

## Training and Capacity Development Programme

# Country-level Implementation of Regional Framework for Coastal & Marine Water Quality Management (C&MWQM) in WIO Region



The Nairobi Convention is an important regional platform to address challenges facing coastal and marine ecosystems in the Western Indian Ocean (WIO) through catalytic interventions, dialogue and partnerships. The Contracting Parties have agreed, through a highly consultative process, on a suite of national and regional collective actions to address major stresses on the region's coastal and marine environment, including the *Implementation of the Strategic Action Programme for the protection of the Western Indian Ocean from land-based sources and activities* (WIOSAP). Towards addressing pollution threats, the implementation of appropriate strategic frameworks and capacity building was considered important, not only to enhance local socio-economic and environmental benefits, but also global environmental benefits. This was to be achieved in two phases - *Phase 1: Development of a Strategic Framework for Coastal and Marine Water Quality Management (C&MWQM)*, and *Phase 2: Implementation of the Strategic Framework at national and sub-national levels*.

During Phase 1, the following outputs were prepared:

- Western Indian Ocean: Situation Assessment on Marine Pollution and C&MWQM.
- Western Indian Ocean: Strategic Framework for C&MWQM
- Western Indian Ocean: Guidelines for Setting Water and Sediment Quality Targets for Coastal and Marine areas.

This country-level training workshop supports *Phase 2: Implementation of the Strategic Framework at national and sub-national levels*. The workshop will provide practical, hands-on training including:

- Development of National Frameworks for C&MWQM, aligned with the strategic regional framework for the WIO region.
- Development of local C&MWQM Plans for marine pollution hotspots (i.e., on-the ground implementation).
- Development of environmental monitoring programmes specifically aimed at informing C&MWQM.

A virtual planning meeting with nominated participants will be convened in February 2024 (date to be confirmed) where the CSIR and Nairobi Convention Secretariat will communicate important requirements and expectations for the training workshop.

The in-person training workshop will include lecture sessions (see proposed agenda attached), as well as practical sessions where participants from each country will work together to populate draft National Frameworks for C&MWQM, as well as a draft C&MWQM plan for a selected marine pollution hotspot. Included will be dedicated lectures and practical sessions on the development of monitoring programmes relevant to C&MWQM. Generic templates for National Frameworks Marine Pollution Hotspot Plans will be distributed to participants prior to the workshop to familiarise themselves with the construct of such documents, as well as to guide information their gathering efforts prior to the workshop. Importantly, the extent to which these documents can be completed at the workshop will depend on participant commitment as well as the level of relevant country-specific information gathered prior to the workshop.

Participating countries need to appoint participants (four per country) that are directly involved in managerial and/or technical aspects of C&MWQM in their countries, also considering participants from local level (e.g., managers located in key marine pollution hotspots). Participants need to familiarise themselves and gather information prior to the workshop on country-specific legislation, policies, and institutional structures pertaining to C&MWQM. Also, they need to familiarise and gather information on marine pollution hotspots and specific marine and coastal water quality issues relevant to their respective countries.

Note that country participants will be required to prepare draft a National Framework for C&MWQM for their own country, as well as a draft C&MWQM plan of a selected marine pollution hotspot during the workshop. These frameworks and plans should then be further developed and refined by the various countries in consultation with national and local stakeholders.

The aim of this in-person training workshop is to provide training and to build practical capacity through development of first draft country-level frameworks and plans for C&MWQM by the participants. It will be the responsibility of the country participants to further develop these draft frameworks and plans.

A one-day joint virtual feedback workshop is proposed for late April 2024 (date to be confirmed). At this workshop county participants will be required to present their draft National Framework for C&MWQM (and ideally also draft C&MWQM plan for a hotspot). In doing this, countries will also be able to learn from one another. At this workshop the CSIR team will provide input on improvements and amendments to the plans. Following this virtual feedback workshop, the countries will be able to update draft frameworks and plans and finalise these in consultation with national and local stakeholders to advance country-level implementation C&MWQM.

