FishSCORE: Fisheries Strategies for Changing Oceans and Resilient Ecosystems by 2030

An Endorsed Program of the United Nations Decade of Ocean Science for Sustainable Development



Kick-Off Webinar Summary

On October 10 and 11, 2023, the UN Ocean Decade Program *Fisheries Strategies for Changing Oceans and Resilient Ecosystems by 2030* (FishSCORE2030) held a kick-off webinar to introduce the program's initiatives. The webinar was held twice to accommodate individuals from different global time zones.

The goal of the webinar was to provide information about the FishSCORE2030 program, its planned initiatives, projects currently aligned to FishSCORE2030 through the UN Decade of Ocean Science, and opportunities to engage. The webinar was open to anyone interested in learning more about the program. The following provides a brief summary of the information presented as well as discussion and feedback provided by attendees.

FishSCORE2030 Goals

Climate change is causing direct, indirect, and cascading impacts on marine social-ecological systems, including fisheries, with the intensity, frequency, extent, and duration of these impacts increasing. Changes in marine ecosystems and the impacts on fished species have cascading effects on fishers, marine resource dependent communities, their economies, and how these systems are managed. Ecological, social, economic, policy, and cultural conditions all must be considered, and they provide a basis for assessing potential resilience. FishSCORE 2030 aims to build a global network of scientists, knowledge holders, fishing sector members, practitioners, and policy experts to co-develop approaches to sustain marine fisheries, protect ocean ecosystem health, and secure equitable benefits from fisheries in a changing ocean.

Program Goals:

- Build a global network to facilitate information exchange, foster learning, and advance approaches to achieve climate-resilient fisheries.
- Support existing and emerging efforts to enhance the resilience of marine ecosystems, fisheries, and communities navigating the impacts of climate change.
- Co-develop information and tools for assessing climate impacts, vulnerabilities, and capacities to enhance resilience.

- Apply frameworks and tools in fishery systems around the world to support climate adaptation, and use insights from these experiences to iteratively improve the tools and resources.
- Further the development of scientific foundations and implementation approaches needed to achieve healthy marine ecosystems, vibrant fisheries, and equitable benefits in the context of climate-driven changes in our world's oceans.

FishSCORE2030 supports knowledge co-production as an iterative, collaboration-building process that brings together multiple types of knowledge and ways of knowing to develop a systems-oriented understanding of the impacts of climate change on diverse marine fisheries. Through the program, we aim to support on-going and new work at local, regional, national and international scales that will identify potential solutions to climate resilience in fisheries and elevate local knowledge and experiences in decision making.

What is the FishSCORE Network?

The FishSCORE2030 Network is a forum for information exchange about climate-resilient fisheries. Through a webinar series, workshops, and topic-based working groups, the network will:

- Create opportunities to facilitate information exchange and learning about climate and fisheries,
- Support collaborative projects and partnerships to understand how climate change is impacting different fisheries and how fisheries are transforming to adapt to new conditions,
- Synthesize and share information on conditions that impede or enhance climate resilience in fisheries, as well as strategies to support diverse pathways to resilience, and
- Encourage the exchange of results and synthesis of information across local and regional experiences to identify global insights for climate-resilient fisheries.

This Network will provide an opportunity to increase collaboration and communication across geographies and disciplines to develop information and design frameworks for enhancing climate adaptation in marine fisheries.

Ways to Engage

FishSCORE2030 endeavors to engage organizations and individuals in multiple ways. These include:

- Partner Network: Join the FishSCORE global network to advance knowledge exchange and collaborations.
- Projects: Collaborations in specific locations or fisheries. These can be connected to FishSCORE through the UN Ocean Decade (formal endorsement) or informally through the Network. Possible projects might: apply frameworks for benchmark assessments of climate resilience and evaluate strategies to enhance resilience; enhance local/regional capacity for resilience; support data collection needed to assess climate impacts;

- develop or implement policy or management opportunities to enhance resilience; or other efforts.
- Working Groups: Focused on specific topics related to climate resilience; developed based on critical mass of interest as FishSCORE launches more activities
- Leadership: Input to shape direction, strategies, partnerships, funding, and activities of FishSCORE
- Management and Policy Pipelines: Avenues for uptake and use of FishSCORE information and syntheses in priority-setting, policy-making, and resilience planning

Upcoming activities include:

