



# ANNUAL REPORT 2022

WWF SOUTH WEST INDIAN OCEAN SEASCAPE  
REGIONAL PROGRAMME

## ABOUT THIS REPORT

Welcome to the first annual report of the WWF South West Indian Ocean Seascape (SWIO Seascape) Regional Programme, in which we capture our activities and progress against our strategy for the initial nine-month period ending 31 December 2022. The programme started in April 2022.

This report captures progress made by various WWF projects across the region that are contributing towards shared strategic goals. Together, these projects are driving systemic, regional changes that cannot be appreciated when viewing each project in isolation. The projects showcased here are not comprehensive but are selected to demonstrate our impact and approach at the regional scale.

The SWIO Seascape Regional Programme is hosted by WWF-Madagascar and covers South Africa, Mozambique, Tanzania, Kenya and Madagascar, where WWF has country offices. The programme is also involved with key projects, activities and partnerships in the Comoros and the Seychelles. In the wider Indian Ocean, the SWIO Seascape Regional Programme also engages deeply with like-minded coastal states who are part of G16.

While every effort has been made to ensure that the information contained in this report is robust, the SWIO Seascape Regional Programme team is still in the process of developing its monitoring and evaluation framework. As such, the data has not been verified and gaps do exist. We are working to address these gaps and to deliver more complete and comprehensive reports in future.

## ACKNOWLEDGEMENTS

This report was prepared by a team led by Dr Samantha Petersen (SWIO Seascape Regional Programme Lead) with the support of Secretariat members Dresy Lovaso (SWIO Seascape Regional Programme Deputy Lead), Kareen Andriantsiferana, Naghmana Zafar Bhatti, Reginald Kwizela, Martin Nirry, Anthony Rakotondramanana, Erica Faramalala Ramamonjisoa, Maafaka Ravelona, Umair Shahid and Eduardo Videira.

It includes valuable contributions and insights from Lily Daly Mwazi, Ahmed Mbarak and Rose Machaku (WWF-Kenya); Heritiana Rakotomalala, Judicael Rakotondrazafy, Lalaina Rakotonaivo, Lilia Rasolofomanana, Tahiry Ranaivoson, Domoina Rakotomalala, Tovoniaina Andriatsiory and Mihary Raparivo (WWF-Madagascar); Rodrigo Fernandez, Dalila Sequeira and Milton Xavier (WWF-Mozambique); Craig Smith, Bokamoso Lebepe, Monalisa Mabandla, Kholofelo Ramokone and Nangamso Thole (WWF South Africa); and Elia Sabula and Modesta Medard (WWF-Tanzania).

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# A STRONG START FOR THE SWIO SEASCAPE REGIONAL PROGRAMME



**Dr Samantha Petersen**  
WWF SWIO Seascape Lead

*Being appointed the WWF Lead of the SWIO Seascape Regional Programme was a homecoming experience for me. After five years with WWF International's Ocean Practice – which offered amazing experience and insights into the global arena – I was excited to play a role in enabling meaningful change for the people and nature of Africa, my home continent.*

Our oceans are a transboundary resource that needs to be managed collaboratively and at a scale that cannot be achieved at a country level. WWF International launched the SWIO Seascape Regional Programme in April 2022 to coordinate its efforts in this region, which has been identified as a top priority node in Africa, to achieve the organization's global goals.

Dating back over 50 years, WWF has a long history of working in the South West Indian Ocean (SWIO). The SWIO Seascape Regional Programme is not its first cross-border undertaking. Most recently, WWF has worked in the shared ocean space of the Northern Mozambique Channel (NMC), the second-most biodiverse ocean region on the planet. This programme of work was ably led by Harifidy Ralison, who over many years made an incredible contribution to the conservation and sustainable management of the NMC region.

Despite previous regional forays, this is the first time WWF has drawn a circle around the entire SWIO region, which collectively is the most biodiverse region in Africa and second most in the world. The scale and scope of WWF's ambition in the area should not be taken lightly.

It has been less than a year since the SWIO Seascape Regional Programme was launched but we are already seeing the benefits of a regional approach. Some notable successes celebrated on the pages of this report include seeing local, national and regional civil society organisation (CSO) networks represent the voice of coastal communities at key global policy meetings.

An empowered and capacitated civil society is key to our strategic approach in the region, and in the year to come we will redouble our efforts to strengthen these networks and increase recognition of the role that coastal communities play as stewards of our important coastal ecosystems.

Another highlight of the year was the establishment of a productive partnership with the African Development Bank and the Southern African Development Community (SADC) Secretariat to accelerate the creation of a shared monitoring, control and surveillance centre to address illegal, unreported and unregulated (IUU) fishing across the region. IUU poses a substantial threat to the region's fisheries, with severe consequences for the region's food security, livelihoods and economy.

The Our Blue Future (OBF) platform is another exciting development that we helped to launch during the year. Hosted by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ, Germany's development agency), the OBF is a multi-stakeholder platform aimed at convening partners from civil society, the private sector and government to collectively shape an inclusive and sustainable regional blue economy. I am excited at this platform's enormous potential to drive positive change for people and nature at a scale that none of the sectors would be able to achieve alone.

However, even as we celebrate these achievements, we must be mindful of how much we are interfering with humanity's life-support system. Nature gives us the food we eat and the water we drink. It keeps our air breathable and the climate habitable. Our task as WWF is enormous, but when I look around, I am motivated when I see ordinary people doing extraordinary things.

Both the SWIO Seascape Regional Programme team and the country-level WWF field teams do amazing work every day to elevate the science, engage decision-makers at all levels, and support coastal communities and civil society to build sustainable development pathways. I honour you all for your passion, determination, integrity, expertise and optimism. In the years to come, we will need these strengths as we scale and deepen our engagements in the region.

An aerial photograph of a blue boat with several people on board, floating on a vibrant teal ocean. The water is clear, revealing dark patches of coral or seabed beneath the surface. A thin black line, possibly a rope or cable, extends from the top of the frame down to the boat. The overall scene is bright and clear, emphasizing the natural beauty of the marine environment.

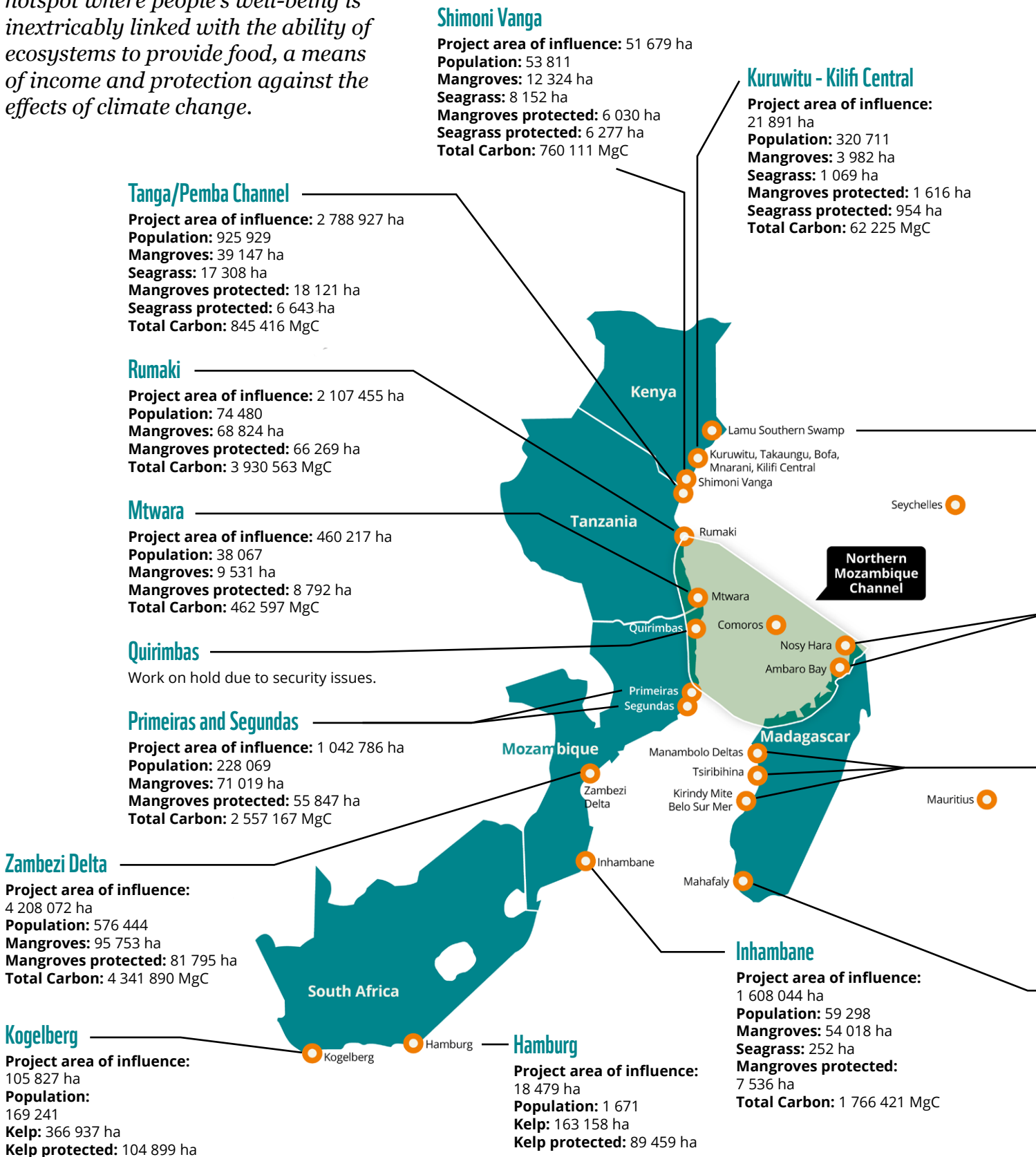
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**DESPITE PREVIOUS REGIONAL FORAYS, THIS IS THE FIRST TIME WWF HAS DRAWN A CIRCLE AROUND THE ENTIRE SWIO REGION, WHICH COLLECTIVELY IS THE MOST BIODIVERSE REGION IN AFRICA AND SECOND MOST IN THE WORLD. THE SCALE AND SCOPE OF WWF’S AMBITION IN THE AREA SHOULD NOT BE TAKEN LIGHTLY.”**

**SAMANTHA PETERSEN, SWIO SEASCAPE LEAD**

# WHERE WE WORK

*The South West Indian Ocean seascape is a globally important – and highly at risk – region. It is a biodiversity hotspot where people’s well-being is inextricably linked with the ability of ecosystems to provide food, a means of income and protection against the effects of climate change.*



## THE SCALE OF OUR AMBITION

*Taking a regional approach allows WWF to scale its impact while pursuing WWF's global goals of conserving (or effectively managing) 30% of coastal and marine habitats and halving unsustainable fisheries.*



### Lamu Southern Swamp

**Project area of influence:** 112 779 ha  
**Population:** 64 327  
**Mangroves:** 20 323 ha  
**Total Carbon:** 912 799 MgC

### Diana Seascape

**Project area of influence:** 1 882 136 ha  
**Population:** 167 500  
**Mangroves:** 67 299 ha  
**Seagrass:** 177 172 ha  
**Mangroves protected:** 6 314 ha  
**Seagrass protected:** 5 790 ha  
**Total Carbon:** 4 839 333 MgC

### Manambolo Tsiribihina Seascape

**Project area of influence:** 3 742 678 ha  
**Population:** 131 921  
**Mangroves:** 55 205 ha  
**Seagrass:** 28 354 ha  
**Mangroves protected:** 29 469 ha  
**Total Carbon:** 1 550 518 MgC

### Mahafaly Seascape

**Project area of influence:** 2 122 641 ha  
**Population:** 44 198  
**Mangroves:** 456 ha  
**Seagrass:** 15 970 ha  
**Mangroves protected:** 49 ha  
**Seagrass protected:** 7 963 ha  
**Total Carbon:** 22 886 MgC



WWF project locations



WWF office in the capital with strong relationships with government and national partners



### IMPACT AREA: 20 MILLION HA

The area collectively covered by WWF long-term project locations in the SWIO region. This includes nearly **500,000 ha** of mangroves, at least **250,000 ha** of seagrass (data not available for all sites) and potential storage of **22 million tonnes** of carbon.



### POPULATION: 2.3 MILLION

The number of people living within 10 km of the coast within our project areas. This is equivalent to **25%** of the overall coastal population of 10 million people in the SWIO region.



### TARGET FISHERIES ANNUAL VALUE: US\$ 674 MILLION

The average annual value of tuna and tuna-like species caught in the SWIO region between 2007 and 2016. This is the equivalent of **34%** of the global annual tuna catch of **US\$ 2 billion** over the same period.



### A BIODIVERSITY HOTSPOT

The region is home to 300 coral species (38% of the world's coral diversity) and holds some of the world's most climate resilient coral reefs and therefore plays an important role in securing coral reefs for future generations. It is also home to 5% of global mangrove coverage.



