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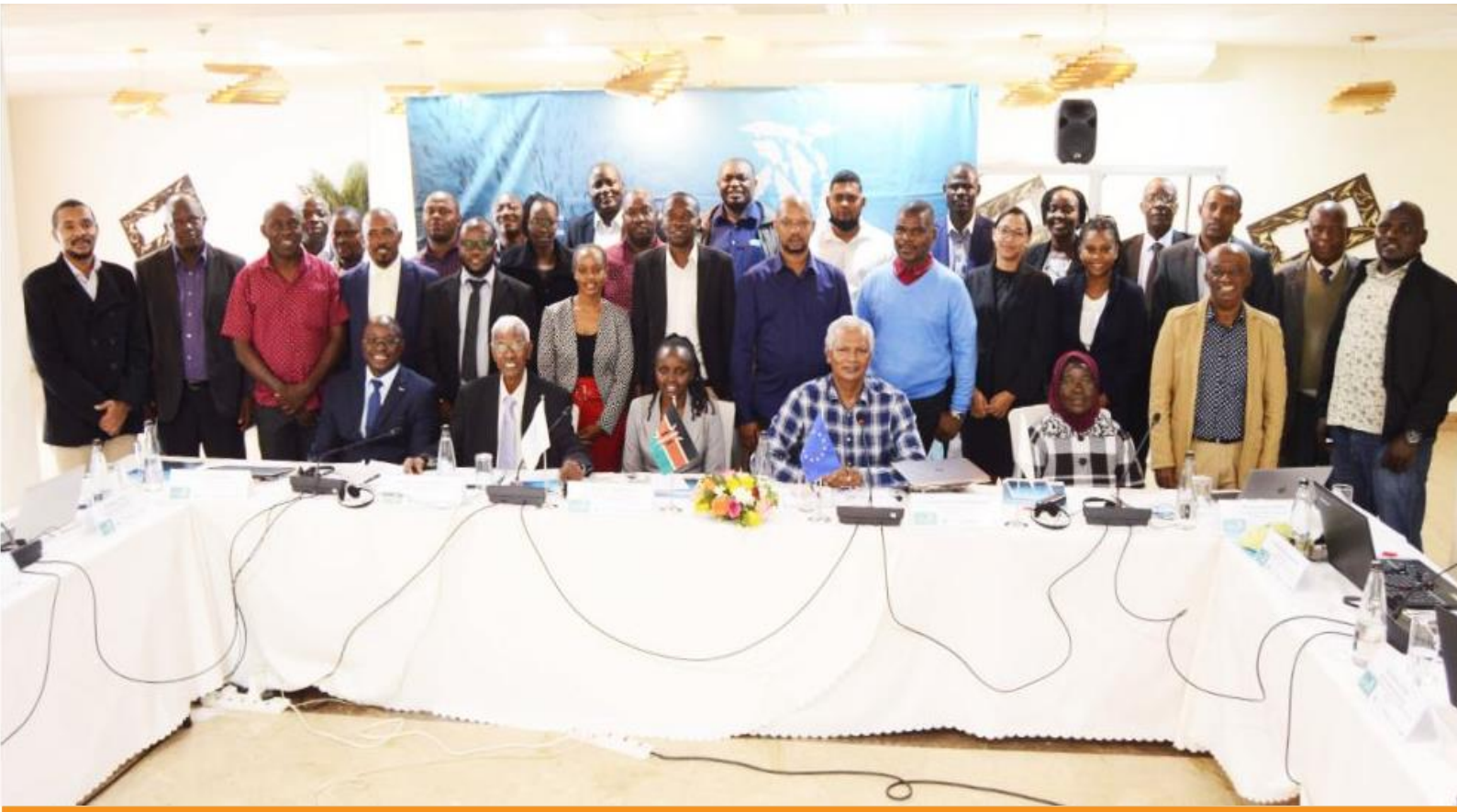
Enhancing equitable economic growth by promoting sustainable fisheries in the EA-SA-IO region



