



## FISHERIES OBSERVERS IN THE SADC REGION



© Kyle LaFerriere / WWF-US

### Introduction

Illegal, Unreported and Unregulated (IUU) fishing disproportionately impacts developing coastal states, disrupting the societal and environmental fabric within coastal communities. Regional Management Organisations such as the Southern African Development Community (SADC), the Indian Ocean Commission (IOC) and fishery specific RFMOs<sup>1</sup> such as ICCAT<sup>2</sup> and IOTC<sup>3</sup> benefit from coordinated national and regional Monitoring Control & Surveillance (MCS) responses to IUU fishing threats. This is accomplished if backed by strong political will to achieve information sharing with close cooperation and collaboration between member states as well as the application of standardised tools and asset sharing.

Before the fishery sector can contribute to the blue economy the impacts of IUU fishing on key fishery-related social and economic characteristics need to be clearly understood:

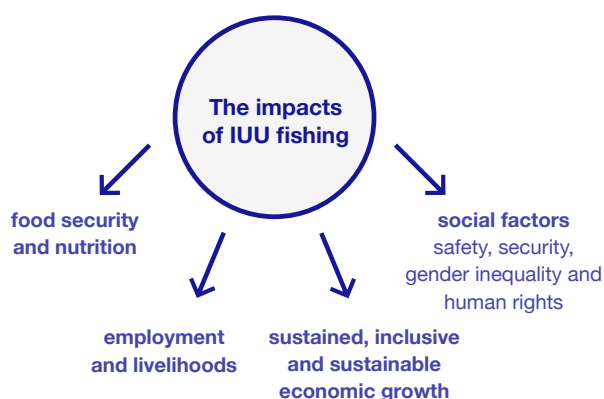


Figure 1 Impacts of IUU Fishing on key fishery-related socioeconomic aspects.

Human capacity is critical and is needed to be able to respond to a combination of risk assessments, information, and intelligence on IUU fishing. Human resource skills development is therefore necessary as well as having the financial and technical resources essential for inspection schemes, fisheries observer programmes, port controls and enforcement.

Information through data collection methods is critical not only in industrial fisheries but also small scale and artisanal fisheries that are an integral part of the African continent. Fisheries compliance and accurate data collection can be directly linked to the level of observer coverage not only on offshore industrial fishing vessels but also in nearshore fisheries. With adequate tools and support, observers have the ability to collect detailed information on fishing operations and fishery resources, as well as monitor compliance and conservation measures. For example, data recorded in logbooks and by observers, Vessel Monitoring Systems (VMS) and vessel registries that can be linked to national and regional information systems, in combination provide an efficient approach to counter IUU fishing.

It is the coastal States responsibility to manage its Exclusive Economic Zone (EEZ), strengthening the rationale for increased capacity and collaboration for observer programs. Observer and compliance data can also support an ecosystem approach that underpins sustainable utilisation of fisheries resources that in the long term supports States meeting important global commitments that ultimately will optimise social, economic, and environmental benefits from the fisheries sector.

**SADC to date has lacked a cohesive strategy to develop not only a national but also a regional approach towards observer programmes and has fallen behind in this globally accepted opportunity. To enhance state capacity to collect marine fisheries data and to help deter IUU fishing, SADC member countries should therefore strengthen or develop at-sea fisheries observer programmes to collect scientific data and provide support to a system that strengthens compliance and effective fisheries management.**

<sup>1</sup>Regional fisheries management organisations (RFMOs) are international organisations formed by countries with fishing interests in an area. These regional bodies typically have Conservation or Management Measures (CMMs) in place requiring Contracting Parties and Cooperating non-contracting Parties (CPCs) to require their flagged vessels to accommodate scientific fisheries observers, to meet specific observer coverages per fleet and agreed standards and guidelines. <sup>2</sup>The International Commission for the Conservation of Atlantic Tunas <sup>3</sup>The Indian Ocean Tuna Commission

# The international framework

There are a number of global responses in action to IUU fishing, the most entrenched and overarching being the 1982 United Nations Convention on the Law of the Sea (UNCLOS), with 166 signatories worldwide including all SADC member countries [except the Democratic Republic of the Congo (DRC)]. Amongst other things the Convention describes the rights and responsibilities of coastal states and fishing nations utilising the living resources of the sea. Pertaining to MCS and fisheries observers and in particular to nationals of foreign states fishing in the waters of coastal states, Article 62, section 4 says:

**Nationals of other States fishing in the exclusive economic zone shall comply with the conservation measures and with the other terms and conditions established in the laws and regulations of the coastal State. These laws and regulations shall be consistent with this Convention and may relate, inter alia, to the following:**

