



Food and Agriculture Organization  
of the United Nations

# FAO's role in supporting sustainable fisheries management in the face of climate change

ICSP-17

15-17 May 2024



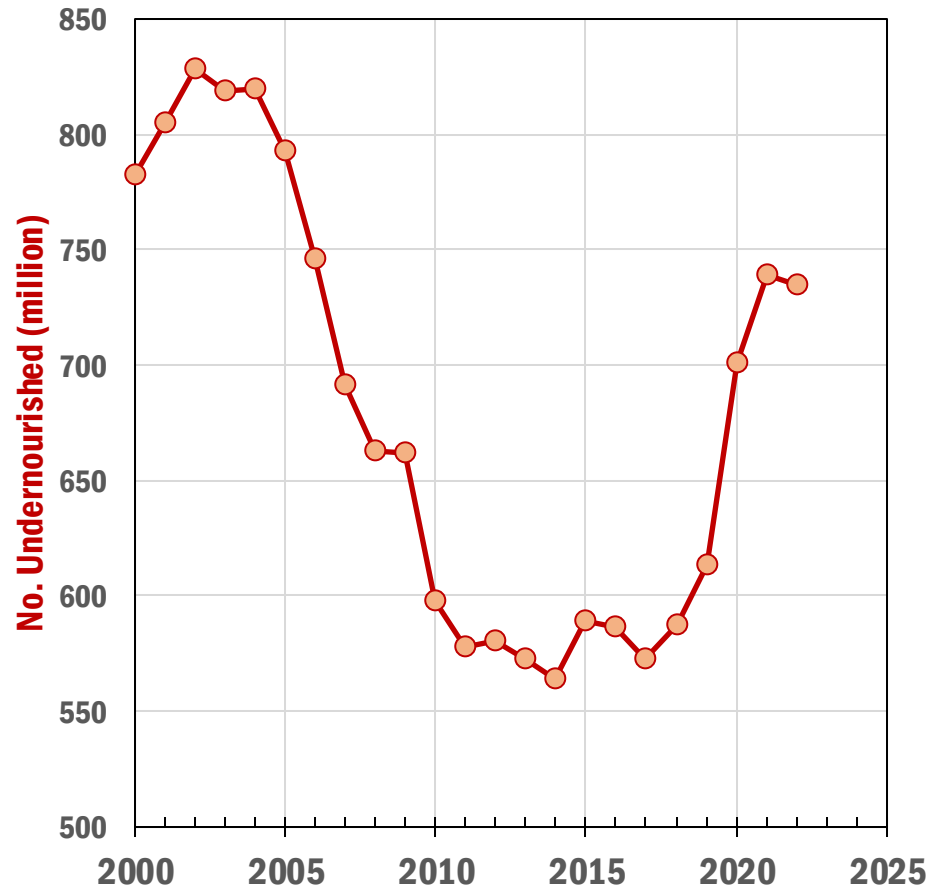
Tarûb Bahri, Xuechan Ma, FAO Fisheries and Aquaculture Division (NFI)

# The growing challenge to feed the world

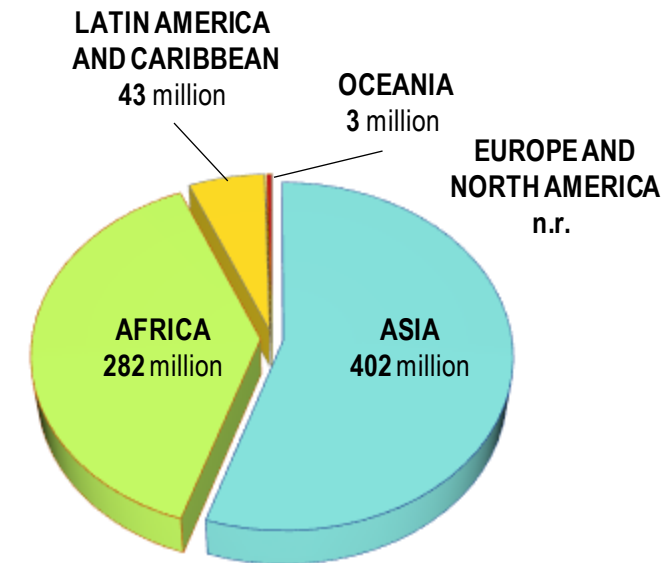


Food and Agriculture  
Organization of the  
United Nations

- An estimated **735 million** people faced hunger in 2022
- Hunger is still on the rise in **Western Asia**, the **Caribbean** and all subregions of **Africa**
- FAO projects that **600 million** people will be chronically undernourished in 2030
- Today **3 billion** people cannot afford a healthy diet
- In **12 countries**, all of them in **Africa**, **>90%** of the population cannot regularly afford a healthy diet.



