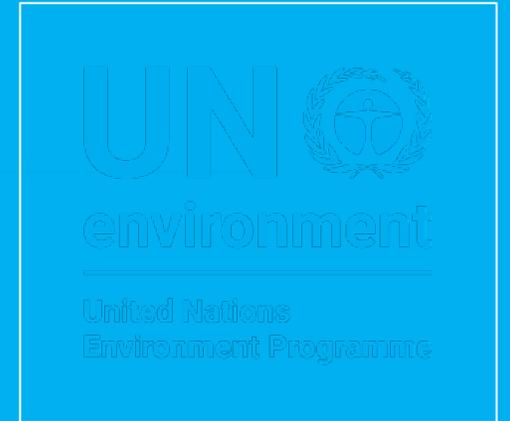


Acting Against Pollution: UNEP's Work on Wastewater Management

Riccardo Zennaro and Josphine Wairimu

Source to Sea Pollution Free Unit
UNEP

**Using SDG 6 Policy Support System (SDG-PSS) to facilitate countries in Africa
for water-related sustainable development – 5-7 July 2023**





Sustainable wastewater management



Governance

Funding



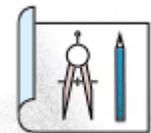
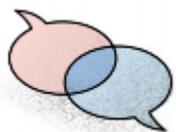
Understanding the value

Technological barriers and a lack of capacity

Challenges...

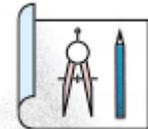
Introduction

- Anchored to the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA) and its project “**Protecting the Marine Environment from Land-Based Pollution through Strengthened Coordination of Global Action**”
- Mainly contributes to **SDGs 6** “Water and Sanitation for All” and **14** “Life Below Water”
- Working beyond silos and delivering together on Wastewater, Nutrients and Plastic/Marine Litter