### ...ON HUGE UNTAPPED RESERVES OF NATURAL OIL AND GAS

There is a major overlap of oil and gas concessions with ecologically or biologically significant areas (EBSAs) (**28%**) as well as marine protected areas (**8%**), especially in the Northern Mozambique Channel.

# THE VALUE OF TAKING A REGIONAL APPROACH

*The Indian Ocean is vast and its biodiversity knows no political boundaries. A systemic change in one area can – and does – have noticeable impacts across the region.*

A regional approach enables the SWIO Seascape Regional Programme to address challenges that no single country could tackle in isolation, such as regional fisheries governance of transboundary fish stocks.

Having a regional perspective also supports WWF’s efforts to deliver impact at scale. This is delivered through a scaling strategy called “scaling up, scaling out and scaling deep”.

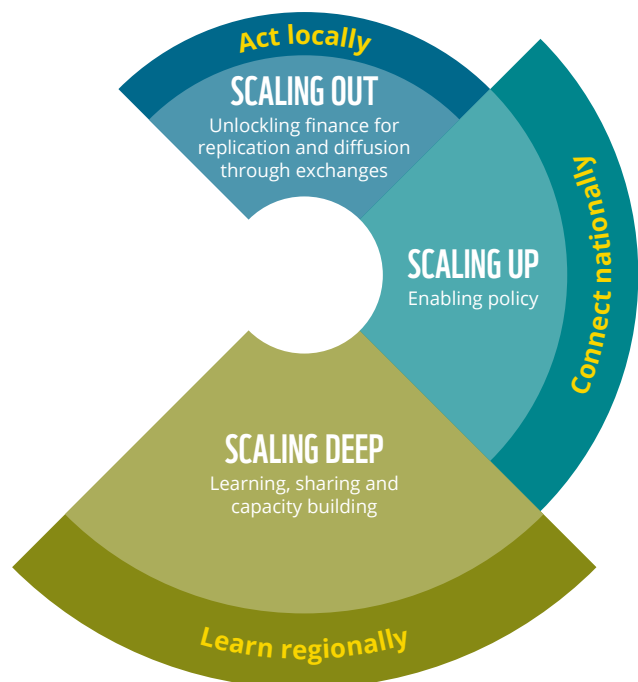
Because change is not a linear process, we work at various levels to achieve impact at scale.

**SCALING UP** refers to embedding our local successes into national, regional and global policy;

**SCALING OUT** refers to replicating successful models in other locations across the region;

**SCALING DEEP** is about building capacitated networks of partners and civil society who can continue furthering the work in their own contexts and from their own perspectives.

Figure 1. SWIO scaling strategy



## A SELECTION OF KEY OUTCOMES

### SCALING UP: ENABLING POLICY

Communities’ rights to access resources are well recognized in national policies but co-management governance structures are still not sufficiently operationalized

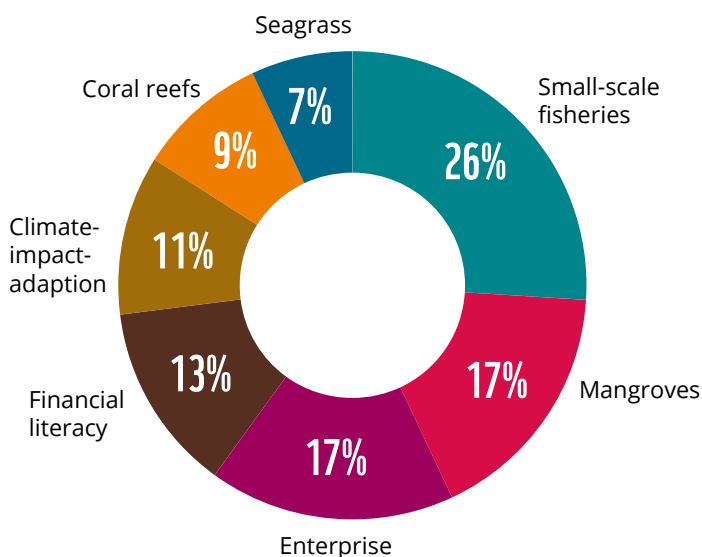
>> see Table 1 on page 9

### SCALING OUT: REPLICATING THE MOST EFFECTIVE COMMUNITY-LED CONSERVATION SOLUTIONS

- WWF is providing direct support to **166** co-management units across the region.
- As many as **866** village banks/microfinance schemes have been developed in **11** project locations and more than **39** different micro-enterprises have been established.
- Small-scale fishery community members from nine project sites use mobile technology for community-led data collection.
- A total of **133** spatial closures for fishery enhancement, totalling **8,524** square kilometres, have been established in seven locations.

### SCALING DEEP: BUILDING CAPACITY THROUGH LEARNING AND SHARING

More than 4,550 people – of which 1,444 were women and 1,274 were aged between 15 and 24 years – were trained across 98 sites.





**A REGIONAL FOCUS ENABLES THE CREATION OF A PORTFOLIO OF INVESTOR-READY PROJECTS AT A SCALE THAT CAN ATTRACT SUBSTANTIAL PRIVATE-SECTOR INVESTMENT. IT ALSO SUPPORTS THE AGGREGATION OF SMALLER COMMUNITY-LED ENTERPRISES, ENABLING THEM TO OVERCOME BARRIERS TO ACCESSING FINANCE AND CATALYZING INVESTMENT INTO SUSTAINABLE DEVELOPMENT PATHWAYS FOR COASTAL COMMUNITIES.**

**Table 1.** Status of coastal community's rights secured in policy instruments and the level of implementation of co-management per field location where WWF has long-term presence.

Country	Location	Sites	Rights secured in Policy	Co-management
Madagascar	Mahafaly Seascape		5	4
Madagascar	Manambolo Tsiribihina Seascape	Tsiribinhina and Manambolo Deltas	5	5
Madagascar	Manambolo Tsiribihina Seascape	Kirindy, Mite and Belo Sur Mer	5	5
Madagascar	Diana Seascape	Nosy Hara	4	2
Madagascar	Diana Seascape	Ambaro Bay	5	3
South Africa	Kogelberg		4	1
South Africa	Hamburg		5	4
Mozambique	Inhambane		4	1
Mozambique	Zambezi Delta	No data 5pt plan data		
Mozambique	Primeiras and Segundas		4	2
Tanzania	Mtwara	No data 5pt plan data		
Tanzania	Rumaki	Rufiji Delta, Mafia Island and Kilifi	5	5
Tanzania	Tanga/Pemba Channel	No data 5pt plan data		
Kenya	Shimoni Vanga		5	3
Kenya	Kuruwitu - Kilifi Central		5	4
Kenya	Lamu Southern Swamp		5	3

**Policy:**

- Co-management enshrined in policy and community rights secured in Policy.
- Some aspects of co-management recognised in policy.
- Appropriate policy is in the process of being drafted.
- Recognition of the role of coastal communities in coastal resource management, but no drafting of new policy taking place yet.
- The role of coastal communities in coastal resource management is not recognised and no current action to address this is underway.

**Co-management:**

- Co-management arrangements meets all criteria (4/4).
- Three of 4 criteria are met by community management arrangements (e.g. BMUs).
- Two of 4 criteria are met by community management arrangements.
- One of 4 criteria are met by community management arrangements.
- If none no criteria are met by community management arrangements.

**Minimum set of criteria:**

1. Agreed co-management operational framework/plan in place e.g. a constitution, which includes appropriate leadership;
2. An agreed decision making mechanism and an equitable and inclusive (marginalised groups such as women and youth) benefit sharing arrangement;
3. Regular meetings with good participation;
4. A mechanism to deal with transgressions.

# TAKING A SEASCAPE APPROACH

WWF has long-term presence in 15 seascapes across the region. Seascapes recognise the interconnected nature of ocean and coastal ecosystems and the extent to which coastal communities rely upon marine resources for their livelihoods. Recognizing this strong interdependence of ecological, social, economic and institutional elements is key to effective integrated coastal zone management. It is therefore, vital to cultivate a sense of shared commitment across seascape actors (government, communities and private sector), including establishing a vehicle for attracting finance at scale.

Our seascape approach follows a five point plan:

**1. Co-management** is enshrined in policy and communities rights to access is secured.

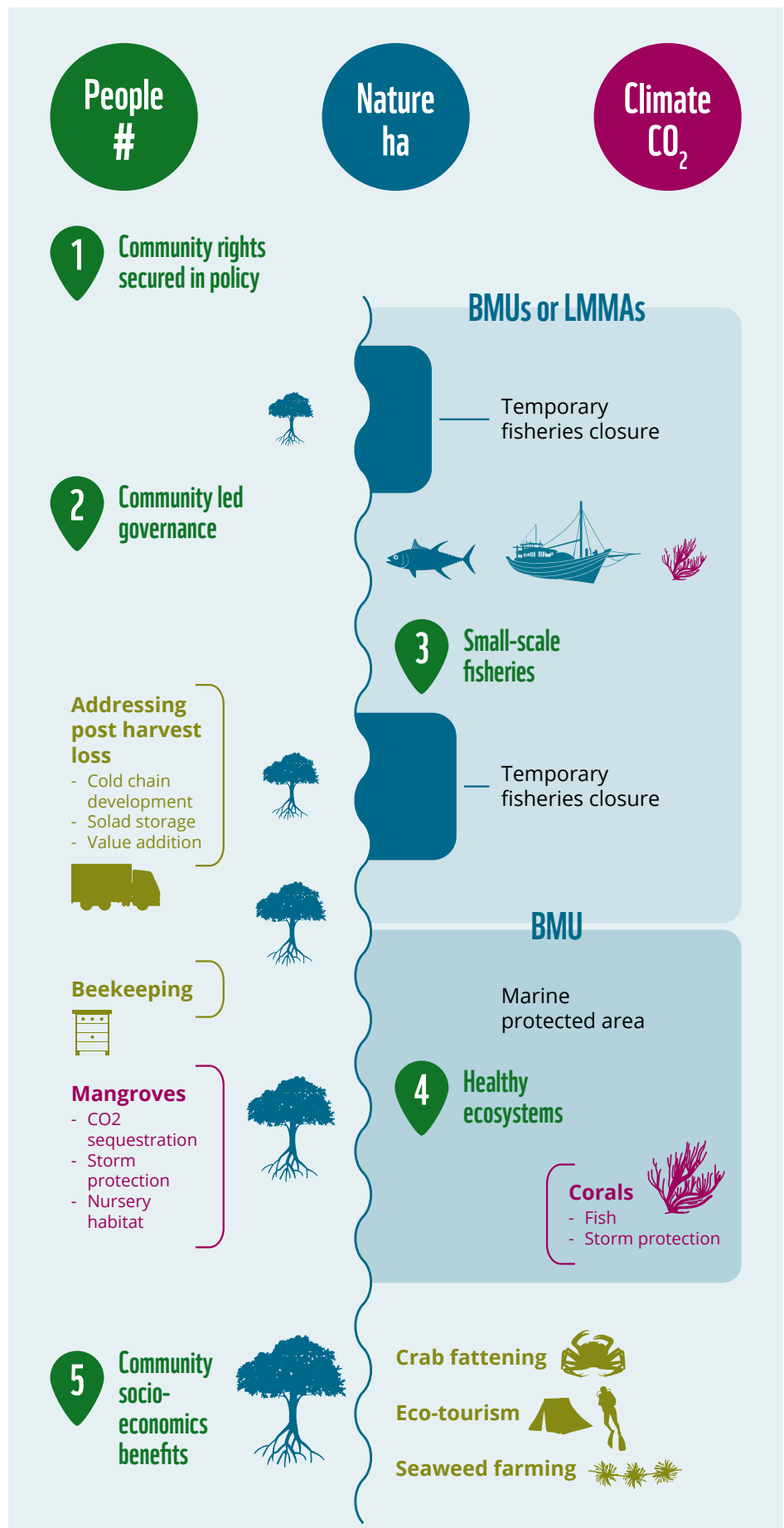
**2. Community governance** (e.g. BMUs, CCPs, CMAs, LMMAs etc) is strengthened including a constitution, which includes appropriate leadership; an agreed decision-making mechanism and an equitable and inclusive benefit-sharing arrangement; regular meetings with good participation and a mechanism to deal with transgressions.

**3. Effective small-scale fisheries management** is in place. i.e. data-informed management decisions result in measurable improvement in stock status (increasing trend in biomass or catch per unit effort (CPUE)).

**4. Ecosystem resilience** enabled including an effective network of marine managed areas is in place (effectiveness is supported by evidence) and/or key habitats have been effectively restored (supported by evidence).

**5. Socio-economic well-being of coastal communities** is improved including an expanded livelihood base (including access to finance) and they are more resilient to the impacts of climate change.

Figure 2. This figure captures a representation of our seascape approach





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## AN INCUBATOR TO CLOSE THE FUNDING GAP

An incubator programme tailored to the needs of SWIO coastal communities has the potential to support the transition to an inclusive and sustainable blue economy across the region.

