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Southern Indian Ocean Fisheries Agreement  
Accord relatif aux Pêches dans le Sud de l'Océan Indien

**9<sup>th</sup> Meeting of the Compliance Committee (CC9) and 12<sup>th</sup> Meeting of the Parties (MoP12)**

*Ebene, Mauritius, 25–27 June 2025 and 30 June – 04 July 2025*

**MoP-12-25 / CC-09-15**

# Options for facilitating and addressing the capacity-building needs of CCP developing states

The SIOFA Secretariat

<b>Meeting</b>	Compliance Committee ✓ Meeting of the Parties ✓
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<b>Abstract</b>	<p>This paper addresses the request from the 11th Meeting of the Parties to “develop a paper for CC9 to identify the capacity building needs of developing states, including where technical assistance or otherwise is needed in the implementation of obligations arising from the Agreement. This should include the identification of mechanisms to provide such assistance. The Secretariat should consult CCPs for the development of this paper.” (Para 36 - MoP11 report). The MoP further tasked the Secretariat with “developing a paper on options for facilitating and addressing the capacity building needs of CCP developing states to be considered by the next SC, CC, and MoP meetings. The scope of the paper should encompass a broad range of areas as commented by the SC in relation to recommendation 6 of the SIOFA Performance Review.” (Para 246 - MoP11 report).</p> <p>Of the 7 CCPs consulted, five CCPs responded to the Secretariat, and two CCPs (India and the Cook Islands) failed to provide a response, nor did they indicate why they did not provide a response. A total of 24 expressions of capacity building needs could be identified from the responses that the Executive Secretary received from SIOFA CCPs.</p>

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Out of these needs, 9 were related to Science, 6 were related to General capacity, 6 were related to Compliance and one was related to Data. Additionally, two needs were identified as straddling across Data/Compliance and Data/Science.

This paper builds on discussions held at the 10th Annual Meeting of the SIOFA Scientific Committee

### Recommendations

The SIOFA Secretariat recommends that :

- That the CC09 and the MoP 12 **notes** the work done by the Secretariat in preparing the *Options for facilitating and addressing the capacity building needs of CCP developing states* as requested by the MoP.
- That the CC09 **considers and revises** the options of capacity building related to Compliance (and straddling themes) listed by the Secretariat, and **recommends** its preferences to the MoP
- That the MoP **considers and revises** all the options of capacity building

## Background

The 1<sup>st</sup> Performance Review of the Southern Indian Ocean Fisheries Agreement (SIOFA), concluded in 2023, was carried out to review SIOFA's performance against the objectives provided in the Agreement. Out of the many outcomes of the performance review, a number of gaps were identified that stemmed from the lack of capacity among CCPs to effectively implement their obligations under the Agreement, and the Conservation and Management Measures (CMMs) adopted thereunder. This resulted in several recommendations endorsed by the Meeting of the Parties (MoP) on how to address those gaps to ensure that the measures adopted are effectively implemented, allowing SIOFA to attain its objectives set under the agreement. It further recommended that the SIOFA CCPs, through the Meeting of the Parties, task the Secretariat to assess the capacity building needed to improve the implementation of obligations by the CCPs, prioritizing the most urgent and providing options to ensure appropriate assistance is provided to CCPs which so require. The gaps and shortcomings identified by the 1st Performance Review Panel relate to Science, Data and Compliance obligations.

The need to support developing States bordering the area is also enshrined in Article 13 of the Agreement, calling on the Contracting Parties to cooperate under the provisions of the Agreement for the purpose of, *inter alia*, enhancing the ability of developing States bordering the Area, in particular the least-developed among them and small island developing States, to conserve and manage fishery resources and to develop their own fisheries for such resources. It further requires that such cooperation should include the provision of financial assistance, assistance relating to human resources development, technical assistance, transfer of technology, and activities directed specifically towards:

- improved conservation and management of the fishery resources and of straddling stocks occurring in waters under national jurisdiction adjacent to the Area, which can include the collection, reporting, verification, exchange and analysis of fisheries data and related information;
- improved information collection and management of the impact of fishing activities on the marine environment;
- stock assessment and scientific research;
- monitoring, control, surveillance, compliance and enforcement, including training and capacity-building at the local level, development and funding of national and regional observer programmes and access to technology; and
- participation in the Meeting of the Parties and meetings of its subsidiary bodies as well as in the settlement of disputes.