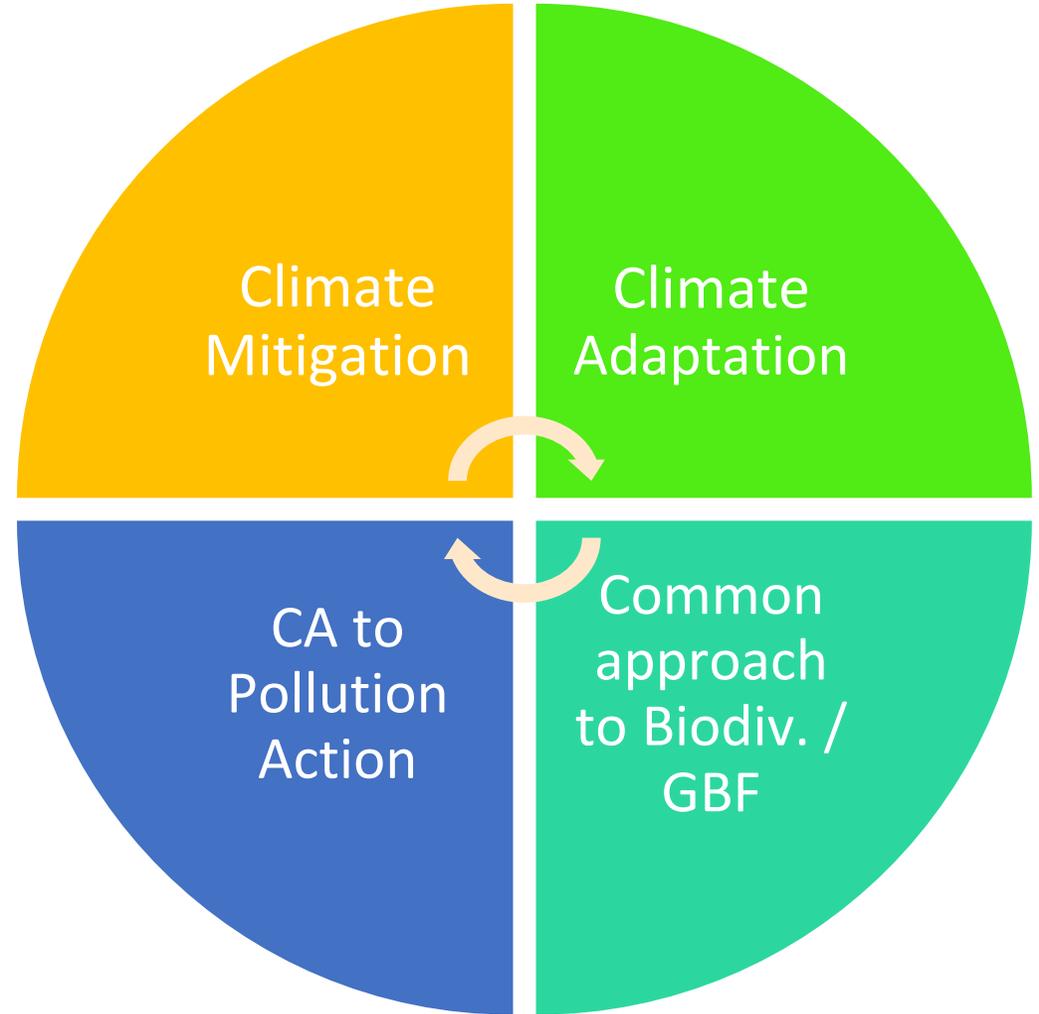
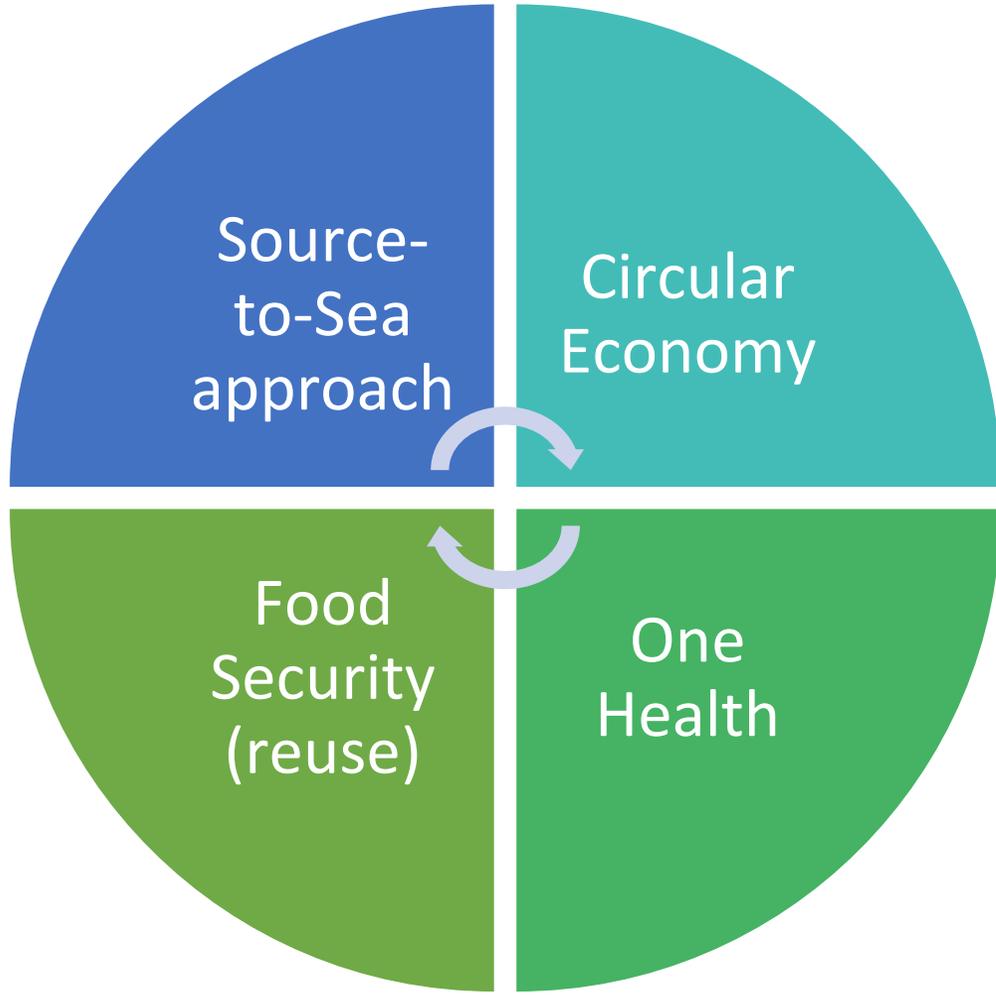


