

## **Annex 2 – Final Progress Report**

### **Identification:**

**Partners Name:** CORDIO East Africa

**Budget line:** Umoja Coding Block SB–014126.08.03.01.01, SB-010591.13.07.01.01

**POW 2022–2024 Sub-programme:** Assessment and conservation of critical habitats and endangered species

### **Expected Accomplishment(s)**

- Activity 1: Awareness campaigns conducted on the conservation, restoration, and protection in priority MPAs in Comoros that are renowned for coral reef and climate change-affected 'refugia of WIO
- Activity 2: Conduct a management effectiveness (ME) assessment with the MPA Managers in at least 2 of the 4 MPAs and support the development and implementation of responsive Annual Work Plans for each MPA
- Activity 3: Identify and map benefits and opportunities for improved or alternative sustainable livelihoods for communities associated with the MPAs in Comoros
- Activity 4: Undertake a desktop review and recommend sustainable financing options in the at least 2 newly established MPAs
- Activity 5: Capacity building and training of technical staff (reef rangers and MPA managers) in Comoros in monitoring, control, and surveillance (MCS), in ecosystem-based management approaches, spatial planning tools, mapping of critical coastal and marine habitats and transboundary ecosystems in the exclusive economic zones, including in adjacent areas, using tools developed with support by UNEP.
- Activity 6: Build capacities of national Coral Reef Task Force (CRTF) members on integrated management of coral reefs and associated ecosystems, monitoring and reporting on ecosystem health, and sharing best practices on coral reef management in the region

### **Anticipated output(s):**

- Increased awareness and knowledge about the value of ocean protection and the role of MPAs
- Information on management effectiveness of selected 2 MPAs created to support future adaptive management
- Information generated on the alternative sustainable livelihoods for communities around the MPAs
- Information on financial sustainability options of at least 2 MPAs created
- Enhanced capacity and understanding of MPA technical staff in Comoros in areal-based, precautionary, ecosystem-directed, and operational MCS measures.
- Enhanced capacities of national coral reef task force (CRTF) members regarding the integrated management of coral reefs and associated ecosystems, monitoring and reporting on ecosystem health.

**Title of the approved PRC project:** Strengthening management effectiveness and sustainably managing coral reef areas crucial to coastal

livelihoods and ecosystems in Comoros

**SSFA starting date:** 15/07/2022

**Reporting period:** from 15/07/2022 to 31/06/2023

### **1. Summary of Status:**

The UNEP Regional Seas Program is an action-oriented program that implements region-specific activities aimed at conserving and managing the marine and coastal environment by bringing together stakeholders including governments, scientific communities, and civil societies. The Nairobi Convention one of the UNEP-administered regional seas Convention, through the ACP MEAs program seeks to reinforce the governance frameworks and associated protocols of the Nairobi Convention for the protection, management, and development of the coastal and marine environment of the Western Indian Ocean region, support development of a regionally representative network of Marine Protected Areas, support efforts on reduction of the influx of waste entering the marine environment of the Western Indian Ocean region and raising awareness on the adverse effects of marine pollution.

The SSFA will under the UNEP's Regional Seas Strategic Direction (RSSD) 2022-2025 contribute to the delivery of UNEP's Medium-Term Strategy (MTS) 2022-2025 and Program of Work (PoW) 2022-2023 on activities that address ocean-related priority areas such as nature action and environmental governance. The SSFA will further contribute to achieving result 2.2 of the ACP MEAs 3 program on the development of regionally representative networks of Marine Protected Areas by addressing some of the recommendations identified in the recently launched Regional [MPA outlook](#) and ultimately contribute to strengthening the management effectiveness at designated MPAs in Comoros. Particularly capacity for MPA managers and the local community will be developed to improve governance and strengthen the management of MPAs around compliance and effective enforcement. This SSFA will also build on the ongoing partnership with CORDIO EA as a member of WIO-C while leveraging on a project which they are co-leading together with WildOceans (a Program of WildTrust) the "*Strengthening Ocean Protection in Comoros through improved management effectiveness and planning within existing MPAs*" to maximize on impact of the proposed activities. The SSFA further builds on twenty years of regional cooperation in the regional coral reef networks, operations of the Nairobi Convention Coral Reef Task Force, and the Global Coral Reef Monitoring Network (GCRMN).

The objectives of the project were achieved through the implementation of a project entitled "*Strengthening management effectiveness and sustainably managing coral reef areas crucial to coastal livelihoods and ecosystems in Comoros*". The project seeks to address the need for improved capacity and awareness of managing and conserving critical marine ecosystems such as coral reefs at selected newly established MPAs in Comoros.

Over the 1-year implementation and reporting period of the present SSFA, the six expected outputs of this project have been accomplished through the realization of the following activities:

**1) Increased awareness and knowledge about the value of ocean protection and the role of MPAs**

*Develop and implement a targeted MPA benefits communications campaign, effective across the spectrum of MPA stakeholders (government, tourism, fishers).*

The WILDTRUST communications team has provided continued increased awareness and knowledge about the value of ocean protection and the role of Marine Protected Areas (MPAs) within Comoros (**Deliverable – Attachment 1**). Awareness content titled ‘*Discovering Comoros’ MPAs*’ was rolled out by WILDTRUST’s communication team on social media (shared on the projects Facebook page- Strengthening Ocean Protection in Comoros – R-POC) throughout the project period, profiling each MPA in Comoros (Moheli National Park, Coelacanth National Park, Shisiwani National Park, and Mitsamiouli-Ndroude National Park) with interesting facts about them, highlighting their respective importance, and showcasing some of the work carried out on the ground by the project team and partners.

An MPA educational story and colouring-in book titled called ‘Harry the Hammerhead Shares the Good News’ was officially launched during this reporting period on 12 October 2022 at the WIOMSA symposium, and the 4,000 copies were successfully shipped to Comoros for distribution in 2023, with associated training planned for 18-20 January 2023.