Source: FAO SOFI 2023

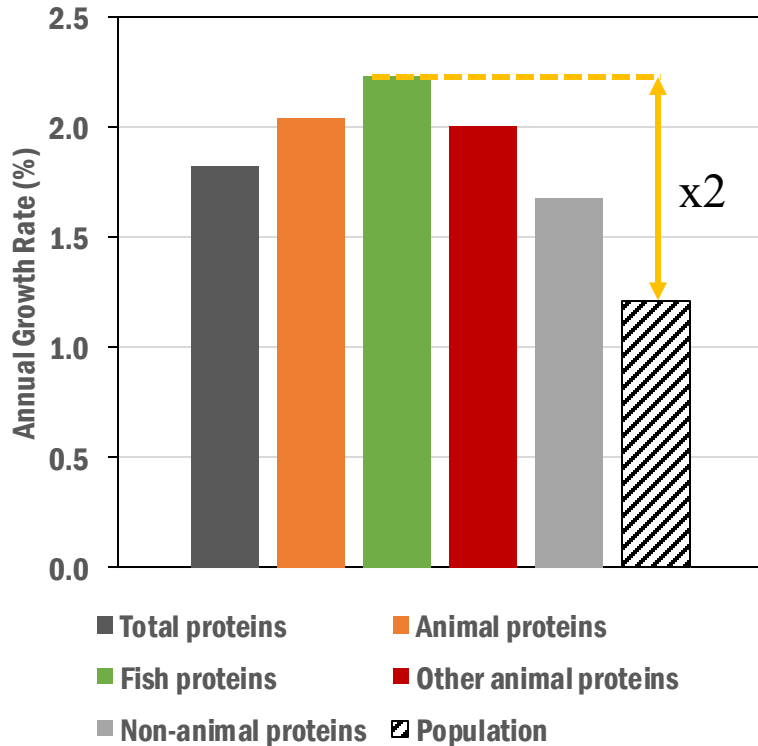


# Aquatic foods: a powerful solution to the dual challenge

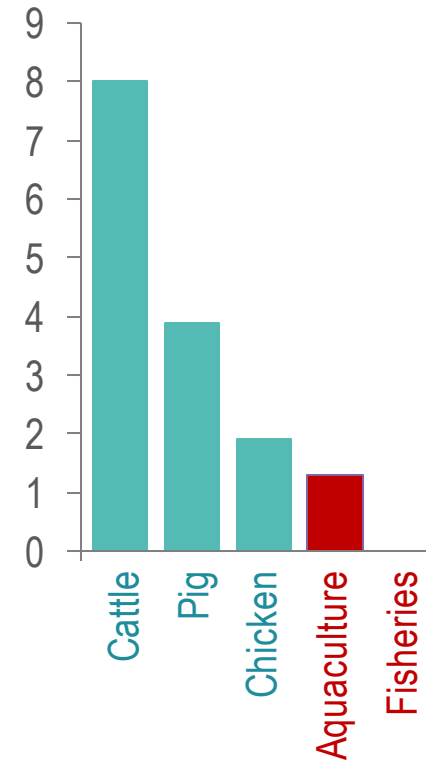


Food and Agriculture Organization of the United Nations

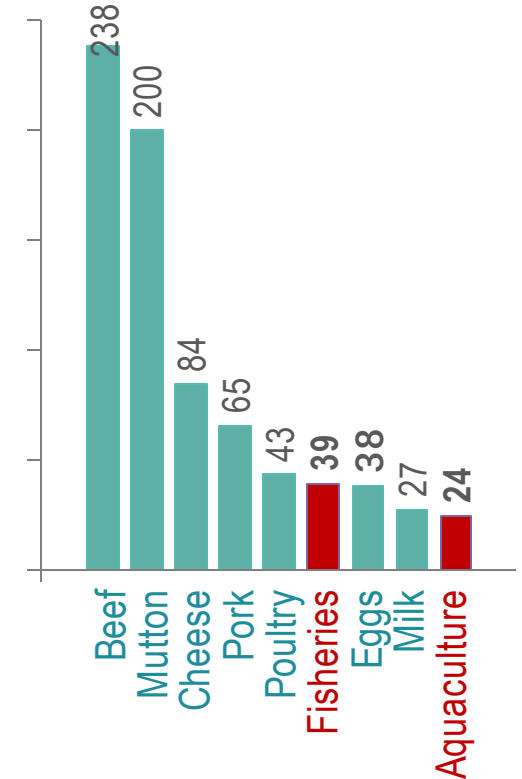
**Consumption Aquatic Animal Foods (Global, 2010-2020)**



