# Strengthening the WIO MPA Network and cooperative actions of governments and society

JULIUS FRANCIS[1], VERA HORIGUE[1,2], JOSEPH MAINA[2], ARTHUR TUDA[1], JARED BOSIRE[3]

[1]WIOMSA, ZANZIBAR, TANZANIA; [2]MACQUARIE UNIVERSITY, SYDNEY, AUSTRALIA; [3]UNEP NAIROBI CONVENTION, NAIROBI, KENYA
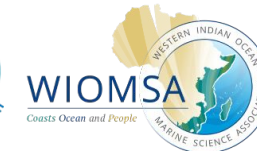
*Correspondence: tuda@wiomsa.org; joseph.mbui@mq.edu.au

23-25 March 2021 – Science to Policy meeting
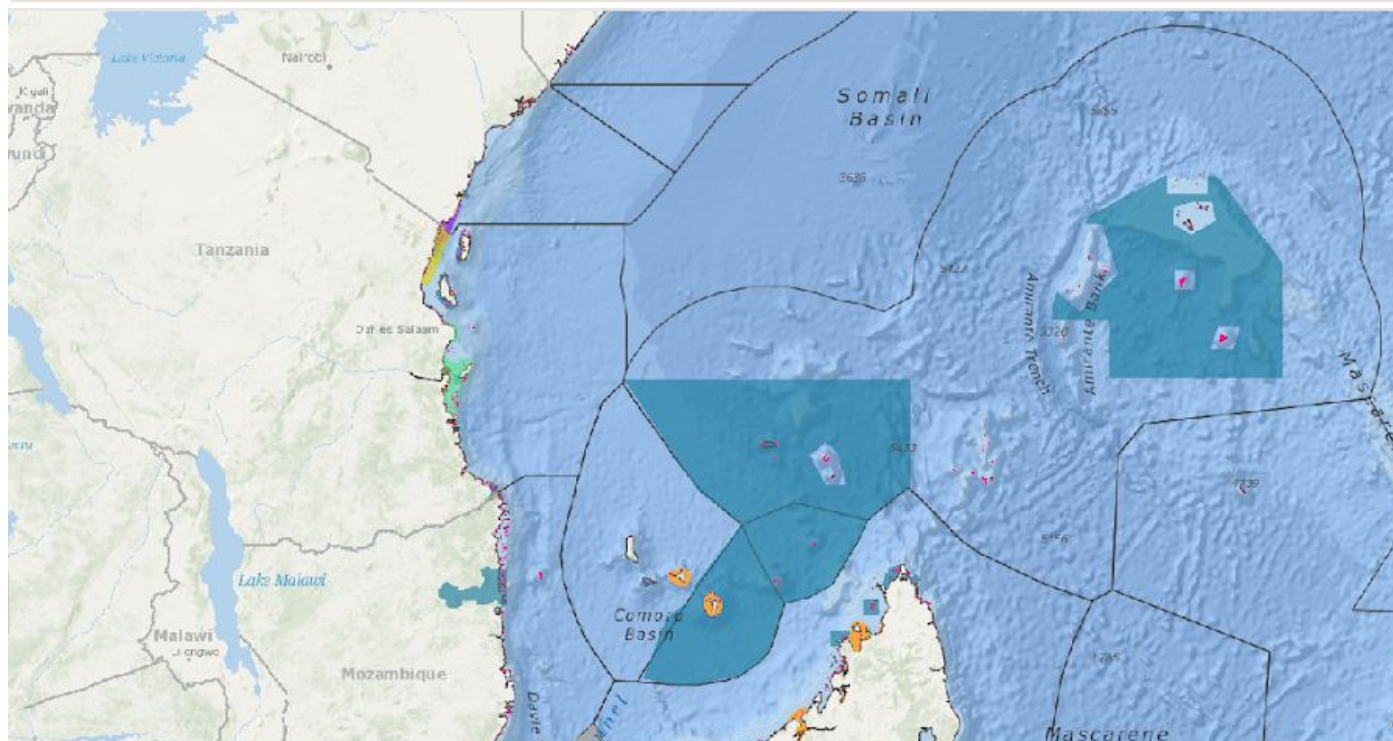
Background and rationale