On December 20<sup>th</sup>, 2022, the project organized the annual Coelacanth Day celebration in the Gombessa house (Coelacanth National Park’s office) in Itsoundzou Mbadjini West. The aim of this celebratory event was to build knowledge and awareness amongst the community and students around the critically endangered species, the Coelacanth - a ‘living fossil’ symbolic of Comoros, and the marine environment, and to officially establish this day as a commitment to the protection of the Coelacanth species. The event was honoured by the presence of the Secretary General of the Ministry of the Environment, the co-founder of the Coelacanth Center, Jerome Hamlin (USA), representatives of NGOs and national projects, local authorities, law enforcement and populations of the villages bordering the National Coelacanth Park. Media outlets were invited to capture the Coelacanth Day festivities that took place, also providing media coverage around the project.

*Develop and deliver site-specific MPA educational materials (such as posters, videos, brochures, learning guides) with associated training for Managers and community representatives*

A variety of communications materials was printed and distributed to the project team in Comoros such as posters, flyers, banners, and stickers: 40 project posters and flyers have been displayed in all Marine Park sites and distributed to Parks managers; 20 Project stickers have been displayed on project equipment and offices and the Coelacanth Center also displayed our stickers on their walls; 16 outdoor project banners have been produced and provided to each MPA for project awareness purposes; 33 branded uniforms including hats/caps and t-shirts were distributed to the project team and technical assistants. These communication materials helped not only communicate important information about the project but also ensure sufficient representation of the project on the ground. Additional communication materials were purchased and provided

to the project team including: two televisions (one to be set up in the local museum and the other at the Coelacanth Centre) to profile educational, informative and scientific content); four flipbooks to showcase the '10 Benefits of MPA' of MPAs in Comoros. Each MPA in Comoros was given its own flipbook to be used for MPA benefits awareness for the local community as well as schools. The Director of Campaigns at the WILDTRUST, Lauren van Nijkerk, came to Comoros on January 19-25, 2023, to visit the R-POC project team on the ground, meeting with the Director of Operations at ORTC, Valery Hidari, the National (and International) broadcaster in Comoros to discuss co-creation content. The WildOceans's Ocean Series Film: *Dinosaurs in the Deep*, *Return of the Giants*, *Shark Sanctuary*, and *the Journey of Discovery* feature films have been translated and dubbed into French for ease of viewing and understanding for the local communities in Comoros, and were broadcasted nationally by ORTC. Lauren also met with the Director of the Mohéli National Park, Daniel Lailina, as well as their Communications Director, Chekidine Said, to discuss their marketing needs, and potential guidance from the South African teams to promote the Park and help get more visitors. A visit to the National Centre for Scientific Research and Museum (CNDRS) in Moroni also took place where Lauren met the Director General of CNDRS, Dr Toiwilou Mze Hamadi, to discuss how we can tell the world about their gem of a facility. From that meeting, an opportunity for an Ocean Festival came out, and such an event supported by RPOC is now due to be held on September 18-21, 2023, in Moroni. Extensive strategic meetings with local partners took place: AIDE NGO about communications needs on the ground in the various villages, as well as local media channels; the Head of the National Parks Agency, Fouad Abdou Rabi, to talk through all the parks' communications, marketing and visibility requirements, and brainstormed ideas and eco-tourism activities that could create income for the parks; the Coelacanth Centre and the Chindini Eco Lodge, which has a lot of potential and is already gaining traction with locals; the Dean of the Faculty of Science, Soulé Hamidou, and the project's biodiversity coordinator and head of the Coastal and Marine Science Lab, Dr Nadjim Ahmed. From a capacity-building, training, and resource-sharing perspective, the Communications team has elaborated some material for online training sessions with the team in Comoros, including 1) social media (Facebook - how to build a page/ effective posts & content/ how to tag, boost and advertise); 2) basic graphic design (free software i.e Canva and a walk through how to use it and create graphics/ flyers etc.); 3) website (how to secure a URL/ how to secure hosting (cost)/how to create a simple website/ what does an effective website look like?); 4) hospitality and tourism (the dos and don'ts i.e Eco Lodges).

A Community and a Media Database have been developed with the aim of communicating in a more structured way with relevant communities and media in and around a certain park/activation area. There are many media representatives in villages across Comoros and this media database will allow better dissemination and advertisement of upcoming relevant events/activations and subsequently reporting/writing about them.

*Provide awareness toolboxes and other materials, with associated training to teachers and NGOs and support roll-out to school children in MPA adjacent communities.*

A Photography training session on Zoom with the project team from Comoros was held to provide photography skills on how to capture quality images and videos when the team is in the field, going to conferences or events so that we can share these photos and videos with our project partners as well as on the social media page.

Twenty-five 'Harry the Hammerhead' and associated sessions were conducted across 21 villages engaging with 800+ participants from ages 8 upwards including university students and fishing communities between March and June 2023.

Ocean literacy training sessions were conducted throughout the project period (**Deliverable – Attachment 2**). An in-depth MARECO toolkit (Coral reef and MPA toolkit) training was conducted by AIDE on August 29-31, 2022, in Moroni for the 4 technical assistants working within the project as well as the Coelacanth Park staff. The purpose of the training was to equip the participants on how to use the MARECO toolkit and conduct sessions in their respective MPAs and communities supporting the work AIDE and UMAMA are already doing. In addition, the sticker book which is an educational resource in the MARECO toolkit has been translated to Shi-Comores and printed an additional 2000 copies. A week-long follow-up training workshop was conducted by Nikki Chapman, WildOceans, on May 6-13, 2023, in Nioumachoua, Mwali. This workshop was attended by eleven facilitators including RPOC technical assistants, National Park staff, as well as participants from AIDE, UMAMA staff and coelacanth centre staff. During that same week, a training and brainstorming session took place on how to adapt the session/resources more appropriately for the regions with the vision of co-crafting an additional storybook highlighting the 4 MPAs and biodiversity in the region. In-water snorkeling sessions and in-depth MARECO toolkit training plus additional educational resources were also carried out over that intensive week.