- a. licensing of fishermen, fishing vessels and equipment, including payment of fees and other forms of remuneration, which, in the case of developing coastal States, may consist of adequate compensation in the field of financing, equipment and technology relating to the fishing industry;
- b. determining the species which may be caught, and fixing quotas of catch, whether in relation to particular stocks or groups of stocks or catch per vessel over a period of time or to the catch by nationals of any State during a specified period;
- c. regulating seasons and areas of fishing, the types, sizes and amount of gear, and the types, sizes and number of fishing vessels that may be used;
- d. fixing the age and size of fish and other species that may be caught;

- e. specifying information required of fishing vessels, including catch and effort statistics and vessel position reports;
- f. requiring, under the authorization and control of the coastal State, the conduct of specified fisheries research programmes and regulating the conduct of such research, including the sampling of catches, disposition of samples and reporting of associated scientific data; and
- g. the placing of observers or trainees on board such vessels by the coastal State;
- h. the landing of all or any part of the catch by such vessels in the ports of the coastal State.

Other key international legal instruments that support SADC Member states mandate to place observers on fishing vessels include the UN Fish Stocks Agreement (UNFSA), the FAO Code of Conduct for Responsible Fisheries (CCRF) and the International plan of action (IPOA) to prevent, deter and eliminate IUU fishing from the Committee on Fisheries (COFI).

The FAO has also developed Guidelines for developing an at-Sea Fishery Observer Programme (FAO, 2003). These Guidelines are intended to help those involved in managing fisheries to understand the range of objectives that an observer programme can meet and how these contribute towards the management of a fishery. The Guidelines promote the use of observers as agents capable of contributing to many monitoring, sampling and compliance activities required in modern integrated fisheries management. The increased capacity of observers to report directly on an almost real-time basis with fishery authorities via modern communications, means that they now offer a primary information source for compliance control even though observers are not empowered to take any direct compliance actions. Ensuring gradual progress to achieve real-time monitoring should be an objective of any observer program in development. Vessel compliance, on its own through control and inspection programs is not the objective of an at-sea observer program.





# The regional context

## Regional Fisheries Management Organisations (RFMOs)

Most Regional Fisheries Management Organisations at-sea observer programme standards and guidelines have broadly followed FAO Guidelines recommended approach. SADC members are active in numerous RFMOs whose areas of jurisdiction extend beyond the southern African region. General RFMOs (which manage fish stocks by geographical area) relevant to SADC Members include the CCAMLR, SWIOFC, SEAFO and SIOFA. Tuna RFMOs of importance to SADC members include the CCSBT, IOTC, and ICCAT that are responsible for the management of highly migratory species of which the tropical tuna is the highest priority.

Other regional organisations, pertinent to SADC Member countries, which have observer programme portfolios include the Southern African Development Community (SADC) itself, and the Indian Ocean Community (IOC). The African Union (AU) also plays an important role on the continent and broadly supports the development of fisheries, including Observer Programmes. Regional agreements and conventions, standards and guidelines on at-sea observer programmes applicable to SADC Members are illustrated in **Table 1**.

Different observer initiatives, with variable approaches to training, data collection methods and procedures have been developed across the region by various organisations. These organisations include the mentioned RFMOs, other Regional Organisations, non-Government Organisations as well as in some cases



initiatives by fishery-specific industrial bodies. A common requirement of all initiatives is an understanding of the specific information needs of each fishery and the resources available to monitor it. Initiatives to develop regional fisheries observer activities have the potential to be effective if complementary, standardised and aligned with RFMOs standards. Membership to multiple RFMOs demands increased capacity and reporting.

**Table 1 Regional agreements and conventions, legal instruments, standards and guidelines on at-sea observer programmes applicable to sadc members.**

REGIONAL ORGANISATIONS WITH AT-SEA OBSERVER PROGRAMME PORTFOLIOS	SADC Members of interest to the present study (ISO 3166-1 alpha-3)								
	AGO	COM	MDG	MUS	MOZ	NAM	SYC	ZAF	TZA
African Union									
CCAMLR SISO standards and data requirements									
CCSBT SRP standards and data requirements									
ICCAT SOP standards, requirements and materials									
Administrative Arrangement between the IOC and its member Countries <sup>2</sup>									
MoU for the accreditation of observers at the level of the South West Indian Ocean (draft) <sup>3</sup>									
IOC MoU accreditation of SWIO Observers (2016)									
SADC MCSCC Charter (2017)									
SADC Regional MCS Strategy and RPOA (2020-2030)									
SEAFO System data requirements and materials									
SIOFA CMM 2019/02, 2019/10 and 2020/01									
SWIOFC data requirements and materials									

AGO Angola COM Comoros MDG Madagascar MUS Mauritius MOZ Mozambique NAM Namibia SYC Seychelles ZAF South Africa TZN Tanzania

<sup>2</sup>The Administrative Arrangement between the IOC and its member Countries has, among others, the objective of carrying out cooperative observation missions to pool and optimize the observation means of the IOC member Countries. The Administrative Arrangement, active since 2007 has been reviewed and superseded in 2014.  
<sup>3</sup>An MoU for the accreditation of SWIO Observers was drafted in 2016, under the context of the IOC-SmartFish programme, and awaits signature. The IOC-EcoFish programme aims to review the MoU and to submit for signature by middle 2022. It also aims to develop SOPs for the deployment of SWIO coastal country observers at the level of the Southwest Indian Ocean.