To this end, the 11<sup>th</sup> Meeting of the Parties endorsed recommendations from the 8<sup>th</sup> Meeting of the Compliance Committee (CC08) to “develop a paper for CC9 to identify the capacity building needs of developing states, including where technical assistance or otherwise is needed in the implementation of obligations arising from the Agreement. This should include the identification of mechanisms to provide such assistance. The Secretariat should consult CCPs for the development of this paper.” (Para 36 - MoP11 report). The MoP further tasked the Secretariat with “developing a paper on options for facilitating and addressing the capacity building needs of CCP developing states to be considered by the next SC, CC, and MoP meetings. The scope of the paper should encompass a broad range of areas as commented by the SC in relation to recommendation 6 of the SIOFA Performance Review.” (Para 246 - MoP11 report).

## Methodology

The process undertaken by the Secretariat to complete this task was:

- Identification of CCPs as developing states
- Consultation with the identified developing state CCPs
- Collation of responses from identified developing state CCPs
- Analysis of responses and identification of options

### *Identification of CCPs as developing states*

As required by the MoP, the scope of the paper is to focus on developing states CCPs. One of the challenges with identifying these CCPs is that, while the Agreement mentions and makes provisions for developing states, SIOFA did not define which CCPs are considered developing states. As such, for this exercise, developing states were identified/defined as any CCP with an economic status of “Low” or “Middle (Lower-middle & Upper-middle)” income as defined by the World Bank classification (<https://datatopics.worldbank.org/world-development-indicators/the-world-by-income-and-region.html>) or, in the specific case of participating fishing entities, a national institution (<https://taiwan.gov.tw/>).

Following these criteria, the following SIOFA CCPs were identified as developing states:

- China
- Mauritius
- Thailand
- Comoros
- India

Moreover, the consultation was expanded to include the Cook Islands and the Seychelles, which are classified as small island developing states by the UN (<https://www.un.org/ohrlls/content/list-sids>).

### *Consultation with the identified developing state CCPs*

To collect the necessary information required to complete this task, the Executive Secretary engaged with the identified States to collect information required to identify their current challenges and needs and also to provide CCPs with the opportunity to suggest any intervention they deem appropriate to address the identified shortcomings and gaps.

A feedback request (Annex 1) was sent as an email to all identified developing state CCPs in September 2024, and a response was kindly requested by October 31<sup>st</sup>, 2024. Some responses were sought after until January 2025, when it was decided to proceed with the responses received thus far.

### *Collation of responses from identified developing state CCPs*

Of the 7 CCPs consulted, five CCPs responded to the Secretariat, and two CCPs (India and the Cook Islands) failed to provide a response, nor did they indicate why they did not provide a response.

The responses received were collated and are reported in Annex 2. A summary of responses and their analysis is provided in the following sections of this paper.

### *Analysis of responses and identification of options*

Collated responses were summarized and the capacity building needs categorized into three main themes: Science, Data and Compliance. This categorization was performed at the Secretariat with the sole aim of identifying the topic most relevant to the different subsidiary bodies of SIOFA, and to assign the corresponding task of analysis to the Staff Officer responsible for each theme at the Secretariat.

An additional category of “General capacity”, was also created for all those needs that did not fall within the three main categories, and these were addressed by the Executive Secretary.

Some needs straddled across more than one theme, and, in that case, these were addressed by the Staff member leading the drafting of the main theme.

Options to address the needs identified by SIOFA CCPs in Science (and straddling themes) were selected based on the personal experience and judgement of the Science Officer, with a similar approach by the Compliance Officer for Compliance-related matters and straddling themes. As such they should be used solely as a framework for the Compliance Committee and the Meeting of the Parties to start their discussion.

These options are organized in a schematic manner, with categories of engagement that clearly underline different approaches to the same problem, leading to different costs of implementation. However, please note that it was not within the tasks of the Secretariat to assess these costs or to identify means of financing these options.

## Results

### *Summary of responses received*

A total of 24 expressions of capacity building needs could be identified from the responses that the Executive Secretary received from SIOFA CCPs.

Out of these needs, 9 were related to Science, 6 were related to General capacity, 6 were related to Compliance and one was related to Data (Table 1). Additionally, two needs were identified as straddling across Data/Compliance and Data/Science (Table 1).