## Why is establishing a global network of MPAs important?

- Advocacy for the global MPA network
    - Establishment of more MPAs to adequately represent ecosystems at various scales
    - Ensures persistence of biodiversity by protecting ecological processes
    - Provides protection and safety net from climate change impacts
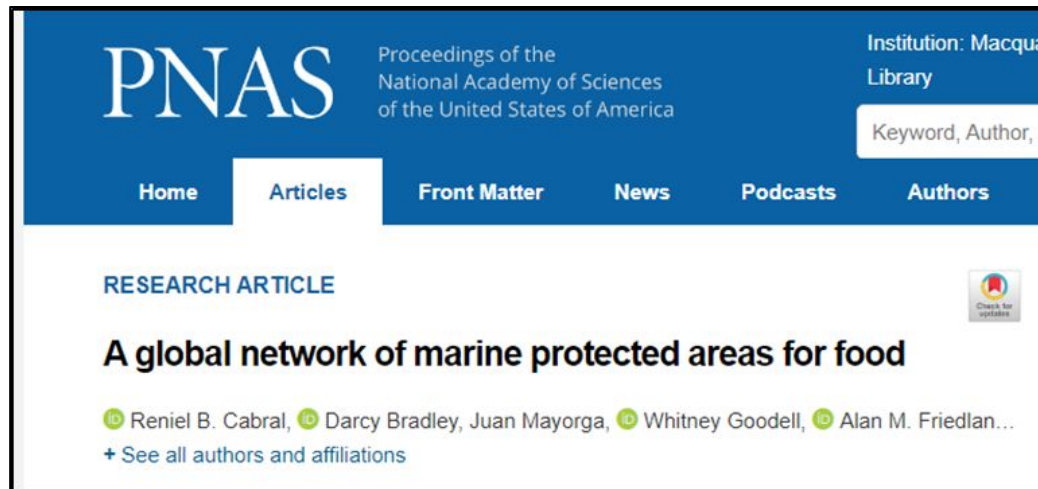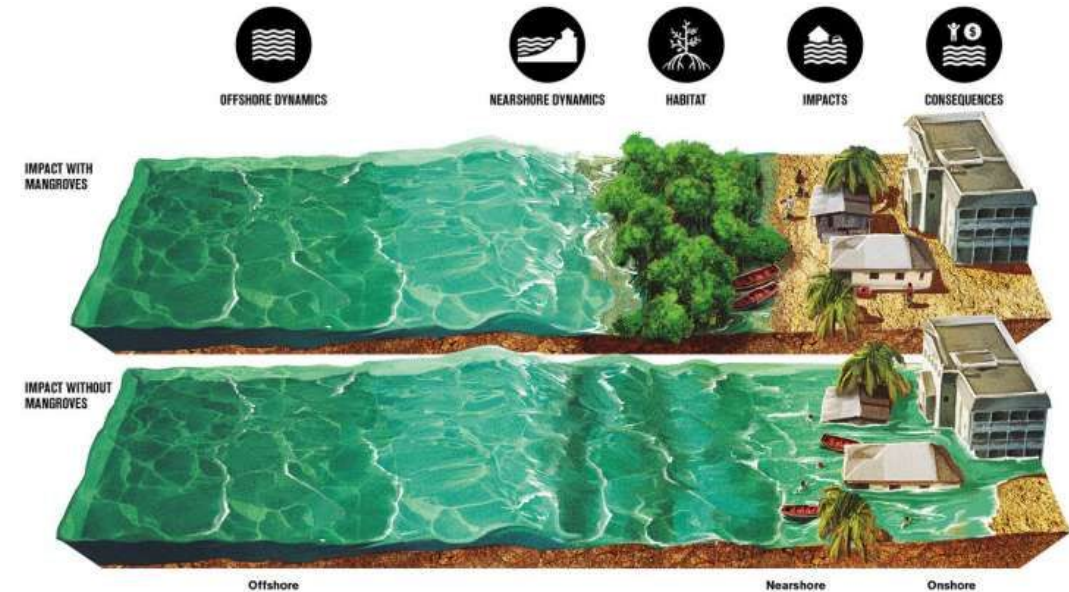
Background and rationale

What is an MPA network?