## Indian Ocean Commission (IOC/COI)

The Indian Ocean Commission is an intergovernmental organization created in 1982 that links African Indian Ocean nations: Comoros, Madagascar, Mauritius, Réunion (an overseas region of France), and Seychelles.

In 2007, the IOC developed a control mechanism to fight IUU fishing and coordinated strategy to improve sustainable fisheries management in the region, via the Fisheries Surveillance Regional Project (PRSP), a project that had the financial support of the EU. This mechanism included the sharing of Observers, observer and MCS data among Member states, through the signature of an Administrative Arrangement between the IOC and its member Countries. This Administrative Arrangement active since 2007 has been reviewed and superseded in 2014.

In 2014, the IOC countries backed the creation of a Working Group (WG) of IOC National Observer Programme (NOP) Managers to coordinate observer deployments, standardize observer data sharing methods and tools, exchange experiences and know-how and to harmonize observer training and management. Working Group activities were funded through the EU funded IOC-Smartfish Project.

In 2016, the WG was enlarged to all SWIOFC Member States NOP Managers under the activities of the IOC-SWIOFish1 project (World Bank fund). In 2017 an MoU for the accreditation of SWIO Coastal States observers at sub-regional level and the exchange of observer data was drafted and submitted to Coastal States competent authorities for revision, but it wasn't signed. Currently the IOC-EcoFish project (EU funds 2019-2024) aims to review the MoU and to submit it to the SWIO Coastal States for signature by middle 2022. The EcoFish project also aims to develop the SOPs for the deployment of SWIO coastal country observers at the level of the Southwest Indian Ocean.



Figure 2 Map of IOC and SADC Member States

- Indian Ocean Commission (IOC/COI)
- Other SADC member States

## Southern African Development Community (SADC)

In 2016 the SADC prepared a Charter to provide a framework for the establishment and operationalisation of a regional MCS Centre in Maputo (the MCSCC). This important initiative by the SADC Secretariat, with support from the World-Wide Fund for Nature (WWF), aims to mobilize resources towards the establishment of a higher-level coordination MCSCC for the entire southern African region and includes support from the World Bank-funded South West Indian Ocean Fisheries Improving Governance, Livelihoods and Ecosystems Project (SWIOFish).

Fisheries MCS data and information sharing	Regional fishery observer coordination
<b>Objective</b>	<b>Objective</b>
Facilitate the sharing of data such as: fishing license lists, surveillance reports and data, VMS data, observer data, fishing vessel logbook information, fishing vessel violation history, fishing vessel access agreements and license conditions.	Coordinate and harmonize national observer standards, observers and observer reporting at regional level.

The benefit of a coordination function is that national and regional observer training activities and standards for training could be harmonized to allow observers from one country to work on vessels flagged or licensed by another. This is particularly relevant in the context of Regional fisheries bodies. It could also improve the utilization of observer data for MCS purposes by providing, for example, standard forms, guidelines, and manuals. This service could also lead to the development of a database of trained fisheries observers whose qualifications (depending on the 'grade') make them suitable for deployment in a regional capacity. Benefits include:

1. **greater MCS coverage;**
2. **improved data collection and monitoring for stock assessments;**
3. **increased regional IUU deterrence;**
4. **expanded capacity and intelligence; and**
5. **regional harmonization (SADC, 2017).**

In 2021, SADC Ministers responsible for Fisheries and Aquaculture approved the Regional Monitoring Control and Surveillance Strategy and Regional Plan of Action to Prevent, Deter and Eliminate IUU Fishing in the SADC Region, which provides strategic objectives, expected outcomes and priority actions for the period 2020-2030.



# Status within the SADC countries - gap analysis

Information on SADC Member's at-sea national observer programmes (NOP) and national fisheries legislation was reviewed and assessed against identified minimum international and regional standards and guidelines using metrics established specifically for the SADC based on internationally and regionally accepted minimum requirements. Each NOP was assessed against the following categories:

**Objectives; Legal framework; Financial resilience; Management and observer staff capacity and qualifications; Sea-safety training; Safety and health equipment; Code of conduct; Pre-boarding vessel safety check; Free communications; Insurance; Emergency action plan; Certificate of medical fitness; Briefing and debriefing; Data collection materials and manuals; Data management, processing, and quality control processes.**

For each category the NOP was scored using pre-determined metrics as meeting, not meeting, or exceeding the minimum requirements. Where information was not available the outcome was scored as unknown. A summary of the results of the gap analysis are displayed in Figure 3.

