



Caribbean Regional Fisheries Mechanism

PROTOCOL ON CLIMATE CHANGE ADAPTATION AND DISASTER RISK MANAGEMENT IN FISHERIES AND AQUACULTURE IN THE CARIBBEAN

Barbados, 11 October 2018



With the technical support of



**Food and Agriculture
Organization of the
United Nations**

**PROTOCOL ON CLIMATE CHANGE ADAPTATION AND DISASTER RISK
MANAGEMENT IN FISHERIES AND AQUACULTURE IN THE CARIBBEAN**

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
and
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PREPARATION OF THIS DOCUMENT

The development of the Protocol on Climate Change Adaptation and Disaster Risk Management in Fisheries and Aquaculture under the Caribbean Community Common Fisheries Policy was funded by the Climate Change Adaptation in the Eastern Caribbean Fisheries Sector (CC4FISH) Project of the Food and Agriculture Organization (FAO), funded by the Global Environment Facility (GEF). The Protocol applies to national waters but also onboard vessels on the High Seas which fly the flags of participating states and wherever participating states have jurisdiction.

The Protocol was developed by the Caribbean Regional Fisheries Mechanism (CRFM) in consultation with stakeholders with interests in fisheries, disaster risk management and climate change adaptation and mitigation and technical support of the FAO. The preparation included developing and administering a survey instrument and conducting desk research to collect information for drafting of the Protocol; facilitating a one-day workshop if stakeholders where the draft Protocol was reviewed; incorporating into the Protocol the various comments and suggestions provided by the stakeholders; and producing the final draft for the consideration of the CRFM Ministerial Council. The Protocol was approved by CARICOM States during a high-level meeting of the Ministerial Council of the CRFM in October 2018.

ABSTRACT

This document presents the Protocol on Climate Change Adaptation (CCA) and Disaster Risk Management (DRM) in Fisheries and Aquaculture in the Caribbean under the Caribbean Community Common Fisheries Policy. The Protocol was approved by CARICOM States during the 8th Special Meeting of the Ministerial Council of the Caribbean Regional Fisheries Mechanism (CRFM), which was held in Barbados on 11 October 2018.

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The Caribbean Regional Fisheries Mechanism (CRFM) and FAO wish to acknowledge the valuable contribution of Mr Leslie Walling, consultant, for his assistance with this initiative. This includes developing and administering a survey instrument and conducting desk research to collect information for drafting of the Protocol; facilitating a one-day regional workshop where the draft Protocol was reviewed by regional governments and stakeholders; incorporating the various comments and suggestions provided by the stakeholders into the Protocol; and assisting with the preparation of the final draft Protocol for submission to the CRFM Ministerial Council. The regional workshop was attended by Directors of Fisheries from CRFM member states and representatives of regional organisations such as the Caribbean Community Climate Change Centre (CCCCC), Caribbean Network of Fisherfolk Organizations (CNFO), the University of the West Indies (UWI), and the Commission of the Organization of Eastern Caribbean States (OECS). Technical support was also provided by Ms. Iris Monnereau, Regional Project Coordinator of the CC4FISH Project at FAO.

The CRFM and FAO further express their gratitude to the CRFM member states, climate change and disaster risk management partners and other fisheries related partners in the Caribbean (CCCCC, UWI, the Caribbean Disaster and Emergency Management Agency (CDEMA), and the Caribbean Institute for Meteorology and Hydrology (CIMH), for provision of the resource materials and reviewing of the draft document. A special acknowledgement goes to the CNFO and the fisherfolk of the CRFM region, for their contributions during the workshop session and reviewing and providing written comments on the draft document.