## **2) Conduct a management effectiveness (ME) assessment with the MPA Managers in at least 2 of the 4 MPAs and support the development and implementation of responsive Annual Work Plans for each MPA**

The management effectiveness of the three newly created Comoros Marine Protected Areas, namely Mitsamiouli-Ndroude, Coelacanth, and Shisiwani National Parks, was carried out in January 2023 by Fouad Abdou Rabi with the effective participation of National Parks staff and members of the newly updated Comoros National Park co-management committees. These evaluations were conducted using the METT 4 tool (Management Effectiveness Tracking Tool) as recommended by Global Environment Facility (GEF) which has been funding the RNAP (Comoros National Protected Area Network) phases 1 and 2. Recommendations and action points have been formulated to improve the effectiveness of the parks' management going forward and the final report was made available to the park agency (**Deliverable - Attachment 3**). The project has supported the development and implementation of the Annual work plans of each of the 4 MPAs.

## **3) Information generated on the alternative sustainable livelihoods for communities around the MPAs**

MPA co-management committee meetings were designed to bring key stakeholders in each MPA together to discuss various critical aspects for project development and progress in the MPA's management. To inform the mapping of social benefits and sustainable livelihoods at each site, the team shaped the agenda to include a space for input from committee members on this. In doing so, the project ensures an inclusive approach to supporting alternative community livelihoods and potential funding opportunities in collaboration with key stakeholders. The team presented on social assessments to build understanding and capacity in the committee representatives and got feedback on the survey in order for it to be finalized for execution in 2023. To inform the mapping of social benefits and sustainable livelihoods at each site, the project

team delivered the project presentation to the co-management committees for each of the four marine National Parks and provided a platform for the committee to discuss the development of MPA management within the Union of Comoros. These sessions explored opportunities and potential interventions for livelihoods, including discussing potential funding opportunities/interventions to support community livelihoods and assessing areas of collaboration between the project and MPA co-management committees. Participants recognized the failures of previous programs and projects that initiated income-generating activities (IGAs) of Comoros National Parks communities and the failures of both organizations and communities in implementation and achievement of results. A welcomed suggestion was the way in which the project, together with various stakeholders including fishermen, vulnerable groups, communities, and co-management committees, could workshop potential livelihood interventions with sustainable resource identification methods. Some livelihood opportunities for exploration that were expressed by committee members include: 1) promote Comoros MPAs for ecotourism developments in Comoros National Parks which would support local livelihoods linked to tourism and generate more jobs; 2) development of the fisheries sector to create sustainable and environmentally friendly jobs; 3) the construction of community ecolodges (accommodation rooms) in certain areas, again to benefit tourism and therefore livelihoods in the area; and 4) initiatives to address the substantial waste challenges in the area which could further unlock the tourism potential of the area and generate eco-jobs. In addition, a livelihood baseline survey has been designed and shared with the parks' management as an inclusive, locally relevant, and effective tool for providing detailed insight into the ideas/ perceptions of individual MPA user groups/ community collectives.

#### **4) Undertake a desktop review and recommend sustainable financing options in the at least 2 newly established MPAs**

A review of sustainable financing options for the three newly established MPAs was completed in December 2022 by consultant Dr Hugo van Zyl, an independent senior economist. This review listed various financing options that could apply to the local context around the Comoros MPAs (**Deliverable – Attachment 5**). It was undertaken through desktop scans and sourcing of information, and a workshop with key informants in Comoros, including MPA managers, jurists, representatives from the Ministry of Environment, and the Planning Commissioner. This review was then presented online on February 28<sup>th</sup>, 2023, to the park managers and higher governmental authorities involved, and the invite was also extended to various regional partners in the WIO such as Expertise France, the Varuna project, IRD (Réunion), the WIOMSA secretariat. This work provides some of the basic groundwork for a much more detailed investment framework and financing strategy process envisaged under the “Biodiversity Protection through the Effective Management of the National Network of Protected Areas” project (RNAP 2 project funded by GEF-7).

#### **5) Enhanced capacity and understanding of MPA technical staff in Comoros in areal-based, precautionary, ecosystem-directed, and operational MCS measures.**

*Training and support to MPA Park Staff and the University of Comoros to oversee ongoing biodiversity monitoring and reporting across all the MPAs.*

CORDIO's research team has engaged in the training of technical staff from the various MPAs in monitoring a variety of key ecosystems identified across the parks, including coral reefs, seagrass meadows, mangroves, rocky shores, and pelagic ecosystems with a focus also on vulnerable species such as marine turtles and elasmobranchs, between April and August 2022.

A weeklong training course on data analysis and data management was conducted end of September 2022 in Moroni by Joshua Rambahiniarison and Clare Thouless (CORDIO), with the assistance of Drs Nadjim Ahmed Mohamed and Halassi Bacar Abdoulhafar, professors at the University of Comoros. The training included an introduction to biostatistics and the use of Excel, with hands-on practical application to biodiversity survey data collected by the teams from each park and local partners AIDE and UMAMA. Best practices on data management and reporting were taught and demonstrated to 13 participants, including 5 (39%) women.

In addition, an online training including 17 participants from the 4 MPAs on participatory mapping of marine ecosystems was conducted in November 2022 prior to conducting rapid surveys within each park. These fisheries surveys collected data on fishing gear used and targeted species at respective fishing zones. These data were crucial in the process of updating maps on key ecosystems and for participatory decisions around no-take zones in each park (described further below).

Additional field equipment has been purchased from France, including depth sounders, underwater cameras for each park, and sets of cameras with deep-rating housings providing the capacity to conduct baited-remote underwater video (BRUV) in deeper areas than allowed by conventional snorkeling or scuba diving monitoring survey methods. Stereo-BRUV-related software and hardware (i.e EventMeasure, calibration cube) were purchased from SeaGIS in June 2023, providing one of the rare stereo-BRUV capacities in the WIO.