- System of MPAs that protects a sufficient proportion of the population of at least one species during vulnerable life stages (juveniles and adults)

- Connectivity – the linking of local populations through the dispersal or movement of larvae, juveniles, or adults
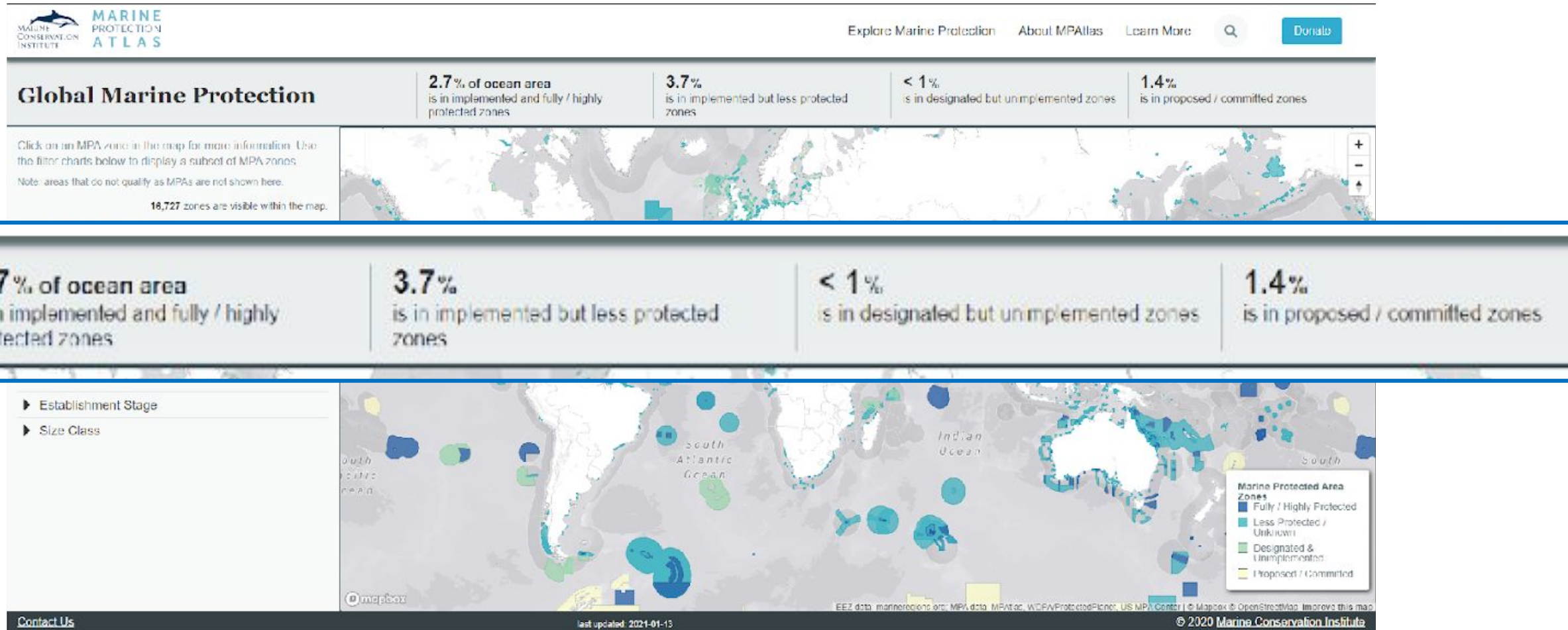
Sale et al. 2005
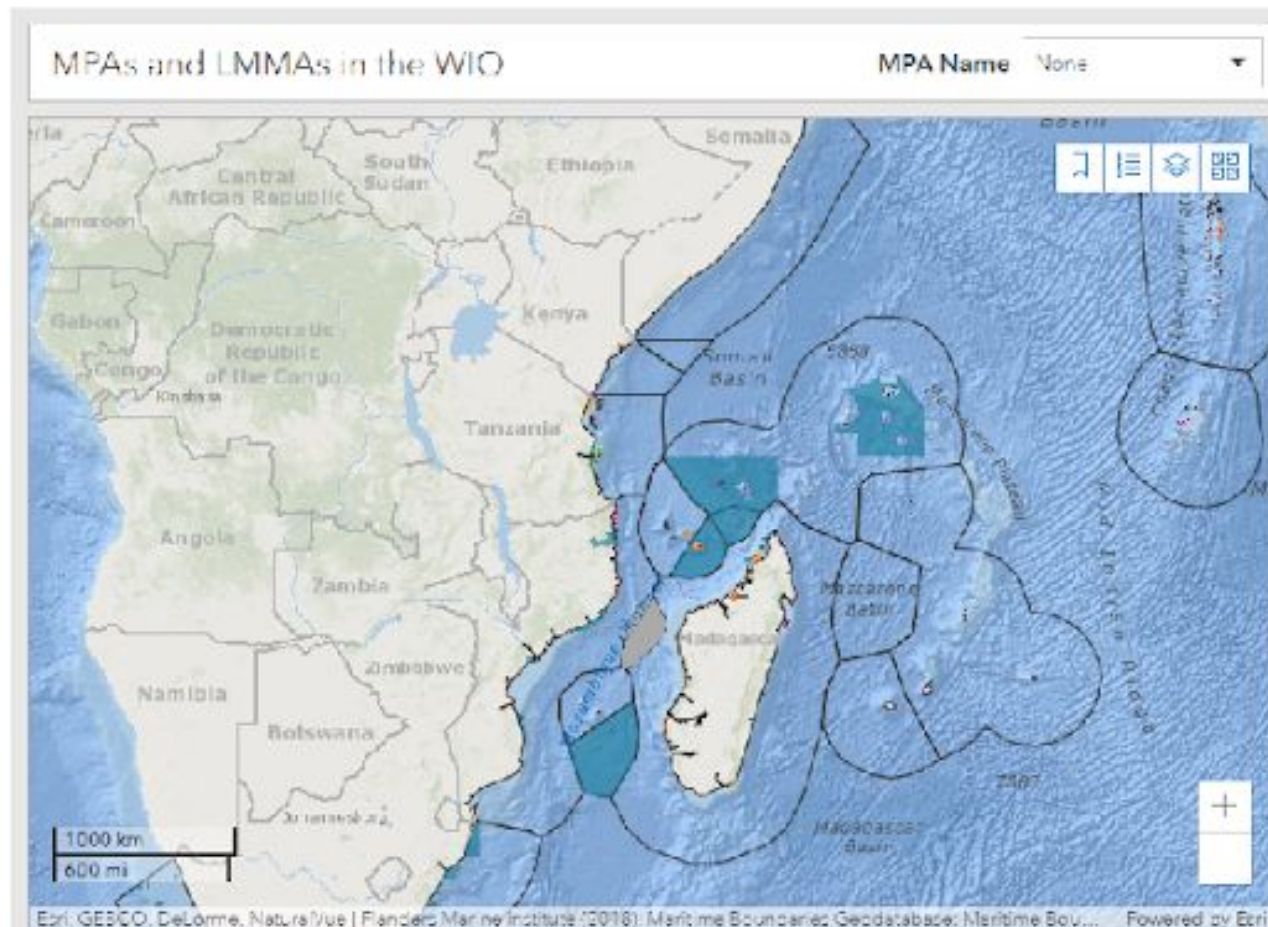