CLIMATE CHANGE NEXUS FOR EFFECTIVE MANAGEMENT AND GOVERNANCE MEETING

14th & 15th June 2022

NAIROBI - KENYA

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WORKSHOP REPORT:

1. Climate change Nexus for effective management and governance.
2. Validation of the Socio-Economic impacts of climate change on the small-scale Fisheries sector of the SWIO region.

by

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1 BACKGROUND

Climate Change threatens the world fisheries. As temperatures are rising, fish populations are projected to decline and disappear in some regions, especially in the tropics. Fish is an essential protein source for 3.2 billion people and provide 17 per cent of the world's animal protein. It is a lifeline for many developing countries, including the EA-SA-IO region that rely on fish for 70 per cent of their nutrition.

The local fishing communities contribute the least to the global CO2 emissions but are facing existential threats. Despites the pledges of the Paris Agreement on Climate Change 2015, there has been no substantial progress in the Global Decarbonisation to-date and the world in sleepwalking into a +2°C or worst scenario with disastrous consequences for the topical coastal and island states

To balance the pessimism of climate science and the faith of the local people about their lives and livelihoods, ECOFISH will do what it takes to promote fish sovereignty for the wellbeing and shared prosperity of the coastal fishing communities. The proposed network will provide scientific evidence to support national projects to the Green Climate Fund (GCF) and other multilateral development agencies

Informed policymaking and management measures are critical for mainstreaming appropriate climate-smart and "no-regret" investments to build resilience of fragile fisheries resources and ecosystems for the present and future generations. Circular Economy is applicable to the coastal fisheries - from hook to plate - to ensure sustainable harvest and consumption of seafood, i.e., fish food sovereignty for the local fishing communities

The operationalisation of a Regional Coastal Marine Fisheries-Climate-Environment Outlook Network to track the socio-economic and ecological impacts of climate change and biodiversity degradation in the ACP countries of the EA-SA-IO region is supported by Strategic Action 1.7 of the ECOFISH Marine Fisheries Work Plan. The purpose of the Concept Note is to define the objectives, theory of change, high-level log frame and implementation modalities of this intervention to trigger a multidisciplinary and multi-stakeholder consultative process for anchoring the mechanism in the regional landscape.

The E€OFISH programme support the sustainable management and development of fisheries to contribute to poverty alleviation food and nutrition security while addressing climate change resilience and enhancing marine biodiversity. It builds on the achievement of previous projects to enhance the sustainable and inclusive management of the marine and inland fisheries resources and ecosystems of the EA, SA and IO region to contribute to the aspirations of the UN-SDG 2020. It also reflects the" AU Transforming Africa 2030 and Blue Economy Strategy" as well as other analogous marine fisheries and environment international and regional instruments, including the *AU Policy Frameworks and Reform Strategies* for the small-scale fisheries 2017.

Against this background, the Ecofish programme commissioned two studies, namely on the indicators used in the region with regards to climate change and a Socio-economic impact assessment of climate change on the small-scale fisheries of the SWIO region. The two consultants presented their findings. This workshop took stock of the contents, discussed and provided further inputs to be incorporated in the report. Once done, the final report submitted will be screened by Ecofish and considered validated to enable Ecofish move to the next level.

1.1 Objectives

The proposed intervention aims to set up a regional Network for assessing and predicting potential impacts of climate change on selected coastal marine fisheries and ecosystems in EA-SA-IO region[1]. The pilot will initially focus on observing the biophysical and socio-economic factors of ocean warming and associated environmental stressors the priority fisheries in the partner countries. The concept is inspired by Integrated Coastal Management which is interrelated to other analogous approaches such as the Ecosystem-based Fisheries Management (EBFM), Integrated and Sustainable Fisheries Management Approach and the FAO Blue Growth Initiative.

Besides a lack of adequate and reliable fisheries data, the conventional fish stock assessment methods are based on a single species which is not appropriate in a multi-species and multi-gear fisheries such as the artisanal fishing. However, there is a global effort to promote EBM to embrace the biophysical and socio-economic dimensions of fisheries management in an integrative and holistic manner. So, the intervention proposes to establish a regional network of national or local in-situ observing of the ocean warming and biodiversity degradation phenomena in selected coastal marine fisheries.