ABBREVIATIONS and ACRONYMS

CARICOM	Caribbean Community
CCA	climate change adaptation
CCCCC	Caribbean Community Climate Change Centre
CCCFP	Caribbean Community Common Fisheries Policy
CC4FISH	Climate Change Adaptation for the Eastern Caribbean Fisheries Sector Project
CDEMA	Caribbean Disaster and Emergency Management Agency
CDM	comprehensive disaster management
CFF	Caribbean Fisheries Forum
CIMH	Caribbean Institute for Meteorology and Hydrology
CNFO	Caribbean Network of Fisherfolk Organizations
CRFM	Caribbean Regional Fisheries Mechanism
DRM	disaster risk management
FAO	Food and Agriculture Organization of the United Nations
GEF	Global Environment Facility
NICs	national inter-sectoral coordinating mechanisms
OECS	Organization of Eastern Caribbean States
RFADRCC	Regional Framework for Achieving Development Resilience to Climate Change
SDG	Sustainable Development Goals
UWI	University of the West Indies

PROTOCOL ON CLIMATE CHANGE ADAPTATION AND DISASTER RISK MANAGEMENT IN FISHERIES AND AQUACULTURE UNDER THE CARIBBEAN COMMUNITY COMMON FISHERIES POLICY

PREAMBLE

The Ministerial Council of the Caribbean Regional Fisheries Mechanism:

Aware that the Caribbean region is one of the most vulnerable regions in the world to the impacts of climatic variability and climate change;

Recognising that global climate change is a development issue, requiring the formulation and implementation of cost-effective policies and measures to ensure that the risks posed by a changing climate to the development prospects of the region are significantly reduced;

Concerned that climate change and ocean acidification will impact the health of coastal and marine habitats such as coral reefs, seagrasses and mangroves, and will significantly affect the distribution, abundance, seasonality, sustainability and production of fisheries in the Caribbean;

Deeply concerned that these changes will have significant social and economic implications for coastal communities and those working in the fisheries sector and will affect livelihood and employment, health and safety, food security and cultural practices;

Deeply concerned that delayed action in adapting to a changing climate will result in significant increases in the social, environmental, and economic costs of responding;

Conscious that the Caribbean in general, and the fisheries sector specifically, faces the challenges of adapting to current climate variability, ocean acidification and Climate Hazard risks, while preparing for the projected impacts of global climate change;

Mindful that the scale of the challenges posed by a changing climate, limits the ability of any CARICOM country acting on its own to build resilience, therefore requiring CARICOM States and the regionally-mandated organisations to work collectively through the regional enabling and support mechanisms to maximise their resources and technical expertise to the benefit of all;

Noting the guidance of the *2030 Agenda for Sustainable Development* and in particular Goal 13: Take urgent action to combat climate change and its impacts, and Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development;

Considering the guidance on measures to address disaster risks and climate change as presented in Section 9 of the *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication*;

Committed to working within the CARICOM enabling frameworks established by the *Caribbean Community Common Fisheries Policy*, the *CARICOM Regional Comprehensive Disaster Management (CDM) Strategy and Results Framework 2014-2024*, the *Regional Framework for Achieving Development Resilience to climate Change 2009-2015*, and its implementation plan, *Delivering Transformational Change 2011-2021*;

Encouraged by the efforts already undertaken by CARICOM bodies, civil society and private sector organisations to strengthen cooperation for the sustainable development management and conservation of national and regional fisheries resources and the supporting ecosystems and ecosystem services through *inter alia*, the activities of the *Caribbean Regional Fisheries Mechanism* and the *Caribbean Community Common Fisheries Policy*;

Noting that Article 7.2. of the *Caribbean Community Common Fisheries Policy* creates a general undertaking that the Participating Parties will prepare and adopt, as appropriate, Protocols establishing detailed rules for the implementation of the Policy;

Noting also that Article 20.4. of the *Caribbean Community Common Fisheries Policy* provides that such Protocols which have been adopted shall form an integral part of the Policy and, unless expressly provided otherwise, a reference to Policy includes a reference to the Protocols;

Have agreed as follows:

ARTICLE 1 - USE OF TERMS

For the purposes of this Protocol:

1.1 **“Caribbean Regional Fisheries Mechanism” or “CRFM”** means the organisation established by Article 2 of the 2002 Agreement Establishing the Caribbean Regional Fisheries Mechanism. The CRFM consists of three bodies: the Ministerial Council; the Caribbean Fisheries Forum; and the CRFM Secretariat. The CRFM is comprised of 17 Member States.