Green et al., 2014
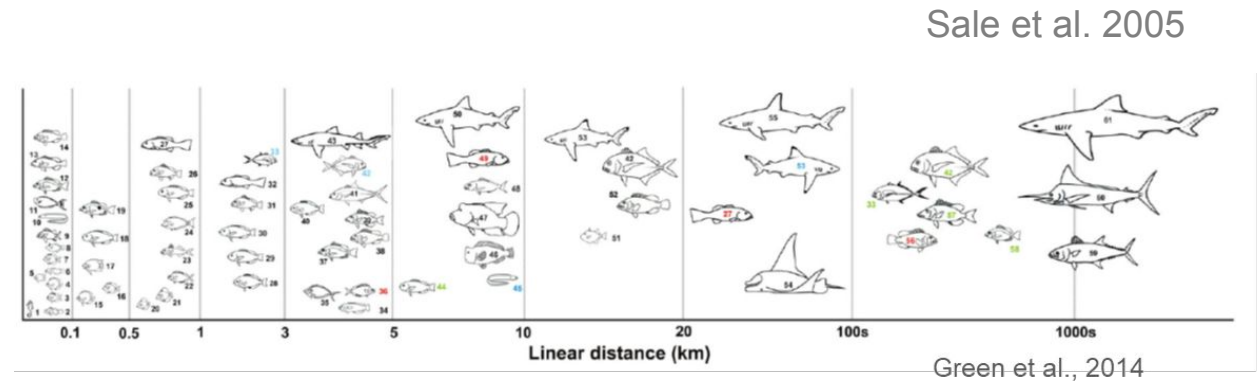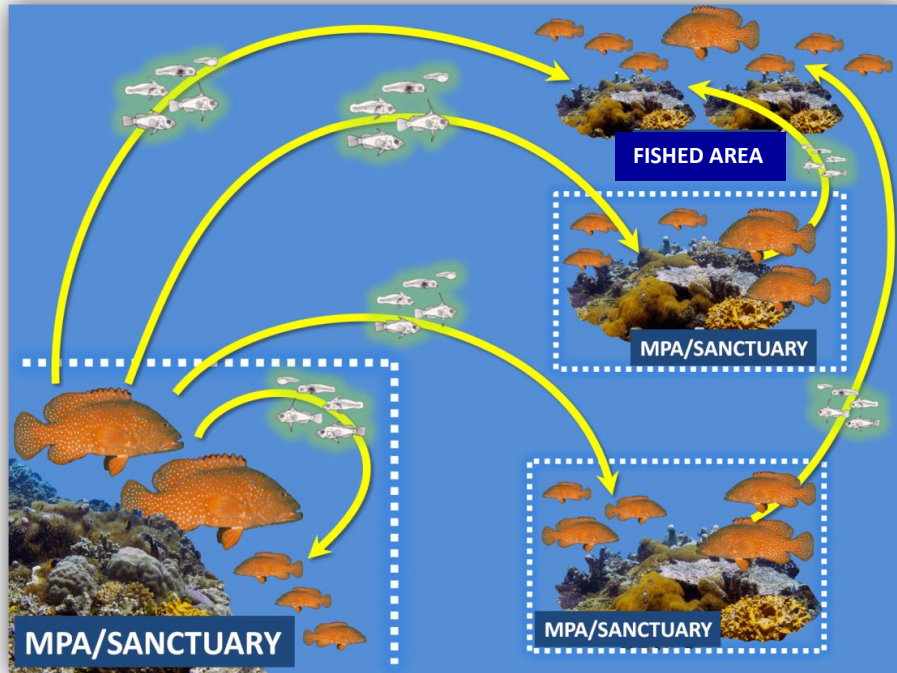
Slide from
RA Abesamis