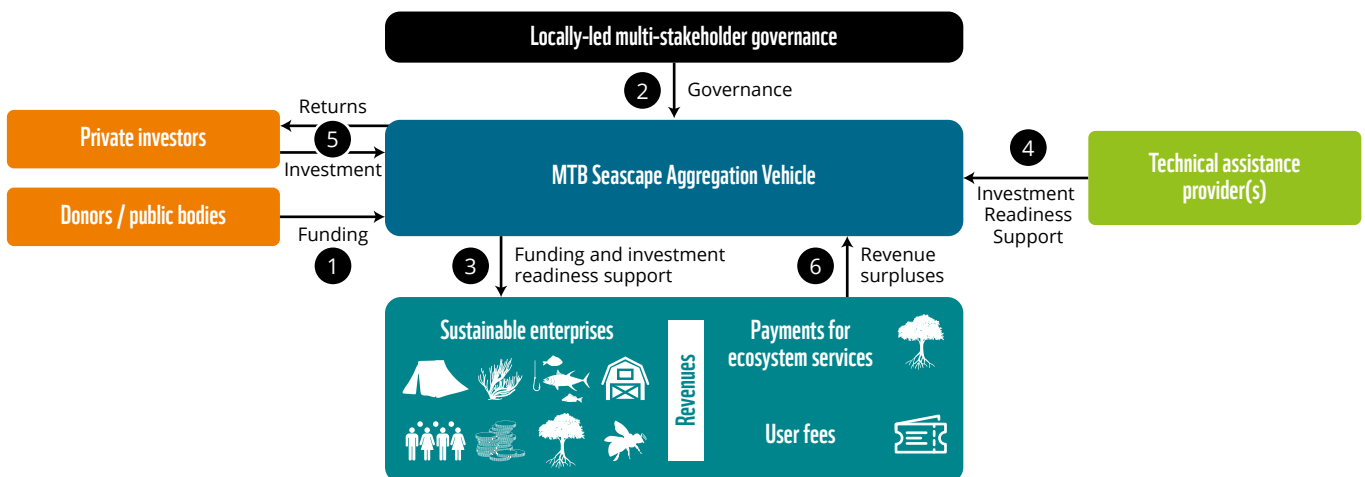
**Working with SWIOTUNA, a network of community organisations across the region, WWF and Finance Earth are co-leading the development of the incubator.**

The programme will equip communities with the capacity and resources to activate sustainable enterprise models that reduce negative impacts on the marine environment and build their social and economic resilience.

### Incubator objectives

- Achieving **economies of scale** in delivering financial and non-financial support to SWIO opportunities.
- Aggregating multiple projects to create investments of **sufficient scale to attract investors** and minimise relative transaction costs.
- Aligning **quality standards to increase the value** of products/services and ensure delivery of environmental and social, as well as economic outcomes.
- Providing **long-term support** to enable projects to progress from concept to maturity.
- Presenting investment opportunities using a **shared strategic approach** to increase their appeal to funders.
- Highlighting infrastructure needs and **supporting sustainable and natural infrastructure development** at seascape and regional level.
- Building a network of communities and community practitioners to establish a **thriving community of practice**.

**Figure 3.** Indicative seascape portfolio approach structure



# POLICY ADVOCACY UPDATE

*WWF's efforts to elevate the scientific discussion while amplifying the voices of coastal states and communities in the regional fisheries policy arena started bearing fruit during 2022 and the early part of 2023.*

## ADVOCACY

### STRATEGIC GOAL

*By 2030, ecosystem-based fisheries management ensures the long-term sustainability of key fisheries in SWIO, particularly the tuna and shrimp fisheries, and contributes to the well-being of local communities and national economies of target countries.*

### MORE STRINGENT DFAD POLICY ADOPTED

**Three years of relentless advocacy by WWF and its valued partners in the policy arena has culminated in the Indian Ocean Tuna Commission (IOTC) adopting measures to progressively reduce the use of drifting fish aggregating devices (dFADs) in the Indian Ocean by January 2026.**

The measures, adopted at a special session held in February 2023, require fishing vessels to reduce the number of dFADs they use from the current level of 300 per purse seine vessel to 200 per vessel by January 2026, with an interim target of 250 per vessel by January 2024. There are also more stringent requirements to report on the use of dFADs. The resulting data will help inform science-based management advice, including seasonal prohibitions.

dFADs are a concern because they result in a high number of juvenile tuna being caught, increasing the risk of overfishing. The Indian Ocean FAD-associated purse seine fishery has a very high percentage of juvenile yellowfin tuna catch (around 25%) compared to the global average (around 16%) for all other purse seine FAD-based fisheries. dFADs also contribute to ocean pollution and degrade coastal reefs because they are typically made from non-biodegradable materials.

The new policy adopts a precautionary approach and is a step in the right direction, but more needs to be done. WWF is now advocating for more stringent measures and a multi-year plan to rebuild tuna stocks and restore ocean health.



**CAPACITY  
BUILDING**

## **G16'S ABILITY TO RECLAIM OWNERSHIP OF REGIONAL OCEAN RESOURCES STRENGTHENED**

**The SWIO Seascape Regional Programme's technical support to the G16 served to strengthen regional voices on the global fisheries-management stage.**

The SWIO Seascape Regional Programme team held three meetings and one capacity-building workshop with the G16 this year to discuss the group's proposals to the IOTC, the United Nations' regional fisheries management organisation.

Since 2011, WWF International has worked with the G16, a collective of Indian Ocean countries with an interest in reclaiming ownership of the region's coastal and marine resources. The collective includes all the SWIO Seascape countries, as well as several other Indian Ocean nations such as India, Sri Lanka and Australia.

The first two meetings, held in March and April 2022, focused on developing robust plans to rebuild yellowfin tuna and fine-tune proposed harvest-control rules for skipjack tuna. This informed the G16's submission to the IOTC's annual meeting in May 2022, which also included suggestions for managing bigeye tuna, climate change and fish aggregating devices (FADs). Two of the G16's proposals were successfully adopted by the IOTC at this meeting.

The third meeting took place in November and a capacity-building workshop took place in the five months leading up to the IOTC's sixth special session on FAD management, where the IOTC took several key decisions

**>> see "More stringent dFAD policy adopted"**

**CAPACITY  
BUILDING**

## **CSO COLLECTIVE RECOGNISED AS OBSERVER AT IOTC MEETINGS**

**With WWF's support, SWIOTUNA – a network of civil society organisations from four SWIO countries – was awarded observer status at IOTC in late 2021, enabling it to contribute to the debate at IOTC meetings during 2022.**

The South West Indian Ocean Tuna Forum (SWIOTUNA) represents artisanal fishers, beach management units and other community groupings. Based in Kenya, SWIOTUNA's membership includes civil society organisations (CSOs) from Kenya, the Comoros, Madagascar, Mozambique, Tanzania, South Africa, Seychelles and Mauritius. The collective also has strong working relationships with organizations in the Seychelles and Mauritius.

Even though SWIOTUNA does not have voting rights at the IOTC, being afforded observer status enables the network to submit memoranda and participate in discussions at IOTC regional meetings, so adding its voice to growing calls for SWIO's coastal nations to have greater control over their regional marine resources.

**>> See "Regional fisheries" on page 18 for more**

# UNLOCKING OUR PARTNERS' POTENTIAL

*We work with local, national and regional civil society organisations and networks to empower SWIO's most vulnerable coastal residents to be their own strongest advocates and to be effective stewards of the environments they depend upon for their food and livelihoods.*

The SWIO Seascape Regional Programme seeks to ensure that communities' rights to manage and access ocean resources are protected. We do this by partnering with community-based and civil society organisations to strengthen the voice of coastal communities in regional, national and local decision-making platforms.

This work seeks to empower civil society organisations (CSOs) directly and through CSO networks at both the regional and national level. Collectively, the eight CSO network partners – SWIOTUNA (regional), the Tuna Fisheries Alliance of Kenya, the Tuna Alliance of Tanzania and FOSCAMC (Mozambique), CNPE and MIHARI (Madagascar), MOSC and DAHARI (the Comoros) – represent 126 civil society organisations, 341 community-

based organisations and three private sector partners. As well as supporting these networks, we offer direct support to 166 locally managed marine areas (LMMAs) or beach management units or similar co-management governance structures and over 100 community-based organisations (CBOs) across the region.

**Table 2.** Location of CSO network partners and their reach

Geography	CSO network partner	Reach/number of member organisations
Regional	SWIOTUNA	40 CSOs
Mozambique	FOSCAMC	22 local CSOs
Tanzania	Tuna Alliance of Tanzania	12 CSOs 7 CBOs 1 private company
Kenya	Tuna Fisheries Alliance of Kenya	8 CSOs 30 CBOs 2 private companies
Madagascar	CNPE	40 local CSOs 75 847 individuals 96 CSOs or CBOs
Madagascar	MIHARI	Represents more than 200 locally managed marine areas (LMMAs)
The Comoros	MOSC	-
The Comoros	DAHARI	4 CSOs 8 CBOs

During 2022, a total of 10 capacity-building workshops for CSO networks were held across the region:

- **Sustainable blue economy:** Three workshops were held on marine spatial planning, a foundational element to a sustainable blue economy (one regional workshop, one in Kenya and one in Tanzania). A further sustainable blue economy workshop was held in Tanzania to support the inclusion of civil society needs into sustainable blue economy planning.
- **Financial management:** Two workshops were held: one in Kenya, where the regional CSO network partner is located, and a second regional workshop in South Africa with participants from CSOs from six countries. The financial management training involved budgeting, financial reporting and audit.
- **Environmental and social safeguards framework and human rights-based approaches:** Seven CSOs (including the leadership of six national coalitions and one regional network) were capacitated in the SWIO region regarding safeguarding principles, policies and grievance mechanisms in a workshop held in South Africa. A further three workshops were held on human rights-based approaches to conservation.

# ABOUT THE SWIO SEASCAPE REGIONAL PROGRAMME

## OUR VISION

*By 2030, SWIO's coastal and marine ecosystems are healthy within a changing climate, able to contribute meaningfully to food security and resilience while improving the quality of life for generations to come.*

This vision is in line with WWF International's goals for the Earth's oceans, which is to, by 2030:

- Halve humanity's environmental footprint by doubling the number of sustainable fisheries.
- Achieve zero loss of natural habitats and zero extinction of species by ensuring that 30% of ocean habitats are conserved or effectively managed.

## OUR PEOPLE



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SWIO Seascape Regional Programme Lead



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SWIO Seascape Regional Programme Deputy Lead, Sustainable Blue Economy Lead



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Senior Marine Officer – WWF-Mozambique



**Maafaka Ravelona**  
Coastal Community-led Conservation Coordinator



**Reginald Kwizela**  
Governance and Policy Manager



**Kareen Andriantsiferana**  
Technical Officer



**Naghmana Zafar Bhatti**  
Technical Officer



**Erica Ramamonjisoa**  
Administrative Assistant



**Tony Rakotondramanana**  
Communications Manager



**Martin Nirry**  
Finance Officer

The SWIO Seascape Regional Programme is hosted by WWF-Madagascar and works closely with programmatic WWF staff from the various SWIO country offices (see map on page 6) and experts from across the WWF network, particularly the global Coastal Communities Initiative and the Sustainable Blue Economy initiative.

# OUR STRATEGY AND OBJECTIVES

GOAL AREAS



REGIONAL FISHERIES

2030 STRATEGIC OUTCOMES

By 2030, ecosystem-based fisheries management ensures the long-term sustainability of key fisheries in the SWIO region, particularly tuna and shrimp fisheries, and contributes to the well-being of local communities and economies of target countries.

This will be measured by tracking Indian Ocean yellowfin tuna, as a flagship species, and monitoring its recovery against a 2022 baseline.

The assumption is that the recovery of Indian Ocean yellowfin tuna would signal improved regional fisheries governance more broadly.

2025 OBJECTIVES

- 1.1 **Fair and equitable access to regional fisheries resources is facilitated**, minimum terms and conditions are implemented by all five SWIO countries, and the G16 has a united and influential voice in negotiations and decision-making.
- 1.2 **IOTC adopts an effective long-term rebuilding plan** (including improved FAD management) for yellowfin tuna, motivated and supported by civil society, the G16, the seafood supply chain and financial institutions.
 

>> page 6
- 1.3 **Bycatch of endangered, threatened and protected species is reduced.**
- 1.4 **Illegal, unreported and unregulated (IUU) fishing is reduced across the region by:**
  - **Establishing a monitoring, control and surveillance centre** for the Southern African Development Community (SADC).
 

>> page 20
  - **Implementing** a low-cost monitoring, control and surveillance technology.
  - **At least three SWIO countries adopt robust management measures to combat IUU**, including implementation of the Agreement of Port State Measures, an international treaty to prevent, deter and eliminate IUU.
- 1.5 **The seafood markets of the European Union and the United States markets provide incentives to improve transparency and responsible fishing across the SWIO region.**



COASTAL COMMUNITY-LED CONSERVATION AND RESTORATION

By 2030, small-scale fisheries are sustainably managed, contributing to resilience, food security and livelihoods of coastal communities in the SWIO region.

Empowered communities effectively manage 20 million ha of mangroves and 9,400 ha of mangroves have been restored, contributing to the climate resilience and food security of 2.3 million people.