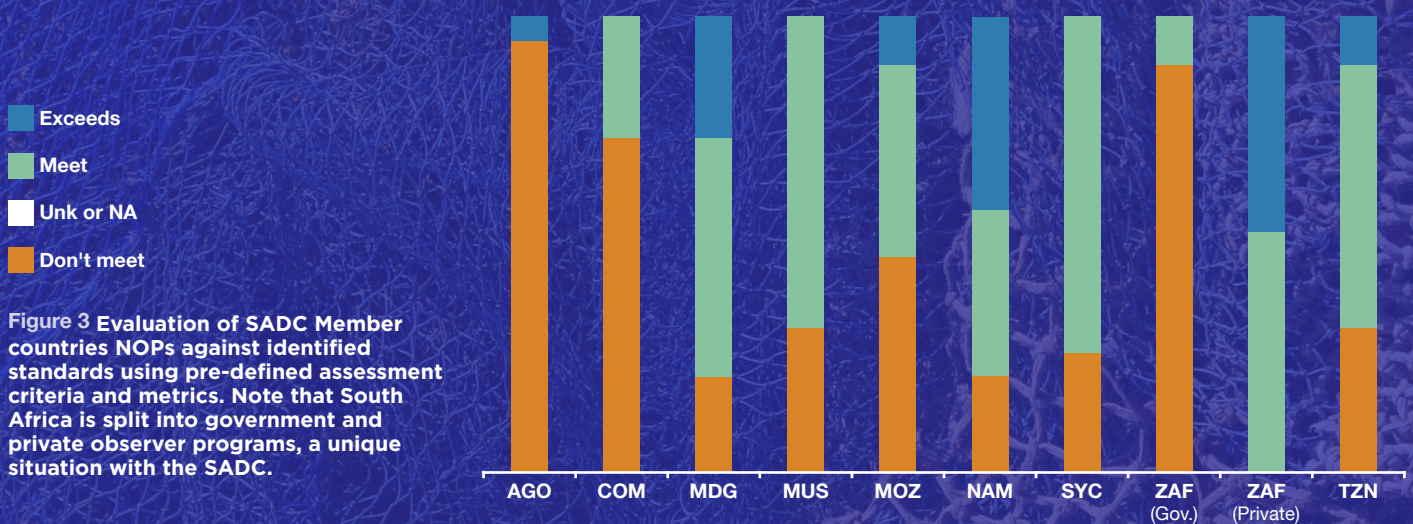


Figure 3 Evaluation of SADC Member countries NOPs against identified standards using pre-defined assessment criteria and metrics. Note that South Africa is split into government and private observer programs, a unique situation with the SADC.

A summary of the results concerning the follow up of observers' at-sea safety best practises by SADC Member countries is displayed in Figure 4.

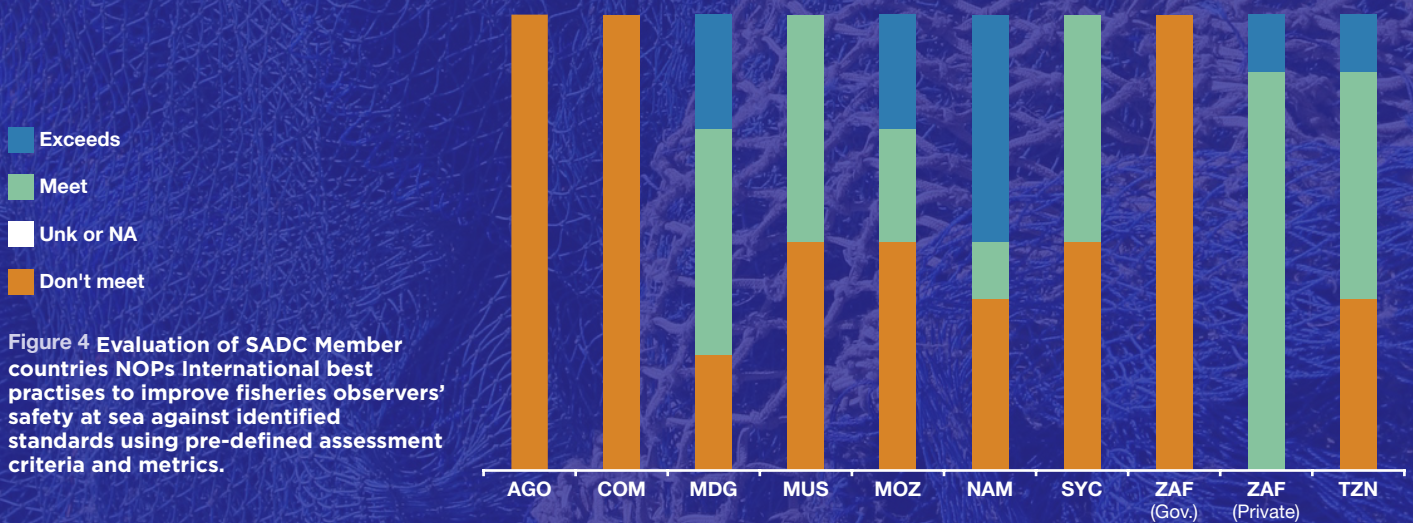


Figure 4 Evaluation of SADC Member countries NOPs International best practises to improve fisheries observers' safety at sea against identified standards using pre-defined assessment criteria and metrics.