- Online seminar series: Starting this November to highlight projects and collaboration opportunities.
- Survey participation: Winter/Spring 2024: Effort to identify key climate resilience knowledge gaps and issues facing marine fisheries in diverse geographies.
- Synthesis efforts: Winter/spring 2024/2025: Effort to synthesize resilience strategies across projects and case studies
- Projects and capacity strengthening: The Ocean Decade just launched a new Call for Actions. FishSCORE is soliciting new and existing projects and efforts to increase capacity for climate resilience in fisheries. For more information see Part II of the Call: https://oceandecade.org/news/ocean-decade-launches-new-cfda6-co-design-decade-actions-africa-caribbean-sids/
- In-person workshops:
 - FishSCORE2030 Full-Day Workshop at the World Fisheries Congress: This
 workshop will provide an opportunity to learn more case studies of climate
 resilience in marine fisheries and vulnerability assessments and resilience
 strategies for diverse fisheries, and participate in an effort to identify key issues
 facing fisheries as they adapt to climate change.
 https://wfc2024.fisheries.org/2023/06/01/fisheries-strategies-for-changing-oceans-and-resilient-ecosystems/
 - 2024 UN Ocean Decade Conference: Focused on 'delivering the science we need for the ocean we want', the 2024 Ocean Decade Conference will be hosted by the Government of Spain in Barcelona from 10 - 12 April 2024 to bring together the global Ocean Decade community and partners to take stock of progress and set joint priorities for the future. FishSCORE hopes to host a side event together with other Ocean Decade programs during the summit. https://oceandecade-conference.com/home.php

Currently Aligned Projects

Brief presentations were given by each of the projects currently aligned with FishSCORE2030 through the UN Ocean Decade and through the FishSCORE Network. The upcoming online seminar series will spotlight each of these projects in more detail.

Project: Costa Rica and Honduras collective action for the implementation of the Voluntary
Guidelines for the sustainability of small scale fishing in the context of food security and poverty
eradication. CoopeSoliDar R.L.

This action aims to strengthen the collective and individual capacity of small-scale fisheries organizations in both Pacific and Caribbean coasts of Costa Rica for the implementation of the Small Scale Fishing guidelines including the necessary areas related to tenure rights, access to responsible fishing, generation of knowledge, gender approach and adaptation to climate change within others to share the experience for the International Year of Small Scale Fisheries 2023. Contact: Vivienne Solis-Rivera (vsolis@coopesolidar.org)

Project: <u>Climate-smart strategies to develop resilience in artisanal fisheries of Mediterranean</u>

<u>Marine Protected Areas (CLISSARTES).</u> Spanish Institute of Oceanography, Spanish National
Research Council (IEO – CSIC)

This action aims to develop adaptive strategies and ocean-based solutions to facilitate climate-smart management of Marine Protected Areas (MPAs). It will assess the climate risk exposure, the connectivity between MPAs, the vulnerability of commercial fishing species in Mediterranean MPAs and their associated socio-economical costs. Contact: Marina Sanz-Martín (marina.sanz@ieo.csic.es)

Project: VADEPES II: Adaptation and climate change mitigation in the Spanish fisheries sector: tools to prevent maladaptation in Atlantic and Mediterranean fisheries. Spanish Institute of Oceanography, Spanish National Research Council (IEO – CSIC)

This effort aims to assess the socio-ecological resilience of the fisheries sector in two areas of the Spanish coast and co-create adaptation and mitigation actions using the Climate Resilient Fisheries Planning Tool developed by a Science to Nature and People Partnership working group. The effort will work to determine the resilience of attributes of the two systems as well as the risk of maladaptation of decarbonization measures. Contact: Marta Albo Puigserver (marta.albo@ieo.csic.es)

Project: <u>The Western Indian Ocean (WIO)</u>, <u>Productivity under climate change</u>. Kenya Marine Fisheries Research Institute

Upwelling and downwelling are the driving mechanisms that facilitate nutrients and plankton mixing to different layers of the ocean. As climate impacts force changes in these dynamics, food-supply, shelter and nurseries also shift over time, forcing many marine species to move to different locations. Future climate projections suggest that the Indian Ocean will continue to warm, driving this previously productive region into an ecological desert. This has major ramifications for fisheries. For example, WIO is responsible for 20% of the global tuna catch and, moreover, is the spawning grounds for these species. This work aims to determine changes in upwelling and downwelling, nutrients distribution, food-supply, shelter and larval distribution in the WIO due to climate forcings and impact on large pelagic fish biology and fishery systems. Contact: Joseph Kamau (jkamau@kmfri.go.ke)

Project: <u>Bioregional Resilience: Professional Conservation Resource Management Planning.</u>
Daluhay – Daloy ng Buhay