R-POC project's Biodiversity and MPA coordinator Dr Nadjim Ahmed (University of Comoros), together with Nadjim Ali Boina a selected technician from Mitsamiouli-Ndroude National Park, have been trained and certified rescue divers in June 2023 in Nosy-Be (Madagascar), after their open water diver certification in August 2022 in Mohéli. This has been a milestone in pursuing the setup of a national scientific scuba diving team for Comoros' marine parks. They are now in the capacity to conduct monitoring survey dives, autonomously and in safety, up to 30m depth.

*Support the establishment of a Training and Resource Centre at Moheli MPA to service all the MPAs, with sampling equipment and field guides, and biodiversity identification field books and materials.*

One of the largest rooms in the offices of Mohéli National Park, recommended by the park managers, was identified to be rehabilitated as a resource and training space. The rehabilitation work was completed in January 2023 by a local company. Due to the high costs of office equipment in Mohéli, furniture such as a conference table, chairs, a whiteboard, a TV screen, and a cabinet were sourced in Moroni. Additional books were also purchased on topics like conservation biology and statistical analysis applied to ecology, as well as tissue sampling kits including vials and ethanol. Since its completion, several trainings took place including the ocean literacy training mentioned in **Activity 1**.

*Conduct rapid surveys of each MPA to create an inventory of biodiversity and update the biodiversity maps of key ecosystems for MPA Spatial and Management*

### *Plans.*

CORDIO's researcher Clare Thouless came to Comoros in September 2022 to assist with reef surveys completed in the National Parks of Mitsamiouli-Ndroudé and Coelacanth, to support the updating of existing biodiversity maps of these key ecosystems. These surveys were joined by the R-POC project's biodiversity and MPA coordinator Dr Nadjim Ahmed (University of Comoros), together with Nadjim Ali Boina a selected technician from Mitsamiouli-Ndroude National Park. As previously mentioned, at that time both were recently certified divers under the RPOC project funded by Oceans5. These surveys thereby provided them with hands-on training in Scuba-based scientific surveys. They both accumulated about 20 dives throughout the month of September, further developing their diving skills and preparing them for their next certification completed in June 2023 as mentioned above. In line with this, six dive tanks and an emergency oxygen kit have been purchased and provided to the Marine Lab at the University of Comoros in November 2022, directly contributing to the establishment of a scientific diving resource centre in Grande Comore.

Participatory mapping was conducted in early December 2022 at all four MPAs to collect data from the local communities on their respective fishing grounds. This highlighted the main fishing areas within each MPA and provided valuable information on the occurrence of fish families of interest (*i.e* economic interest and vulnerable species) across the parks. In addition, the completion of available data gathering across the parks was continued throughout December 2022, including biodiversity data, and geomorphologic and socio-economic data. The collation of scientific work conducted within the MPAs over the past decade was also undertaken by reaching out to the various institutions involved (*i.e* MAREX, IOC, IRD, scientific publications), creating a database of existing biodiversity inventories which is now being hosted at the Marine Lab of the University of Comoros. Additionally, a reef fish species inventory report is being finalised and will be provided to the University and the CNDRS, making it available to all Comorian and foreign scientists. The inventory builds on research conducted throughout a CEPF project in 2018 led by WildOceans with CORDIO and SAIAB in Comoros waters.

Based on these updated biodiversity maps of key ecosystems and collation of scientific works conducted within the MPAs by various institutions (local *i.e* AIDE, and regional *i.e* IOC, Kelonia, IRD, ARVAM) over the past decade, a workshop on the identification of possible no-take zones within the Parks was held in Moroni on December 19-22, 2022, with the participation of national GIS experts (Nair Aboubacar and Dr Mahamoud Avouca) with in-person technical support from Dr Rodolphe Devillers, an MSP and GIS specialist at IRD in Reunion. This workshop brought together 21 participants including managers and community members from the four MPAs. Potential areas of enhanced protection (*i.e* highly protected, fully protected) have been identified within three of the MPAs (Mitsamiouli-Ndroudé, Coelacanth, Shisiwani), reaching over 20% of the park's total area. Mohéli National Park already has 8 designated and implemented no-take zones, and currently does not plan to expand or add any. The park management team attending (Mouchitadi Madi, Daniel Lailina and Ben Anthoy) however completed the exercise and presented possible areas of interest for future no-take zone extensions. CORDIO's research team additionally conducted a pilot study between April 1-13, 2023, in Mohéli National Park, looking at reef shark nursery grounds and identifying such key habitats across the park for these endangered species, and therefore providing the park with evidence of urgent needs for conservation and fisheries measures in these areas.



Preliminary findings from that study were presented at the “4<sup>th</sup> Science Festival” organized by the Faculty of Science of the University of Comoros on May 9-11, 2023. Updated biodiversity maps, rapid survey results, and recommendations for no-take zones are shared and assimilated by the management of the parks prior to conducting consultations within the involved communities as a reviewing process **(Deliverable – Attachment 6)**.

*Support the development of Monitoring Programs that inform adaptive management, including (as appropriate for each MPA): coral reef biodiversity, fish abundance surveys, turtle monitoring, and mangrove and seagrass habitat monitoring.*

Monitoring programs have been elaborated throughout April and May 2023 in partnership with the Marine and Coastal Science Lab (LSML, University of Comoros) managed by Dr Nadjim Ahmed and who is part of the project’s research team. One monitoring station has been identified in each of the two parks of Coalacanth and Mitsamiouli-Ndroude, based on reflections with the park managers and updated key ecosystems maps and data obtained during the rapid surveys mentioned previously. Each station will include the monitoring of beach, rocky shore, seagrass bed, coral reef, and open sea, in order to evaluate variation within each of these inter-connected ecosystems over time to inform adaptative management and protection measures effectiveness **(Deliverable)**. A memorandum of Understanding has now been signed between these two parks and the Faculty of Science.