Note that two CCPs (Mauritius and Thailand) expressed the same capacity building need (identification of VMEs).

Table 1 – Categorization of the capacity needs expressed by SIOFA CCPs during the consultation with the Executive Secretary.

ID #	Need	CCP	Theme/s	CCP proposed activity
1	Strengthen exchanges between CCPs	China	General capacity	
2	Strengthen relevant cooperation between CCPs and developing countries	China	General capacity	
3	Strengthen monitoring and evaluation technology in fishery area	China	Compliance	
4	Strengthen resource conservation	China	General capacity	
5	Help to identify real and effective needs and propose sustainable solutions	Union of Comoros	General capacity	
6	English language capacity	Union of Comoros	General capacity	practical training in an English-speaking country abroad allowing its representatives at SIOFA to improve English
7	Identification of deep-water sharks	Mauritius	Science	
8	Identification of VMEs	Mauritius	Science	
9	Undertaking stock assessment studies for deepwater demersal species	Mauritius	Science	Training can be dispensed by experts working in collaboration with SIOFA
10	Preparation of a BFIA report	Mauritius	Science	
11	Collection and analysis of biological samples, such as gonads and otoliths, of deep-water demersal species	Mauritius	Science	
12	Strengthening of port state measures in connection with the implementation of SIOFA CMMs	Mauritius	Compliance	
13	Capacity-building programs for advanced surveillance operations, data collection, and analysis	Seychelles	Compliance/Data	
14	Specialized training for enforcement officers on inspections, regulation enforcement, and species identification	Seychelles	Compliance	
15	Support for acquiring and maintaining satellite monitoring systems, electronic monitoring systems (EMS), and automated reporting systems	Seychelles	Compliance	
16	Strengthening regional cooperation for information sharing and joint surveillance efforts.	Seychelles	Compliance	
17	Developing and participating in regional MCS networks to enhance coordination and prevent IUU fishing.	Seychelles	Compliance	
18	Training on CPUE standardization processes	Seychelles	Science	
19	Development and implementation of Harvest Control Rules (HCR) and Management Strategy Evaluations (MSE)	Seychelles	Science	
20	Capacity building to address mandatory requirements under SIOFA	Seychelles	General capacity	
21	Data management and processing to meet SIOFA's reporting obligations	Seychelles	Data	

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ID #	Need	CCP	Theme/s	CCP proposed activity
22	Capacity building on VME identification	Thailand	Science	Trainings for identification methodologies, updating identification guides, translation of the SIOFA VMEs identification guide to local languages
23	Capacity building on impact and risk assessment methods to incorporate in BFIA	Thailand	Science	
24	Capacity building to improve onboard data collection in trawl fishery	Thailand	Data/Science	Sharing experience among CCPs to enhance trawl data collection which may include data collection technology, data management and data analysis

*Options for capacity building in the Science theme (and straddling themes)*

Table 2 summarizes the options proposed by the Secretariat (Science Officer) for the capacity building needs expressed by SIOFA CCPs during the consultation with the Executive Secretary, within the Science theme (and straddling themes). Some options were recommended by SC10 and are flagged as such in the table.

SC10 noted that a key area for capacity building should be the development of common data collection protocols, such as common measurement units, gonad staging techniques, otolith collection principles, etc., and training in the implementation of these protocols when collecting data. The SC noted that the ongoing observer harmonisation work, the proposed development of standardised observer manuals and identification guides, and the improvements to the website for species identification and observer resources would contribute to meeting this need, while recognising that additional training and resources may be required.

SC10 also noted the importance of providing training to CCPs on completing SC-related scientific/administrative processes, such as conducting a BFIA in accordance with the BFIA standard and preparing a Fisheries Operation Plan.

Regarding the identification of deep-water sharks, SC10 agreed that onboard species identification would be a more pressing priority than DNA barcoding training for capacity building.

Regarding stock assessment studies for deepwater demersal species, SC10 noted the need for more specificity about the areas in which capacity building is needed. The SC also noted that the Pacific Community (SPC) conducts stock assessment workshops and requested the Secretariat to communicate with the SPC Secretariat regarding potential participation in these workshops by SIOFA CCPs. The SC also noted additional stock assessment capacity building opportunities, including stock assessment training courses provided by the International Council for the Exploration of the Sea (ICES), and a stock assessment workshop that Spain, Japan and South Africa will provide for CCAMLR members.