Background and rationale

Where are we now at achieving global MPA targets?

Background and rationale

Status of MPAs and OECMs in the WIO

MPAs and LMMAs in the WIO   MPA Name None

https://wiomsa.org/wiompan/interactive-map/

- 149 MPAs and 173 LMMAs recorded
- Covers ~678K sq.km. or 8% of the combined EEZ of WIO nations
- Most of the MPAs represented nearshore ecosystems (i.e., coral reefs, seagrass beds)
  - 17% of combined East African coastline
- Established MPAs protect WIO endemic and endangered species
  - WIO coelacanth, Madagascar teal, dugongs, turtles, bird nesting sites

Background and rationale

Status of MPAs and OECMs in the WIO

Main gaps

- Existing MPAs are connected, but we need to increase protection to ensure persistence of biodiversity

- Offshore features (e.g., banks, seamounts) remain largely unprotected

- The majority of MPAs (out of 101 MPAs evaluated using the METT) are not effectively managed

  – Low financial, technical, and human resource capacity

  – Contributed to weak enforcement and illegal activities
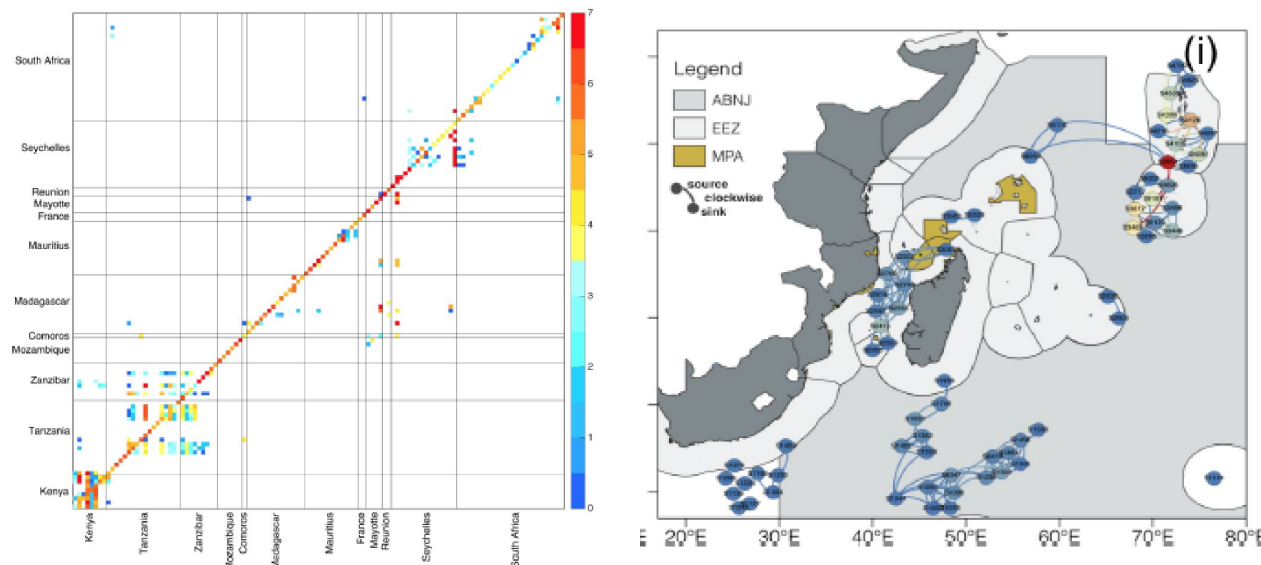
Maina et al., 2020

General recommendations

Overall recommendation

Formally establish the regional WIOMPAN by strengthening existing local- to regional-scale institutional arrangements and structures, and improving the design and establishment of national MPANs

Key recommendations

Technical recommendations

- Develop and adopt a regional and systematic MPAN planning and implementation framework to support the development of national MPANs and formation of the corresponding institutional arrangements and structures

General recommendations

Specific recommendations to establishing the WIOMPAN

Combined top-down and bottom-up approach

Work stream 2: Developing a regional network of MPAs

- Strengthening cooperation, coordination & improving communication
- Increasing capacity
- Regional MPAN design

Work stream 1: Improving MPA management and establishing a national MPAN

- Individual MPAs as building blocks of MPANs
- Increased establishment and improved management