This project places a resilience focus on the capacitation and certification of skills that contribute to a pluralistic socio-ecological approach for sustainability and food system security across a

complete marine bioregion. Standardization of a knowledge base and related skills is being done to initiate Marine Spatial Food Security Planning for fisherfolk and approximately 10 million linked beneficiaries across the 10 North Philippine Sea Provinces. The project is intended as a model to be expanded to the other 5 Philippine Bioregions. Collaboration includes a national alliance of fisherfolk Marine Protected Area Managers; several national government agencies. including – the Technical Education and Skills Development Authority (TESDA) and; the Bagong Lumad Artists Foundation for the use of social artistry. Contact: Paul Watts (paulwatts@daluhay.org)

Discussions and Participant Feedback

Following the presentations of the FishSCORE2030 program and hosted projects, webinar attendees joined break-out sessions to introduce themselves and their work, ask questions about the program, and provide initial feedback. The key points of these discussions are summarized below.

Projects

- While some projects may be locally focused (as currently aligned projects are),
 FishSCORE2030 takes an approach of learning from local and regional experiences to scale up knowledge and learning to inform global and macroscale work.
- Projects can either be aligned with FishSCORE2030 through the UN Ocean Decade, or informally as part of the FishSCORE Network. If through the UN Ocean Decade, projects must submit a proposal during one of the Call for Decade Actions that will be reviewed by the UN as well as FishSCORE leadership. There is currently an open <u>Call for Actions</u>. To be associated with FishSCORE through the Network, interested individuals and organizations should reach out directly to the FishSCORE leadership.

Collaborations and Information Sharing

- Many participants noted that the sharing of ideas and experiences was a crucial part of
 the value of FishSCORE2030, specifically through gaining insights from differing scales,
 and from those with differing perspectives and disciplines. Additionally, participants saw
 high value in the potential of the program to increase the discoverability and accessibility
 of information and tools for decision-making.
- There is an opportunity with FishSCORE2030 to increase the availability of ocean data and awareness of existing available data, as well as best practices for the collection of new ocean data that may contribute to existing data repositories.
- There are multiple UN Ocean Decade programs whose goals can be related to and help advance the objectives of FishSCORE2030. These include programs focused on ocean observing (CoastPredict, ForeSea, SmartNet), ocean forecasting, prediction, and modeling (SUPREME), information networks (Blue Climate Initiative), data collection and citizen science efforts (OceanPractices), impact of increasing harmful algal blooms on marine ecosystems and fisheries (OBON), and sustainable ocean food (Blue Foods Initiative), among others. FishSCORE2030 has existing collaborations with many of these programs and will expand our work with other programs to maximize these synergies.
- There is work outside of the UN Ocean Decade that contributes to the understanding and implementation of climate resilient fisheries strategies. FishSCORE2030 should encourage information sharing and collaboration with these other efforts.

- There is an interest in the use of the Climate Resilient Fisheries Planning Tool and other tools and management frameworks in both developing and developed countries. A focused seminar on available tools and frameworks would be helpful to understand what these tools are and how they might be used.
- FishSCORE2030 has the potential to facilitate data and information exchange between data-rich and data-poor systems, for example providing approaches for data-poor and/or capacity-limited fisheries that are analogous to approaches used in data-rich systems.

Working with Communities

- Efforts should be made to empower indigenous voices and communities.
- In addition to the initiatives described in the presentation, education is an important element to consider as an important avenue for empowerment and information exchange with communities.
- Perceptions about the impact of climate change on fishery systems differ among fishers and communities, and in turn, these perceptions affect implementation of actions.
 FishSCORE2030 may consider work to compile and disseminate stories and experiences to inform how resilience strategies are perceived and adopted.

Key Issues To Consider

- Many countries are facing social and economic challenges that will contribute to the ability of their fisheries systems to adapt to climate change. As an example, Japan's aging population is leading to labor shortages that affect the fishing industry and processing sectors.
- There are significant social impacts occurring due to the impact of climate change on fishery systems that are especially pronounced in small scale fisheries and indigenous communities.
- While it is recognized that FishSCORE2030, as described in the presentation, will
 provide opportunities for increasing collaborative work and information exchange,
 actions to enable change and create impact should be better incorporated into the
 implementation of the program.

Webinar Follow-Up

To solicit more feedback about FishSCORE2030's planned activities and initiatives and to identify how individuals may want to be involved, a follow-up survey will be sent to all participants and registrants within the coming weeks.