**Conversion Efficiency (kg feed/ kg live weight)**



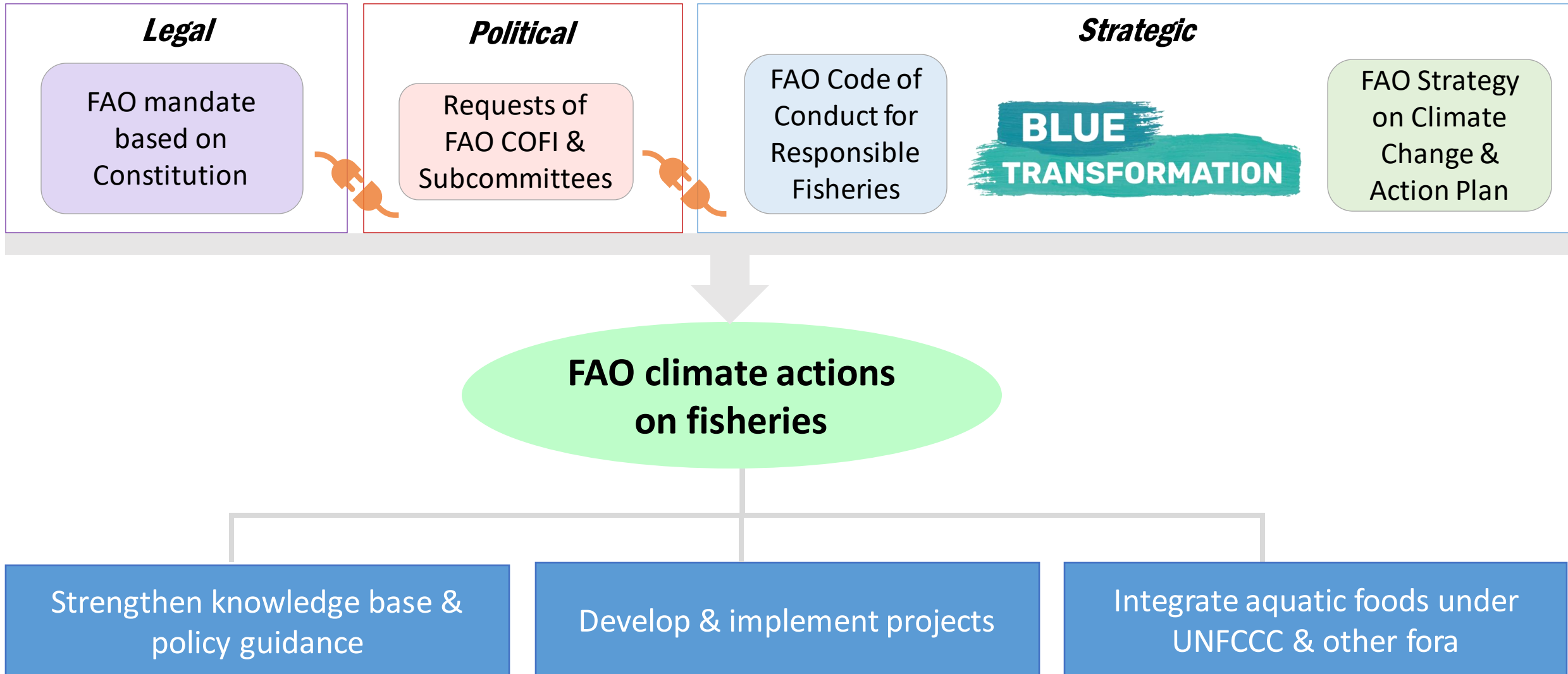
**GHG Emissions Intensity (g CO2 eq./g protein)**



# Legal mandate on fisheries management in a changing climate

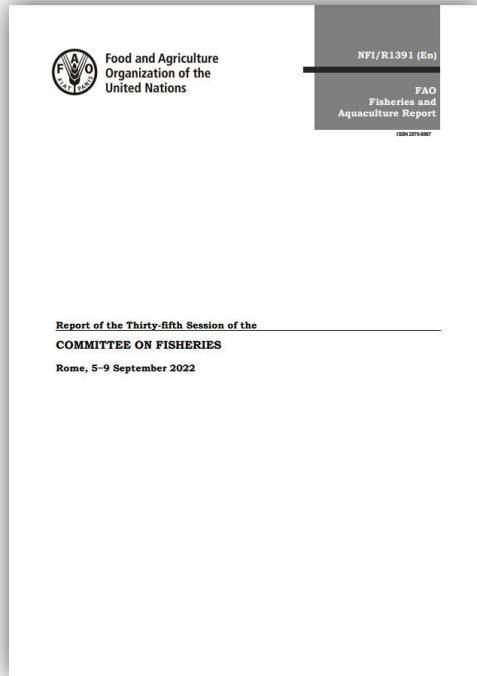


Food and Agriculture  
Organization of the  
United Nations





# Recap of COFI35 requests



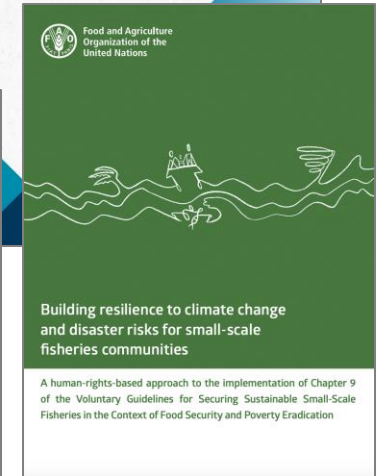
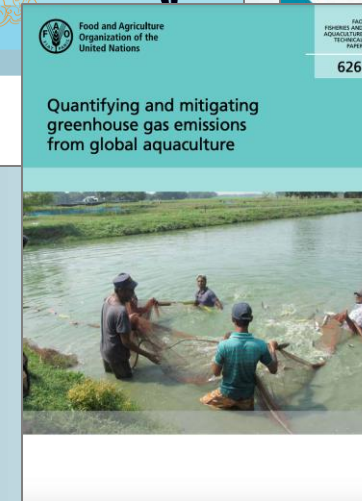
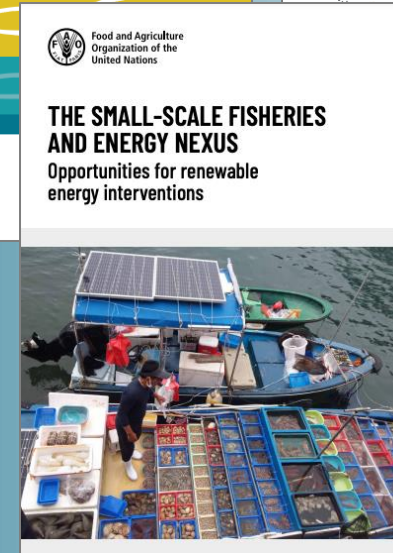
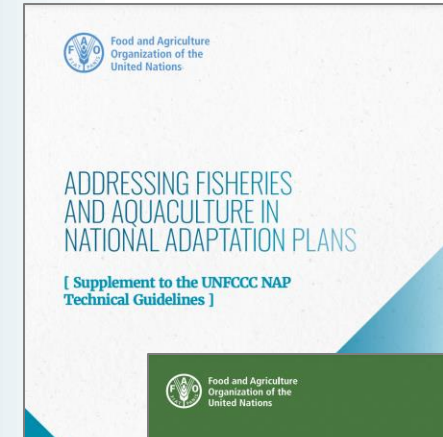
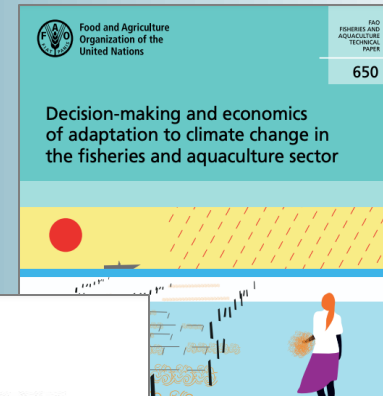
*COFI35 report*