Fig. 3/4 AGO Angola COM Comoros MDG Madagascar MUS Mauritius MOZ Mozambique NAM Namibia SYC Seychelles ZAF South Africa TZN Tanzania

Regional challenges and opportunities related to implementation of a fisheries observer program, including best practises to improve fisheries observers' safety at sea are acknowledged. National priorities moving forward have been identified, best practises in the region and the way forward in the implementation of effective observer programs have been documented and prioritized.





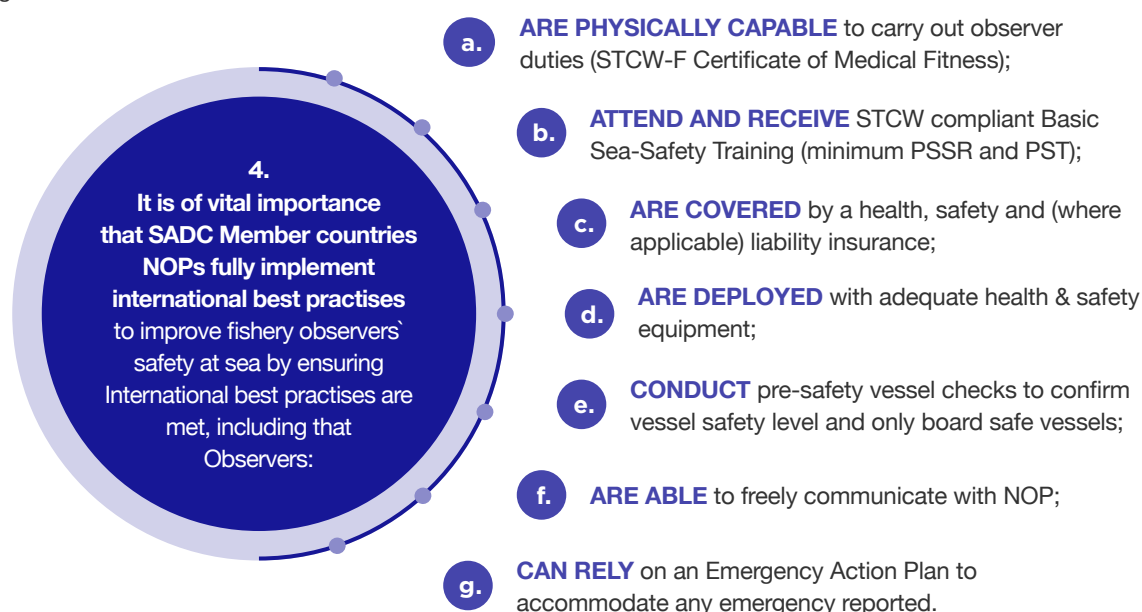
## Regional challenges and opportunities

- **The level of detail of SADC Member countries legislation pertaining to “Observers” varies dramatically and presents gaps** as to the minimum requirements it should stipulate.
- **Angola and Mozambique NOPs do not have the dual objective of collecting both scientific and compliance data.**
- **Financial resilience is particularly important for the Comoros NOP funded by external donors**, the South African Government NOP whose activities are at a standstill since 2011, and the Angolan NOP inactive due to the lack of resources.
- **SADC Member countries show difficulties to meet required RFMOs minimum coverage.** Problems faced differ from country to country and include NOPs capacity issues and lack of political will to deploy observers on pelagic longline fleets. Tanzania, Madagascar, and Mozambique are currently capable of meeting RFMOs required coverage since the number of vessels to be covered, according to IOTC Res.11/04, is restricted to one vessel per country. It should be noted that Seychelles is conducting electronic monitoring trials with the objective to surpass the challenge of meeting required observer coverage, a best practice that should be followed in the SADC region.
- **Analysis of SADC Member countries NOPs capacity shows that certain countries lack sufficient staff, qualifications and/or training.** Yet there are other SADC Member countries NOPs that possess the required capacity and knowledge. The sharing of this knowledge should be a best practice to be implemented in SADC region. This could be done via the organising of SADC Member countries NOPs Working Group meetings, national and regional training workshops.
- **Only the Namibia NOP and the South Africa privately managed NOP require their observers to sign a document agreeing to conform to an internationally recognized Code of Conduct.** This should serve as an example of best practices to be followed by the other NOPs of the SADC.
- **South Africa private NOP is the programme that more fully implements international best practises to improve fisheries observers` safety at sea.** Namibia NOP is also an example concerning the compliance with certain observer safety best practices. The remaining SADC Member countries NOPs should benefit from the existing systems in place to improve the safety at sea of their observers.
- **The large majority of SADC Member NOPs implement observer briefing and debriefing sessions.** Nonetheless, to meet regional requirements, they should use detailed briefing and debriefing protocols and equipment checklists as done by Madagascar NOP and South Africa private NOP. **SADC Member countries NOPs could benefit from knowledge-sharing to improve their briefing and debriefing protocols.**
- **NOPs show difficulties in managing, processing, and controlling the quality of observer data.** SADC Member NOPs observer manuals include pertinent information on RFMOs data requirements, sampling protocols, and CMMs or NOPs voluntary use RFMOs standard manuals, sampling protocols and data collection forms. Nonetheless SADC Member countries NOPs observers should benefit from regular training in the collection of RFMOs required data and the usage of RFMOs data collection materials. While NOPs Management teams should benefit from training on observer data management, processing, and quality control.



