

Disaster risk management in fisheries

Key messages

- **Delayed action in adapting to a changing climate will result in significant increases in the social, environmental and economic costs of responding.**
- **Negative impacts to acute disasters include:**
 - safety of fishers compromised;
 - loss of fisherfolk livelihoods;
 - destruction of fisheries infrastructure, boats and gear;
 - damage to shallow fish habitats.
- **Ongoing disaster risk management (DRM) initiatives in the Caribbean include:**
 - fisheries & aquaculture emergency response training;
 - early warning communication & safety-at-sea training for fisherfolk;
 - innovative parametric insurance;
 - mainstreaming climate change adaptation (CCA) & DRM into fisheries governance.

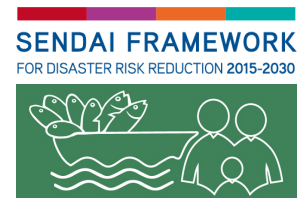
Disasters precipitated by climate change and climate variability are already wreaking havoc in the Caribbean fisheries sector.

Examples include hurricanes: Irma 2017 in Barbuda, Maria 2017 in Dominica, Dorian 2019 in The Bahamas.

Doing nothing different from current practices will result in increasing damage and critical losses to the fisheries sector.

This policy brief:

- highlights the DRM cycle for the fisheries sector;
- summarises ongoing DRM initiatives;
- presents supporting policy actions for adaptation;
- aligns with the Sustainable Development Goals, the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries (SSF Guidelines) and the Sendai Framework for Disaster Risk Reduction.





Disaster risk management cycle

The disaster risk management (DRM) cycle has four key phases that guide appropriate actions to cope with and adapt to disasters caused by extreme weather events. The diagram below shows a DRM cycle tailored to the fisheries sector to help build resilience and promote climate change adaptation.





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What is being done?

ONGOING DRM INITIATIVES

Regional policies:

- 2018 Protocol on climate change adaptation (CCA) and DRM under the Caribbean community common fisheries policy.
- CARICOM regional comprehensive disaster management strategy and results framework 2014-2024. This includes an Agriculture and Fisheries Sector Sub-committee.
- Regional Framework for Achieving Development Resilience to Climate Change, and implementation plan 'Delivering transformational change 2011 -2021'.

Forecasting: Strengthening ocean, climate and weather forecasting and communication for informed decision-making and emergency planning.

Early warning: Development of mobile apps and provision of very high frequency (VHF) radios for improved communication, early warning and vessel tracking.

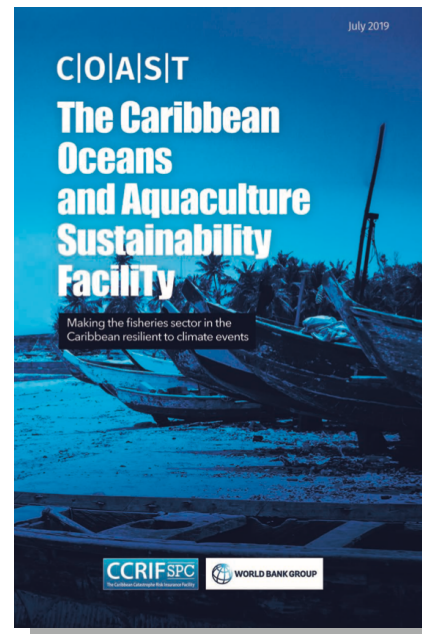
Capacity building: Training in safety-at-sea, use of information and communications technology (ICT), post disaster needs assessment (PDNA) at national and community levels for fisheries and aquaculture.

Climate-proof infrastructure: New and improved safe harbours and haul-out facilities. Fish markets, lockers and processing facilities designed to withstand extreme weather.

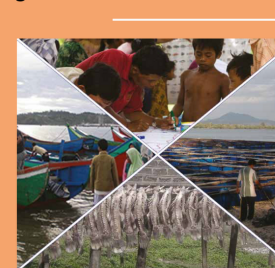
Insurance schemes: Improved access to affordable insurance and development of parametric insurance for the fisheries sector.

Knowledge-building and management: Understanding and communication improved, and vulnerability capacity assessments conducted in the fisheries sectors in the Eastern Caribbean.

Disaster response: Assistance with PDNA and relief and rehabilitation efforts.



Fisheries and aquaculture emergency response guidance



Guidelines for the fisheries and aquaculture sector on damage and needs assessments in emergencies





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Supporting policy actions

IMPROVEMENTS FOR DRM

Mainstreaming DRM: Integrate DRM into existing fisheries policy, and fisheries into national and regional DRM plans.

'Build back better': Incorporate back-up systems for water, energy and data storage to ensure quick recovery after a disaster. Improve building standards of fisheries infrastructure to withstand extreme weather events.

Livelihoods security: Revive livelihoods post-disaster through facilitating diversification. Mainstream social protection scheme for fisherfolk. Improve access to asset insurance in the fisheries sector.

Working collectively: CARICOM states could collaborate through regional mechanisms to maximize resources and technical expertise.

Disaster relief:

- Include the fisheries sector in regional and national networks trained in PDNA.
- Better communication to avoid mismatch of post-disaster donations and actual fisherfolk needs.
- Beneficiary selection needs to be based on a good understanding of local livelihood systems and community structures, and involve the target communities themselves.
- Coordination of national, regional and international agencies involved in disaster response needs to be ensured.
- Adequate funding at the national and local level needs to be in place to support DRM capacity.

USEFUL RESOURCES

Westlund, L., Poulain, F., Bage, H. & van Anrooy, R. 2007. *Disaster response and risk management in the fisheries sector*. FAO Fisheries Technical Paper No. 479, Rome, FAO. 56 pp. (also available at <http://www.fao.org/3/a1217e/a1217e00.htm>).

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CRFM. 2013. McConney, P., J. Charlery, M. Pena. *Climate Change Adaptation and Disaster Risk Management in Fisheries and Aquaculture in the Caribbean Region*. Volume 3 – Programme Proposals. CRFM Technical & Advisory Document 2013/8, Belize. 20 pp. (also available at http://www.crfm.net/~uwohxjxf/images/CCA_and_DRM_-_Programme_Proposals_final_-_Volume_3.pdf).



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