## PROPOSED TRAINING WORKSHOP AGENDA

Date: 4 to 8 March 2024

Venue: CSIR Campus, Durban, South Africa

### Day 1: Monday: Regional and National Frameworks for C&MWQM

TIME	ITEM	PRESENTER
08:30 – 09:30	Registration and Welcome	Nairobi Convention
09:30 – 10:30	Overview on Regional Strategic Framework for C&MWQM in WIO region and Purpose of this Workshop	CSIR
10:30 – 11:00	<i>Tea/Coffee Break</i>	CSIR
11:00 – 12:00	Introduction to National Framework for C&MWQM	CSIR
12:00 – 13:00	Group Discussion	CSIR facilitate with All
13:00 – 14:00	<i>Lunch</i>	
14:00 – 15:30	Country break-away sessions to work on development of own National Frameworks (templates to be provided), assisted by CSIR team	All
15:30 – 16:30	Plenary session reflecting on progress in break-away sessions	CSIR facilitate with All

### Day 2: Tuesday: Local C&MWQM Plans for Marine Pollution Hotspots

TIME	ITEM	PRESENTER
08:30 – 09:00	Re-cap on Day 1	Nairobi Convention
09:30 – 10:30	Introduction to Local C&MWQM Implementation Plans	CSIR
10:30 – 11:00	<i>Tea/Coffee Break</i>	
11:00 – 12:00	Local institutional arrangements: Story of Saldanha Bay	CSIR
12:00 – 13:00	Using Guidelines for Setting Water and Sediment Quality Targets for Coastal and Marine areas	CSIR
13:00 – 14:00	<i>Lunch</i>	
14:00 – 15:30	Country break-away sessions to work on local C&MWQM Plans for a selected hotspot (templates to be provided), assisted by CSIR team	All
15:30 – 16:30	Plenary session reflecting on progress in break-away sessions	CSIR facilitate with All

### Day 3: Wednesday – Practical Sessions & Introduction to Monitoring Programmes

TIME	ITEM	PRESENTER
08:30 – 09:00	Recap on Day 2	Nairobi Convention
09:00 – 10:30	Country break-away sessions to work on National Frameworks and Hotspot C&MWQM Plans (templates to be provided, assisted by CSIR team)	All
10:30 – 11:00	<i>Tea/Coffee Break</i>	
11:00 – 11:30	Monitoring in C&MWQM: Overview	CSIR
11:30 – 13:00	Monitoring in C&MWQM: Design and Requirements of Long-term Monitoring Programmes	CSIR
13:00 – 14:00	<i>Lunch</i>	
14:00 – 15:30	Monitoring in C&MWQM: Design and Requirements of Long-term Monitoring Programmes, <i>continued...</i>	CSIR
15:30 – 16:30	Facilities demonstration and laboratory tour	CSIR facilitate with All

### Day 4: Thursday - Monitoring Programmes

TIME	ITEM	PRESENTER
08:30 – 09:00	Re-cap on Day 3	Nairobi Convention
09:00 – 09:30	Monitoring Plan: Pollution source	CSIR
09:30 – 10:30	Ecosystem Monitoring Plan: Effluent Discharge vs a Port	CSIR
10:30 – 11:00	<i>Tea/Coffee Break</i>	
11:00 – 11:30	Monitoring plan for recreational (bathing) waters	CSIR
11:30 – 12:00	Monitoring for human health consumption of seafood	CSIR
12:00 – 13:00	Monitoring Plan for Permitting of Dredge Disposal at Sea (London Convention)	
13:00 – 14:00	<i>Lunch</i>	
14:00 – 14:30	Tips for practical implementation	CSIR
14:30 – 15:30	Country break-away sessions to work on Monitoring Plan using selected hotspot as case study, assisted by CSIR team	All
15:30 – 16:00	Plenary session reflecting on progress in break-away sessions	

### Day 5: Friday- Monitoring Programmes and Re-cap

TIME	ITEM	PRESENTER
08:30 – 09:00	Re-cap of Day 4	Nairobi Convention
09:00 – 10:30	Country Break-away sessions developing monitoring plan <i>continued...</i>	All
10:30 – 11:00	<i>Tea/Coffee Break</i>	
11:00 – 13:00	Country break-away sessions to wrap up work on programmes and plans, assisted by CSIR team	All
13:00 – 14:00	<i>Lunch</i>	
14:00 – 15:00	Plenary Session reflecting on progress during workshop	CSIR facilitate with All
15:00 – 15:30	Closure and Way Forward	Nairobi Convention

## APPENDIX: CONCEPT NOTE

Globally, at least 40% of the world's population lives in coastal areas. Coastal cities have expanded rapidly in recent decades and continue to expand. The WIO region has been no exception. All countries in the region have experienced rapid population growth and urbanisation in coastal areas, particularly in larger coastal centres. Opportunities created by urbanisation, availability of ports and harbours, and development in economic sectors specific to coasts have attracted high concentrations of people.