## National priorities – the way forward

- 1. Adequate national fisheries related legislation is essential for the establishment of at-sea observer programmes**, as it provides the mandate and authority to place observers on vessels and outlines deployment conditions. Fisheries legislation pertaining to “Observers” should be standardized at the SADC region level. Angola, Namibia, and Tanzania fisheries legislation should serve as an example of best practices to be followed.
- 2. The long-term sustainability of an NOP can be achieved via the implementation of a direct levy system** applicable to national and foreign vessels, the re-direction of financial penalties for contravening, the usage of external donors’ funds and governmental funds to sponsor NOP activities. Namibia NOPs shows a high level of financial resilience, thanks to the legal establishment of a reserve fund exclusively dedicated to NOP activities. The remaining countries of the SADC region should follow their example to guarantee that their NOPs achieve strong financial resilience.
- 3. NOP objectives should be standardized at the level of the SADC region.** In order to achieve this Angola and Mozambique should expand their NOP objectives to include science and control as both types of data are needed for effective fisheries management.



Observers can benefit from vessel Protection & Indemnity insurance if registered under vessel articles as a crew member. This can only be achieved if Observers comply with the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978 (STCW-F), that is if they hold valid STCW-F At-Sea Basic Safety Training Certificate (5 years validity) and STCW-F Certificate of Medical Fitness (2-years validity).

The development and implementation of an Emergency Action Plan (EAP) to accommodate reported Observer emergencies shall require the NOP Management Team to establish communications with key national and regional organisations such as the coast guard, the navy, national and regional sea-rescue centres, national and regional MCS centres, and other SADC member countries NOPs.

### **5. SADC Member countries should consider supplementing their NOPs with electronic monitoring (EM) technology.**

Fleets that spend long time periods at sea and vessels that don't meet minimum work and safety conditions for the deployment of human observers can be covered by EM.

### **6. The SADC should consider providing support to its Member countries NOPs capacity via the:**

- Establishment of a SADC Member countries NOPs Observer Coordinator Working Group;**
- Organising of workshops on Observer Programme** management, observer briefing and debriefing and training sessions on observer data management, processing, and quality control; and
- Conducting of regular observer training** in the collection of RFMOs required data and the usage of RFMOs data collection materials.

### **7. SADC Member countries should agree on the adoption of a general Code of Conduct** for observers to establish a set of expected standards of behaviour in a homogenous and transparent manner across their NOPs. The most recent example of a clear set of guiding principles developed by the IOTC and can be proposed for adoption.