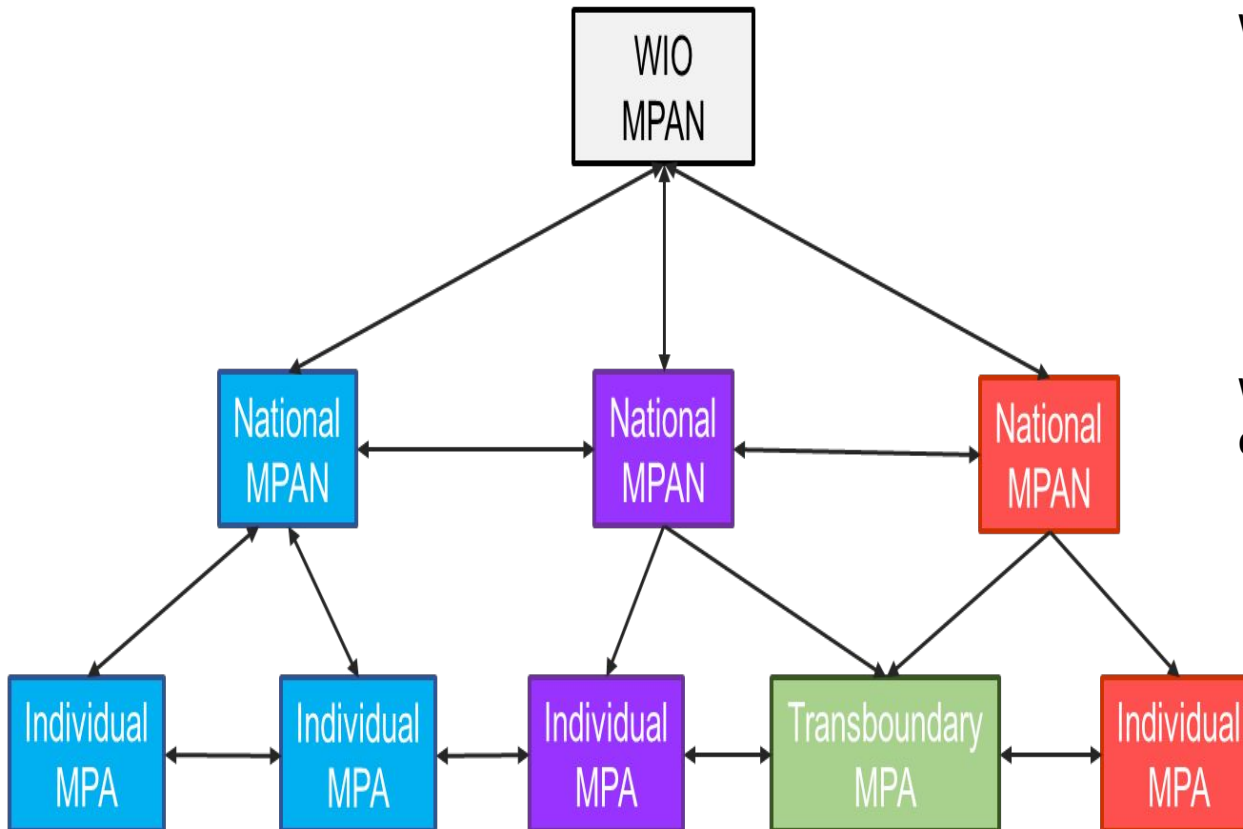# Key recommendations

Technical recommendations

- Develop and adopt a regional and systematic MPAN planning and implementation framework to support the development of national MPANs and formation of the corresponding institutional arrangements and structures

- Adopt a systematic conservation planning approach to ensure that the national MPAN plans adhere to ecological design principles and post-2020 CBD targets, and are attuned to social, economic, and political contexts

- Develop and adopt a national MPAN monitoring and evaluation framework, which includes regular capacity building initiatives, to ensure that individual MPAs are effectively managed and are contributing to maintaining ecological function of the MPAN

Key recommendations

Specific recommendations to establishing the WIOMPAN

Policy recommendations

- Strengthen existing partnerships (e.g., WIO MPA management network; country-level LMMA networks), and form new bilateral and multilateral agreements and institutional arrangements to support sharing of knowledge, resources, roles, and responsibilities to help increase MPAN management capacity

- Develop and adopt a national MPAN management and operational plan, which includes sustainability measures to ensure long-term financing, effective implementation, regular capacity building initiatives, and strong cooperation, coordination, and collaboration across all levels of organisation

For more information

WIOMSA: Arthur Tuda – tuda@wiomsa.org

UNEP Nairobi Convention: Jared Bosire – jared.bosire@un.org

MPA maps

https://wiomsa.org/wiompan/interactive-map/

https://www.nairobiconvention.org/clearinghouse/node/410

Acknowledgements

Contact

Joseph Maina – Email: joseph.mbui@mq.edu.au; Twitter: @mainambui

Vera Horigue – Email: vera.horigue@mq.edu.au; Twitter: @VeraHorigue