

Enhancing sustainable marine fisheries management in the Red Sea State of Sudan

The United Nations Industrial Development Organization (UNIDO) is committed to promoting sustainable practices in marine fisheries management in the Red Sea State of Sudan, where biodiverse coral reefs are withstanding the effects of climate change. This report highlights the significant progress made under the project "Building institutional capacities for an ecosystem approach to management of the marine fishery in the Red Sea State (Phase II)". This UNIDO implemented project is generously funded by Norway, with the grant administered by the Norwegian Agency for Development Cooperation (Norad). The project is carried out in collaboration with the Norwegian Institute of Marine Research (IMR) and IMA International.

Key activities and achievements covering the period from 1 September 2023 to August 2024:

1. Strengthening Institutional Capacities:

- **Fisheries Statistics System (FSS):** The Marine Fisheries Administration (MFA) has been fully enabled to operate the FSS, ensuring continuous data collection at Sigala and Suakin, and conducting comprehensive analyses for the preparation of reports on fish stocks and landings. The MFA is now capable of developing management recommendations without further external assistance.
- Both the Faculty of Marine Sciences and Fisheries at the Red Sea University (RSU) and the Red Sea Fisheries Research Station (RSFRS) are fully equipped to use the FSS for scientific analyses and to provide scientific advice to the MFA.

2. Development and Implementation of Management Plans:

- The MFA has been enabled to collect statistically representative data on fish captured in licensed trawling and purse seining activities in the EEZ of Sudan and integrate these data into the FSS. The MFA can extract and analyze this data to issue science-based management recommendations for designated areas, seasons, total allowable catch, and quotas.
- The MFA is now capable of using the Vessel Monitoring System (VMS) to monitor the activities of licensed trawling and purse seining vessels. A cost-recovery model for VMS, TED, and BRD equipment has been established.

3. Feasibility Studies and Policy Development:

- Investigated both current and potential future ecosystem services. Enhancing fisheries catches and mariculture has the potential to improve the livelihoods of relevant communities. However, it was equally important to explore the potential of sustainable alternatives related to the marine environment.
- The project facilitated the planning and execution of Baited Remote Underwater Video (BRUV) and Diver Operated Video (DOV) based surveys. Counterpart institutions have built the skills and capacities to use BRUV and DOV for reef ecology assessments, integrating this data into the FSS for management recommendations without requiring further technical assistance.
- Developed and implemented management plans for key harvested species using the Ecosystem Approach to Fisheries Management (EAFM). Specific technical management advice has been provided for species such as the Roving Coral Grouper and the Squaretail Coral Grouper. The MFA's institutional capacities have been enhanced to independently carry out future EAFM iterations.
- Prepared a series of 14 policy briefs on critical issues, including:

- Fish Stocks and Landings
- Marine Protected Areas
- Climate Change
- Marine Biodiversity
- Usage of the Vessel Monitoring System (VMS)
- Ecosystem Approach to Fisheries Management (EAFM)
- Addressing Plastic Pollution
- Gender Mainstreaming and Improving Livelihoods of Coastal Communities
- Alternative Livelihoods for Coastal Communities
- Impact of Population Relocation due to Conflict
- Coastal and Ocean Governance
- Blue Economy
- Marine Spatial Planning
- Plastic Pollution Impact on Economic Potential of the Red Sea

4. Addressing Challenges During Conflict:

- The violent clashes that erupted on 15 April 2023 between the army and the paramilitary RSF in Khartoum, led to the displacement of approximately 107,000 people to the Red Sea State.
- The sudden increase in population due to conflict underscores the importance of the project's EAFM work for resource sustainability, ecosystem resilience, food security, and livelihoods. EAFM helps manage increased fishing pressure, ensures the resilience of marine ecosystems, and contributes to local food security and conflict prevention by establishing clear and equitable rules for resource use.

5. #LoveTheRedSea Campaign and Ocean Literacy:

- After a successful launch of the #LoveTheRedSea campaign ahead of World Ocean Day, reaching nearly 2,500 people in under 28 days, the project has generated significant momentum. This campaign encouraged community engagement and individual pledges to protect the Red Sea by reducing plastic pollution, cleaning up the surrounding environment, making more sustainable seafood choices, and educating others about the importance of the Red Sea Large Marine Ecosystem.
- Building on this success, an Ocean Literacy Program is being created and distributed, targeting high school students, fisherfolk, and the broader community. The aim is to foster an ocean-literate community in the Red Sea State that values and sustains the health of the Red Sea and the global ocean. This initiative involves educational workshops, community outreach, and the distribution of educational materials.

6. Impact and Future Directions:

- The project is contributing to the sustainable management of marine resources, aligning with SDG 14 (Life Below Water), SDG 8 (Inclusive Growth), and SDG 2 (Zero Hunger).
- Plans for continued support and capacity-building to ensure the long-term sustainability of marine fisheries management in the Red Sea State.

UNIDO's efforts in the Red Sea State of Sudan exemplify the organization's commitment to sustainable marine management and the broader goals outlined in General Assembly resolution 78/69. The progress achieved through this project underscores the importance of collaborative efforts and capacity-building in promoting sustainable ocean governance, even in times of conflict.