1.2 **“Competent Agency”** means the CRFM.

1.3 **“Fisheries Sector”** means both the capture fisheries and aquaculture sub-sectors and the associated value chains.

1.4 **“Climate Hazard”** means a physical process or event (hydro-meteorological or oceanographic variables or phenomena) that can harm human health, livelihoods, or natural resources.

1.5 **“Member State” or “Participating Party”** means any State or Territory that has signed or acceded to the CRFM Agreement.

1.6 “**Policy**” means the *Caribbean Community Common Fisheries Policy* and the definitions in Article 1 of the Policy apply to this Protocol.

1.7 “**Protocol**” means this instrument, mandated under Article 7 and made under Article 20 of the *Caribbean Community Common Fisheries Policy*.

ARTICLE 2 - GOAL

2.1 The goal of this Protocol is to ensure development of a regional fishery sector that is resilient to climate change and ocean acidification, and enhanced through comprehensive disaster management, and sustainable use of marine and other aquatic living resources and ecosystems.

ARTICLE 3 - OBJECTIVES

3.1 The overall objective of the Protocol is to support member states in adapting to the impacts of climate change and building resilience in fisheries sector livelihoods assets and ecosystems, through research and integrated adaptive planning and policy development, awareness and capacity building and regulatory reforms.

ARTICLE 4 - SCOPE

4.1 This Protocol is an integral part of the *Caribbean Community Common Fisheries Policy* and shall be interpreted and applied in the context of, and in a manner consistent with the Policy. The Protocol shall apply to all aspects of fisheries and aquaculture and livelihood assets under the jurisdiction of member states.

4.2 The Protocol shall consider all meteorological climate hazards, climate variability, climate change and ocean acidification impacts that may affect the fisheries sector and related livelihoods assets.

ARTICLE 5 - PRINCIPLES

The implementation of the Protocol shall be guided by the following principles:

5.1 **Take Proactive Action:** Anticipate the impacts of climate change and climate hazards and plan for the incidents as if they were to occur, rather than waiting for the impact to occur before responding.

5.2 **Apply the Precautionary Principle:** Preparedness for climate change and all climate hazards, and resilient activities should be based on the best available scientific data. However, in cases where scientific data are inadequate or lacking but there is reasonable suspicion that climate change, ocean acidification or climate hazards events are likely to cause severe harm, the best information available, at the time, including traditional ecological knowledge, shall be used in adaptation, preparedness and resilient decision-making and planning.

5.3 **Flexibility:** The Protocol shall be a flexible and living document that allows for the inclusion of additional data, information and ideas as they become available.

5.4 **Participatory Approaches:** Decision making shall involve everyone who has a stake in the fisheries sector. Due consideration shall be given to their views, traditional rights and special needs.

5.5 **Subsidiarity:** Action to adapt to climate change and climate hazard impacts on the fisheries sector should be taken at the lowest level of competency.

5.6 **Interactive Governance:** An integrative, inclusive, nested, multi-level, regional governance system for fisheries livelihoods assets that is built on linkages between the global, regional, sub-regional and national levels; and embraces complete policy cycles and support processes for continually improving policies and practices, through coordinated and structured learning from the outcomes of previously employed policies and practices.