- 2.1 **Community-led management is enshrined in policy** and communities' rights to access are secured.
- 2.2 **Effective community governance arrangements** are in place.
- 2.3 **Coastal communities are effectively managing their fishing activities** through data-driven decision-making.
- 2.4 **Coral reefs and blue carbon ecosystems are conserved, managed and restored**, including through locally and community-managed marine areas.
 

**WWF has committed to restoring 9,375 ha of mangroves across SWIO** (1,300 ha in Kenya, 7,500 ha in Madagascar, 450 ha in Mozambique and 125 ha in Tanzania). This includes restoring the soil's ability to store carbon.
- 2.5 **An expanded livelihood base has been established** (including access to finance) and community economic resilience is measurably improved, especially for women and youth.
 

>> page 28
- 2.6 **Coastal communities are resilient** to climate change.





## SUSTAINABLE BLUE ECONOMY



## INTEGRATED OCEAN GOVERNANCE

GOAL AREAS

By 2030, critical enabling conditions are in place to mobilise US\$250 million in investments for an inclusive and sustainable blue economy.

By 2030, integrated ocean governance has optimised the value of the SWIO region for future generations.

2030 STRATEGIC OUTCOMES

**3.1 Key financial institutions adopt sustainable blue economy principles** and catalyse an increased flow of investments and initiatives that contribute to sustainable, inclusive and gender-sensitive management of ocean resources.

**3.2 A coastal community incubator develops a portfolio of bankable projects across five value chains**, namely, small-scale fisheries, blue carbon, eco-tourism, and seaweed and honey production.

>> page 24

**3.3 Microfinance is delivered to 1,000 community groups.**

>> page 28

**3.4 All five countries have a sustainable blue economy national plan** that aligns with WWF's definition and guidance.

**4.1 Marine spatial planning facilitates integrated ocean management** that optimises the long-term value of the ocean to society and supports decision-making across the region.

**4.2 Major commercial threats to ocean health are reduced** (oil and gas, and infrastructure projects).

2025 OBJECTIVES

# TRACKING OUR IMPACT

*This section showcases a selection of projects that are designed to act as levers for cascading positive change across the SWIO Seascape Regional Programme's four strategic goal areas.*



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## GOAL 1: REGIONAL FISHERIES

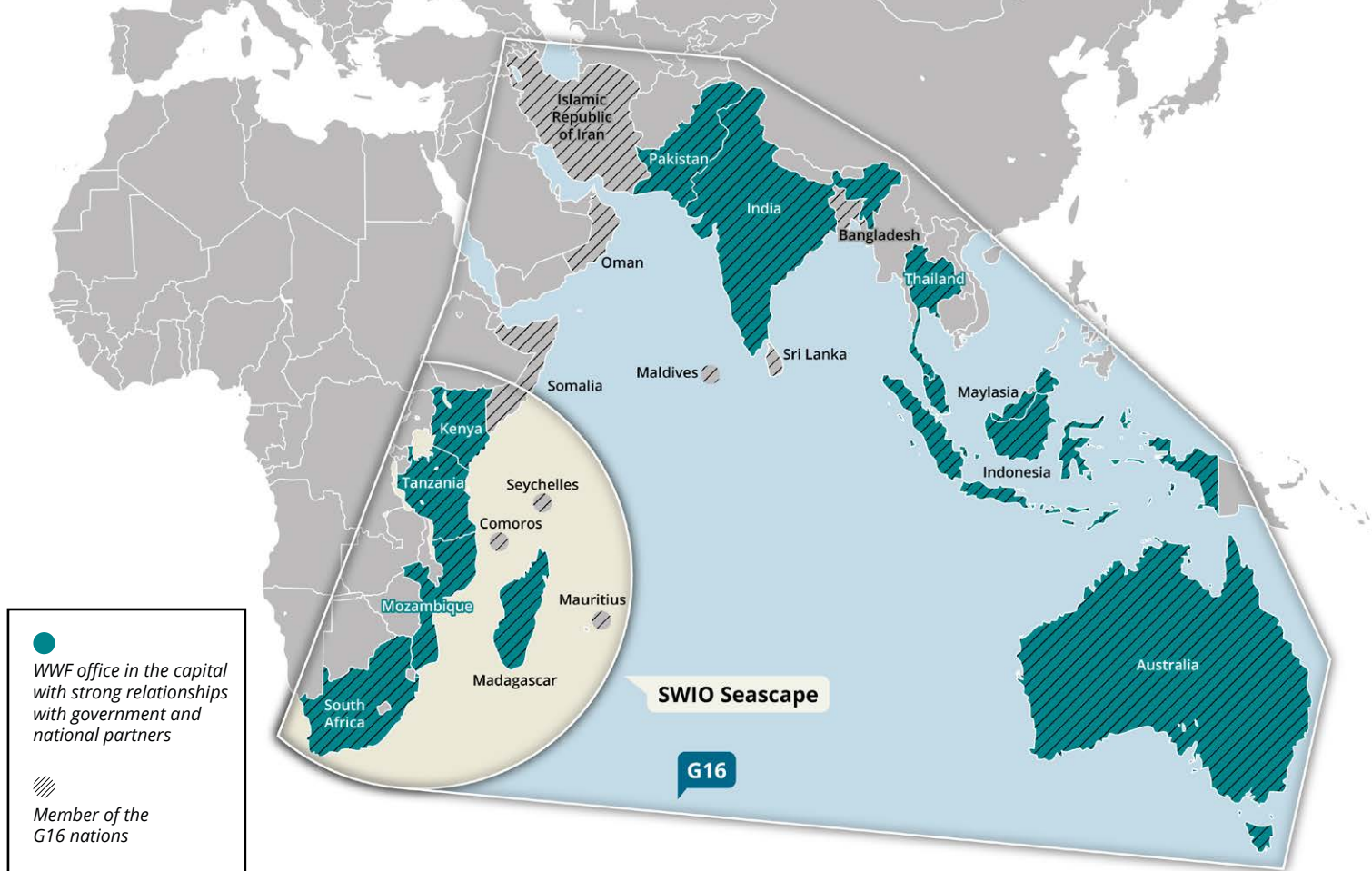
### THE CHALLENGE

The Indian Ocean is the second-largest producer of tuna, which accounts for nearly 20% of the global tuna catch – most of which is exported to food-secure countries. This US\$1.3 billion haul is increasingly threatened by climate change and rampant illegal, unreported and unregulated (IUU) fishing.

As an indicator species, Indian Ocean yellowfin tuna was 67% overfished in 2022. After nearly a decade of being overfished, Indian Ocean yellowfin tuna is nearing collapse.

Conservation and management measures have failed to mitigate the devastating consequences of some countries being exempt from catch reductions, while industrial vessels have continued harvesting juvenile tuna, with devastating consequences for the future of this species.

In 2022, the IOTC's Scientific Committee determined that bigeye tuna is also being overfished, meaning two commercial Indian Ocean tuna stocks are now in the red.



## LEVERS FOR CHANGE

We focus on improving the management of Indian Ocean yellowfin tuna on the assumption that a recovery of this species will indicate improvements in regional fisheries governance more broadly.

We approach this problem from four perspectives:

- **We advocate for the need for transparent, capacitated governance and immediate action to halt overfishing**, which will benefit both global commercial interests and the food security and livelihoods of millions of people who live in and around the coasts of the SWIO region.
- **We elevate the scientific dimension of regional policy dialogues** through direct engagements with the Indian Ocean Tuna Commission (IOTC).
- **We develop the capacity of coastal states and civil society organisations** in the SWIO region to engage the IOTC from their own perspectives while remaining grounded in fisheries science. Such engagements are critical for the region’s ability to reclaim sovereignty over its marine resources.
- **We engage directly with tuna retailers** in US and European markets to shift the market demand for overfished tuna species.

## IN BRIEF

- Illegal, unregulated and unreported fishing costs the Indian Ocean region nearly US\$400 million per year.
- The interests of distant water fishing nations from Europe and Asia tend to be prioritised over the needs of coastal SWIO states in regional fishing management platforms.
- The Indian Ocean FAD-associated purse seine fishery has a very high percentage of juvenile yellowfin tuna catch (around 25%) compared to the global average (around 16%) for all other purse seine FAD-based fisheries. The purse seine fishery contributes to 52% of the yellowfin tuna and 77% of the bigeye tuna juveniles caught in the Indian Ocean from 2014 to 2021.
- These factors contribute to the mismanagement of regional fisheries, to the point that Indian Ocean yellowfin tuna – as an indicator species – was 67% overfished in 2022.
- To enable recovery of yellowfin tuna the overall catch will need to be reduced by 30%.
- The recovery of Indian Ocean yellowfin tuna would signal improved regional fisheries governance more broadly.

## KEY ACTIVITIES IN 2022

Our efforts to improve the management of regional fisheries included the following activities:

- **We submitted a WWF [position paper](#) for the IOTC's 26th commission meeting.** Among other measures, this paper urged: (i) the adoption of a multi-year plan for the recovery of yellowfin tuna in the region; (ii) the mandatory use of electronically tracked, non-entangling and biodegradable fish aggregating devices to reduce the mortality of juvenile yellowfin tuna; and (iii) a 30% reduction in the overall catch of yellowfin tuna (against 2020 levels) by IOTC member states. Our position paper also called for scientific observer programmes to be implemented on industrial tuna fishing vessels, together with measures to ensure the on-board safety of observers.
- **We led the first workshop in the region on mitigating multi-taxa bycatch related to the use of drift/gillnets for the IOTC.** The outcomes of the three-day workshop were shared at the 18th meeting of the IOTC Working Party on Ecosystems and Bycatch. Such engagements enable us to drive the adoption of robust, adequate conservation management measures by demonstrating action through evidence-based reporting.
- **We raised public awareness about the ecological importance of tuna by co-producing a [short video](#) titled "Untangled".** The video also promoted our goal of getting scientific observers onto industrial fishing vessels. "Untangled" has been viewed more than 5,000 times since it was released in January 2022.
- **We led a capacity-building workshop for SWIO countries and SADC member states on low-cost data collection and monitoring, control and surveillance (MCS) tools for small-scale fisheries.** The workshop was followed by a demonstration of how data collection and MCS might look in practice. This engagement led to the development of roadmaps for rolling out pilot projects in two candidate countries, Mozambique and Madagascar.
- **We engaged with tuna retailers in the United Kingdom to reduce sourcing of yellowfin tuna from the Indian Ocean.** These recommendations are in line with our recommendations to the IOTC to reduce yellowfin tuna catches by 30% from 2020 levels to allow stocks to recover by 2030. Several of the retailers approached have since endorsed our recommendations.

>> See "Special feature: Policy advocacy update" on page 12

## ONE STEP CLOSER: TO A SADC MONITORING, CONTROL AND SURVEILLANCE CENTRE

*In early 2023, the SWIO Seascape Regional Programme secured the 11 signatures from SADC states needed to green light a fisheries monitoring, control and surveillance coordination centre for the SADC region.*

The centre will draw on low-cost technologies to facilitate cross-border access to national fisheries data, enabling SADC countries to respond more effectively to the common threat of illegal, unreported and unregulated (IUU) fishing.

Being able to access national fisheries data that is comprehensive, reliable and current will support the development of integrated regional and national fisheries policies that are rooted in robust fisheries data.

The SWIO Seascape Regional Programme has prioritised operationalizing the centre, which will be based in Mozambique, in 2023.



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## GOAL 2: COASTAL COMMUNITY-LED CONSERVATION AND RESTORATION

### THE CHALLENGE

The vast SWIO coastline has a growing population of about 60 million people, many of whom are poor and deeply dependent on the natural resources in their immediate vicinities. These coastal residents are the de facto stewards of SWIO’s coastal and marine ecosystems, and it is unfair and unrealistic to expect them to restore and conserve these ecosystems without support from the global community.

The coastal ecosystems most at risk in the SWIO region are coral reefs and mangroves, which provide protective nurseries for juvenile fish and habitats for 300 coral species. Mangroves, meanwhile, are remarkably effective carbon sinks, sequestering 10 times more carbon than terrestrial ecosystems and protecting coastal communities against storm surges linked to climate change.

Despite these varied benefits, the SWIO region’s coral reefs and mangroves are at risk of being harvested for fuelwood, building material and as a source of income. The loss of these crucial habitats is already having dire impacts on marine biodiversity and fisheries, with knock-on consequences for both national economies and local food security.

### LEVERS FOR CHANGE

Through a spectrum of dimensions, we aim to create an enabling policy landscape in which empowered and informed communities have the resources and structures they need to pioneer a future that is inclusive and independent from the unsustainable use of natural resources.