The regional network of national marine research centres will collaborate to synthesize a suite of existing and in-situ observations through the dynamic models to assess the current and future trend of climate and environmental impacts on the fisheries. It will also refer to UN SDG 2030 framework, particularly SDG 14 that has six targets related to marine life, small-scale fisheries, and associated ecosystem services.

1.2 Methodology

The Regional Climate-Fisheries Outlook Network will have to select key indicators/pointers related to the impacts of ocean warming as well as overfishing and unsustainable fishing practices on the coastal marine fisheries to anticipate appropriate adaptation measures for maximisation of the socio-economic and ecological benefits to local fishers and fish workers in the partner countries. The

[1] It is one of the strategic actions of ECOFISH Marine Fisheries Work Plan which is implemented by the IOC Secretariat. It covers the ACP countries of the marine façade of the EA-SA-IO region: Comoros, Madagascar, Mauritius, Seychelles, Mozambique, Tanzania, Kenya, Somalia, Eretria, Djibouti, and Sudan. La Reunion, an outer territory of France/EU is also participating this programme on its resources.

Network will be designed through consultation among the key stakeholders (data users and producers). The National Focal Points of the Ecofish Programme will assist in the facilitation and coordination of the key stakeholders at the national and sub-national levels. However, this is just the beginning of the process for an in-depth and inclusive consultation with all relevant stakeholder groups.

Scientific institutions will be equipped to measure ocean production and main parameters illustrating the change of the biophysics of the ocean. The Fisheries R&D Network will work in close collaboration with Meteorological Services as well as other relevant international institutions over the duration of the project to have an insight of likely impacts of climate change on key fish species. It is worth noting that there are already studies (cf. recent study from FAO on the impact of climate change on fisheries) - with detailed information on the Indian Ocean region.

Analytical capacities are essential to measure and plan actions against climate change. To uphold ocean and fisheries in the climate priorities per country, the work package will include studies, validation meetings, training and provision of IT equipment with software application (supply contract). These will be commissioned to assist countries, DRMOs and RFBs with stronger analytical works on the climate effects to the attention of the decision-makers.

1.3 Expected Outcomes

- In keeping with the narratives of this Concept Note the ECOFISH Programme aims at ushering a paradigm shift in the region regarding the climate change adaptation in the coastal marine fisheries in the EA-SA-IO region through science-based policymaking and management decisions. *This initiative is part of an ensemble of macro-economic and technical mechanisms for unleashing the development potentials of sustainable and climate-resilient marine fisheries to contribute to shared prosperity and economic transformation of the African continent.*

- It should be perceived a pride for relevant stakeholders at all levels to partake their leadership and commitments for anchoring this Coastal Marine Fisheries-Climate Outlook Network in the EA-SA-IO landscape. Effective consultation and collaboration are now triggered.

- The activity will assist the DMROs and RFBs in the incorporation of climate adaptation and resilience strategies and action plans into their respective policy and institutional frameworks. The beneficiary countries will be supported through appropriate skill development, training and capacity building initiatives.
- Analytical capacities of the DMRO's are enhanced.
- Countries will benefit from required equipment to carry out the necessary measurements.
- Knowledge of impacts can help in the mitigation of issues.

2 INTRODUCTION

2.1 Welcome speech from Dr Rodrick kundu

Dr R. Kundu, Director Fisheries & Aquaculture Development in Kenya, welcomed all the participants to this Climate Change Nexus for effective Management and Governance meeting. He pointed out the close collaboration between Kenya and the Ecofish programme. Dr Kundu spoke of the vast benefits offered by the small-scale fisheries to society at large and to the developing countries. However, climate change and its impacts are having a far greater implications that was originally thought of, especially on the livelihoods of communities.

2.1.1 Speech of Dr. Kundu at annex 1

Download Speech Annexe 1: click here

Mr. S. Hanoomanjee presented the apologies from the EU Representative and those of the IOC representative. He invited the Dr S. Sweenarain to say a few welcoming words to the participants.