*Developing knowledge amongst the MPA managers about the priority ecosystems and species in each MPA, and an understanding of resource use management principles, and inclusive, effective stakeholder engagement.*

A workshop was organized by AIDE on November 22-24, 2022, at the Faculty of Sciences of the University of Comoros, and led by local consultant Aboubacar Tayffa Hassanali to develop knowledge among the MPA managers about monitoring, control, and surveillance (MCS), priority ecosystems, ecosystem-services approaches, effective stakeholder engagement and spatial planning tools. This workshop involved experts from the University of Réunion and IRD (Réunion), as well as from national institutions (i.e INRAPE, Fisheries surveillance centre), bringing together 15 participants including MPA managers from Moheli, Coelacanth, and Mitsamiouli-Ndroude Marine Parks.

In Anjouan, UMAMA conducted sensitization meetings with community leaders within the Park Shisiwani, including co-management and community committees, contributing to the development of knowledge amongst its members and the MPA managers about the priority ecosystems.

In addition, the workshop mentioned above on the identification of no-take zones held at the Faculty of Sciences of the University of Comoros, on December 19-22, 2022, aligned closely with this activity by developing knowledge amongst the Managers about the priority ecosystems and species in each MPA, together with discussions on resource use management principles and effective stakeholder engagement. The initiation of shark and ray studies in Comoros, as mentioned previously, also comes as a key component in developing knowledge and awareness amongst the MPA managers in a country where these species, critical for healthy reef ecosystems, are largely overlooked and misunderstood.

A national workshop described further down held on June 21-22, 2023, in Anjouan in the scope of the NOCAMO project, fed into the knowledge

development of MPA managers on best practices for sustainable co-management of marine and coastal resources.

*Provide training and support for enforcement and surveillance to all Park Management staff and purchase boat and engine for Mitsamiouli-Ndroude National Park*

A 7-m fibreglass boat with two 25cc outboard engines has been delivered to Mitsamiouli-National Park, together with boat safety accessories including life jackets, an anchor, mooring rope, and a depth sounder. Additional life jackets, anchors, mooring ropes, and depth sounders were purchased to equip the two other newly established parks (Coelacanth and Shisiwani) to ensure safety onboard when they are going out on surveys and patrols.

CORDIO in partnership with IUCN held a regional workshop, funded by LEAP with additional support from the Nairobi Convention, on enforcement and compliance in small-scale fisheries, in Dar-es-Salaam on April 17-18, 2023. The workshop brought together 45 participants from Comoros, Kenya, Madagascar, Mozambique, and Tanzania, including members from relevant governmental departments, NGOs, and coastal community leaders. A total of four main drivers were identified, including the lack of awareness, social and cultural ties, corruption, and the lack of synergy (collaboration and coordination) between different Ministries. A policy brief is now being drafted providing potential technical and policy recommendations/solutions to the identified drivers. Follow-up activities with the participants from Comoros to advocate these recommendations will be undertaken as part of the R-POC project.

*Support Community Committees for each MPA through 4 local NGOs that meet regularly with MPA managers to address compliance issues and co-management of resources*

Co-financed by the Nairobi Convention and Oceans 5, AIDE and UMAMA in partnership with Comoros National Parks facilitated the election and seating of the newly appointed members of the Comoros Marine Protected Areas co-management committees, which started in October 2022 and the process was completed within the four parks in January 2023.

Co-financed by the Nairobi Convention and the NOCAMO project, AIDE conducted a national workshop on June 21-22, 2023, at the Mirontsy Fisheries School in Anjouan, on best practices for sustainable co-management of marine and coastal resources, and to the establishment of a national learning network. Support was also provided to ensure the attendance of various stakeholder leaders, bringing together 30 participants (14 women and 16 men) from NGOs, local communities, as well as financial and public institutions, this workshop first aimed.

**6) Enhanced capacities of national coral reef task force (CRTF) members regarding the integrated management of coral reefs and associated ecosystems, monitoring and reporting on ecosystem health.**

*Reconstitute the GCRMN Technical Working Group with a new workplan established and coral reef monitoring tasks of the country-level technical membership defined.*

A workshop organized by CORDIO East Africa in collaboration with AIDE NGO, the Environment Ministry of Comoros, and the Nairobi Convention was held at the Retaj Moroni hotel in Comoros on March 1-3, 2023. This regional workshop was structured for in-person and virtual attendance, bringing together a total of 40 attendees, nominated and selected from existing members of the Coral Reef Task Force (CRTF) and active national contributors to the WIO regional coral reef monitoring, as well as related coral reef networks and reporting procedures. Participants came not only from different organizations but also from nine different countries: Kenya, Tanzania, Mozambique, South Africa, Madagascar, Seychelles, Comoros, Mauritius, and Reunion. The aim of this workshop was to revitalize the capacities of national coral reef task force technical members for the integrated management of coral reefs and associated ecosystems through monitoring and reporting on ecosystem health under the Global Coral Reef Monitoring Network (GCRMN). During this workshop, a new workplan was established, including priorities for monitoring and use of data, and continued engagement in the GCRMN; coral reef monitoring tasks within the CRTF were reinstated by confirming technical membership by country and roles, and coordination mechanisms; data sharing and repository mechanisms for the regional Coral Reef Monitoring Network were strengthened; headline indicators and monitoring framework adopted for the Kunming-Montreal Global Biodiversity Framework were recognised, to identify mechanisms for supporting national coral reef management and reporting under the framework of the Nairobi Convention, the GCRMN, Convention on Biological Diversity, and Sustainable Development Goals (**Deliverable - Attachment 7**).

*Build on the WIO participation in the 2020 GCRMN global report and MASMA-CORDIO data analysis course (2021) by establishing data sharing and repository mechanisms for the regional network.*

A data analysis training resource is being developed by consultants as an online course. The resource is based on the MASMA data training course that was held in 2021. The coral reef data analysis resource will be freely available for WIO monitoring and data management teams to use for self-training with mentoring facilitated by CORDIO staff and consultants (**Deliverable - Attachment 8**).

