

Strengthening forecast-based early action in the Caribbean

Recommendations for the Eastern Caribbean



Key messages

- The Caribbean is highly exposed to extreme weather and climate events including drought, tropical cyclones and flooding.
- When an extreme event is forecast, action taken *before* the event occurs can significantly reduce losses, damages and human suffering.
- Caribbean governments and their partners are already taking early action; however, there is significant potential to strengthen these interventions.
- Under a two-part proposal presented here: (i) national governments would ringfence dedicated contingency funds for early action, which would attract matched funding from donors and be managed by a regional entity; and (ii) donors would increase the capitalisation of the regional Emergency Assistance Fund (EAF) managed by the Caribbean Disaster Emergency Management Agency (CDEMA). Modifications would make it easier to deploy funds before extreme events happen, based on defined trigger points.
- These are intended to be mutually reinforcing but countries will need to do adequate risk assessments to make them fully viable.

A region at increasing risk of climate hazards

Across the OECS, extreme weather events caused average annual losses of 4.2% of GDP, from 1995 to 2014.¹ With climate change, the risk of extreme events increases, and particularly the risk of drought and heavy rainfall events.²

Taking early action, based on a forecast of weather and its expected impact, can significantly reduce loss and damages. Early action could include:

- evacuating people from low lying islands and areas
- distributing supplies in advance to bolster defences, including shelter preparation and paying contractors to remove debris and unblock drains
- ensuring that equipment (e.g. chain saws for removing fallen trees, water purification tablets) is positioned where it may be needed
- keeping the public and businesses well informed
- delivering social assistance such as cash transfers to vulnerable families.

Caribbean governments already plan to take action when an alert is issued, but these actions do not always materialise, partly due to insufficient funds. The Caribbean Disaster Emergency Management Agency (CDEMA) has a regional response mechanism (RRM) to support governments with post-disaster relief. Its scope could be expanded, to release funds for preparedness and to reduce disaster losses.

Improvements in weather forecasts for the Caribbean region make early action feasible. What needs further work are:

- (i) the arrangements for increased capitalisation of national and regional contingency funds for both early action and response;
- (ii) the rules for triggering the release of funds in each case, based on appropriate thresholds.

A two-part proposal for (re)capitalising and managing national and regional emergency funds and showing how they could work together to reduce disaster losses is shown overleaf.

The present scenario

Eastern Caribbean governments (singly at national level and collectively at regional level), knowing a hazard (storm, flood or drought) is on the way:



Don't put aside sufficient contingency funds for early action needed.



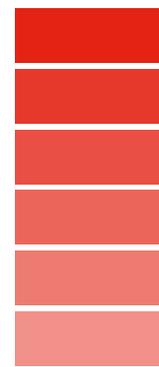
Don't manage to attract enough donor funds in time to cover the early action needed.

Consequences

When an extreme event (e.g. storm, flood or drought) is forecast, and when it's projected to have severe impacts on communities and sectors based on their exposure and vulnerability, governments **take only minimal early action** because their contingency funds are lacking.

Examples of early action to avert disaster include:

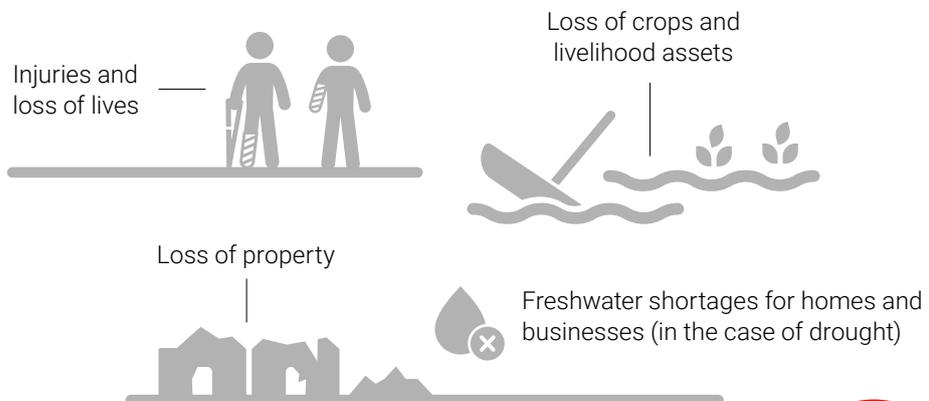
- evacuating people from low-lying areas
- prepositioning supplies to protect people and properties
- distributing fuel, water and equipment
- paying contractors to remove debris and unblock drains
- keeping the public and businesses well informed.