In the WIO region a significant proportion of the population depends on coastal and marine resources for their livelihood and income generation and the socioeconomics of island and mainland states counties the WIO are largely dictated by availability and patterns of natural coastal resource, where. People here rely heavily on small scale fisheries, marine aquaculture and localised trading for their livelihoods, or employment in services industries, tourism, oil and gas production, shipping and ports. For coastal and marine ecosystems to support these livelihoods as well as ecosystem services (such as Carbon sequestration and climate change mitigation the environmental quality must be suitable and fit-for-use. Good environmental water quality is a critical enabler for sustainable blue economic growth and societal well-being. At the core of coastal and marine water quality management (C&MWQM) is the protection of valuable natural resources, not only to protect biodiversity, but also to protect socio-economic ecosystem services (or benefits) to society.

Reflecting on the status of marine water quality policy and management at the national level, most countries in the WIO are signatories to the main international conventions and agreements pertaining to the combating of marine pollution, such as Regional Seas (Nairobi Convention), MARPOL and the Stockholm Convention. All countries have some form of legislation to enable the control and management of marine water quality, some more advanced than others. However, dedicated management initiatives focusing on C&MWQM are limited and where policies and plans are in place, implementation remains a major challenge. Numerous root causes, such as inappropriate governance, inadequate knowledge and awareness, and inadequate financial resources have to be addressed to ultimately achieve effective C&MWQM, but there are a few direct measures that could be undertaken to improve C&MWQM in the region. The lack of effective development or implementation of initiatives is often a result of a silo-based, fragmented management, instead of a more holistic, ecosystem-based approach that is critical for successful management of the marine environment. Ecosystem-based management programmes are largely lacking in countries of the WIO, and consequently there is no coordinated and consistent monitoring and reporting of marine pollution matters. This gravely impairs policy decision-making, management and intervention to improving water quality.

The Nairobi Convention is an important regional platform to address challenges facing coastal and marine ecosystems in the Western Indian Ocean (WIO) through catalytic interventions, dialogue and partnerships. The Contracting Parties have agreed, through a highly consultative process, on a suite of national and regional collective actions to address major stresses on the region's coastal and marine environment, including the *Implementation of the Strategic Action Programme for the protection of the Western Indian Ocean from land-based sources and activities* (WIOSAP), *The Western Indian Ocean Large Marine Ecosystems Strategic Action Programme Policy Harmonisation and Institutional Reforms* (WIO LME SAPPHIRE), and *Enforcing Environmental Treaties in African, Caribbean and Pacific (ACP) Countries* (ACP-MEA Phase III). Towards addressing pollution threats, the implementation of appropriate strategic frameworks

and capacity building was considered important, not only to enhance local socio-economic and environmental benefits, but also global environmental benefits. A *regional Strategic Framework for Coastal and Marine Water Quality Management (C&MWQM)* is a sound basis for adopting and integrating C&MWQM into national frameworks. This is to be achieved in two phases - *Phase 1: Development of a Strategic Framework for C&MWQM*, and *Phase 2: Implementation of the Strategic Framework at national and sub-national levels*.

*Phase 1: Development of a Strategic Framework for C&MWQM* of this project has now been completed. It included the development and adoption of a strategic framework for coastal and marine water quality management in the WIO region (UNEP et al. in press), including a framework for implementation at country-level, as presented in Figure 1. As part of Phase 1, Guidelines for Setting Water and Sediment Quality Targets for Coastal and Marine areas in the WIO region were also developed to assist countries with setting appropriate water and sediment quality targets (UNEP et al. in press).