We work with coastal communities across five dimensions, as captured in our strategic goals:

- **From a policy perspective, we seek to ensure that communities’ rights to manage and access ocean resources are protected.** We do this by partnering with community-based and civil society organisations to strengthen the voice of coastal communities in regional, national and local decision-making platforms

>> see “Special feature: Unlocking our partners potential” on page 14

### IN BRIEF

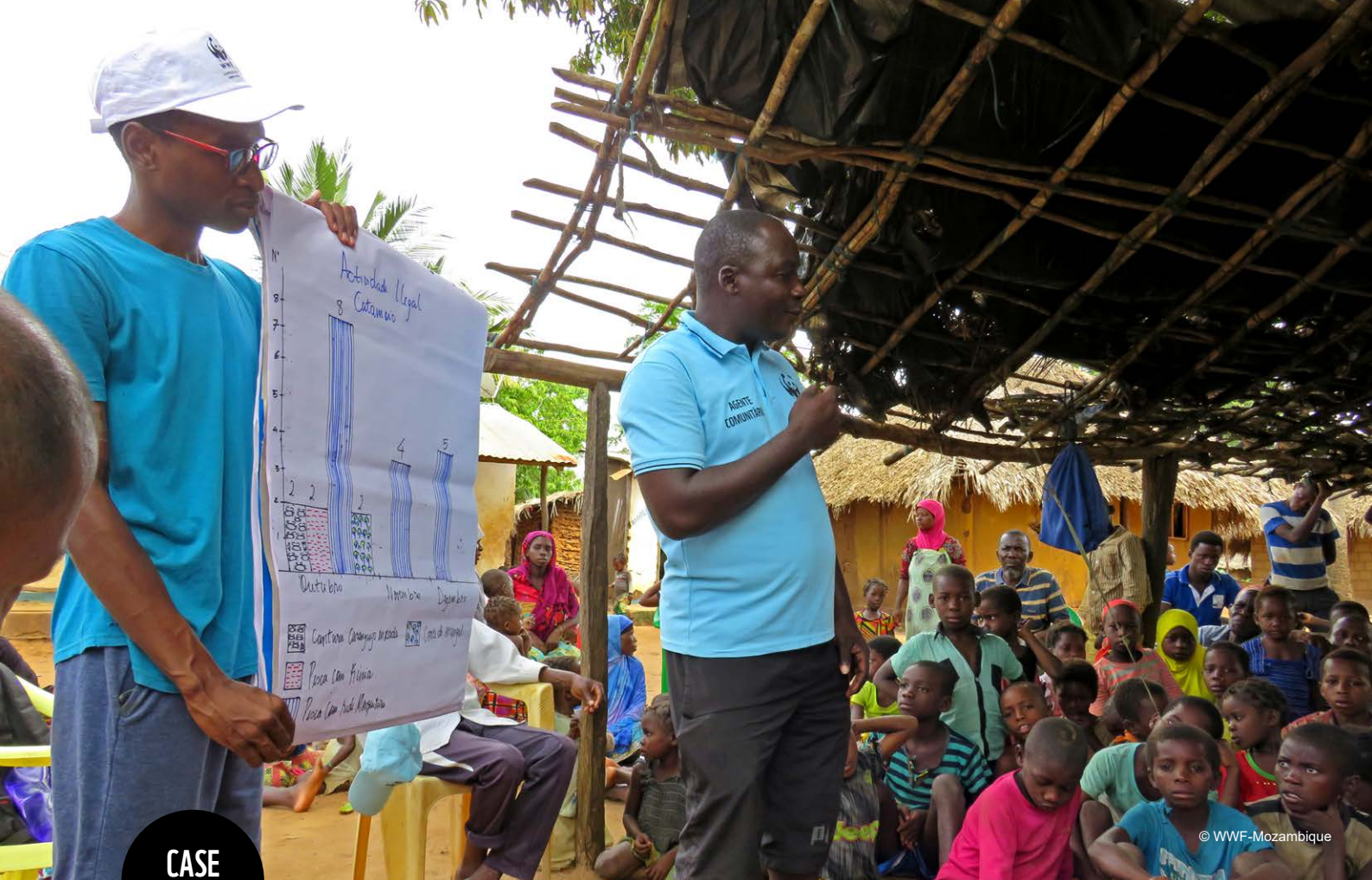
- The South West Indian Ocean is home to 5% of the world’s remaining mangroves and 25% of Africa’s mangroves.
- Most of the region’s mangroves are found in Mozambique (41%) and Madagascar (37%).
- Many coastal communities rely on natural resources, such as mangrove wood, for fuel for cooking, construction for structures and their local livelihoods.
- The SWIO Seascape Regional Programme’s goal is to empower coastal communities to restore 9,375 ha of mangroves along the region’s coastline by 2030.

- **At the local governance level, we ensure that communities have appropriate and capacitated governance arrangements in place to deliver on the responsibilities linked to their management and access rights.** This often involves working with communities to establish fisheries management units such as beach management units (BMUs), or to declare locally managed marine areas (LMMAs) to enhance the governance of small-scale fisheries and restore degraded mangroves.
- **At a sector level in our approach to fishing activities, we focus on supporting community governance structures with the evidence they need to implement effective fisheries management measures.** Small-scale fisheries in the five SWIO Seascape Regional Programme countries collectively caught about 7,000 tonnes of Indian Ocean yellowfin tuna on average per year from 2014 to 2021 – equivalent to only 1.4% of the average regional yellowfin tuna catch of 485,000 tonnes per year during the same period. The reliable and effective reporting of small-scale fishery catches is foundational for regional and local fisheries management. To strengthen such reporting, we develop and implement low-cost, reliable, community-led methods for gathering catch data. This data can inform national and regional policy debates while strengthening the community’s ability to sustainably manage their own resources. WWF supports small-scale fishery community members from nine sites to use mobile technology to enable community-led data collection. Furthermore, we have supported the establishment of 133 spatial closures for fishery enhancement including a total of 8,524 square kilometres within seven project locations.
- **At the ecosystem level, we partner with communities to conserve, manage and restore coral reefs and mangrove ecosystems.** And from a climate change perspective, we work to improve the resilience to climate impacts of communities along the SWIO region’s vast coastline.
- **At the household level, we seek to broaden the diversity of livelihoods and improve economic resilience,** especially among women and young people.
- **WWF-Kenya successfully piloted a smartphone app to collect small-scale fisheries data across 13 landing sites on Kenya’s 1,400 km coastline.** The timely analysis and interpretation of the data collected through the app will strengthen understanding of the condition of Kenya’s fisheries, enabling coastal communities to better manage small-scale fisheries. It will also help the government decide on the scale of a potential national fishing fleet, which would reduce reliance on the small-scale fishers who are currently the country’s primary source of marine fisheries catch.
- **WWF-Madagascar celebrated the formal transfer of fisheries management for the next two years to legally recognised local fishers’ associations** in the in the bays of Ampasindava, Tsimpaika, Ambaro and Nosy Be. This transfer – the culmination of five years of engagements with communities and government – confers the authority to protect and sustainably manage more than 9,000 ha of coastal and marine ecosystems to the fishers’ associations. This will enable them to safeguard their future livelihoods and food security.
- **WWF South Africa piloted a mobile app that, once integrated with government systems, will allow the residents of a small, marginalised fishing community to anonymously report coastal and marine incidents to the government authorities for action.** In addition to promoting active citizenship, the app will collect data that government authorities could use to support resource planning to manage future incidents. WWF South Africa has also partnered with Abalobi and are implementing their small-scale fisheries app in five locations.
- **WWF-Tanzania completed two socio-economic assessments.** The first was an assessment of the socio-economic needs of women and youth in the Rumaki area, with the objective of mainstreaming women and youth into economic and livelihood projects for the integrated management of coastal and marine ecosystems. The second assessment reviews the status of 465 community microfinance enterprise groups that have accumulated substantial amounts of money through savings (US\$3.6 million) and provided soft loans to the value of US\$5 million, so promoting economic growth for 13,058 people in the Rumaki seascape, of which 71% (9,129) were women (see case study on page 28).
- **WWF facilitated the establishment of the regional West Indian Ocean Mangrove Network (WIOMN),** including the development of the WIOMN strategy and the development of a regional vision. Based in Zanzibar, the WIOMN is now a fully independent organization and poised to support mangrove conservation across the region.

## KEY ACTIVITIES IN 2022

Work under this strategic focus area is primarily done by WWF’s country offices. Here are the successes noted to date:

- **Overall, our country teams reported that they had actively restored 820 ha of mangroves during the year** (110 ha in Mozambique, 300 ha in Kenya, 10 ha in Tanzania and 400 ha in Madagascar).



© WWF-Mozambique

**CASE STUDY**

# MORE MOMS AGENTS KEEPING AN EYE ON MOZAMBIQUE’S COASTLINE

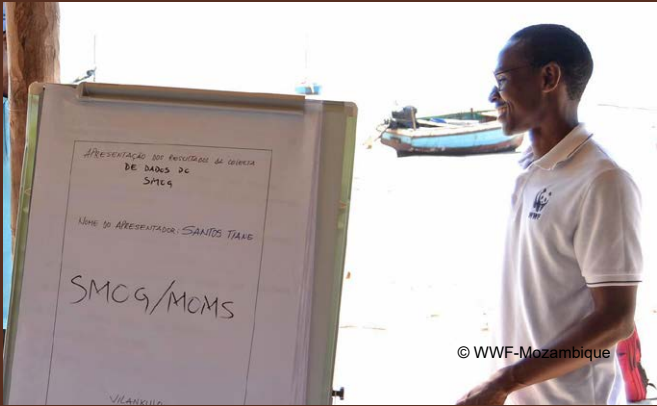
*In 2022, WWF-Mozambique rolled out its management-oriented monitoring system (MOMS) to 16 additional communities in the Inhambane and Zambezi Delta land and seascapes, enlisting the eyes and ears of 32 new community-based agents to monitor marine natural resources and report on meaningful observations.*

In complex systems such as the SWIO coastline, being able to quickly track and respond to shifts in the natural and social environment are crucial for effective natural resource management.

MOMS is a simple tool for observing and sharing coastal and marine data in a way that supports responsive management. It consists of a daily data collection protocol that is followed by routine data analyses to produce usable and useful knowledge that supports natural resource governance. The tool is flexible in the way it allows communities to identify areas of investigation that matter to them.

MOMS has been used to collect and disseminate coastal and marine data in Mozambique since 2005. The approach was initially focused on law enforcement officials in response to the lack of monitoring within protected areas. Recently, WWF has started promoting the system focusing on communities in order to improve communities’ inclusive participation in management of the natural resources they depend on.

The latest rollout to two additional seascapes, brings the number of MOMS agents across the country, including inland areas, to 204. In December 2022, WWF-Mozambique hosted a national workshop for about 75 MOMS agents, coastal communities and government to facilitate knowledge-sharing and to raise the profile of the MOMS monitoring system.



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© WWF-Madagascar

## CASE STUDY

# HONEY FOR MONEY: HOW BEES ARE SAVING SWIO'S MANGROVES

*The humble bee, already an economically and ecologically important insect, is again proving its worth: this time as a champion of mangrove conservation. Here we showcase the potential mangrove honey holds for coastal communities in Madagascar, where 37% of the Indian Ocean's mangroves can be found.*

## THE CHALLENGE

Mangroves provide humans with a wide range of benefits: they sequester carbon, protect coastlines against storm surges, improve water quality, and provide safe nurseries for economically and nutritionally important fish species. This is as true in Madagascar as elsewhere in the SWIO region, yet between 1996 and 2016, Madagascar lost 8,526 ha of its coastal mangroves – or 2.3% of its total mangrove cover.

In the four years that followed, only 1,449 ha were regained, indicating the difficulty with which this damage is reversed.

Despite the odds, WWF has committed to restoring 7,500 ha of mangroves in Madagascar (and a total of more than 9,000 ha in the SWIO region). One way it will achieve this is by partnering with communities to broaden their livelihood base and improve their economic resilience at a household level, in effect reducing dependency on mangrove wood for fuel, construction and income.

## THE OPPORTUNITY

Beekeeping is an alternative livelihood with an especially compelling business case for Madagascar. In 2021, the global trade value of natural honey was more than US\$2 billion. However, in the same year, Madagascar's natural honey exports totalled little more than US\$200 000.

Clearly, there is substantial opportunity to increase the country's market share by investing in the production of natural honey from mangrove trees, a relatively rare form of honey that is valued by health- and eco-conscious consumers for its light, palatable taste and pesticide-free profile. Currently, only 102 out of the 4,000 tonnes of mangrove honey produced across the world originates in Madagascar.

## LEVERS FOR CHANGE

Since 2017, WWF-Madagascar has worked to introduce beekeeping as an alternative and supplemental livelihood source for communities in Diana seascape and the Manambolo

Tsiribihina land and seascape (MTB) (see the map on page 6). Both are important zones for mangrove growth and conservation.

## INVESTMENTS AND ACTIVITIES

With the support of the Bezos Earth Fund, WWF-Madagascar provided 542 households in MTB and Diana with the materials and training needed to establish and run successful mangrove honey enterprises. Beneficiaries of the project received hives, smokers, protective clothing, honey-extraction facilities and training on the technical and business aspects of beekeeping.

Communities were encouraged to form cooperatives, enabling beekeeping households to combine their produce, share transportation and marketing costs, and improve their negotiating position. WWF-Madagascar also linked cooperatives with local and regional markets, creating sustainable opportunities to improve livelihoods.



