Topics at the nexus of climate change, fisheries, and blue foods

A webinar series highlighting the impact of climate change on fisheries and aquaculture and the communities who depend on them

February 2024 Webinar: Empowering fishers through training

Jointly hosted by the UN Ocean Decade Programs Blue Food Futures, Fisheries Strategies for Changing Oceans and Resilient Ecosystems (FishSCORE), Sustainability, Predictability, and Resilience of Marine Ecosystems (SUPREME), and Sustainability of Marine Ecosystems through Global Knowledge Networks (SmartNet).

This webinar series highlights current efforts and challenges along the spectrum of the climate-fisheries nexus. Presentations and discussions will range from data-driven efforts being undertaken around the world to better understand oceanographic and biological changes affecting fisheries, to how the results can be used to inform fisheries management, aquaculture, and sustainable food decisions, to the many ways people and broader communities are being impacted by and adapting to the way these changes impact marine ecosystems and marine resource use.

Presentations

Bioregional Resilience: Professional Coastal Resource Management Planning at the Scale of Climate

This project is endorsed by the UN Ocean Decade as Action 15.4, and addresses multiple Challenges (C1-10 below) of the Decade. For more information about the Challenges, visit: https://oceandecade.org/challenges/

The traditional science approach to influencing policy remains frighteningly isolated from climate-change mitigation (C5). This project targets a global paucity of (positive) change-focused **Action Research** at the scale of climate. As a contribution to cultural, financial educational, and administrative management (C10) of large-scale sustainable fisheries ecosystems or bioregions (C3,4,5); this community-based Arctic-Tropic comparison of socio-ecological resilience enhancement through institutionalized training (C9) will provide templates for global replication, paradigm shift, and holistic programming inclusive of restoration (C1,2), maternal ecohealth, youth, and livelihoods (C4). The project also aims at food security improvements for an Arctic culture and at least 10 Million Filipinos. Although bioregions and ridge-to-reef watershed basins are not new concepts, advances will consider these ecological units through mandate-harmonization and Geographic Information Systems applied to sustainable socio-ecological production through draft international Technical and Vocational Education Training digital (C8) skill-set standardization. This pluralistic (C9) participatory approach to resilience and sustainability

goal advancements considers balance (C10) at the nexus of society, culture, and nature. The project provides catalytic support for ongoing spatial and participatory (C10) program institutionalization across the North Philippine Sea, responding to a globally significant coast for hazard management (C6), as part of Southeast Asia where the majority of the world's impoverished small-scale fisherfolk live. This science platform also provides spatial analysis support to sustain the unique complexity of an Arctic marine-based, socio-ecological culture and geographic considerations for Canada's Hudson Bay, inclusive of mobilizing existing ocean observation infrastructure (C7) and reversing the population decline of the iconic Polar Bear.

Senior Researchers: Susan Blum, Konstantia Koutouki, Marivic Pajaro, Paul Watts

Webinar Presenters: **Marivic Pajaro** is the Executive Director of Daluhay (Daloy ng Buhay, Inc.). She holds a PhD in Resource Management and Environmental Studies from the University of British Columbia, and has more than 30 years' experience in teaching, research, and non-profit development in natural resources and Indigenous knowledge in the Philippines and Canada. She has also published extensively for academic and general audiences on Action Research and participatory education. Marivic coordinates consultation and partnerships with Daluhay's local partners in the Philippines and will work with technical teams in both Canada and the Philippines as well as community partners to refine data access processes and training.

Paul Watts is President of Daluhay. He holds a Doctor of Science in Zoophysiology from the University of Oslo and has more than 30 years' experience in instructional and management positions related to ethnoecology and university/college administration. He has published on topics related to food security and maternal health, sustainability and Indigenous knowledge, and coastal ecology, with extensive research based on Philippine marine sustainability as well polar bear and Arctic bioenergetics highlighted by extensive collaboration with Indigenous communities. Based upon his experience on program institutionalization, Paul's primary focus is resilience.

For more information about this work, visit: https://oceandecade.org/actions/bioregional-resilience-professional-crm-planning/

The Fisherman Weather Field School: Increasing Ocean Literacy

The Fisherman Weather Field School is an ocean literacy programme that provides education for fishing communities to support understanding of the information provided by weather and ocean climate services. Hosted by the Indonesia Agency for Meteorology Climatology and Geophysics , this programme enhances the level of understanding of maritime weather and climate forecasting and information to improve safety. It also increases fishers' understanding and awareness of the importance of maritime observation equipment which are essential to produce accurate maritime weather and climate information for their safety when conducting maritime activities.

Webinar Presenter: **Prof. Dwikorita Karnawati, Ph.D** has been the Head of the Indonesia Agency for Meteorology, Climatology and Geophysics (BMKG) since November 2017 after serving as the President of Universitas Gadjah Mada, a prominent university with 55,000 students in

Indonesia. She was a Professor in Environmental Geology and Disaster Mitigation at UGM and was active in promoting and developing a National Multi-Hazard Early Warning System and a key figure in the preparation of the Presidential Decree on Indonesian Tsunami Early Warning System (Presidential Decree, Number 93 of 2019). In 2019, Prof. Karnawati was elected as the Executive Council Member of the World Meteorological Organization and was re-elected in 2023. She is also the Chair of the Intergovernmental Coordination Group of Indian Ocean Tsunami Warning and Mitigation System and was appointed as a Steering Committee Member of Global Ocean Observing System as a representative of WMO in 2021.

For more information and to use the tool, visit: https://maritim.bmkg.go.id/inawis

SUPREME
SUstainability, Predictability and REsilience of Marine Ecosystems

Blue Food Futures

Smart Net

FishSCORE 2030
Fisheries Strategies for Changing Oceans and Resilient Ecosystems