*On the basis of GCRMN results and monitoring network partners, identify options for integrated management of coral reefs and associated ecosystems, and initiate outreach to managers.*

On June 27th, 2023, 32 (including 9 women) Marine Park managers from all five Marine Protected Areas in Kenya participated in a workshop on the validation of the national coral reef assessment based on GCRMN national data used as the foundation for The Red List of Ecosystems (RLE), now a Headline Indicator for the Global Biodiversity Framework agreed by CBD Parties in December 2022. The workshop focused on validating the findings of exploration of the data to support local management of coral reef ecosystems inside and outside of protected areas and for future production of a national RLE for Kenya. The next steps following the workshop will be supported by a follow-on grant from the IUCN RLE Unit to specific tangible actions for integrated management of coral reefs and associated ecosystems through folding this work into management plan revisions being planned by Kenya Wildlife Service for two marine parks (Kisite marine park and Kiunga marine reserve). A call from participants to

revitalize the National Coral Reef Task Force pronounced during that workshop came as a strengthening outcome supporting the regional reef network activity completed earlier in 2023.

2. Activity delivery status

Activity	Description of work undertaken during reporting period	Deliverables	Delivery date	Status of Activity (complete/ on-going/ delayed)	Comments - brief description of implementing challenges, strategy/actions which have been adopted to address these challenges and planned actions to mitigate any identified risks
<b>Activity 1.</b> Awareness campaigns conducted on the conservation, restoration, protection in priority MPAs in Comoros that are renowned for coral reef and climate change-affected 'refugia of WIO					
Develop and implement a targeted MPA benefits communications campaign, effective across the spectrum of MPA stakeholders (government, tourism, fishers).	<p>'Harry the Hammerhead' was officially launched during this reporting period on October 12, 2022, at the WIOMSA symposium. The book has been translated to French and 4,000 copies were shipped to Comoros.</p> <p>25 'Harry the Hammerhead' and associated sessions were conducted across 21 villages engaging with 800+ participants from ages 8 upwards including university students and fishing communities.</p>	2000 copies of the French reader and 2000 copies of the French coloring book as well as 2000 boxes of crayons distributed.	April 2023	Completed	<p>Shipping options from South Africa to Comoros for this number of materials was challenging. Air fret turned out to be the safest and most efficient way although at very high costs.</p> <p>Choosing the most appropriate language for the areas in the Comoros we are working in was challenging, we settled with the most universally utilized language in the region.</p>
	<p>Increase awareness and knowledge about value of ocean protection and role of MPAs through social media content posted on the project's social media page.</p> <p>A monthly budget was secured for the placement of project</p>	Increased reach into coastal communities about the value of ocean protection and role of MPAs	April 2023	Completed	N/A

	articles, interviews and press coverage for upcoming events throughout the project period.				
	WildOceans' Ocean series film <i>Dinosaur in the deep, Return of the Giants, Shark Sanctuary, and the Journey of Discovery</i> have been translated and dubbed into French, and broadcasted by ORTC.	Films aired for the local community in Comoros and on the national TV.	June 2023	Completed	N/A
	Media and social media were covering project activities and providing visibility to the various MPAs throughout the project period.	01 media coverage report	June 2023	Completed	N/A
Develop and deliver site-specific MPA educational materials (such as posters, videos, brochures, learning guides) with associated training for Managers and community representatives	2 TVs were purchased and provided to the coelacanth centre and the CNDRS to screen ocean literacy-related content. Also, project banners and awareness flipbooks were produced to showcase and generate awareness of the project.	Increased visibility	June 2023	Completed	N/A
Provide awareness toolboxes and other materials, with associated training to teachers and NGOs and support roll-out to school children in MPA adjacent communities.	In-depth MARECO toolbox (Coral reef and MPA toolkit) training conducted on August 29-31, 2022, in Moroni for the 4 RPOC technical assistants.  A 3-day training held in Moroni on January 18-20, 2023, for 11 pax from the 4 MPAs including the RPOC technical assistants, park managers and education staff from the coelacanth center.  This was followed by a training on the use of the toolbox and associated session packs to	01 training report	June 2023	Completed	N/A

	strengthen ocean literacy held in Nioumachoua, Mwali, on May 6-13, 2023, for 11 facilitators from the 4 MPAs including the RPOC technical assistants, park managers and education staff.				
<b>Activity 2.</b> Conduct a management effectiveness (ME) assessment with the MPA Managers in at least 2 of the 4 MPAs and support development and implementation of responsive Annual Work Plans for each MPA					
Management effectiveness assessment with the MPA Managers	Assessments of the management effectiveness of the three newly created Comoros Marine Protected Areas were conducted in January 2023 using the METT 4 tool with the effective participation of National Park staff and members of the newly updated Comoros National Park co-management committees.	01 technical report on management effectiveness for 3 MPAs	April 2023	Completed	N/A
Supporting work plans development for MPAs	The project has been supporting the elaboration of the Annual work plans of each of the 4 MPAs, incorporating and aligning project activities with parks' objectives and timelines.	Annual work plans for 4 MPAs developed	June 2023	Completed	N/A
<b>Activity 3.</b> Identify and map benefits and opportunities for improved or alternative sustainable livelihoods for communities associated with the MPAs.					
Identify and map benefits and opportunities for improved or alternative sustainable livelihoods for communities associated with the MPAs.	<p>Relevant stakeholders have been identified and affected communities adjacent to each of the MPAs have been mapped.</p> <p>The DRAFT surveys have been developed for the community livelihoods assessment and social mapping.</p> <p>The team supported the</p>	<p>04 opportunities for livelihood suggested by the communities</p> <p>01 livelihood baseline survey designed</p>	June 2023	Completed	<p>Due to delays in the seating of the co-management committee meetings (completed in January 2023), and the delayed start of the phase 2 of RNAP (June 2023), social assessments were delayed.</p> <p>Conducting a social assessment of this magnitude is a challenge given that there are four MPAs and many communities inside each MPA that need to be assessed. The team has strategized the best way to get rich data using multiple methods in a</p>