## Resources

- **IOTC. 2011.** Resolution 11/04 On A Regional Observer Scheme.
- **Angola Law No. 6-A/04 on Aquatic Biological Resources** (new Fishing Act).
- **Athayde T. 2011.** SWIOFP Data Collection Forms for the South West Indian Ocean Fisheries. SWIOFP.
- **Athayde T. 2011.** SWIOFP Observer Briefing and Debriefing Protocols. 24 pages. SWIOFP.
- **Athayde T. 2011.** SWIOFP Observer Programme Data Collection Guide. 79 pages. SWIOFP.
- **Athayde T. 2011.** SWIOFP Observer sampling protocols for the South West Indian Ocean fisheries. SWIOFP.
- **Athayde T. 2016.** Proposal for addressing Regional Observers aspects as part of development of a protocol for MTC for Foreign Fisheries Access in the SWIO region. September 2016. Indian Ocean Commission. 228 pages.
- **Athayde T. 2018.** Development of a set of standards to support implementation of the Regional Observer Scheme in the Indian Ocean. April 2018. Indian Ocean Tuna Commission. 94 pages.
- **Athayde T. 2018.** Outputs from the expert review workshop on standards for the IOTC Regional Observer Scheme – data collection fields. Ref: IOTC-2018-WPDCS14-INF03 Rev\_1. <http://www.iotc.org/documents/outputs-expert-review-workshop-standards-iotc-ros-%E2%80%93-data-collection-fields>
- **Athayde. T. 2016.** MoU for the accreditation of Southwest Indian Ocean coastal State Observers at sub-regional level and the exchange of Observer data. IOC – SWIOFish1.
- **Athayde. T. 2016.** Proposal for addressing Regional Observers aspects as part of development of protocol for regional Minimum Terms and Conditions in the South West Indian Ocean region. Consultancy report. 228 pages. IOC/ SWIOFC - SWIOFish1.
- **Athayde. T. IOTC Secretariat. 2019.** IOTC Regional Observer Scheme Programme Standards. Meeting document. 23rd IOTC Commission. Ref. IOTC-2019-S23-10\_Rev1. 48 pp. <https://iotc.org/documents/regional-observer-scheme-programme-standards>.
- **Capricorn Marine Environmental (Pty) Ltd.** Establishing and/or strengthening regional fisheries Observer programmes and fishing vessel registers in Eastern Africa. April 2016. African Union-IBAR. 86 pages.
- **Capricorn Marine Environmental (Pty) Ltd.** Establishing and/or strengthening regional fisheries observer programmes and fishing vessel registers in Southern Africa. June 2016. African Union-IBAR. 73 pages.
- **CCAMLR. 1992.** Text of the CCAMLR Scheme of International Scientific Observation. As amended at CCAMLR-XXXVII (paragraph 7.1). Part 10 - page 123 to 130.
- **CCAMLR. 2011** CCAMLR Observer Training Program Accreditation Scheme (COTPAS) to review Members Observer training programs as endorsed by the CCAMLR Scientific Committee. CCAMLR Internal report.
- **CCSBT. 2015.** CCSBT Scientific Observer Program Standards. 22nd CCSBT Commission.
- **CCSBT. 2019.** Report of the Twenty Fourth Meeting of the Scientific Committee. [https://www.ccsbt.org/sites/default/files/userfiles/file/docs\\_english/meetings/meeting\\_reports/ccsbt\\_26/report\\_of\\_SC24.pdf](https://www.ccsbt.org/sites/default/files/userfiles/file/docs_english/meetings/meeting_reports/ccsbt_26/report_of_SC24.pdf)
- **Heinecken C. and Athayde T. 2012.** SWIOFP Guide to the deployment and coordination of sea-going observers. 44 pages. SWIOFP.
- **Heinecken C., Groeneveld J. and all. 2010.** SWIOFP Observer Manual - An Illustrated Manual for Training Fisheries Observers for Deployment on Commercial Fishing Vessels Active in the South West Indian Ocean. 153 pages. SWIOFP.
- **ICCAT. 2006-2016.** ICCAT Manual. International Commission for the Conservation of Atlantic Tuna. In: ICCAT Publications [on-line]. Updated 2016. [Cited 01/27/]. ISBN (Electronic Edition): 978-92-990055-0-7.
- **ICCAT. 2016.** Recommendation 16-14 to establish minimum standards for fishing vessel scientific observer programs.
- **ICCAT.2019.** Commission report for biennial period, 2018-19, PART I (2018) - Vol. 1. 2018.
- **ICCAT.2020.** Commission report for biennial period, 2018-19, PART II (2019) - Vol. 1. 2019.
- **IOTC. 2009.** Mozambique National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2019. IOTC-2019-SC22-NR18.
- **IOTC. 2019.** Regional Observer Scheme Programme Standards. Meeting document. 23rd IOTC Commission. Ref. IOTC-2019-S23-10\_Rev1. 48 pp. <https://iotc.org/documents/regional-observer-scheme-programme-standards>.
- **IOTC. 2019.** United Republic of Tanzania National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2019. IOTC-2019-SC21-NR28.
- **IOTC. 2020.** Mauritius National Report to the Scientific Committee of the Indian Ocean Tuna Commission. Ref.: IOTC-2020-SC23-NR14.
- **IOTC. 2020.** Rapport National de Madagascar destiné au Comité Scientifique de la Commission des thons de l'Océan Indien. Ref.: IOTC-2020-SC23-NR11.
- **IOTC. 2020.** Seychelles National Report to the Scientific Committee of the Indian Ocean Tuna Commission. IOTC-2020-SC23-NR18.
- **IOTC. 2020.** South Africa National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2020. IOTC-2020-SC23-NR20\_-\_South\_Africa.pdf.
- **IOTC. 2020.** Union des Comores Rapport national destiné au Comité scientifique de la Commission des thons de l'océan Indien, 2020. IOTC-2020-SC23-NR25\_-\_Comoros.
- **Madagascar Law No. 2015-053** on the Code of fishery and aquaculture.
- **Mauritius Fisheries and Marine Resources Act 2007 Edition.**
- **Mozambique Fisheries Law No. 22/2013** references samplers, extension and technical researcher but not to observers.
- **Namibia Marine Resources Act, 2000 (Act 27 of 2000).**
- **SADC. 2010.** Guidelines for the establishment of the SADC Regional Fisheries Monitoring, Control and Surveillance Coordination Centre. Ref: CU/PE1MZ/10/010.
- **SADC. 2020.** Draft Regional Strategy on Monitoring, Control and Surveillance (MCS) and Plan of Action (RPOA) to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated (IUU Fishing in the SADC Region 2020-2030.
- **Sandy L. Davies.** Guidelines for Developing an at-Sea Fishery Observer Programme. FAO FISHERIES TECHNICAL PAPER 414 by Sandy L. Davies edited by J. Eric Reynolds FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS Rome, 2003.
- **SEAFO. 2013.** Observer Programme. SEAFO System of Observation, Inspection, Compliance and Enforcement (System). Chapter V, Article 18.
- **Seychelles Fisheries Act 24 of 2014.**
- **SIOFA. 2019.** CMM 2019/10 - for the Monitoring of Fisheries in the Agreement Area (Monitoring).
- **SIOFA. 2020.** CMM 2020/01 Conservation and Management Measure for the Interim Management of Bottom Fishing in the Agreement Area (Interim Management of Bottom Fishing).
- **SIOFA. 2020.** CMM 2019/02 Conservation and Management Measure for the Collection, Reporting, Verification and Exchange of Data relating to fishing activities in the Agreement Area (Data Standards).
- **South Africa MARINE LIVING RESOURCES ACT 18 OF 1998** Amendment Act 5 of 2014.
- **SWIOFC. 2019.** Final approval of the guidelines on minimum terms and Conditions (MTC) for foreign fisheries access in the SWIOFC region. September 2019. 9th Working Party on Collaboration and Cooperation in Tuna Fisheries. SWIOFC/WPCCTF/19/ Inf 5 E.
- **SWIOFC. 2019.** Guidelines for minimum terms and conditions for foreign fisheries access in the Southwest Indian Ocean Fisheries Commission Region. Ref: SWIOFC/WPCCTF/19/ Inf 5 E.
- **The Comoros Code of Fishing and Aquaculture**, Decree No15 – 050/PR (2015).
- **URT Deep-Sea Fishing Authority Regulations, 2009**
- **URT Deep Sea Fisheries Management and Development Act, 2020.**
- **IOC. Administrative Arrangement** between the IOC and its member Countries concerning activities under the regional fishery surveillance plan. 2014.