Mandate

- **UNEA resolutions 3.10 (para 16.b):**
 - ✓ Requests the ED of the UNEP within available resources to assist developing countries, upon their request, *by strengthening their capacity to reach the target of halving by 2030 the amount of untreated wastewater reaching water bodies (SDG target 6.3.1), taking into account gender perspectives, and including the development of wastewater treatment options*
- **UNEP's MTS, 2022-2025** especially its pollution pillar - Objectives :
 - ✓ 3.7 “Resilient waste and wastewater systems and infrastructures are **upscaled**”; and
 - ✓ 3.2 “Land-based sources of pollution in freshwater and oceans are reduced”



Cross cutting approach





Multi-stakeholder platform born in 2013

Change the paradigm around wastewater, from waste to a valuable resource.

Address the challenges of wastewater management and sanitation provision

UNEP acts as its secretariat



United Nations
Department of Economic and Social Affairs



Asian Development Bank



IAEA
International Atomic Energy Agency

UN-HABITAT



Convention on
Biological Diversity



UNITED NATIONS
UNIVERSITY



100 Members



Developing Sustainable Solutions for Africa



UNU INWEH



University of Nairobi



Swiss TPH



The Water Network



China Beijing Environment
Exchange



TURKISH WATER INSTITUTE
TÜRKİYE SU ENSTİTÜSÜ



Local
Governments
for Sustainability



the international
water association



Ecoturismo
y Nuevas
Tecnologías
S.A. de C.V.

Our past portfolio



Policy

- *DEWATS* Guidelines (2018-2021)*
- *Atlas "Sanitation and Wastewater Atlas of Africa" (2021)*

Demo Projects

- In Malaysia and Kenya: solutions for wastewater and nutrient pollution (2021 and 2022).
- DEWATS project in Tanzania (2016, 2021 and 2022).
- Afforestation and reforestation in Ghana and Morocco (2021 and still ongoing, respectively).
- Nutrient recovery from wastewater in India (2022)

Awareness Raising

- Series of webinars on wastewater (COVID-19)
- Articles on wastewater-related matters and sharing of news, opportunities, and other information (Factsheet, web story)

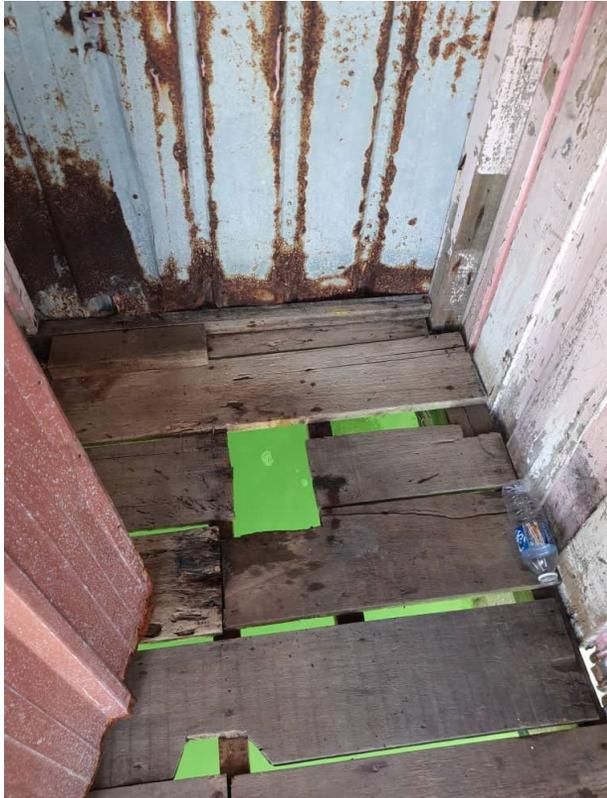
Private Sector Engagement

- Fostering collaboration between stakeholders, and enhance private sector involvement through the Partnerships (GPNM, GPML GWWI)

Technology

- *Toolkit and catalogue on water pollution by plastics and microplastics (2020)*