ARTICLE 6 - ROLE OF MEMBER STATES

6.1 Member states shall take action and adopt measures to combat climate change and ocean acidification and their impacts, build resilience and protect fisheries sector livelihood assets, and in doing so shall pay attention to:

- i. Determining the possible impacts of climate change and climate hazards events on the fisheries sector, including the relevant livelihoods assets (natural, human, social, physical and financial) and governance systems (laws, policies and institutions);
- ii. Preparing and implementing a complimentary combination of climate smart policies, plans and measures to mitigate, cope and recover from these impacts;
- iii. Incorporating climate change adaptation and disaster risk management into the planning, budgetary, development and decision-making processes at the national level;
- iv. Preparing and implementing public education and awareness raising measures for climate change and disaster risk reduction in the fisheries sector.
- v. Preparing and implementing monitoring and evaluation planning and policies arrangements to ensure that the adaptation measures meet accepted criteria for environmental, cost and distributional effectiveness and institutional feasibility;
- vi. Enhancing governance systems to ensure the sustainability of fish stocks and their ecosystems in the light of the impacts of climate change and climate hazards as well as the fisheries sector production systems.

6.2 Member states shall promote and conduct research and establish monitoring systems to strengthen the knowledge base and inform the preparation and implementation of local, national and regional adaptation policies, plans, and legislation as well as public education and awareness raising measures, to combat climate change, ocean acidification and disaster risk reduction in the fisheries sector.

6.3 Each member state shall incorporate in their fisheries management, national adaptation, economic development, physical development, land-use, data collection and management, and hazard risk management plans and policies affecting the fisheries sector, provisions for climate change information, climate change adaptation and disaster risk management. These provisions shall provide for, *inter alia*:

- i. Identifying fisheries stakeholder livelihood assets and governance systems that are critical to the fisheries sector that are likely to be impacted by climate change, ocean acidification and climate hazard events, and indicate how they are likely to be impacted;
- ii. Identifying the actions and resources required to reduce the negative impacts of climate change, ocean acidification and climate hazard events, aid recovery and build resilience in the fisheries sector;
- iii. Assessing the ability of the national fisheries sector to resist, cope and recover in a timely and efficient manner from the effects of climate change, ocean acidification or climate hazard events;
- iv. Developing and adopting policies and measures to ensure the maintenance of food security, hygiene and sanitary and phyto-sanitary standards, and supply of fish and seafood products in the face of climate change, ocean acidification and climate hazards;
- v. Enacting climate smart national policies and enabling legislation for, *inter alia*, protected areas, wildlife protection, fisheries and marine ecosystem conservation and management, environmental protection, pollution and waste management, the observance of which will support and further the objectives of this Protocol;
- vi. Creating an enabling policy environment for the private sector and civil society to self-organise, learn and adapt with minimal or no external inputs;
- vii. Keeping the provisions under constant review;
- viii. Lodging copies of their fisheries management plans with the CRFM Secretariat and thereafter reporting to the Secretariat to document progress made, and challenges experienced, in implementing the provisions of the Protocol in those plans;
- ix. Reporting to the CRFM immediately, and sharing with other Member State, any information or event of which they are aware, that is likely to adversely impact the fisheries sector at the national or regional levels;
- x. Appointing a National fisheries sector climate change focal point to:
 - a. Champion the incorporation of climate change adaptation and disaster risk management in the fisheries sector into the planning, budgetary development and decision-making processes at the national level;
 - b. Work with stakeholders to keep the provisions under constant review;
 - c. Coordinate activities (include training) at the national level to combat the adverse effect of climate change, ocean acidification and climate hazards on the fisheries sector;
 - d. Monitor and report to the CRFM on the impact of climate change, ocean acidification and climate hazards on the fisheries sector, and implement plans to address the impacts, and;
 - e. Coordinate the development of education and public awareness programmes on climate change adaptation and disaster risk management in the fisheries sector.

ARTICLE 7 - ROLE OF THE COMPETENT AGENCY

7.1 The CRFM, where requested by one or more member states, and in accordance with the principle of subsidiarity in Article 5, shall cooperate with, and assist those member states in order to support them in achieving the objectives of this Protocol and in discharging their obligations and commitments under it.