## Member countries constituting the Committee on Fisheries (COFI):

- **FAO Strategy on Climate Change 2022–2031:**
  - requested Action Plan for the implementation of the Strategy with a set of actions focused on climate resilient fisheries and aquaculture
  - requested transparent consultation processes with Members for development of the Action Plan
- **Knowledge, awareness & guidance:**
  - increase knowledge and awareness on climate change impacts in fisheries & aquaculture
  - provide guidance on climate resilient fisheries management (adaptation and mitigation) (e.g. workshop with RFMOs and RFABs, inclusion of climate change in the GSA)
- **Resource mobilization & support to Members:**
  - requested increased support to SIDS and LDCs
  - mobilizing additional resources (e.g. Green Climate Fund): inclusive collaboration to adopt low-emission, good practices and innovative solutions
- **UNFCCC:**
  - encouraged FAO to further include aquatic foods under UNFCCC

# Strengthen knowledge base & policy guidance

## Aquatic foods are a food security solution, as well as a climate solution



+ many more

# Strengthen knowledge base & policy guidance



Food and Agriculture  
Organization of the  
United Nations

## ❖ MAIN HIGHLIGHTS OF ONGOING WORK (NON-EXHAUSTIVE)

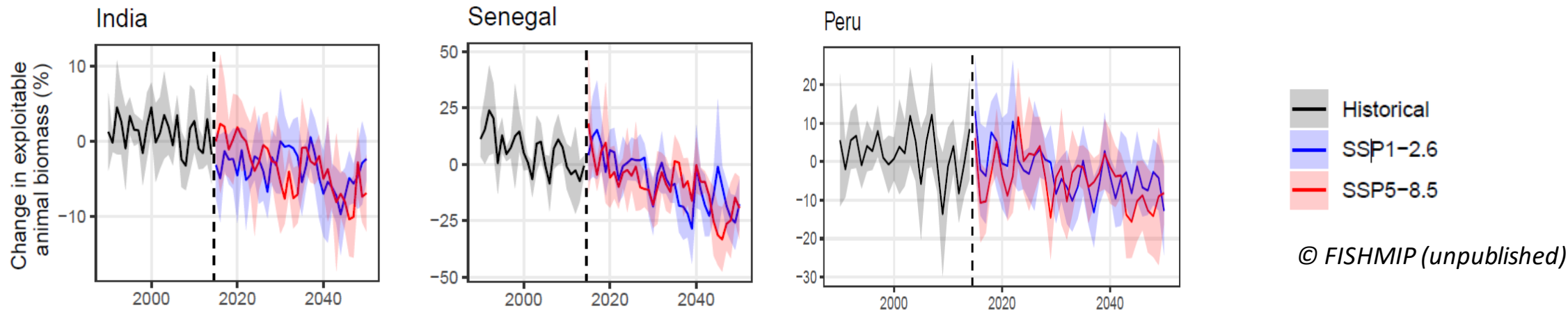
- **Studies:** IPCC AR6 findings; Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs) & funding gap
- **Technical reports:**
  - climate-driven changes in exploitable animal biomass
  - projections of tuna stocks distribution
  - aquatic invasive species
  - climate challenges and opportunities for SSF
  - linking early warning systems with shock-responsive social protection programs
- **Methodological review:** GHG emissions from fishing vessels
- **Safety-at-sea training:** for fishers and development of fishing vessel safety standards
- **Project formulation support:** background studies for SIDS
- **Guidance:** mainstreaming climate change into **EAF/ EAA**

© FAO/Luis Costa



# Strengthen knowledge base & policy guidance

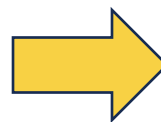
## Climate-driven changes in exploitable animal biomass