Table 2 – Options for capacity building in the Science theme (and straddling themes) for the capacity needs expressed by SIOFA CCPs during the consultation with the Executive Secretary. Most options were developed by the Secretariat (Science Officer), while some were developed by SC10.

ID #	Need	CCP	Theme	CCP proposed activity	Secretariat proposed option 1	Secretariat proposed option 2	Secretariat proposed option 3
24	Capacity building to improve onboard data collection in trawl fishery	Thailand	Data/Science	Sharing experience among CCPs to enhance trawl data collection which may include data collection technology, data management and data analysis	<p><b>Online Training for Observers</b></p> <p>Organize online workshops to train observers on proper data collection methods (catch composition, bycatch, species identification, length, and weight). Include hands-on training on using data collection tools, such as electronic logbooks or tablets</p>	<p><b>Practical Onboard Training for Observers</b></p> <p>Organize onboard workshops to train observers on proper data collection methods (catch composition, bycatch, species identification, length, and weight). Include hands-on training on using data collection tools, such as electronic logbooks or tablets</p>	<p><b>Data Quality Control and Analysis Workshops</b></p> <p>Conduct workshops focused on quality control procedures for onboard data, including strategies for minimizing errors in data entry and how to flag outliers or anomalies during data collection.</p>
7	Identification of deep-water sharks	Mauritius	Science		<p><b>DNA Barcoding Training</b></p> <p>Provide training on DNA barcoding techniques and their use in species identification, enabling fisheries personnel to identify deep-water sharks using genetic markers</p>	<p><b>Field Identification Apps</b></p> <p>Train on and promote the use of the FAO mobile app that assists with the real-time identification of deep-water sharks, incorporating features like photo recognition and a species database</p>	<p><b>Species Identification Workshops</b></p> <p>Organize workshops focusing on the morphological characteristics and identification of deep-water sharks using field guides and expert-led sessions</p>

ID #	Need	CCP	Theme	CCP proposed activity	Secretariat proposed option 1	Secretariat proposed option 2	Secretariat proposed option 3
8, 22	Identification of VMEs [indicator taxa]	Mauritius, Thailand	Science	Trainings for identification methodologies, updating identification guides, translation of the SIOFA VMEs identification guide to local languages (Thailand)	<p><b>VME Indicator Taxa Identification Workshops</b></p> <p>Offer targeted training on recognizing VME indicator species, such as certain corals, sponges, and other benthic organisms. Provide visual aids and interactive sessions with specimen samples, photos, and video footage of these taxa in situ.</p>	<p><b>Taxonomic Identification Training with Field Guides</b></p> <p>Develop and distribute comprehensive field guides for identifying key VME indicator taxa in the region and provide hands-on training sessions in the field.</p>	<p><b>Collaboration with Marine Taxonomists</b></p> <p>Organize training with marine taxonomists and biodiversity experts to provide deeper insights into VME indicator taxa in a laboratory setting. This could include practical sessions in which trainees can learn to identify these taxa and understand their ecological roles.</p>
11	Collection and analysis of biological samples, such as gonads and otoliths, of deep-water demersal species	Mauritius	Science		<p><b>Laboratory Techniques for Biological Sample Processing</b></p> <p>Organize laboratory training sessions on the extraction and analysis of gonads and otoliths from deep-water species, including aging techniques and reproductive analysis</p>	<p><b>Genetic sampling techniques</b></p> <p>SC10 noted the value of providing training in genetic sampling using sterile techniques, especially using tools such as biopsy punches.</p>	