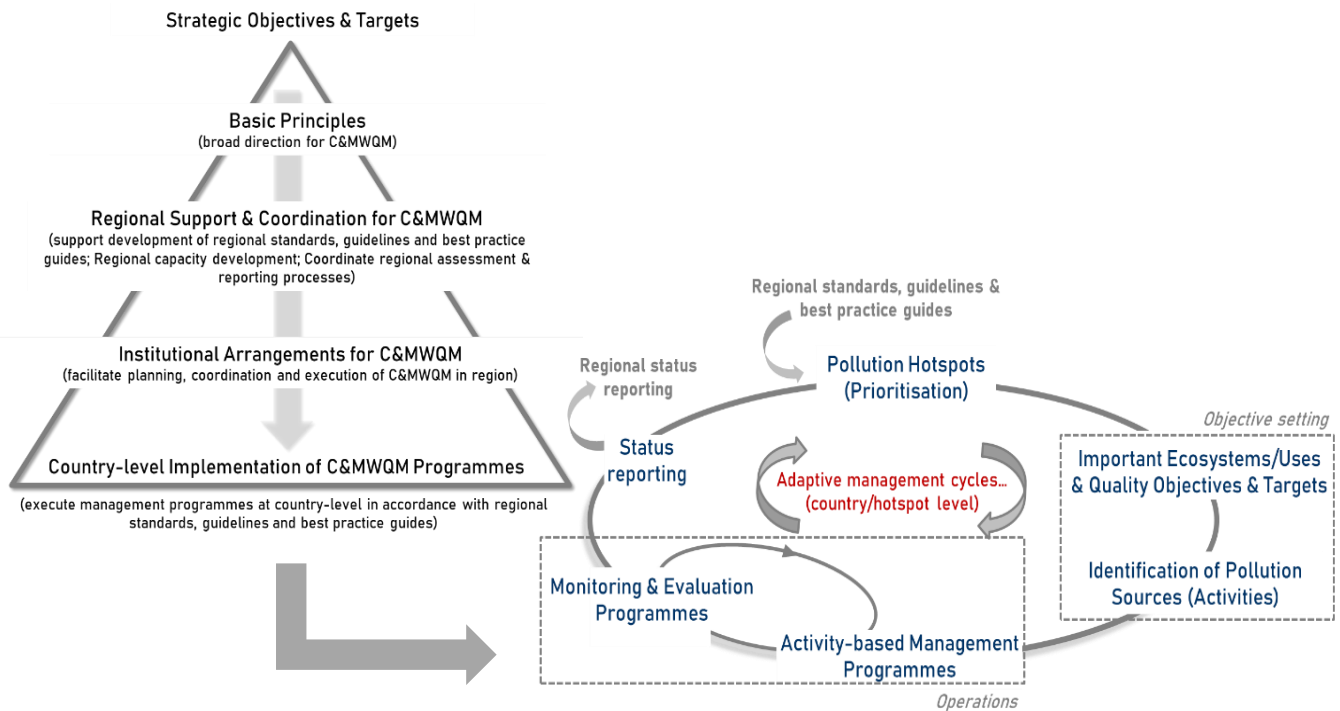


Figure 1 Strategic framework for C&MWQM in the WIO region (left), including ecosystem-based framework for implementation at country level (right) (UNEP et al. in press)

Formal institutional arrangements to facilitate and coordinate implementation across regional, national and hotspot-scales will be critical in the successful implementation of effective environmental management are (Figure 1). A structure for these institutional arrangements has been proposed (Figure 2).

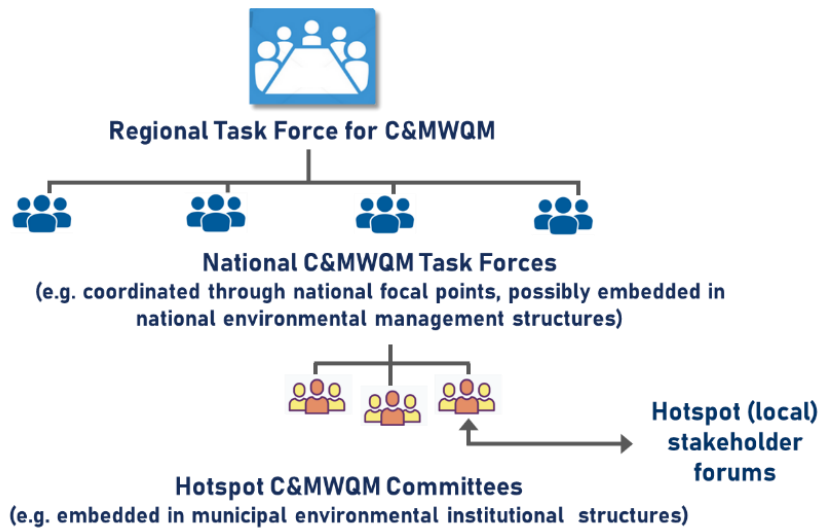


Figure 2 Proposed institutional arrangements to facilitate and coordinate implementation of C&MWQM in WIO region (UNEP et al. in press)

With the regional strategic framework and relevant supporting tools for sustainable C&MWQM in the WIO region now in place, the logical progression to *Phase 2: Implementation of the Strategic Framework at national and sub-national levels* (on-the-ground implementation) is now possible. This can be achieved through mainstreaming the regional framework, guidelines, and other supporting tools developed at the regional level, at national level and local marine pollution hotspots (e.g., coastal cities). This country-level Training and Capacity Development Workshop supports *Phase 2: Implementation of the Strategic Framework at national and sub-national levels*, undertaken under the guidance of the Nairobi Convention Secretariat.