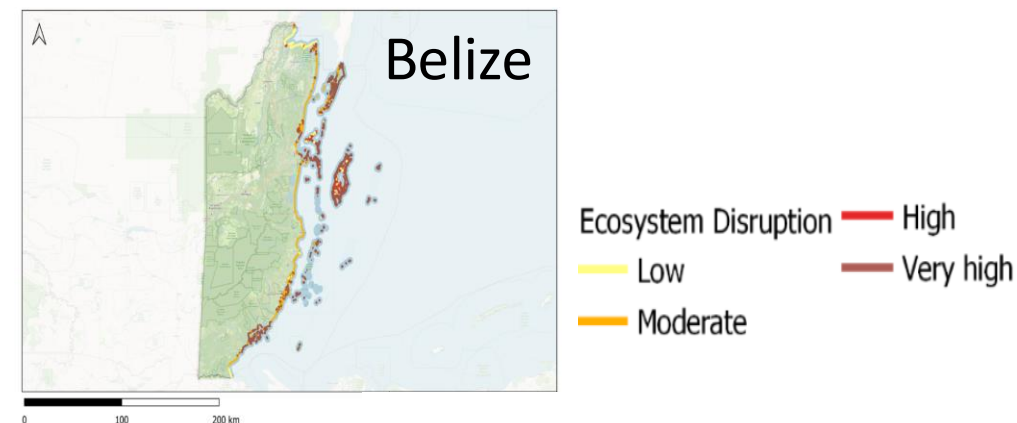
## Background studies for 41 SIDS

Hazard (high & very high hazard level)	Percentage of coastline	Total assets in million USD
Ecosystem disruption	62%	140 449
Gradual inundation	46%	168 113
Salt water intrusion	29%	47 770
Erosion	28%	82 094
Flooding	39%	132 494

Assets subject to high/  
very high hazard level:  
**USD 48 - 168 billion**



Resolution: **300-500 meters**

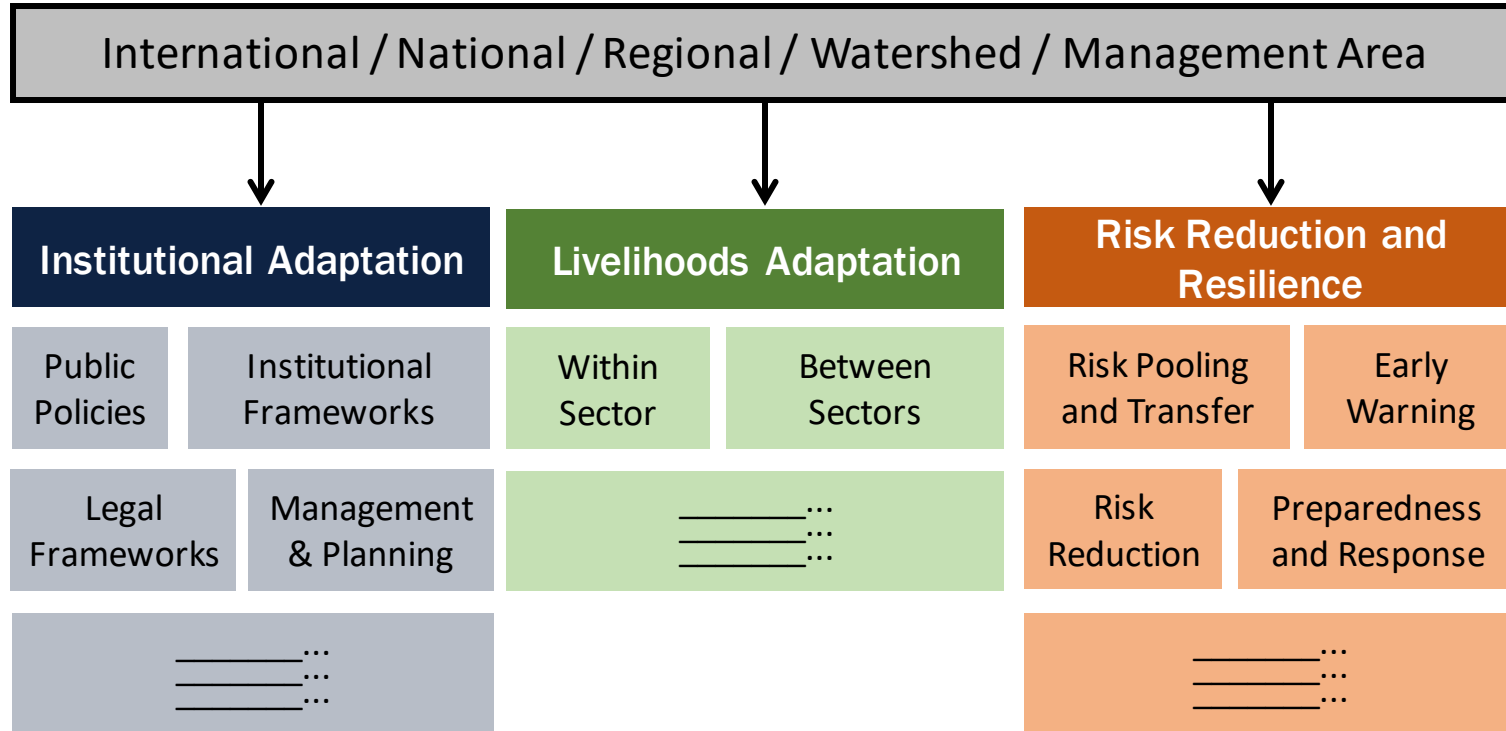




# Develop & implement projects



## FAO Adaptation Toolbox



### Develop & implement projects

on the ground in collaboration with governments to reduce vulnerability of fishing and fish-farming communities to climate change and natural disasters