2.1.2 Speech by Dr S. Sweenarain

Dr Sweenarain welcomed the participants on behalf of the Technical Assistance Team and the Ecofish IPMU. He recalled the difficulties faced at the start of the project namely the covid 19 pandemic, the various lockdowns, prohibition of travels and now the Russian war, etc. However, Ecofish skilfully navigated through the stormy waters and over the last two years have achieved much.

2.1.3 Preliminaries to the workshop

Dr Kundu was proposed as the chairperson for the meeting and Dr S. Sweenarain as the co-chair. This was followed by the adoption of the agenda without any amendments and some housekeeping items for the participants. Participants at the workshop and also those online presented themselves, followed by a souvenir Photo.

3 Climate change Nexus

3.1 Setting the scene for the meeting

Dr S. Sweenarain presented the situation as it stands today. He spoke on the asymmetry of information and why the fisheries sector id still lagging behind. He described the situation of International and Multilateral instruments and the lack of coordination at these higher levels and pondered on Africa's place, especially its Blue Economy Development prospects. He further expanded on the following:

- Climate Mitigation, adaptation, and Disaster Risk Management
- Global public goods governance and market failures [Free rider economy]
- Inequalities [Winners and Losers] Vulnerabilities of the poorest of the poor in the tropical regions (Sub-Saharan Africa) – low laying countries and small island states
- Tug of war between Mitigation and Adaptation! From the perspectives of developing countries [the Negotiation dramas of COPs]
- A lack of financial and technical resources to invest in climate adaptations in developing countries [No regret policy]
- Blue Economy and Circular Economy
- Activities, indicators and milestones

He further informed the assembly on the Memorandum of Understanding with the Mauritius Oceanography Institute to explore key drivers, capacity needs and Gaps and the urgent need to empower the countries on climate change adaptation and resilience measures and mitigation measures.

Download Presentation annexe 2: click here

3.2 Socio-economic impacts of climate change on the socio economic

Dr Kirugara presented his report on the Socio-economic impacts of climate change on the small-scale fisheries of the SWIO region. The objective of the study was the understanding and prediction of the potential impacts of climate change and Extreme weather events on the coastal fisheries of the SWIO Region. Dr. Kirugara spoke on the global and regional landscape with regards to small-scale fisheries, fish types and ecosystems. He also enumerated the potential impacts of climate change (changes in the ocean & cryosphere, human impacts and the resulting consequences. He mentioned on the vulnerability and adaptation (indicators, exposure, sensitivity impacts etc. He briefly explained the various indicators and the way forward.

Discussions: discussions were axed on the following:

- Fish species and types of systems which will be adopted
- Ocean climate actions & the complex ecosystems
- Link to the global processes & concrete impacts
- Lack of scientific data in some countries, capacity needs, gap assessment and
- Inventory of publications, modelling, EWE extent, siltation's & price increases, socio-economic indicators
- Habitats
- Addressing population dynamics and climate change.

The consultant will address the above as far as possible in his final report and submit to Ecofish.

Download Presentation annexe 3: click here

3.3 Potential impacts of Ocean Warming on the small-scale Fisheries in the SWIO region.

Dr Sweenarain briefly presented on the Potential impacts of ocean warming on the small-scale:

- Global risk report 2019 (risks & trends),
- The planetary boundaries and the donuts economics,
- ES-SA-IO Marine Fisheries & Ecosystems,
- The world EEZ
- Productivity indicators & ocean health
- Climate impacts and adaptation mechanisms
- Policies measures

Discussions:

Various suggestions were made by participants, and these relates mainly to:

- Governance & climate change
- Climate change and financial support initiatives; CC financing
- Data gaps, sources and propose developments within the sector.
- Disconnect between the communities and Governments and vice-versa. This needs to be addressed as a matter of urgency.

Download Presentation annexe 4: click here

3.4 Climate Change related indicators and needs for Marine Research Institutions

Dr Sandeep Beeput presented his report on the identification of indicators and liaison with the research institutes of the region. The main objectives were as follows.