	<p>finalization of the structure and planning of the co-management meetings – the agenda allowed for input from these key stakeholders on the design of the social assessments and input on livelihood opportunities.</p> <p>The Project has supported capacity building training of MPA agents and co-management committee members of the Comoros Marine Protected Areas from October 2022 to January 2023 at each of the four project sites. These sessions explored opportunities and potential interventions for livelihoods, including discussing potential funding opportunities/interventions to support community livelihoods and assessing areas of collaboration between the project and MPA co-management committees.</p>				cost-effective manner whilst maintaining the integrity of the results.
<b>Activity 4.</b> Information on financial sustainability of at least 2 MPAs created.					
Desktop review sustainable financing option in at least 2 newly established MPAs in Comoros	A desktop review of sustainable financing options for the newly established MPAs was completed in December 2022. An online presentation followed on February 28, 2023, to present and discuss the results with all involved local and regional partners.	01 report on the sustainable financing options for the newly established MPAs in Comoros	April 2023	Completed	N/A
<b>Activity 5.</b> Enhanced capacity and understanding of MPA technical staff in Comoros in areal-based, precautionary, ecosystem-directed, and operational MCS measures.					
Training and support to	A review of standard	31 technical staff	April 2023	Completed	The basic level of knowledge on marine

MPA Park Staff and University of Comoros to oversee ongoing biodiversity monitoring and reporting across all the MPAs.	biodiversity monitoring indicators and protocols used in various marine related ecosystems including coral reef, seagrass meadows, mangroves, rocky shores, pelagic and demersal ecosystems, together with a focus on endangered species, has been conducted. These protocols are being used to train MPA staff and further reviewed through a participatory process.	including 8 (26%) women trained on these protocols			ecosystems of a certain proportion of the park staff will require regular internal follow-ups. We are building the leadership of the most skilled technicians in each park, to enable them to provide continuous trainings within their respective teams.
	A training course on data analysis and data management training conducted with park technicians and staff from local partners. Best practices on data management and reporting were taught and demonstrated.	13 participants, including 5 (39%) women attended the data analysis training.	April 2023	Completed	The basic level of knowledge on marine ecosystems of a certain proportion of the park staff will require regular internal follow-ups.
	An online training on participatory mapping has been conducted with park technicians on gear used and targeted species at respective fishing zones.	17 participants, including 7 (41%) women attended the participatory mapping training.	April 2023	Completed	N/A
	R-POC project's biodiversity and MPA coordinator Dr Nadjim Ahmed (University of Comoros), together with Nadjim Ali Boina a selected technician from Mitsamiouli-Ndroude National Park, were trained in scuba diving in August 2022 then June 2023, and are now certified SSI Adventure diver with in-water rescue and emergency first response training passed.	02 scientific divers trained	June 2023	Completed	Local dive center in Comoros where the Open water diver training took place in August 2022 was not able to provide dive courses over the requested period, therefore the trainees went to Nosy-Be, Madagascar, to complete the training, with co-financing from Oceans5.



Support establishment of a Training and Resource Centre at Moheli MPA to service all the MPAs, with sampling equipment and field-guides, and biodiversity identification field-books and materials	<p>A room within the Office building of Moheli National Park has been rehabilitated as a resource training center.</p> <p>Sampling materials (i.e vials, ethanol), field guides were provided.</p>	01 Training and Resource Centre at Moheli MPA established.	June 2023	Completed	Significant increase of construction materials and equipment costs in Comoros (i.e furnitures) required fund higher than anticipated. Costs difference has been co-financed by RPOC project.
Conduct rapid surveys of each MPA to create an inventory of biodiversity and update the biodiversity maps of key ecosystems for MPA Spatial and Management Plans.	<p>Coral reef surveys were completed in the National Parks of Mitsamiouli-Ndroudé and Coelacanth throughout September 2022.</p> <p>A pilot study was conducted between April 1-13, 2023, in Mohéli National Park, looking at reef shark nursery grounds and identifying such key habitats across the park for these endangered species.</p>	01 technical report on biodiversity surveys in Comoros	June 2023	Completed	Logistic and safety conditions in Anjouan did not allow the completion of rapid surveys in the park of Shisiwani over the good field season (November-January) for 2022-2023. This will be carried out during the coming field season (2023-2024) as part of the RPOC project.
	A workshop on the identification of no-take zones (reaching over 20% of each newly designated MPA) was held in Moroni on December 19-22, 2022, with 21 participants including managers and community members from the four MPAs, national GIS and in-person technical support from Dr Rodolphe Devillers, an MSP and GIS specialist at IRD in Reunion.	01 report on priority ecosystems and species in each MPA, including 03 updated biodiversity maps of key ecosystems for MPA Spatial and Management Plans in the 3 newly established MPAs	April 2023	Completed	Scarcity of data available across the MPAs. Hesitation of MPA managers to share their data due to past experiences with foreign initiatives. We are providing them with a MoU template which they will be able to use from now on when collaborating with other institutions.
	Equipment for conducting biodiversity surveys including six dive tanks and an emergency oxygen kit for SCUBA based activities, and stereo-BRUV software and hardware (EventMeasure,	Innovative monitoring methods and technologies available at the national level through the Marine Science Lab. of the University of Comoros	June 2023	Completed	Such pieces of equipment were to be sourced from abroad due to the absence of these items in Comoros.