7.2 The functions that may be performed by the CRFM pursuant to paragraph 7.1 include coordinating activities, as required, with development partners, fisheries sector stakeholders and national focal points, for the purpose of:

- i. Identifying the actions and resources required to mitigate negative climate change, ocean acidification and climate hazard impacts, aid recovery and build resilience;
- ii. Assessing the ability of the member states to resist, cope with, and recover from, the effects of climate change, ocean acidification or climate hazard events, in a timely and efficient manner;
- iii. Providing policy briefs and guidance to member states, as required, to facilitate implementation of the provisions of this Protocol;
- iv. Reviewing existing mechanisms, tools, and strategies to ensure that they reflect the climate change and climate hazards preparedness and resilience needs of the fisheries sector;
- v. Building capacity at the regional and national levels to combat the adverse effects of climate change, ocean acidification and climate hazard events on fisheries sector livelihoods assets and operations;
- vi. Mobilizing financial resources and technical assistance to assist member states and the CRFM in strengthening national and regional response to the impacts of changing climate, ocean acidification and climate hazards on the fisheries sector;
- vii. Assisting regional and national organizations to develop the necessary skills and capabilities for data collection, analysis and research to inform decision making to enhance the resilience and reduce risks arising from climate change, ocean acidification and climate hazard;
- viii. Assisting member states in:
 - a. Anticipating and assessing climate change, ocean acidification and climate hazard impacts;
 - b. Developing climate change and climate hazard preparedness and resilience plans and budgets; and
 - c. Preparing and implementing measures to reduce the impacts of climate change and climate hazard events on fisheries sector assets and operations.
- ix. Functioning as a repository for data and information relating to climate change, ocean acidification and climate hazard impacts on the fisheries sector livelihoods assets at the regional level;

- x. Analyzing the data and information collected and make the results available to member states in a format, and in accordance with, conditions agreed to by member states and approved by the Ministerial Council;
- xi. Assisting member states to develop fisheries sector education and public awareness programmes;
- xii. Highlighting, at regional and international fora, the resources and technical assistance required by the regional fisheries sector to combat climate change, ocean acidification and climate hazards and build resilience;
- xiii. Providing guidance and advice to stakeholders on addressing the impacts of climate change, ocean acidification and climate hazards as they affect the fisheries sector;
- xiv. Collaborate with other regional agencies working in the areas of climate change, ocean acidification, disaster management, public education and awareness, and research, in support of the above actions;
- xv. Regularly reporting on notifications received from member states of the actions taken pursuant to the provisions set out in Article 6.

ARTICLE 8 - COORDINATION

8.1 The CRFM shall be responsible for coordinating activities to support the implementation of the Protocol.

8.2 The CRFM shall coordinate its work with national, regional and international organisations active in the region in climate change adaptation and disaster risk management, including, but not limited to, the Caribbean Disaster and Emergency Management Agency (CDEMA), the Caribbean Community Climate Change Centre (CCCCC); Government Ministries, National Focal Point organisations, National Inter-sectoral Coordinating Mechanisms (NICs), the Caribbean Network of Fisherfolk Organisation (CNFO), private sector and community based organisations, and donors and any other agencies that may be determined from time to time by the Ministerial Council.

ARTICLE 9 - MONITORING AND EVALUATION

9.1 The Member States will meet regularly, using the CRFM governance mechanisms to review the Protocol and its implementation.

9.2 The objective of the review process will be to ensure that the Protocol and its guidance to member states and stakeholders continues to enable and support stakeholders in their respective, local, national and regional efforts to enhance resilience and reduce risks arising from climate change, ocean acidification and climate hazard.

9.3 The review of the Protocol will, as far as possible, be undertaken in coordination with the review cycles of relevant CARICOM policies and strategies on climate change adaptation and disaster risk management to secure guidance and feedback, and enhance coordination in support of climate change adaptation and disaster risk management in the fishers sector.