- Identify main Marine research institutes of the partner countries.
- Identify main existing indicators/Parameters and locations to be used for data collection.
- Collaborate to list the needs of the Research Institutes in terms of equipment & support services
- Examine capacity building needs including training and sharing of lessons learned, use of innovative technologies, and good practices at the regional level.

Dr Sandeep also looked into the parameters being presently collected by the countries of the region and the needs of the various research institutes.

Discussions:

Proposals made by participants relates to:

- Global biodiversity framework gives a set of indicators and would need to be consulted
- CBD goals
- Human capacitation
- Empowerment & capacity building at all levels
- Data sources and relevance
- Priority actions.

Download Presentation annexe 5: click here

4 Day 2: Climate Smart Fisheries and Blue Economy Nexus – An Ecofish Perspective.

Dr Sweenarain made a recap of Day1 work and proceeded with his presentation on climate smart fisheries and blue economy - an Ecofish perspective. He spoke on the following:

- the landscape of the marine fisheries of the EA, SA & IO region.
- sustainable fisheries model.
- the FAO code of conduct for responsible fisheries,
- a conceptual framework for MDG/SDG,
- operationalization of sustainable development,
- the key drivers for sustainable development,
- the wealth management approach (Human and social assets, environmental and government assets, natural capital & economic indicators etc.).
- Sustainable development dashboard, indicators of sustainable development, fish consumption as an indicator etc.
- He also spoke on mainstreaming sustainable development and the role of the national focal points.

Download Presentation annexe 6: click here

Discussions:

The NFP's of Mozambique, Seychelles and Zanzibar mentioned the lack of reliable data, protocol for sharing of data which would need to be developed by Ecofish. The also expanded on the issues with regards to environmental and communities' data sharing. They also raised the question of "How much data is needed for effective governance".

Dr, Wassie from IGAD remarked the cross regional nature of the Ecofish programme and the sharing of experience between the HOA countries and the SWIO region. He also remarked that lack of trust/s is probably the main factor to address for the sharing of data to become a reality.

Mr Tiana Randriambola (Ecofish) spoke on data sharing and the protocols linked to data sharing under result 2 of Ecofish Workplan. He also remarked the need for countries commitments.

4.1 Status of climate adaptation, mitigating policies and legal frameworks applied by SWIO Countries – Comoros

Dr Adbouchakour Mohamed Abderremane, the alternate NFO for Comoros spoke on the fishing sector, the decline in production, the degradation in the ecosystem/s and the negative impacts of climate change on the fisheries communities. He remarked on the need to set up an information platform for the fishermen and further training for the fishers. He briefly talked on the priority actions for Comoros specially in conservation and Biodiversity and the need for co-management.

Download Presentation annexe 7:click here

4.2 Status of climate adaptation, mitigating policies and legal frameworks applied by SWIO Countries – Mozambique

Dr. Samuel Sitoe, the NFP for Mozambique spoke on the hotspots distribution from a study carried out by the US Aid. He stressed on the fact that the entire Mozambique coast is vulnerable, with more intensity on the coast of Zambézia province. He listed the impacts of climate changes on the various ecosystems and on the fisheries sector. He explained the various mitigating policies with regards to the national climate change adaptation. He briefly spoke on mainstreaming the climate change adaptation and the prospects and challenges for the small-scale fisheries sector.

Download Presentation annexe 8: click here

Discussions:

Discussion axed on the following:

- Are all landing sites equipped with data collectors?
- The Open Access of the small-scale fisheries.
- Specific Policies for the SSF.
- Budget to implement the management plans and ways and means to improve the well-being of the communities
- Participatory approach
- Fishing gears: damages caused e.g., nets
- Resilience, ecosystem productivity, research to be developed, reinforce control, Management of fishing activities and impacts on coastal fishing activities.