## Acknowledgements

This policy brief was prepared by Capricorn Marine Environmental (Pty) Ltd. in partnership with the SADC IUU Task Force, the SADC Secretariat and WWF.

## About SADC

The SADC's main objectives are to achieve development, peace and security, and economic growth, to alleviate poverty, enhance the standard and quality of life of the peoples of Southern Africa, and support the socially disadvantaged through regional integration, built on democratic principles and equitable and sustainable development.

Find out more at: [www.sadc.int](http://www.sadc.int)

## About WWF

WWF works to look after our natural resources – oceans, land and wildlife – so we can continue to benefit from food, water and a healthy climate. It is the world's leading independent conservation organization, which promotes building of a sustainable and equitable future.

Find out more at: [www.wwf.org.mz](http://www.wwf.org.mz)

## About CapMarine

CapMarine is a private scientific observer service provider for South Africa and is endorsed by the IOTC, ICCAT and CCAMLR to provide training and support to National Observer Programs in the region.

Find out more at: [www.capmarine-sa.co.za](http://www.capmarine-sa.co.za)

### Copyright SADC, 2021. All Rights Reserved.

The information contained in this publication may be freely used and copied for non-commercial purposes, provided that any information reproduced elsewhere be accompanied by an acknowledgement of SADC as the source. The SADC name and emblem are the exclusive property of the Southern African Development Community. They are protected under international law. Unauthorised use is prohibited. They may not be copied or reproduced in any way without the prior written permission of SADC. Requests for permission should be sent to the Executive Secretary of the SADC Secretariat.



© Kyle LaFerriere / WWF-US

Further details of this publication  
may be sourced from the  
SADC Secretariat:

**SADC Secretariat,  
SADC Headquarters**

Plot No. 54385, CBD Square,  
Private Bag 0095  
Gaborone, Botswana

T. +267 395 1863  
E. [registry@sadc.int](mailto:registry@sadc.int)

### Supported by the

