



联合国  
粮食及  
农业组织

Food and Agriculture  
Organization of the  
United Nations

Organisation des Nations  
Unies pour l'alimentation  
et l'agriculture

Продовольственная и  
сельскохозяйственная организация  
Объединенных Наций

Organización de las  
Naciones Unidas para la  
Alimentación y la Agricultura

منظمة  
الأمم المتحدة  
للزراعة

# COMMITTEE ON FISHERIES

## Thirty-second Session

Rome, 11-15 July 2016

### FIA STRATEGY FOR FISHERIES, AQUACULTURE AND CLIMATE CHANGE FOR 2017-2020

#### Executive Summary

This document provides the draft 2017-2020 Fisheries and Aquaculture Department's Climate Change Strategy to support climate readiness within fisheries and aquaculture.

*This document can be accessed using the Quick Response Code on this page;  
an FAO initiative to minimize its environmental impact and promote greener communications.  
Other documents can be consulted at <http://www.fao.org/cofi/en/>*



mq843

## I. INTRODUCTION

The broader development and food security threats of climate change are increasingly well recognized and are now a major priority for local, national and international action. The issues and implications relating to fisheries and aquaculture in general and for coastal and riparian communities in particular, are enormous and yet poorly identified, ranging from distributional shifts, productivity and seasonality changes, to habitat restructuring. The sector, and the aquatic environments on which it depends, also have potentially important roles in greenhouse gas emission, management and mitigation, with significant issues and impacts of fuel and energy use, and major implications in 'blue carbon' management and its global ecosystem value. Though often overlooked or neglected amidst broader development concerns, the fisheries and aquaculture sectors have unique issues and vulnerabilities with respect to climate change, and these require specific and well considered responses.

Recognising the comparative strengths and potential contributions of the FAO, a strategic approach and programme framework was defined for the 2011-2016 period<sup>1</sup>, aligned in turn with the Department's strategic objective and organizational objectives for the sector and the Global Partnership for Climate Fisheries and Aquaculture (PaCFA) framework, which provides an overarching structure for wider partnership-based development goals associated with climate change, fisheries and aquaculture. A summary of efforts to implement the 2011-2016 strategy is provided in COFI/2016/SBD.19.

This document is a draft strategic framework to serve as a starting point for COFI guidance on FIA's sectoral-specific strategy for the 2017-2020 period. This strategy will support FAO's broader, cross-sectoral strategy and framework for climate change and food security (COFI/2016/Inf.17).

## II. FIA DRAFT STRATEGY FOR FISHERIES, AQUACULTURE AND CLIMATE CHANGE FOR 2017-2020

The goal of the strategic programme is for people, communities and states to meet their social and development goals effectively; while taking into account and responding to the additional challenges imposed by climate change on fisheries and aquaculture.

The purpose of the strategic programme is to support member states and partners to effectively mitigate and adapt to the impacts of climate change for fisheries, aquaculture and aquatic ecosystems, through policy development, knowledge development and exchange, normative outputs, practical demonstration, and capacity building.

The key operational objectives, outputs and proposed activities for the four-year period (2017-2020) of the strategic programme are to:

1. Set up and develop global, regional and local climate change action partnerships, across public, private community and NGO sectors, to support regional and sub-regional cooperation and to develop inter-regional and global policy and management initiatives within the sector. Related activities would include:

- 1.1 Consult and identify interested partners at global and regional levels; including establishing and agreeing on partnership aims and mechanisms.

- 1.2 Set out and agree on programme or project plans, delivery, management and implementation systems.

---

<sup>1</sup> The complete document is available at [www.fao.org/3/a-am434e/index.html](http://www.fao.org/3/a-am434e/index.html)

1.3 Define specific approaches and linkages for mainstreaming climate change issues into sector development, inclusion of the sector into global climate change actions and ensuring links with disaster risk management (DRM) and emergency processes.

1.4 Develop funding strategies, initiate and develop contacts, potential programme connections.

1.5 Set up funded structure for sustained implementation programmes.

2. Establish the knowledge base for local, national and international policy development for climate change and the fisheries and aquaculture sector; specifically to assist in the evaluation of projections of climate change impacts on the sector, raise awareness of the importance of the sector with respect to climate change mitigation and adaptation, its contribution to Sustainable Development Goals, the vulnerability of its communities at various scales, and the potential ways in which climate change responses can be developed. Related activities would include, together with partners, to:

2.1 Define scales, contexts, information sources, key knowledge gaps and priority work areas.

2.2 Provide guidelines for the interpretation and use of model-based global and regional projections of climate change impacts on ecosystems, and their fisheries.

2.3 Develop indicators at global, regional and local levels to identify climate change impacts and vulnerabilities based on local and regional reviews of physical, environmental, social, economic and institutional issues.

2.4 Develop sector linkages with climate change scenarios outside the sector and improve the sector's presence in the UNFCCC, IPCC and other climate change knowledge fora.