Additional alternative livelihoods are being explored and strengthened to sustain communities in the six months of the year when mangrove trees are not in bloom. These value chains include ecotourism, small-scale fishing using sustainable methods and the local trade of poultry.

In addition to supporting beekeeping ventures, WWF-Madagascar worked with the broader community to conserve mangrove forests by keeping livestock away from sensitive mangroves areas and restoring depleted areas by planting new mangrove trees. Newly planted saplings were also monitored to ensure that they took root.

Together, these activities helped to ensure that bees in the area have a ready source of healthy mangrove blossoms from which to produce their honey.

## OUTCOMES

Since the first harvest in 2017, beekeeping has become a popular income-generating activity. The number of beekeepers has increased from 80 to more than 2,000. However, there is a need to upgrade operational equipment and materials and to equip the growing number of people showing an interest in beekeeping.

The supported sites cumulatively produce 4,000 litres of mangrove honey per year, reducing coastal residents' economic reliance on unsustainable fishing practices and promoting the protection of mangroves. Most of the produce is sold on local markets, with some regional sales taking place.

From an ecological restoration perspective, bees support natural pollination processes and so are supporting the recovery and health of mangrove ecosystems.

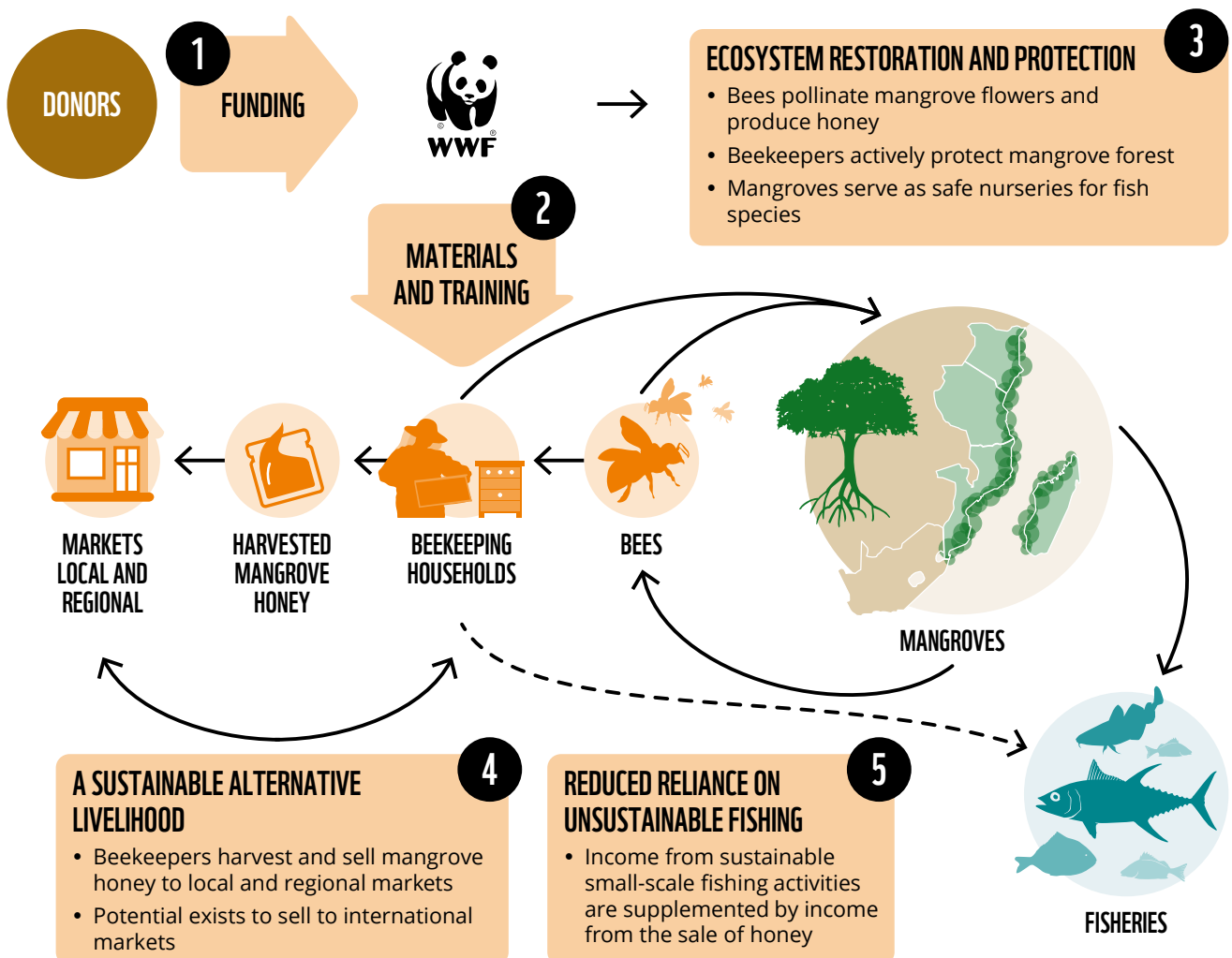
## OPPORTUNITIES TO SCALE

Within Madagascar, the project has generated high levels of community interest in beekeeping as an alternative livelihood source. The next step is for WWF-Madagascar to secure funding to recapitalise existing beekeeping equipment and expand the project's footprint.

The private sector has also expressed an interest in purchasing artisanal honey from the cooperatives, provided the honey is consistently of export quality. Putting in place product-aggregation facilities would help cooperatives achieve this goal.

Beekeeping is also an established alternative livelihood source in Tanzania where WWF has supported six CBOs, one CSO and 753 individuals by providing beehives and capacity building activities. There is strong potential to further scale the concept across the SWIO region.

**Figure 4.** Representation of our approach to bee keeping as a livelihood intervention





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## GOAL 3: SUSTAINABLE BLUE ECONOMY

### THE CHALLENGE

Over the next decade, tens of trillions of dollars will be invested into heavy infrastructure and the exploitation of natural resources, including oil and gas, in and near SWIO's coastal and marine areas. These investments need to be managed in a way that limits environmental damage – and is possibly even restorative – in order to secure ocean-based environmental services for generations to come.

At the same time, very little finance is being made available to coastal communities to support their own sustainable development trajectory, putting the long-term viability of coastal communities' livelihoods at risk.

The transition to a sustainable blue economy must be delivered at all levels: ensuring that coastal communities are empowered to develop in ways that secure their long-term needs without negatively affecting the natural ecosystems on which they depend. They also need to be supported in their role as environmental stewards of coastal ecosystems.

### LEVERS FOR CHANGE

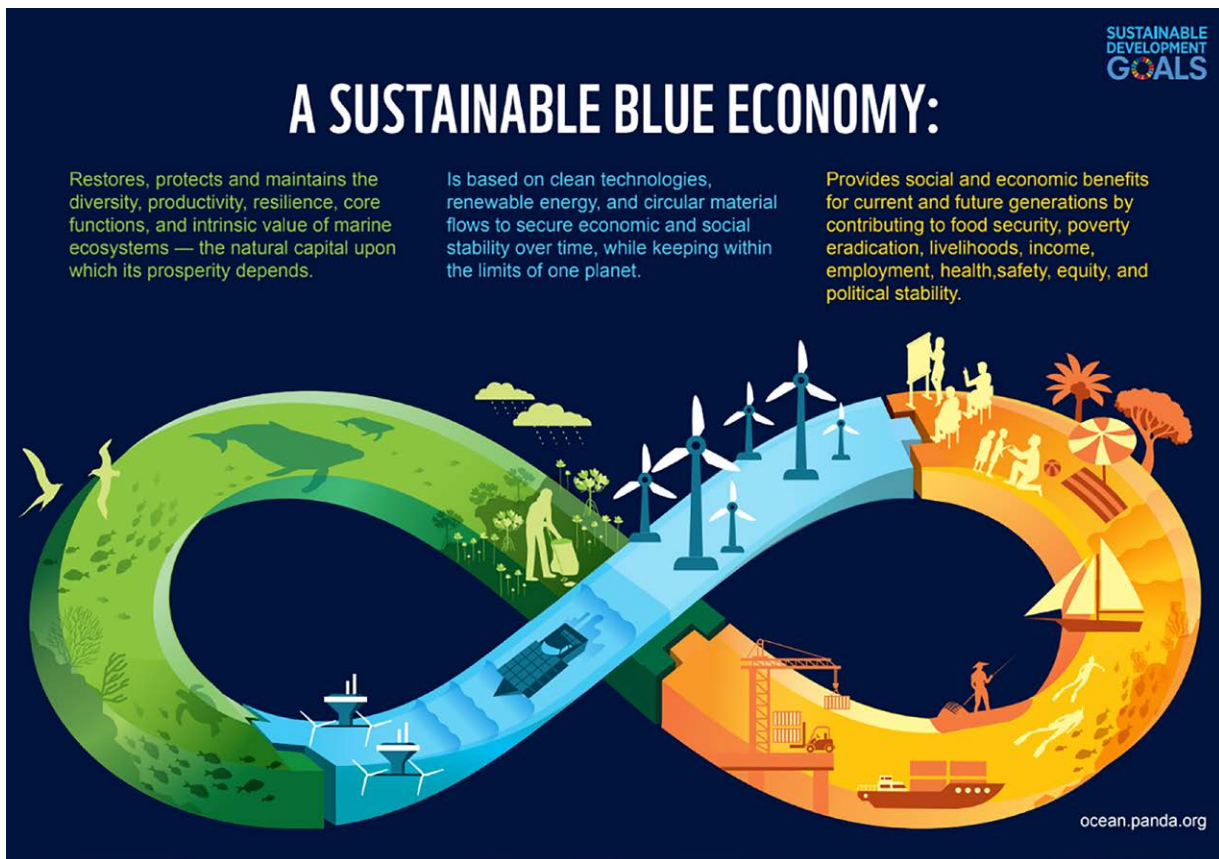
We work across all scales – global, regional, and local – to shift financial flows in favour of sustainable blue economy projects. Some ways we do this:

- **We engage development finance institutions** to apply sustainable blue economy finance principles.
- **We develop bankable sustainable blue economy projects** with potential for private-sector investment.
- **We work at community level to improve the financial resilience of households**, with a special focus on women.
- **We advocate for sustainable blue economy national plans** that align with sustainable blue economy principles and WWF standards and guidance.
- **We deliver targeted advocacy on new developments** to ensure that they are undertaken using best practice, or to try to prevent those developments considered to not be part of a sustainable blue economy.

### IN BRIEF

- The SWIO's total ocean-based asset base – which includes fisheries, ecotourism, and the value of sequestered carbon – has been estimated at US\$333.8 billion.
- Rapid economic and population growth in SWIO states is expected to drive substantial investments into new infrastructure and industries.
- If poorly managed, these investments could damage coastal and marine ecosystems, jeopardising food security and preventing the region from developing a sustainable blue economy that is restorative and inclusive.
- SWIO Seascape Regional Programme's strategic aim is to ensure the enabling conditions for the effective management of such development by mobilising US\$250 million in investments into a sustainable blue economy.

Figure 5. A sustainable blue economy



Source: [ocean.panda.org](https://ocean.panda.org)

## KEY ACTIVITIES IN 2022

The SWIO Seascape Regional Programme is one of many players active in developing the region’s SBE. During the year:

- We completed a baseline study on the key risks to a sustainable blue economy in the region.** The study concluded that establishing a sustainable blue economy will be challenging, especially in a landscape where stakeholders often have conflicting agendas and communities are frequently sidelined. This presents governance challenges at all levels, with a focus on empowering communities and the private sector for a sustainable blue economy.
- We supported GIZ in launching [Our Blue Future](#), a new regional multi-stakeholder platform that focuses on developing the region’s sustainable blue economy.** It was launched at the Western Indian Ocean Marine Science Association’s Symposium in October 2022. GIZ is the platform’s interim secretariat, while the SWIO Seascape Regional Programme’s Lead sits on the 20-member interim steering committee, which is 65% non-government, 25% government or quasi-government and 1% private sector. Our Blue Future is endorsed by the Nairobi Convention.
- We identified 28 bankable sustainable blue economy projects through our blue business incubator.** These projects fall into three categories: projects that transition away from destructive practices (for example, the use of more sustainable fishing gear); projects that have net-positive outcomes (such as reducing pollution or reducing overfishing – see case study on page 20) and projects that support the diversification of livelihoods while regenerating coastal ecosystems (or at the very least, without harming them). Our next step is to attract finance to formalise the incubator, including putting in place appropriate governance frameworks, to ensure a continuous pipeline of bankable, community-centred projects similar to the one featured in the case study on page 24. By the end of 2023, the incubator should be fully operational.
- We developed a seascape financing mechanism prototype model in Madagascar** that will be piloted in 2023. This aims to aggregate revenue streams within a seascape to provide long-term financing and deliver a full set of ecosystem services to the community who depends on them.
- We supported nearly 5,500 households in joining village savings and loan associations (VSLAs) across two SWIO countries,** improving people’s lives by improving their financial security in times of need and therefore reducing pressure on natural resources (see case study on page 28).