	calibration cube) to complete stereo-BRUV platform, have been purchased and provided to the Marine Lab at the University of Comoros				
Support the development of Monitoring Programmes that inform adaptive management, including (as appropriate for each MPA): coral reef biodiversity, fish abundance surveys, turtle monitoring, and mangrove and seagrass habitat monitoring.	Monitoring stations (1 per park) have been established with the Marine and Coastal Science Lab (LSML) of the University of Comoros in Coelacanth (site: Male) and Mitsamiouli-Ndroude (site: Ndroude) National Parks. Each station includes the various ecosystems of interests: beach, rockyshore, coral reefs, sea grass meadow, mangroves, and open sea.	Monitoring program	June 2023	Completed	The recent vacant warden position in Shisiwani National Park has resulted in the non-finalization of such similar monitoring program. A potential monitoring station has however been identified and monitoring program for Shisiwani will be finalized and implemented upon appointment of a new warden.
Developing knowledge amongst the MPA managers about the priority ecosystems and species in each MPA, and an understanding of resource use management principles, and inclusive, effective stakeholder engagement.	A workshop was organized between November 22-24, 2022, at the Faculty of Sciences, University of Comoros, to build capacities of MPA managers. 15 participants attended including MPA managers from Moheli, Coelacanth, and Mitsamiouli-Ndroude Marine Parks.	01 workshop report	December 2022	Completed	Initially a workshop per MPA was thought. Due to the limited availability of the experts and consultants of interests, and as a matter of cost-efficiency, it was decided to combine a workshop for these 3 MPAs.
Provide training and support for enforcement and surveillance to all Park Management staff and purchase boat and engine for Mitsamiouli-Ndroude National Park	A regional workshop on enforcement and compliance in small-scale fisheries was held in Dar-es-Salaam on April 17-18, 2023. 45 participants from Comoros, Kenya, Madagascar, Mozambique, and Tanzania attended the workshop.	01 workshop report	June 2023	Completed	N/A
	A 7m fiberglass boat was delivered by a contracted local boat maker, together with the delivery of two 25cc engines.	01 boat for Mitsamiouli-Ndroude National Park.	April 2023	Completed	Delays applied on delivering the engines - high costs of equipment in Comoros, resulted in ordering supplies from abroad (France, Dubai) allowing better options,

	Additional safety accessories (i.e life jackets, anchors, depth sounder) have been purchased and delivered.				prices, and quality.
Support Community Committees for each MPA through 4 local NGOs that meet regularly with MPA managers to address compliance issues and co-management of resources	Meetings were organized for the elections of co-management committees in each of the parks between October 2022 and January 2023.	04 actualized co-management committees (01 for each of the four MPAs)	January 2023	Completed	High transportation costs and fuel shortage can be an obstacle and result in fewer participants able to come from their village to the venue.
	A national workshop on June 21-22, 2023, at the Mirontsy Fisheries School in Anjouan, on best practices for sustainable co-management of marine and coastal resources, and to establishment of a national learning network. 30 participants (14 women and 16 men) from NGOs, local communities, as well as financial and public institutions.	01 workshop report	June 2023	Completed	N/A
<b>Activity 6.</b> Enhanced capacities of national coral reef task force (CRTF) members regarding the integrated management of coral reefs and associated ecosystems, monitoring and reporting on ecosystem health					
Reconstitute the GCRMN Technical Working Group with a new workplan established and coral reef monitoring tasks of the country level technical membership defined	A workshop on was held on March 1-3, 2023, at the Retaj Moroni Hotel in Comoros. The workshop was attended by about 40 people (11 women, 27%) from 9 WIO countries, some of whom only attended specific sessions. The report of this workshop was developed through a collaborative process with the partners/participants to identify agreed inputs from the workshop for the way forward.  Following the report, decisions	01 workshop report	April 2023	Completed	Challenges in attending in-person for certain key players due to logistic and time availability around regional and international travels. This was easily solved by hosting a hybrid workshop.  To maintain engagement within the WIO technical working group, additional source of financing will be required to move the action items and the follow-up activities ahead.

	and action points, follow-up activities are ongoing, including the implementation of other sub-activities.				
Build on the WIO participation in the 2020 GCRMN global report and MASMA-CORDIO data analysis course (2021) by establishing data sharing and repository mechanisms for the regional network.	An R-based coral reef data analysis resource is currently being produced. This resource will serve as a reference tool for the WIO's efforts to standardize data sharing, including data sharing mechanisms and a repository structure for the status and trends of coral reefs. The handbook is based on the MASMA data training course that was held in 2021.	01 online training resource	July 2023	Completed	N/A
On the basis of GCRMN results and monitoring network partners, identify options for integrated management of coral reefs and associated ecosystems, and initiate outreach to managers.	A workshop co-hosted by Kenya Wildlife Service from Malindi on June 27, 2023, was held at their headquarters, and attended by all park wardens from Kenya's five MPAs as well as the Wildlife Research and Training Institute (WRTI). A total of 32 participants including 9 women (28%) attended. The purpose of the workshop was to validate and disseminate the results of the assessment, as well as to identify options to promote integrated management of coral reefs and associated ecosystems and to initiate outreach to managers. Following the workshop's decisions and action points, follow-up efforts are ongoing, including the finalization of dissemination and outreach products.	Dissemination products (e.g <a href="#">Kenya National Coral Reefs Assessment maps</a> )	June 2023	Ongoing	Additional source of funding is required to push follow-up actions forward. These will be supported by funding through the IUCN RLE unit as well as an extension grant from NORAD.

### 3. List of attached documents

*(for example, publications, meeting reports, participants list, reports of workshops, etc.)*

- **Attachment 1** – Media and social media coverage report
- **Attachment 2** – Ocean Literacy Annual Report
- **Attachment 3** – Management effectiveness of Comoros MPAs report
- **Attachment 4** – ESMS activities report
- **Attachment 5** – Review of Sustainable Finance Options for Marine Protected Areas in the Comoros
- **Attachment 6** – Biodiversity surveys in Comoros report
- **Attachment 7** – GCRMN CRTWG workshop report
- **Attachment 8** – [Online training resource](#)

**Signature:**



**Date: 31<sup>st</sup> July 2023**

**Name and title of signing officer: Melita Samoilys, PhD**