2.5 Define ways in which scientific and local knowledge would best be linked for mitigation and adaptation purposes.

2.6 Use and develop methodologies for improved integration of information and knowledge (e.g. databases, GIS, decision systems, economic and valuation systems).

3. Identify and develop the fisheries and aquaculture sector's climate change mitigation actions at global, regional and national levels, support their implementation within and across the sectors, and identify resources to support prioritized actions. Related activities would include:

3.1 Review and establish agreed methodologies for estimating energy use and GHG emissions from capture fisheries, aquaculture and post-harvest and supply chain sub-sectors.

3.2 Estimate sectoral GHG emissions (through global registries, case studies, typologies and models) and identify the key technological, economic and policy modifying factors relating to these emissions.

3.3 Identify mitigation (including carbon/GHG capture) potentials at national and regional levels in main fisheries and aquaculture subsectors, and define conditions for supporting their uptake.

3.4 Undertake case studies for the development of policies and technologies to support the transition to energy-efficient and low GHG footprint aquatic food production systems.

3.5 Identify funding and operational opportunities and linkages with other partners at community, national and regional levels.

3.6 Support and collaborate with other agencies and actors to carry out and scale up mitigation activities.

4. Identify and promote effective climate change adaptation strategies within fisheries and aquaculture sector development frameworks at global, regional and national levels, and identify resources to support prioritized actions at all levels. Related activities would include:
  - 4.1 Review and improve understanding of climate change vulnerable ecosystems, communities and societies in fisheries and aquaculture sectors at local, national and regional levels.
  - 4.2 Collect and analyze examples of vulnerability identification, of impact reduction mechanisms and of adaptation strategies, and define criteria and indicators for effective outcomes.
  - 4.3 Identify effective adaptation responses, from physical, economic to institutional/governance levels; including DRM links, related to a range of locations, contexts and subsector features.
  - 4.4 Define linkages with wider development and climate change adaptation and mitigation contexts, and determine how sector needs can best be met.
  - 4.5 Develop and disseminate best-practice guidelines on, for example, adaptation strategies in fisheries and aquaculture within a multi-sectoral context.
  - 4.6 In consultation with Members, identify case studies and programmes for the development and implementation of adaptive strategies; making full use of relevant funding and operational opportunities at local, regional and global levels.
  - 4.7 Collaborate with partners to promote and scale-up (or down) adaptation strategies.
5. Establish lessons learning and capacity building processes with partners to build more effective climate change and sectoral knowledge and response capacity through specific tools, such as the development of strategies and best practices, as well as strengthening country capacities to plan and implement climate change mitigation and adaptation measures in the sector and in collaboration with other sectors. Related activities would include:
  - 5.1 Establish lessons learning methodologies and processes across the programme's activities.
  - 5.2 Develop a strategy for setting sectoral findings into broader climate change contexts, and for prioritising, scaling up, and further evaluating options and strategies for capacity building.
  - 5.3 Carry out lessons learning activities across a range of contexts and subsectors and develop dissemination materials (including guidelines for stakeholders and policy makers)
  - 5.4 Build capacity amongst partners from local to international levels to share lesson-learning, further develop knowledge potentials and promote effective participation in global, national and local climate change actions.
6. Develop and implement a communication strategy for climate change mitigation and adaptation, for a range of audiences, to increase and disseminate knowledge and develop a coordinated approach to global planning and feedback. Related activities would include:
  - 6.1 Define a communication strategy for a wide range of audiences, making use of partnership links at local, regional and global levels.
  - 6.2 Agree on priorities, mechanisms, partnership approaches, targets, specific outcomes and relevant indicators.
  - 6.3 Identify funding and operational opportunities to implement the communication strategy including promoting linkages with other communication resources.

### **III. FUNDING FOR THE IMPLEMENTATION OF THE 2011-2016 STRATEGY**

Primary funding for the implementation of the first (2011-2016) FAO Fisheries and Aquaculture Climate Change Strategy was made possible by support from the Government of Japan through the project “Improved fisheries management for sustainable use of marine living resources in the face of changing systems” (GCP/INT/228/JPN<sup>2</sup>, 2014-2019) and the Government of Norway through the project “Climate Change, Fisheries and Aquaculture: testing a suite of methods for understanding vulnerability, improving adaptability and enabling mitigation“ (GCP/GLO/322/NOR, 2011-2016). Additional funding was made available by the Government of the United States of America and the FAO’s Regular Programme and Technical Cooperation Programme. The Global Environmental Fund's (GEF) Least Developed Countries Fund (LDCF) and Special Climate Change Fund (SCCF) have made possible the development of national and regional climate change adaptation projects in Bangladesh, Benguela Current Countries (Angola, Namibia, South Africa), Chile, Easter Caribbean (Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Trinidad and Tobago), Malawi and Myanmar, which will begin implementation in 2016.

---

<sup>2</sup> Formally GCP/INT/253/JPN - Fisheries management and marine conservation within a changing ecosystem context (2009-2014).