4.3 Status of climate adaptation, mitigating policies and legal frameworks applied by SWIO Countries – Mauritius

Mr Satish Khadun, the NFP for Mauritius spoke on the challenges faced by Mauritius. Following the covid 19 pandemic, the time now is to maximise the use of the large EEZ (2.4 million Km^2). Setting a base for the development of the fisheries sector has now become imperative, to counter the over reliance on the tourism sector. Exploration of new potential untapped fishing resources should be the priority 1 of the sector. He also spoke on the various advantages being given to the fishers and the reinforcement of the marine surveillance in the region.

Download Presentation annexe 9: click here

4.4 Status of climate adaptation, mitigating policies and legal frameworks applied by SWIO Countries – Seychelles

Ms Stephanie Radegonde and Ms Julie Barra spoke on the National climate change adaptation and mitigation policies of the Seychelles. Stephanie briefly described the 'Seychelles National Climate Change Policy, National Climate Change Strategy, and the Fisheries Sector Policy and Strategy 2019-2023". She noted that the objective for Seychelles is to reduce its economy wide absolute GHG emissions by 122.5 ktCO2e (21.4%) in 2025 and estimated 188 ktCO2e (29%) in 2030 relative to baselines. The cost estimated to USD 295 million. She also gave an apercu on the status of climate adaptation and mitigation measures in major economic sectors, with emphasis on fisheries; adaptation and mitigation policies; the prospects and challenges and resource mobilization. She concluded on the Seychelles Blue Carbon initiative.

Download Presentation annexe 10: click here

4.5 Status of climate adaptation, mitigating policies and legal frameworks applied by SWIO Countries – Zanzibar

Mr Omar Foum the Ecofish National Liaison Officer based in Zanzibar spoke on the following:

- Marine Conservation Areas and Issues of the MPA's.
- The Zanzibar Blue Economy Policy 2020

He further spoke on Zanzibar Environmental Management Authority (ZEMA) together with DoE they are responsible of the National Climate Change adaptation and Mitigation Policy and legal frame works but till now there is no collaboration and funds for working together in the conservation issues. He also noted that various points with regards to the mainstreaming of CC adaptation in the small-scale fisheries sector.

Mr Foum concluded by providing a list of priority actions which needs to be tackled as a matter of urgency in Zanzibar.

Download Presentation annexe 11: click here

4.6 Discussions on the country presentations

The discussions articulated around the following points:

- Many countries from the region have still not fully understood climate change and its impacts.
- On the other hand, climate change also offers various opportunities for further development, job creation, adaptation, cross sectoral initiatives, alternative livelihoods, co-management of the fishery resources and /or fisheries and aquaculture, circular economy i.e., maximizing use of the various resources and limiting wastages.
- Investigating and adopting inclusive sustainable management and governance.
- Maximise the use of solar energy for processing and value addition.
- Seek new markets for new products.
- Be more proactive and solutions/development oriented.

Dr Wassie from IGAD spoke on the impacts of climate change and how the communities are affected and mitigating measures being developed. He also mentioned that continuous awareness needs to be carried out at all levels withing the communities. He also mentioned on the use of the Beach Management Units (BMU's) as a tool for strategic and policy planning at the regional/communities' level.

4.7 Update of the Ecofish Programme

Dr S. Sweenarain gave an update of the Ecofish Programme highlighting the objectives, theory of change, the expected results, and the mandated strategic actions with emphasis on SA 1.7.

5 CONCLUSION

Mr Satish Hanoomanjee briefly reviewed the various discussions on the report of the consultant and proposed that participants at the meeting will have a further 8 days to submit any comment/s to be considered by the consultant for inclusion in his report.

He thanked all the participants, including the online participants for their contribution and discussions. He also thanked everyone concerned in one way or the other with the various activities related to the workshop in Nairobi including the consultant, translators, the hotel management, the service providers and all people concerned with the event. Last but not the least, he thanked Dr Rodrick Kundu and the Ministry responsible for Fisheries in Kenya for their collaboration.

Dr Samuel Sitoe from Tanzania presented a vote of thanks to the Ecofish programme, the organisers, Countries and participants and to all concerned in one way or the other.

The meeting closed at 15.30 hours.

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