HIGH

Potential impact

Result: When the storm, flood or drought comes, countries are overwhelmed and the disaster losses are large



Funds for relief are too little, too late, and depend on national and regional agencies asking donors for funds **after the disaster**.

The proposed future scenario

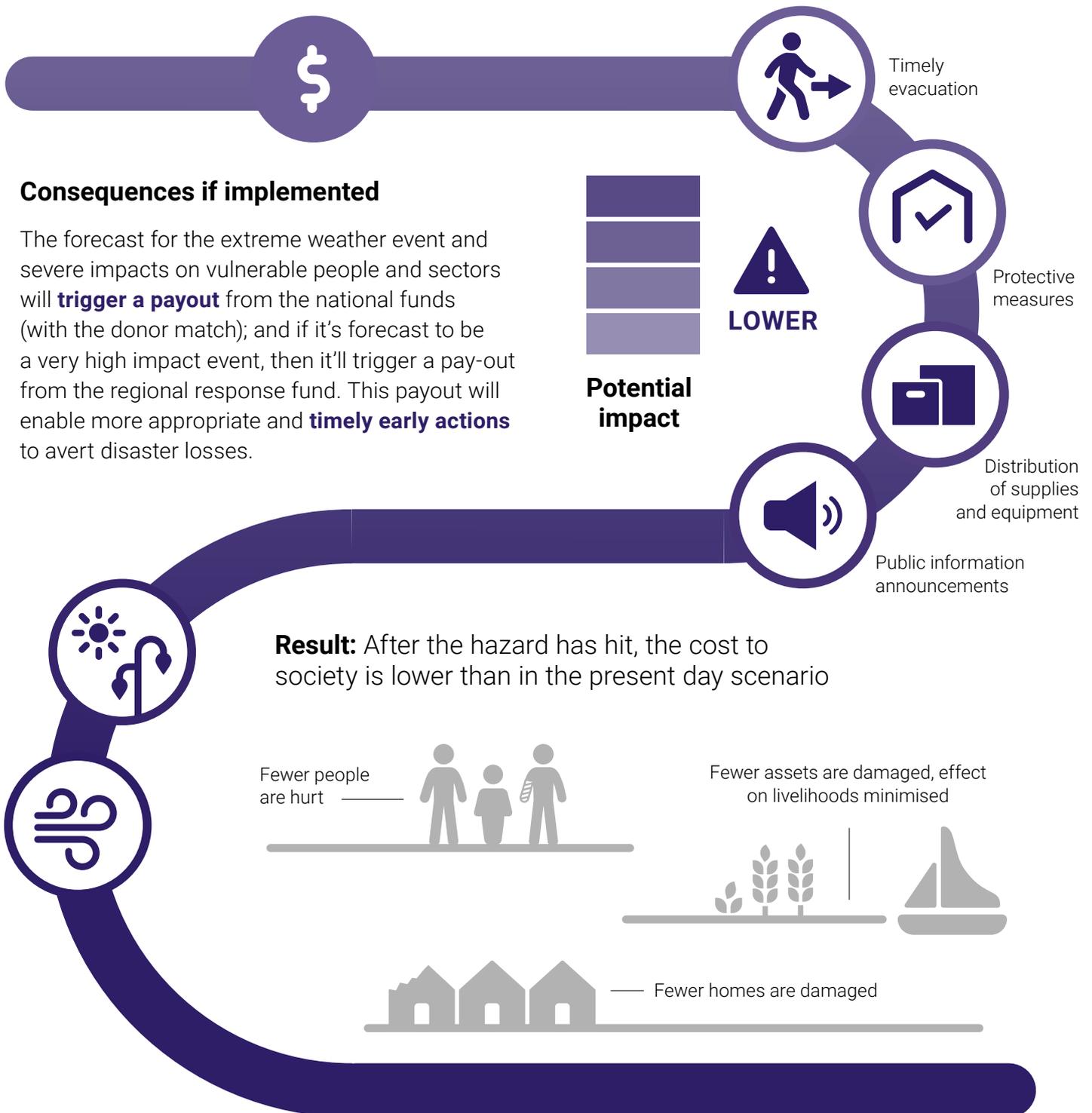
Eastern Caribbean governments:

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Set up contingency funds and dedicate sufficient resources at the national level.
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 These national funds **attract enough regular, predictable donor funding** to support early action.
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 There is an adequately capitalised **regional response fund** that can be used for early action if national funds* are insufficient.