© WWF Kenya

CASE STUDY

## COMMUNITY MICROFINANCING SPREADS ACROSS SWIO

*Communities can manage their own savings and loans in a way that benefits households. This is the message at the heart of our microfinance strategy, which focuses on working with communities to establish village savings that households can borrow from in times of need – so preventing the desperation-fuelled, unsustainable harvesting of ocean resources while improving quality of life and enhancing climate resilience.*

The village savings and loan association (VSLA) is a widely used mechanism for enhancing the financial security of marginalised communities and the households within them, which are generally regarded as too high-risk for traditional lenders like commercial banks.

The concept behind a VSLA is simple: a community forms a financial management group to oversee a pool of funds that contributing members can borrow from when they need to. As opposed to a microlender, which is a business that may levy a crippling interest rate, loans from a VSLA carry minimal interest and are typically repaid within months.

WWF offices in Kenya, Tanzania, Madagascar and Mozambique have been working either directly with communities or through partners to establish VSLAs since 2006. Updated data is only available for Kenya, Mozambique and Tanzania where over 1,200 new VSLAs have been formed in coastal communities across these countries, benefiting at least 18,600 members.

In Rumaki area alone, the VLSAs have facilitated US\$3.6 million in savings and US\$5 million in soft loans enabling the economic growth of 3,929 men and 9,129 women in the area. An additional 272 VLSAs were established in Primeiras and Segundas Protected Environment alone between 2020 and 2022.

Because women are often responsible for household budgetary decisions relating to day-to-day matters such as savings, children's schooling and meals, most VSLA members are women. VSLAs therefore serve to mitigate gender inequity while strengthening social cohesion. VSLAs also help to improve resilience to the effects of climate change (especially when these relate to the quantity and quality of fishing catches) and contribute to funding for coastal and marine monitoring efforts and mangrove restoration.

## INCUBATING A COOL BUSINESS IDEA: TO REDUCE CATCH LOSSES

*High ambient temperatures along Kenya's coastline, combined with a lack of refrigeration facilities to keep seafood fresh, are causing small-scale fishers to lose a substantial portion of their catch. This, in turn, is forcing them to either catch more fish or face another hungry day.*

As distressing as this situation is for the affected fishers, from a development finance perspective it presents an opportunity to incubate a sustainable, environmentally sound, community-owned blue business that enhances local food security while reducing pressure on the region's ocean resources.

Lamu County in Kenya is home to about 9,500 small-scale fishers who rely heavily on the ocean for their food security. Going to sea to catch a fish to eat, and perhaps a few extra fish to sell to local fish dealers, is part of these small-scale fishers' daily lives. But ice suppliers in the area are not able to scale production to keep up with growing demand. The result: high levels of post-harvest losses, which negatively impact food security for the area's fishers and their families.

Working with community-based organizations and Finance Earth, a United Kingdom-based consultancy specializing in developing finance solutions for sustainable businesses, our sustainable blue economy business incubator has developed the business case for a community-run facility that uses solar power to produce ice.

The market for the ice has been identified. What is needed next is the capital to buy three solar-powered ice machines. These machines will be managed by an existing community-based organisation with a strong governance structure.

Representatives from this organisation, which incorporates two beach management units, will receive business skills training as well as training on how to operate and repair the ice machines.

The initiative will enhance food security for small-scale fishers while strengthening their income potential without increasing pressure on regional fisheries. At the same time, the community will benefit from selling ice to fishers and, in the off season, to the suppliers of other perishable foods.

The SWIO Seascape Regional Programme is currently engaging potential donors and development finance organisations for funding for the Lamu County ice-making business, which is but one of many potentially scalable initiatives that our incubator has identified as having potential to reduce post-harvest losses by enhancing cold chains. A similar project was first initiated in 2020 in Songosongo Island (Kilwa District) in Tanzania with the capacity of producing 1.4 tonnes of ice flakes in 24 hours.

Further projects have also been initiated in Shimoni Vanga and Kilifi central in Kenya; Primeiras and Segundas environmental protected area (PSEPA) in Mozambique; and Diana, MTB and Mahafaly in Madagascar during the year. Moreover, supply of deep freezers to 24 groups of women and men fish traders and processors has been undertaken in Tanzania to reduce post-harvest losses, as well as increase fish quality, market share and price negotiation power.





© WWF South Africa



## GOAL 4: INTEGRATED OCEAN GOVERNANCE

### THE CHALLENGE

The discovery of oil and gas deposits off the shores of Mozambique, Tanzania and Kenya has triggered a modern-day mining rush. If not managed in a way that considers the needs of all users, while prioritizing intact ecosystems as foundational for future prosperity, this could have serious consequences. These include negative impacts for coastal biodiversity and the communities that rely on healthy marine ecosystems for their livelihoods and food security.

Integrated ocean governance is when economic activities preserve the health of marine ecosystems while safeguarding livelihoods for decades to come, rather than extracting value over the short term at the cost of ecosystem services for future generations. In short, it is when the value of our oceans is optimised for long-term benefit.

### LEVERS FOR CHANGE

There are currently two important tools for achieving the necessary balance: integrated multi-stakeholder platforms and ecosystem-based marine spatial planning. The former serves to convene stakeholders to negotiate uses for ocean resources, while the latter sees stakeholders (who may or may not belong to a multi-stakeholder platform) physically map out areas of current and future use.

#### Integrated multi-stakeholder platforms

Locally managed marine areas (LMMAs) and similar local governance systems are further useful tools for achieving a balance between short- and long-term benefit. With LMMAs, the management of inshore coastal areas is conferred to capacitated and informed coastal communities so that governments can focus on offshore management.

### IN BRIEF

- The SWIO seascape is rapidly becoming a contested region in which short-term economic gains from mining activities compete with long-term development goals derived from healthy ecosystems.
- There is a 28% overlap between current oil and gas concessions and ecologically or biologically significant areas. There is also an 8% overlap between these concessions and marine protected areas.
- The SWIO Seascape supports participatory ecosystem-based marine spatial planning as a mechanism for embedding integrated ocean governance in the region, so preserving SWIO's ecosystem-based economic value for future generations.

To support this vision, we build the capacity of civil society and community-based organisations to restore their ecosystems (see the “Coastal community-led conservation and restoration” focus area on page 21), contribute to regional policy discussions and hold their governments accountable for implementing policies.

### **Ecosystem-based marine spatial planning**

Ecosystem-based marine spatial planning allows stakeholders to collectively identify areas to place under protection, on the one hand, and areas to allocate to sustainable blue economy activities such as ecotourism and seaweed farming, on the other. This ensures that the carrying capacity of the seascape is not undermined while reducing user conflicts across the space. In line with the position of the United Nations Environment Programme’s Finance Initiative, [deep-sea mining](#), oil and gas are explicitly excluded from our vision of the sustainable blue economy.

Civil society organisations play a crucial role in representing the voices of coastal communities in ecosystem-based marine spatial planning processes. They bring forward for consideration a broad range of interests, including human rights and conflict, culture and religion, economic development, social status and environmental conservation.

## **KEY ACTIVITIES IN 2022**

We approached the integrated ocean agenda as follows:

- **We supported the launch of the Integrated Management of the Marine and Coastal Resources of the Northern Mozambique Channel (NoCaMo) project**, in partnership with the Nairobi Convention Secretariat

[>> see case study on page 32](#)

- **We provided training for five of our CSO networks partners on ecosystem-based marine spatial planning.** Ecosystem-based marine spatial planning pays particularly close attention to the principles of ecosystem-based integrated management, human rights and climate change. Such planning is foundational for a sustainable blue economy and is, in effect, part of a multi-stakeholder approach to enhancing sustainable and equitable ocean governance.
- **We helped civil society and community-based organizations represent their needs** at several high-level regional meetings, including several IOTC and G16 meetings, the 35th session of the Food and Agriculture Organization’s Committee on Fisheries in September 2022, the Western Indian Ocean Marine Science Association’s 12th Scientific Symposium in October 2022 and the 4th World Small-Scale Fisheries Congress in November 2022.
- **In October and November 2022, SWIO Seascape Regional Programme team hosted two workshops**, one in collaboration with SWIOTUNA, to capacitate CSOs to develop country-level policy briefs and to engage them on topics such as environmental and social safeguards, gender, taking a human-rights-based approach to policy initiatives, and managing conflict. The workshops – which were held in Tanzania and South Africa – explored opportunities for collaboration and identified common challenges, and policy and advocacy gaps. The information gathered at these workshops has been useful in shaping SWIO Seascape’s 2023 implementation plan.



## SHAPING THE FUTURE OF THE NORTHERN MOZAMBIQUE CHANNEL

*The Integrated Management of the Marine and Coastal Resources of the Northern Mozambique Channel project (NoCaMo) provides a platform for stakeholders from all sectors to collectively decide on a management strategy for the Northern Mozambique Channel, a globally significant biodiversity hotspot that is also important for the energy and fisheries sectors.*

The platform aligns with several of our strategic aims in that it provides a framework and enabling conditions (institutional organization, capacity building, decision-making elements and process framing) for implementing ecosystem-based marine spatial planning across the region.

It also creates opportunities for partnership with other conservation partners such as the Wildlife Conservation Society and Fauna and Flora International, which also

seek to influence the oil and gas sector by building the capacity of key stakeholders to adopt environmental and social best practices.

Lastly, it is a place where coastal communities are empowered through a learning exchange network on community-based marine resource management and health-population-environment-related activities.





# LOOKING AHEAD

*The SWIO region's development trajectory is at a crossroads, and time is running out to ensure that a regenerative and inclusive path is chosen.*

We have set ourselves several optimistic 2023 goals for ensuring that ecosystem health – and related human well-being – is prioritised in future management decisions in the region.



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## GENERAL PRIORITIES FOR 2023

We have set ourselves the following high-impact objectives:



**Advocate for key financial institutions in the region to adopt sustainable blue economy finance principles.**

Create opportunities for investors to financially support the development of SWIO's sustainable blue economy.



**Advocate for the adoption of a ministerial declaration governments of the G16 to support the implementation of a long-term rebuilding plan for Indian Ocean yellowfin tuna stocks.**

And implementation of more rigorous FAD management measures adopted by the IOTC.



**Expand the area of community-led mangrove restoration by 2,615 ha**

This consists of 110 ha in Mozambique; 205 ha in Tanzania; 300 ha in Kenya; and 2,000 ha in Madagascar, of which 1,500 ha will be passive restoration.



**Develop a regional vision and plan that enlists ecosystem-based marine spatial planning to deliver on WWF International's goal of conserving 30% of marine habitats by 2030.**

This will need additional resources to deliver.



**Strengthen civil society networks to enable stronger advocacy for community rights.**

# PRIORITIES BY GOAL AREA

The following table highlights a priority selection of goals by focus area. These have been incorporated into practical action plans for the SWIO Seascape Regional Programme for the year ahead.

GOAL AREA	GOAL	INTERMEDIATE OBJECTIVES FOR 2023
<b>REGIONAL FISHERIES</b> 	<b>BY 2030, INDIAN OCEAN YELLOWFIN TUNA, AS A FLAGSHIP SPECIES, IS RECOVERING AGAINST THE 2020 BASELINE.</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> SADC monitoring, control and surveillance centre is operational, with at least two low-cost data technologies being tested.</li> <li><input type="checkbox"/> Transparency roadmaps are developed and approved for at least three countries (Madagascar, Tanzania, Mozambique or the Seychelles).</li> <li><input type="checkbox"/> An IUU action plan for addressing key issues is developed following the completion of our fisheries baseline report.</li> <li><input type="checkbox"/> Progress is made towards the adoption of a long-term/multi-year rebuilding plan for yellowfin tuna by the IOTC.</li> </ul>
<b>COASTAL COMMUNITY-LED CONSERVATION AND RESTORATION</b> 	<b>BY 2030, EMPOWERED COMMUNITIES EFFECTIVELY MANAGE 20 MILLION HA OF MANGROVES AND 9,400 HA OF MANGROVES HAVE BEEN RESTORED, CONTRIBUTING TO THE CLIMATE RESILIENCE AND FOOD SECURITY OF 2.3 MILLION PEOPLE.</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> 166 community governance structures across all countries are strengthened.</li> <li><input type="checkbox"/> A learning network is established.</li> <li><input type="checkbox"/> The CSO network is strengthened through training and joint advocacy.</li> <li><input type="checkbox"/> The WIO Mangrove Network is operational and its action plan has been implemented.</li> <li><input type="checkbox"/> 2,615 ha of mangroves are restored.</li> <li><input type="checkbox"/> Disaster risk reduction mechanisms are implemented in at least two SWIO countries (Kenya and Madagascar).</li> </ul>
<b>SUSTAINABLE BLUE ECONOMY</b> 	<b>BY 2030, CRITICAL ENABLING CONDITIONS ARE IN PLACE TO MOBILISE US\$250 MILLION IN INVESTMENTS FOR AN INCLUSIVE AND SUSTAINABLE BLUE ECONOMY.</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Small-scale fisheries cold chain development, mangrove-associated livelihoods and microfinance prototypes are being scaled:</li> <li><input type="checkbox"/> Sustainable blue economy training (in collaboration with GIZ) is developed and rolled out in at least three countries.</li> <li><input type="checkbox"/> Four sustainable blue economy plans (for Kenya, Madagascar, Tanzania and Mozambique) are influenced through advocacy, training (including CSO empowerment) and commentary on documents.</li> <li><input type="checkbox"/> SWIO blue economy financial flows analysis is completed to identify key financial institutions and opportunities for leverage.</li> <li><input type="checkbox"/> Seascape financing model prototyped in the MTB seascape.</li> </ul>
<b>INTEGRATED OCEAN GOVERNANCE</b> 	<b>BY 2030, INTEGRATED OCEAN GOVERNANCE HAS OPTIMISED THE VALUE OF THE SWIO REGION FOR FUTURE GENERATIONS.</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Develop the institutional basis for ecosystem-based marine spatial planning by engaging countries through the Nairobi Convention.</li> <li><input type="checkbox"/> Develop guidance on priority biodiversity and ecosystem services to inform environmental and social impact assessments for the oil and gas sector.</li> <li><input type="checkbox"/> Develop an integrated ocean governance strategy for the SWIO region that includes a regional plan for ensuring that 30% of the region is under protection by 2030.</li> </ul>