9.4 Where appropriate, the updating of the Protocol will take place every five years.

ARTICLE 10 - COMPLIANCE WITH THIS PROTOCOL

10.1 Each Member State shall take appropriate measures within its competence, including the adoption of laws and regulations, administrative actions and enforcement measures, to ensure the implementation of this Protocol.

10.2 Each Member State shall notify all other member states through the CRFM Secretariat of the measures it takes pursuant to the applicable measures set out in Article 5.

10.3 Each Member State shall draw to the attention of all other member states, any activity which in its opinion affects the implementation of the objectives and principles of this Protocol.

10.4 The implementation of this Protocol is voluntary.

GLOSSARY OF TERMS

- a) **“Climate change”** refers to any change in climate over time, whether due to natural variability or as a result of human activity.
- b) **“Climate variability”** refers to variations in the mean state and other statistics of climate variables, such as temperature and rainfall, either above or below average, beyond that of individual weather events. Variability may be due to natural internal processes within the climate system, or to variations in natural or anthropogenic external forcing.
- c) **“Climate change adaptation”** means the process by which the adverse (and beneficial) effects of climate change are considered, evaluated, and, appropriately addressed, to prevent or minimise the damage they can cause or taking advantage of opportunities that may arise.
- d) **“Comprehensive disaster management”** means the management of all hazards through all phases of the disaster management cycle – prevention, mitigation, preparedness, response, recovery and rehabilitation – by all stakeholders– public and private sectors, all segments of civil society and the general population in hazard prone areas.
- e) **“Disaster”** means a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources.
- f) **“Disaster risk management”** means the systematic process of using administrative directives, organisations, and operational skills and capacities to implement strategies, policies and improve coping capacities to lessen the adverse impacts of hazards and the possibility of disaster.
- g) **“Disaster risk reduction”** means the practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters and hazards, to lessen vulnerability of people and property through wise management of land and the environment and improve preparedness for adverse events.
- h) **“Governance system”** means the organisations or institutions that set and implement policies enforce legislation or perform functions which affect fisheries stakeholders’ livelihoods and the fisheries/aquaculture sector and value chain (the *Structures*) and the laws (local, regional, international and local instruments) and policies, that define the way things are done, how fishers interact with each other or how structures interact and operate (the *Processes*).
- i) **“Hazard”** means a dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.
- j) **Livelihoods assets”** means *Natural Assets* (fisheries resources, ecosystem services, supporting ecosystem), *Human Assets* (skills, knowledge, health, ability to work), *Social Assets* (relationships, networks, community), *Physical Assets* (boats, gear equipment, infrastructure) and *Financial Assets* (income, saving, credit, debt, Insurance).

k) **“Ocean acidification”** refers to a reduction in the pH of the ocean over time, caused primarily by increased uptake of the greenhouse gas carbon dioxide, from the atmosphere. The ocean absorbs about 30 percent of the carbon dioxide that is released into the atmosphere, and as levels of atmospheric carbon dioxide increase, so do the levels in the ocean causing the seawater to become more acidic.

This Report presents the Protocol on Climate Change Adaptation and Disaster Risk Management in Fisheries and Aquaculture was approved for CARICOM States in a high-level meeting of the Ministerial Council of the Caribbean Regional Fisheries Mechanism (CRFM) in 2018. At the 8th Special Meeting of the CRFM Ministerial Council held in Barbados on Thursday, 11 October, 2018, the ministers approved the protocol to the Caribbean Community Common Fisheries Policy (CCCFP).

This protocol is of paramount importance in the region, given the urgent and ever-increasing threats to fishing communities, fishers and the health of marine ecosystems and associated fish stocks in the region posed not only by warming waters and climate change but also by the acidification of the oceans as a result of increased absorption of carbon dioxide from the atmosphere. The protocol provides pragmatic tools and measures to enable States and stakeholders to adapt and build resilience by working together and sharing experiences and best practices.