- ⦿ Adaptation is place and context based
- ⦿ Adaptation should be viewed as an on-going and iterative process
- ⦿ Transboundary issues need to be considered when developing an adaptation strategy

# FAO climate change adaptation programme

20 projects

>24 countries supported



## The Gambia



Funded by Green Climate Fund (GCF):

- ⦿ Climate-proofing fisheries infrastructure
- ⦿ Enhancing value chain segments critical for women such as fish handling and processing
- ⦿ Developing aquaculture to compensate decreases in fisheries
- ⦿ Restoring mangrove forests and critical fisheries habitats

## Timor-Leste



Funded by Global Environment Facility (GEF):

- ⦿ Enabling national fisheries policies, legal frameworks and local management institutions to address climate change
- ⦿ Building adaptive capacity of communities and developing climate information systems
- ⦿ Adopting Ecosystem Approach to Fisheries and Aquaculture (EAF/ EAA) and Ecosystem based Adaptation (EbA), and promoting Nature Based Solutions (NbS)

# Develop & implement projects

## Broader climate resilience building: disaster risk management



Food and Agriculture  
Organization of the  
United Nations

- ❖ **Supported Rapid/Post-Disaster Damage and Needs Assessments and response plans** for the aquatic food sector in **Libya, Mozambique, The Bahamas, Sudan and Vanuatu**
- ❖ **Fisheries and Aquaculture Emergency Response (FARE)** training carried out in six **Caribbean** countries, to build institutional capacity across the region and improve inclusion of the aquatic foods in Post-Disaster Damage and Needs Assessments
- ❖ Developed a proposal of a **Boat Bank** to have containers with vessels, engines and fishing gears ready to be deployed at 5 UN hubs around the world after a disaster to support food security and livelihoods

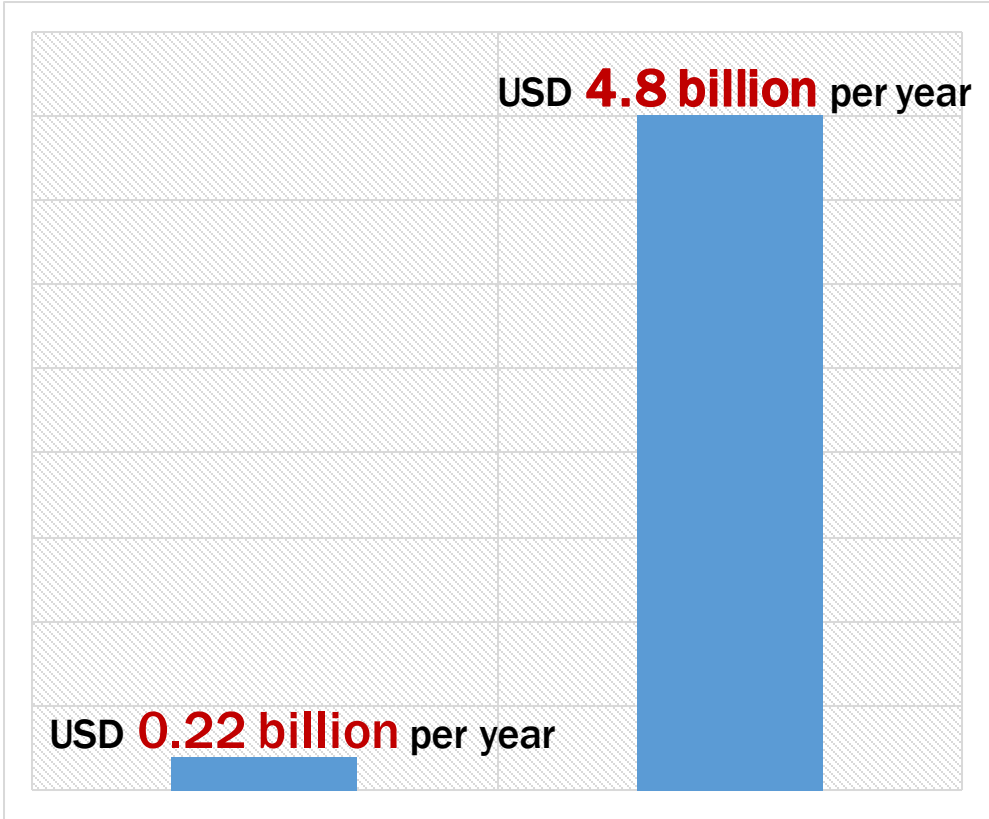




# The cost of scaling up climate action in aquatic food sector: adaptation



© FAO data



Actual adaptation finance flow (2017-2021) (i.e. public international adaptation finance flows to the aquatic food sector )

Target adaptation finance flow by 2030 (i.e. total costs of adaptation for the aquatic food sector in all developing countries )



