8 Cyberattacks
- 9 Human-made environmental disasters
- 10 Infectious diseases

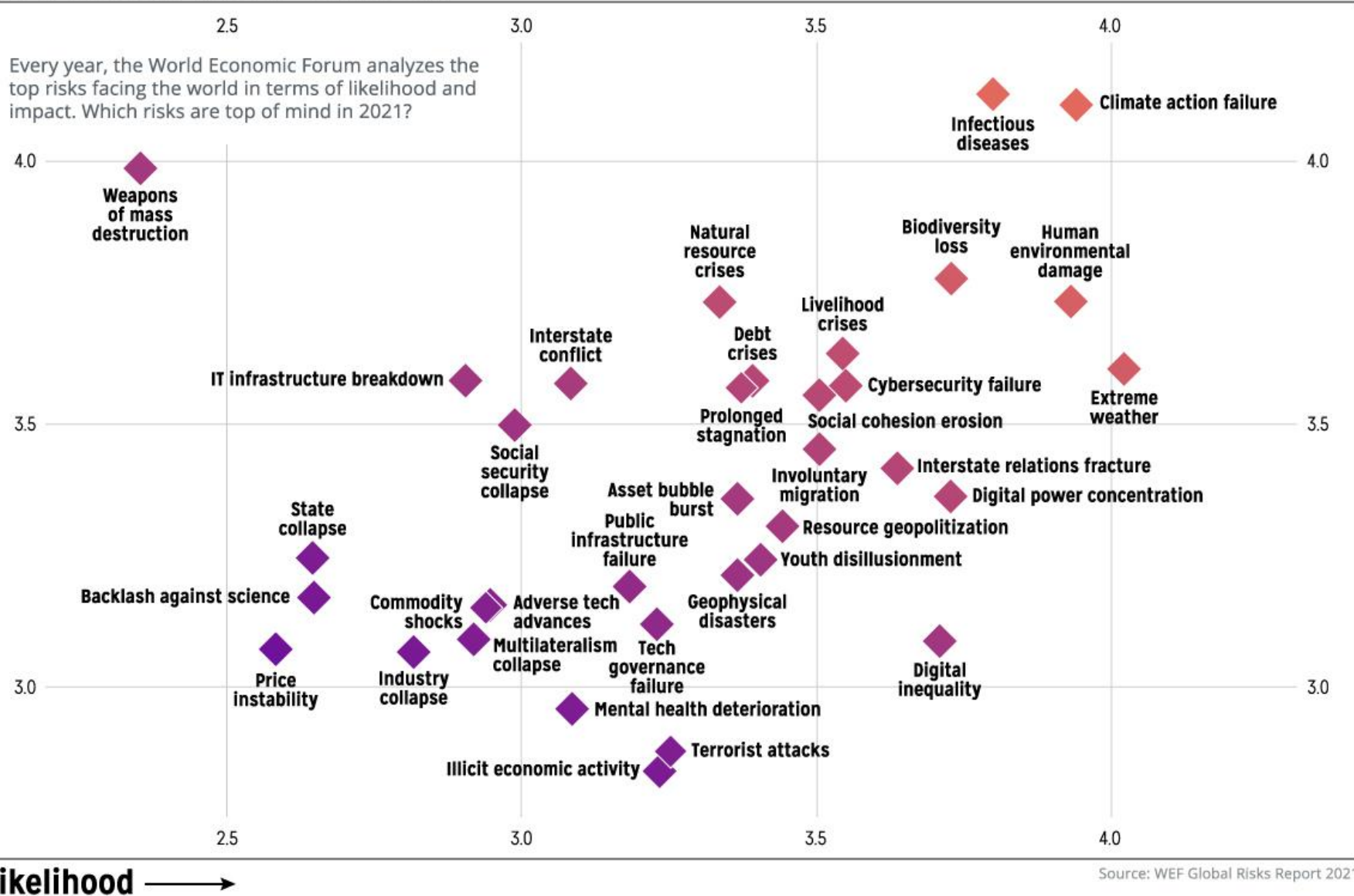
Categories

- ◆ Economic
- ◆ Environmental
- ◆ Geopolitical
- ◆ Societal
- ◆ Technological



2021 Global Risks Outlook

Every year, the World Economic Forum analyzes the top risks facing the world in terms of likelihood and impact. Which risks are top of mind in 2021?



Source: WEF Global Risks Report 2021

Example of a Risk Map – Global Risk Landscape - WEC

The Interconnectedness of Risk

- **Advances in technology, globalization, and deregulation have made economic, social, and ecological systems increasingly interconnected.**
- **In addition to opportunities for growth, this interconnectedness has created a set of risks that cross national borders and require effective risk management.**
- **In recent years, a multitude of crises have disrupted the world economy resulting in significant negative consequences on development.**
- **Moreover, with significant shifts in the frequency, impact and nature of risks in the 21st century, governments are faced with a need to more effectively manage their risks within an integrated framework.**

Risk Interconnection Map 2020