# GOVERNANCE

*Good governance is a priority for any organisation, but it is especially important for one that relies on donor funding. For the kinds of projects that WWF engages in, it is important to demonstrate both strategic and financial oversight, which together ensure that the available resources achieve the greatest positive outcomes over time while ensuring appropriate financial controls.*

Figure 6 provides an overview of SWIO Seascope's operational and governance structure. The SWIO Seascope Regional Programme team delivers regional elements of the SWIO strategy while the oceans teams in various WWF country offices deliver the on-ground components of the framework. Some projects are funded directly through the country offices, while others are funded by the SWIO Seascope Regional Programme

» see Finance section on page 38

- although in practice, high levels of collaboration between the SWIO Seascope regional secretariat and the country teams means that fundraising is regarded as a cross-border team effort.

## THE SWIO SEASCOPE LEAD IS RESPONSIBLE FOR:

- Facilitating the delivery of impact at scale;
- Tracking progress and impact of projects;
- Providing strategic guidance and thought leadership;
- Identifying opportunities for cross-country replication of successful models and accelerating implementation through learning opportunities;
- Leading fundraising efforts, especially engaging with the private sector to enable delivery of conservation action at the scale of the challenges facing the region.

## THE LEAD IS SUPPORTED IN THIS ROLE BY:

- **The SWIO Technical Advisory Group**, which meets quarterly to provide technical input to support the implementation of projects across the region. This group includes WWF partner offices from across the global network (WWF-Germany, WWF-US, WWF-Norway, WWF-Sweden, WWF-Switzerland), WWF Conservation Directors and key representatives from the five WWF offices in the SWIO region, representation from the Regional Office of Africa and WWF International's Oceans Practice.
- **The SWIO Support Unit**, which provides crucial services such as communications, monitoring and evaluation, and financial and procurement management in line with WWF International's processes on an ongoing basis. Most of these services are provided by SWIO Seascope's host office, WWF-Madagascar.

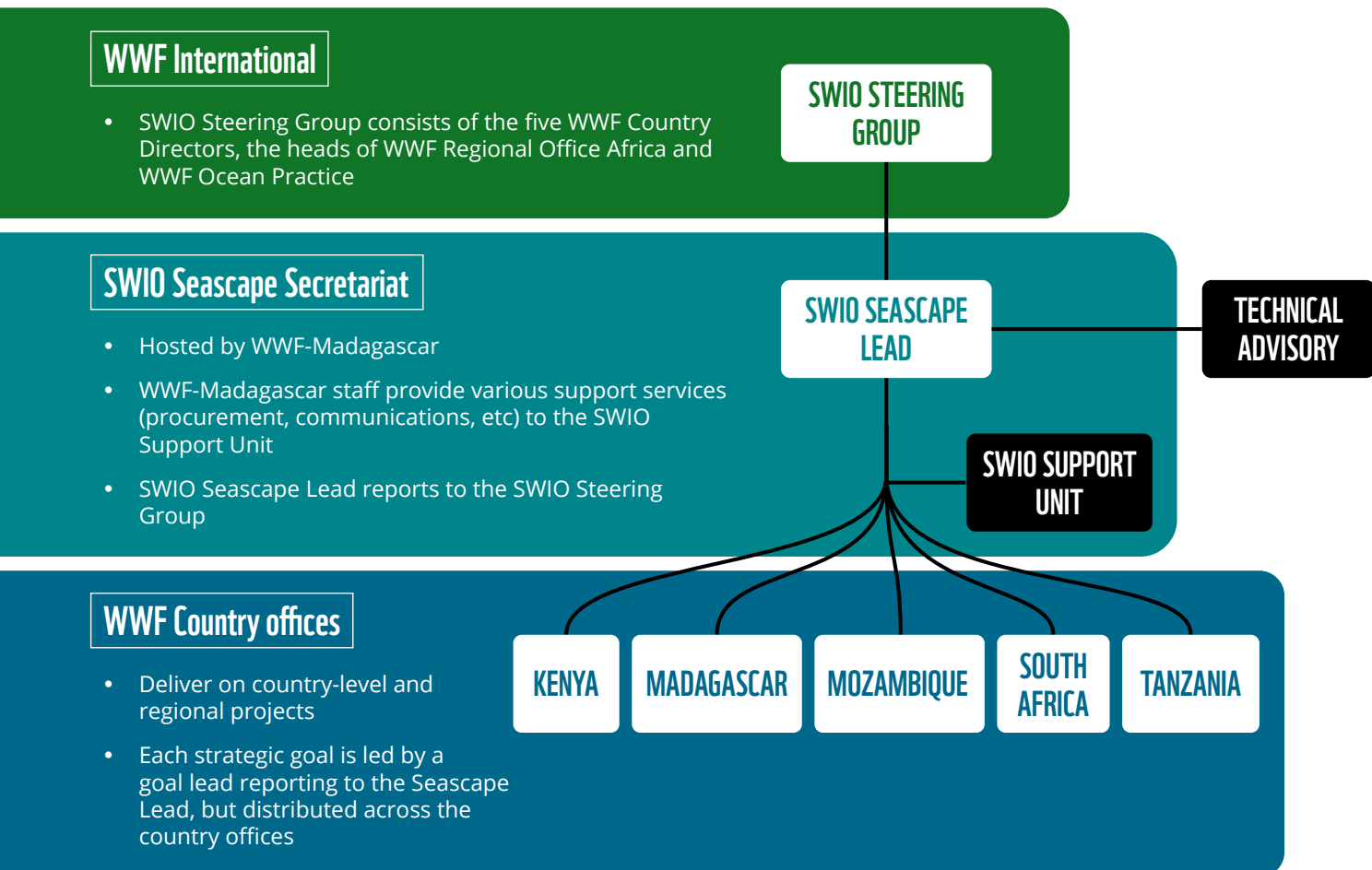
The SWIO Seascope operates under the oversight of the **Steering Group** consisting of the directors of the five participating WWF country offices, as well as the Head of Conservation Impact for WWF's Regional Office of Africa and WWF International's Ocean Practice Leader. The Steering Group meets twice a year and signs off on SWIO Seascope's strategic direction on an annual basis.





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**Figure 6.** The operational and governance structures for the SWIO Seascape Regional Programme



# ENVIRONMENTAL AND SOCIAL SAFEGUARDS

Beginning with its 1996 Statement of Principles on Indigenous Peoples and Conservation, WWF has adopted a range of social policies that incorporate human rights commitments, including to recognise and protect the rights of indigenous peoples and local communities. In 2009, WWF along with other conservation organisations, founded the Conservation Initiative for Human Rights and adopted the Conservation and Human Rights Framework. In 2018 it adopted Network Guidelines on the Prevention of Restriction of Rights and Involuntary Relocation and Resettlement of Indigenous Peoples and Local Communities. And in 2022, *Embedding Human Rights in Nature Conservation: From Intent to Action* was published and can be [found here](#). This report details further guidelines which all WWF offices, programmes and initiatives must take into consideration in their implementation. This includes customary rights to lands and resources and interventions requiring the free, prior and informed consent of affected communities.

Between 2020 and 2022, Environmental and Social Safeguards Framework (ESSF) screening reports have been submitted for 13 out of 14 locations across the five SWIO countries where we have offices. Screening will be done for the remaining seascape in 2023.

As part of our commitment to ensuring an effective Environmental and Social Safeguards Framework we are also working with each of the SWIO country offices to ensure grievance mechanisms are in place.

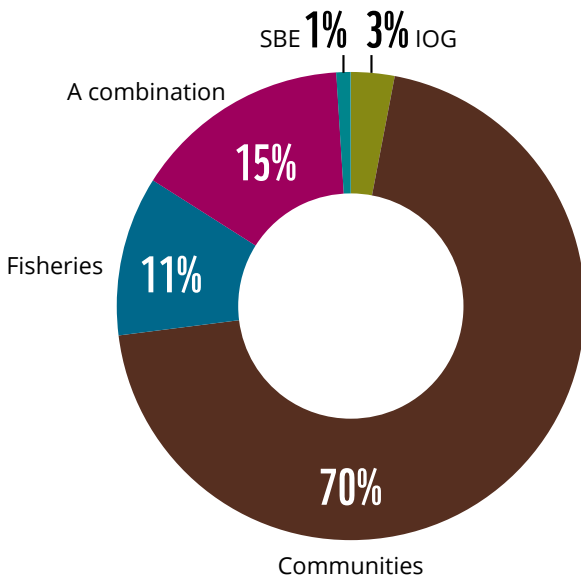
Our commitment to sustaining the natural world for the benefit of people and nature means regularly improving and adapting our practices by embedding lessons learned and maintaining transparency and honesty about our progress against our commitments.



# FINANCIAL PERFORMANCE

The SWIO Seascape Regional Programme has to date secured funding to the value of US\$55.3million – mostly from global public-sector donors – for regional, in-country and multi-country projects running between 2021 and 2025. Most of this funding (70%) is earmarked for projects under the community-led conservation and restoration focus area.

**Figure 7.** Funding by strategic goal area



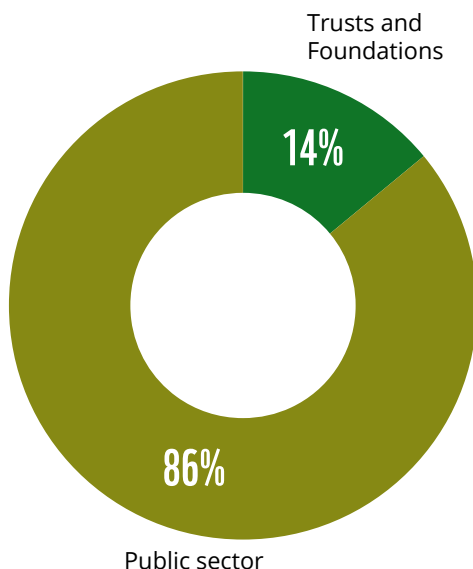
**Funding secured by strategic focus area**

Regional fisheries	US\$6,200,000
Coastal community-led conservation and restoration	US\$38,900,000
Sustainable blue economy (SBE)	US\$240,000
Integrated ocean governance (IOG)	US\$1,500,000
Combination of areas	US\$8,500,000
<b>Total</b>	<b>US\$55,340,000</b>

All regional donor funds are managed by WWF-Madagascar as the host office, which oversees all procurements and payments in line with WWF International’s procurement rules. All procurements over US\$2,500 are required to undergo a tender process.

During the year under review, the programme disbursed US\$3.9 million, including US\$650,000 directly to CSO or CBOs.

**Figure 8.** Secured by donor type



0%	Corporate
0%	Major donor
0%	WWF National office/ Unrestricted



# WITH THANKS

## MULTI-COUNTRY DONORS

Bezos Earth Fund  
 Bloomberg  
 Blue Action Fund  
 French Environment Facility (FFEM)  
 German Government - BMZ  
 Global Environment Facility (GEF)  
 Kreditanstalt für Wiederaufbau (KfW)  
 Margaret A. Cargill Philanthropies  
 Norwegian Agency for Development Cooperation (NORAD)  
 Ocean Risk and Resilience Action Alliance (ORRAA)  
 Swedish International Development and Cooperation Agency (SIDA)  
 WWF International Oceans Practice

## CSO NETWORKS

FOSCAMC  
 CNPE  
 DAHARI  
 MIHARI  
 MOSC  
 SWIOTUNA  
 Tuna Alliance of Kenya  
 Tuna Alliance of Tanzania

## PARTNERS

Abalobi  
 African Development Bank Group  
 CORDIO East Africa  
 Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)  
 Finance Earth  
 Great Blue Wall  
 IPNLF/SFACT  
 Nairobi Convention Secretariat  
 Our Blue Future  
 SADC  
 Save our Mangroves Now! (SOMN) – Wetlands International, IUCN, WWF



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