# Integrate aquatic foods under UNFCCC & other fora



Food and Agriculture  
Organization of the  
United Nations

## ❖ REGIONAL FISHERY BODIES AND CLIMATE CHANGE

- CC included in the agenda of 9th meeting of **Regional Fishery Body Secretariats' Network** (RSN) held in conjunction with COFI35
- FAO workshop on CC with RFBs from **Indo-Pacific** region (Chennai, India) (October 2023) and from the **Atlantic** region (June 2024)
- CC is a **working topic** under several RFBs (e.g. COPPESAALC, GFCM, ICCAT, RECOFI)

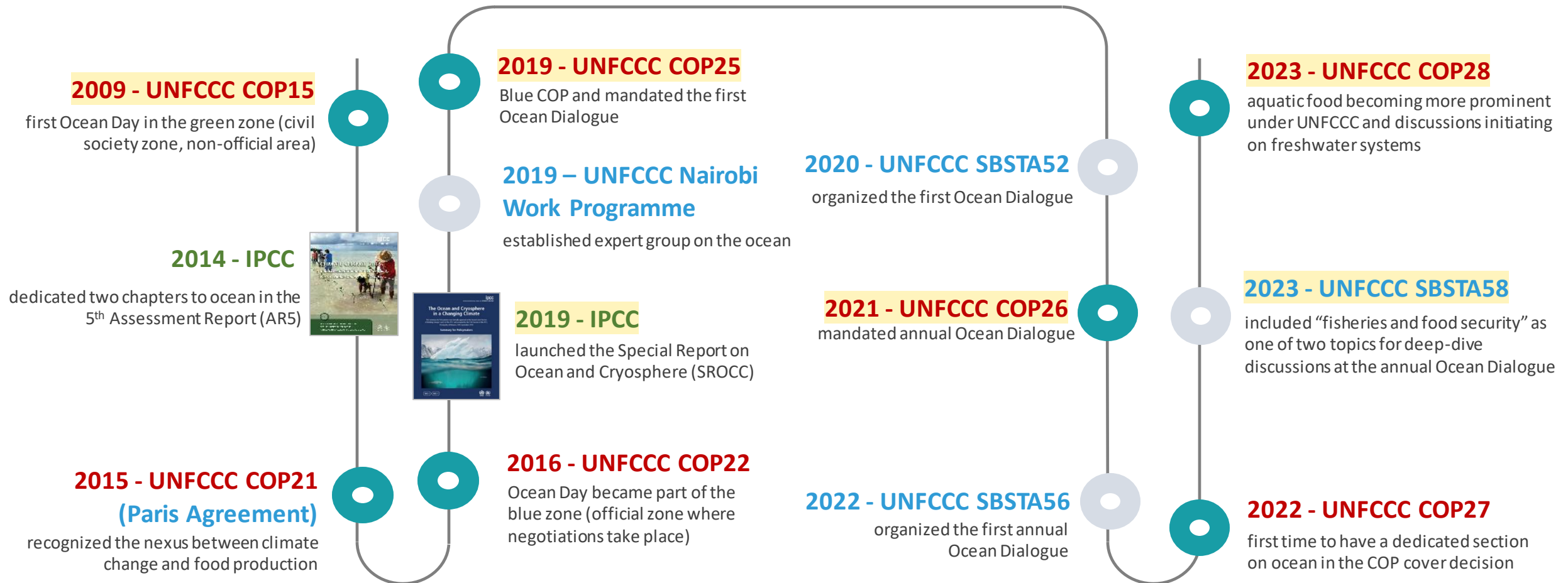


**Lunch time side-event today!**  
**Conference room A @ 13:15**

# Integrate aquatic foods under UNFCCC & other fora

## Global

- ❖ **73%** of Nationally Determined Contributions (**NDC**) referred to adaptation in fisheries and aquaculture in the 2020 NDC submission cycle
- ❖ Sectoral National Adaptation Plans (**NAP**): Chile, Saint Lucia, Senegal, etc.

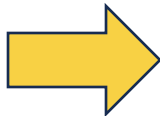


# URGENCY OF SCALING UP CLIMATE ACTION & ADAPTATION FINANCE GAP



United Nations OceanDialogue2023

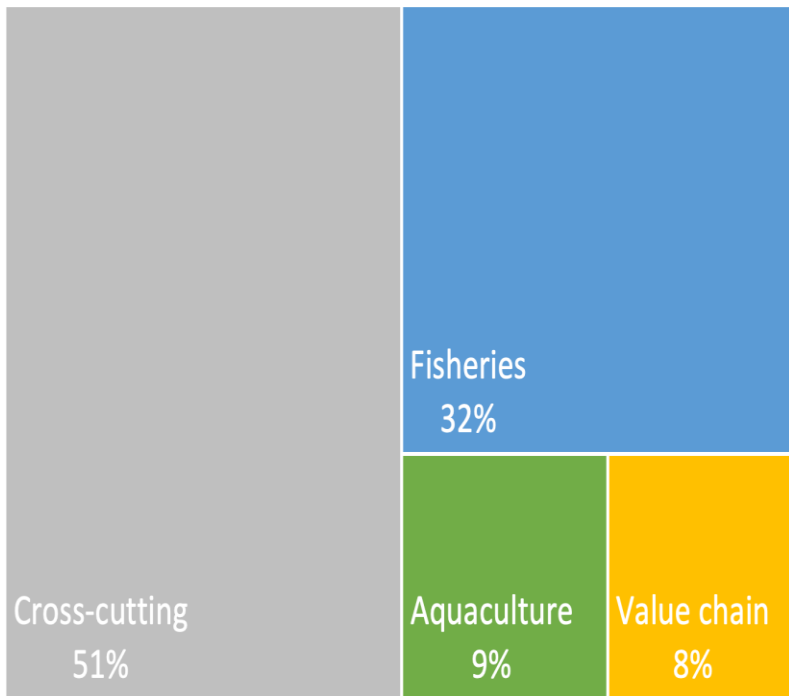
Framework Convention on Climate Change



**Topic 1 Coastal ecosystem restoration, including blue carbon**  
**Topic 2 Fisheries and food security**



Aquatic food related case studies (n≈100)