*The governments' own funds, plus donors' matched funding

Principles for forecast-based early action

The proposals are based on a set of principles for strengthening early action across the Caribbean. The principles were developed by the study team, then refined and endorsed by participants at a stakeholder workshop in October 2019. They are:

1. Build on existing initiatives and coordination mechanisms.
2. Ensure transparent decision rules and full accountability for use of funds.
3. Mandate planning for disaster preparedness and early action across government: planning which is detailed and institutionalised as part of a government's routine process.
4. Acquire robust, comparable risk data (linked hazard, exposure and vulnerability data) which is standardised across Eastern Caribbean countries; and build capacity to interpret this data.
5. Encourage the development of scenarios linked to different hazards and complex risks and regular mandatory simulations as a basis for identifying and updating preparedness plans.
6. Target vulnerable communities and valuable sectors with early actions, working with civil society.
7. Ensure that early action is gender responsive and socially inclusive.
8. Leverage external funding for early actions that may be expensive and bear political risk because the hazard might not happen, but which are justified as the losses are high if the hazard occurs.
9. Promote comprehensive disaster risk financing, including longer-term investments in risk reduction and resilience.

The principles and proposals outlined here are for the Eastern Caribbean, regional organisations, development partners and disaster risk financiers to consider and take forward together.

About the project

This brief is a summary of a scoping study on the challenges and opportunities for creating a regional forecast-based early action mechanism for the Eastern Caribbean. The study was undertaken by ODI, the Red Cross Red Crescent Climate Centre and Ramboll. It involved extensive consultations with disaster risk managers, environmental planners, meteorologists, financiers in the OECS, UN and humanitarian agencies, community representatives and NGOs. The methodology included: a virtual consultative workshop in July 2019; bilateral meetings and focus group discussions with 45 key informants at national and regional levels (June–August 2019); and a consultative workshop in October 2019 in Rodney Bay, Saint Lucia.

This project is financed by the French Development Agency (AFD) within the framework of the Adapt'Action Facility. Endowed with €30 million over four years, the Adapt'Action facility enables AFD to provide support to 15 countries and regional organisations that are especially vulnerable to the effects of climate change in the implementation of their adaptation strategies. Adapt'Action provides technical assistance and capacity building activities to consolidate climate change governance, better integrate adaptation in public policies and develop adaptation projects.

For more information about the study methodology and findings, please contact: Dr Emily Wilkinson, ODI (e.wilkinson@odi.org.uk), Elodie Afonso, AFD (afonsoe@afd.fr, www.afd.fr/en/adaptaction) or Crispin d'Auvergne, OECS, (crispin.dauvergne@oecs.int, www.oecs.org)

Please find out more about the project:
<https://www.odi.org/projects/exploring-options-forecast-based-early-action-eastern-caribbean>

1 Wilkinson et al. (2019, forthcoming).

2 "Small islands are projected to experience multiple inter-related risks at 1.5°C of global warming that will increase with warming of 2°C and higher (high confidence)...[for] extreme weather events, the transition from moderate to high risk is now located between 1.0°C and 1.5°C of global warming." – IPCC (2018). Global warming has already reached 1°C above preindustrial levels, today.

References

Intergovernmental Panel on Climate Change (2018). Special Report on Global Warming of 1.5°C. Geneva: IPCC.

Forecast-based early action workshop: Report of the stakeholder workshop held at Rodney Bay, Saint Lucia, 17th-18th October 2019. Saint Lucia: OECS Commission and Adapt'Action.

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This briefing note was written by M. Dupar, E. Wilkinson, B. Arvis and J. Mendler de Suarez. The authors assume full responsibility for the contents of this document. The opinions expressed do not necessarily reflect those of AFD or its partners.

Photo on cover page: Hurricane Irma, NASA/NOAA GOES Project.

Designed by L. Peers (lucypeers.com)



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