Projects on the ground: smart sanitation in Malaysia



Projects on the ground: DEWATS in Tanzania



Our pipeline for 2023-2024

- **Launch of COVID-19 and Water Report: open for collaboration with ROs and RSs**
- **Sick Water Rich Water Report: Engagement of ROs and RSs on the revision, launch and outreach**
- **Source to Sea Symposium (Oct 2023)**
- **Scaling-up Sustainable Wastewater Management in Tanzania**
- **Supporting the use of DEWATS and other low-cost treatment solutions in Malaysia**
- **New phase of project of Recovery of Nutrients in India**
- **Scaling up sustainable wastewater and coral reef management for climate change resilience in the Pacific SIDS - IKI**



Our pipeline for 2023-2024

- Strengthening the **Global Wastewater Initiative** (revamped Steering Committee; extra funding and capacity)
- Global Solution Platform on Innovations for Wastewater with Science Division
- Estimation of Sustainable Wastewater and Nutrients contribution for **Climate Change Mitigation** (study) in collaboration with CC team (tentative)
- **Strengthening workstream on AMR* and COVID-19**: monitoring and surveillance in Africa and Asia-Pacific (Mustaq), new workstream under the **World Water Quality Alliance**, exhibition in November, etc.
- Other Awareness-raising and capacity building: MOOC on S2S, AMR webinars, certification programme, articles and stories;



UNEP's wide engagement on wastewater #1

Tourism and wastewater management

How tourism and sustainable wastewater management can advance recovery for people, the planet, and prosperity, including cross-cutting aspects of financing, and digitalization.

From wastewater to oasis: greening the desert

Morocco has been using wastewater from the city of Ouarzazate to plant trees to combat desertification and reduce the impact of dust storms.

CREW+

An integrated approach to sustainable water and wastewater management in the Wider Caribbean Region using innovative solutions and sustainable financing mechanisms.

GoBlue Project

Under Component 2, the project aims to enhance wastewater treatment in Mombasa County as a way to address land-based pollution impacting the marine environment.



UNEP's wide engagement on wastewater #2

Nairobi Convention

Nairobi Convention plays a key role in improving water quality by using constructed wetlands for wastewater treatment and providing accurate and relevant data and information for the protection and sustainable management of the coastal and marine environment in the Western Indian Ocean region.

UNEP Working Group (WG) on Nitrogen

The UNEP WG on Nitrogen (as mandated by the UNEA 4 and 5 resolutions) works on reducing nitrogen pollution globally. To ensure this, it is critical to comprehensively assess the total recoverable nutrients from wastewater and manage it sustainably.

Custodian role on indicator 6.3.1

UNEP acts as a key custodian in implementing and monitoring the progress on SDG 6.3.1 and works to achieve the goal of halving the proportion of untreated wastewater discharged into water bodies by 2030. This work also aims at substantially increasing recycling and the safe reuse of treated wastewater globally.



Strategic Planning (with a 2030 vision)

- Development of the **new core project for Source to Sea approach** for 2024-2029 cycle (informal consultations with key stakeholders – internal and external)
- Develop a longer-term programme on wastewater applied to wastewater high-impact sectors (including donors round tables)
- To strengthen the **enabling environment and encourage partnerships to scale up** sustainable wastewater and nitrogen management solutions at country level
- Increase engagement and collaboration with **Regional /Country Offices and Regional Seas;**
- Wastewater and circularity
- Foster collaboration with UNEP's portfolio and pipeline **GEF (beyond IW), Adaptation Fund and GCF.**
 - Replication of successful projects: I.e. CREW+ from Caribbean to COBSEA



Source to Sea Symposium

- Being organized to **highlight key achievements** of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA).
 - To follow-up on progress of previous UNEA resolutions.
 - To highlight other emerging issues in the source-to-sea continuum including perspectives from freshwater, coastal and marine ecosystems, while considering cross-cutting areas, such as governance, climate change, food system, loss of biodiversity and sustainable blue economy, among others.
 - To **bring together different stakeholders** and discuss priorities areas in the source-to-sea continuum as well as potential next steps for priority interventions.
 - The event will also **connect outcomes** from the 2022 UN Ocean Conference, the UN 2023 Water Conference and other major events on related subjects.
 - An objective of conducting this event is also to **support the development of science-based recommendations for UNEA6**.
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UN 

environment

United Nations
Environment Programme

Thank you for your attention!

Email: riccardo.zennaro@un.org and josphine.nduguti@un.org