- ⊙ Integration of aquatic food climate solutions within **national and multinational processes**, including UNFCCC...linking national climate policies with their blue food production
- ⊙ Managing fish using an **ecosystem approach**...better recognizing the role of aquatic food in **carbon cycle** and **food security**
- ⊙ **Decarbonizing** the entire value chain of aquatic food production, including fishing vessels and aquaculture practices
- ⊙ Increasing, scaling up, and ensuring stable and accessible **finance flows**



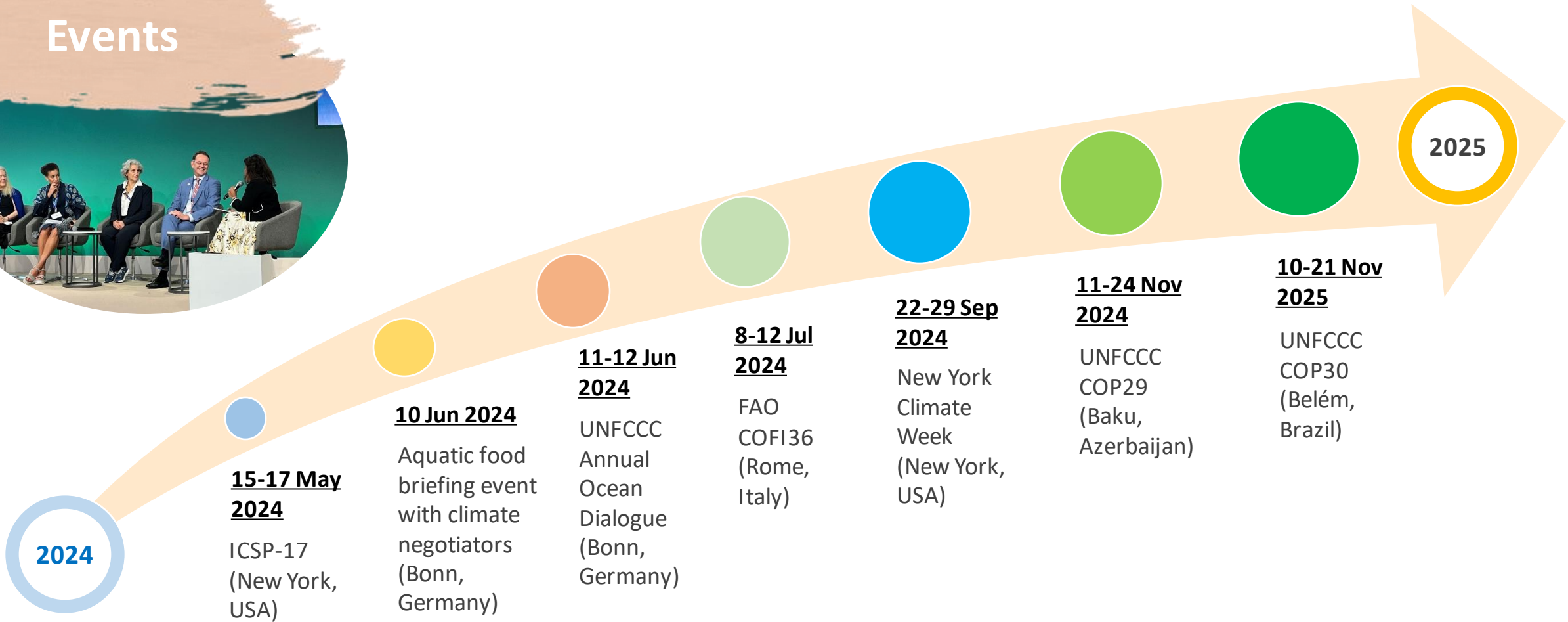


# Synergies across fora



Food and Agriculture  
Organization of the  
United Nations

## Events



2024

**15-17 May 2024**

ICSP-17  
(New York, USA)

**10 Jun 2024**

Aquatic food briefing event with climate negotiators  
(Bonn, Germany)

**11-12 Jun 2024**

UNFCCC Annual Ocean Dialogue  
(Bonn, Germany)

**8-12 Jul 2024**

FAO COFI36  
(Rome, Italy)

**22-29 Sep 2024**

New York Climate Week  
(New York, USA)

**11-24 Nov 2024**

UNFCCC COP29  
(Baku, Azerbaijan)

**10-21 Nov 2025**

UNFCCC COP30  
(Belém, Brazil)

2025

# Thank you!

---

Contact detail:

Tarûb Bahri <[Tarub.Bahri@fao.org](mailto:Tarub.Bahri@fao.org)>

Xuechan Ma <[Xuechan.Ma@fao.org](mailto:Xuechan.Ma@fao.org)>