ID #	Need	CCP	Theme	CCP proposed activity	Secretariat proposed option 1	Secretariat proposed option 2	Secretariat proposed option 3
9	Undertaking stock assessment studies for deepwater demersal species	Mauritius	Science	Training can be dispensed by experts working in collaboration with SIOFA	<p><b>Stock Assessment Methodology Training</b> Provide training on stock assessment methodologies, focusing on deep-water demersal species, including surplus production models, biomass estimation, and age-based assessments. SC10 noted that other institutions (e.g. SPC, ICES) are providing stock assessment training that SIOFA developing CCPs might be able to participate in.</p>	<p><b>Use of Modeling Software for Stock Assessments</b> Organize workshops on the use of stock assessment software (e.g., Stock Synthesis, VPA, CASAL, JABBA, or biomass models) tailored to deep-water species.</p>	<p><b>Collaborative Research Programs</b> Implement field-based stock assessment programs where scientists from multiple countries and organizations collaborate on deep-water stock surveys, data collection, and analysis</p>
10, 23	Preparation of a BFIA report, Capacity building on impact and risk assessment methods to incorporate in BFIA	Mauritius, Thailand	Science		<p><b>Risk Assessment Frameworks and Tools</b> Offer training on various risk assessment frameworks (e.g., qualitative and quantitative risk models) and tools, with a focus on identifying the potential risks associated with bottom fishing on benthic habitats.</p>	<p><b>BFIA Methodology and Case Study Training</b> Conduct workshops on the preparation of BFIA reports, with a focus on data collection, impact pathways, and the relationship between fishing practices and ecosystem health</p>	<p><b>Expert-led Writing and Peer Review Sessions</b> Organize writing workshops where experienced practitioners guide participants through the BFIA process. Involve peer review sessions where participants critique and improve draft BFIA reports.</p>

ID #	Need	CCP	Theme	CCP proposed activity	Secretariat proposed option 1	Secretariat proposed option 2	Secretariat proposed option 3
18	Training on CPUE standardization processes	Seychelles	Science		<p><b>CPUE Calculation Methodology Workshops</b> Provide training on different CPUE calculation methods and how to standardize them across regions and fleets, including addressing biases and ensuring consistency in data.</p>	<p><b>Training on Statistical Software for CPUE Analysis</b> Offer hands-on workshops on using statistical software (e.g., R, SAS) to standardize CPUE data and analyze catch trends across different fleet types and fishing locations.</p>	<p><b>Peer-to-Peer Data Review Sessions</b> Establish peer review mechanisms where fishery scientists review each other's CPUE standardization processes and outcomes to ensure consistent and reliable data.</p>
19	Development and implementation of Harvest Control Rules (HCR) and Management Strategy Evaluations (MSE)	Seychelles	Science		<p><b>HCR and MSE Design Workshops</b> Offer workshops focused on the theory and application of HCRs and MSE, emphasizing their role in ensuring sustainable fishery management and adapting to uncertainty.</p>	<p><b>Simulation Exercises for HCR and MSE</b> Facilitate hands-on simulation exercises where participants develop HCRs and evaluate them through MSE models, helping them understand trade-offs and best management practices.</p>	<p><b>Mentorship Program for MSE Application</b> Pair fisheries managers and researchers with mentors who have experience in applying MSE to fisheries, providing guidance on how to incorporate these tools into real-world fisheries management.</p>

*Options for capacity building in the Compliance and straddling themes*

Table 3 summarizes the options proposed by the Secretariat for the capacity building needs expressed by SIOFA CCPs during the consultation with the Executive Secretary, within the Compliance theme (and straddling themes). It should be noted that the capacity building needs of similar sub-themes have been grouped together, and some interventions may be applicable to more than one capacity building needs.

*Table 3 – Options for capacity building in the Compliance and straddling themes for the capacity needs expressed by SIOFA CCPs.*

ID #	Need	CCP	Theme	CCP proposed activity	Secretariat proposed option 1	Secretariat proposed option 2	Secretariat proposed option 3
3	Strengthen monitoring and evaluation technology in fishery area	China	Compliance	None	Facilitate <b>workshops</b> by a key expert in the various satellite technologies used to monitor fisheries activities, including data analysis techniques for fisheries monitoring.		
13	Capacity-building programs for advanced surveillance operations, data collection, and analysis	Seychelles	Compliance/Data	None		Facilitate <b>workshops</b> by a key expert on advanced surveillance operations, data collection, and analysis, including risk assessment in fisheries surveillance.	
15	Support for acquiring and maintaining satellite monitoring systems, electronic monitoring systems (EMS), and automated reporting systems	Seychelles	Compliance	None		Facilitate engagement with potential service providers of such systems.	
16	Strengthening regional cooperation for information sharing and joint surveillance efforts.	Seychelles	Compliance	None	Proactively support ongoing regional initiatives aimed at sharing information regionally and undertaking joint surveillance in our capacity as an RFMO.		

ID #	Need	CCP	Theme	CCP proposed activity	Secretariat proposed option 1	Secretariat proposed option 2	Secretariat proposed option 3
17	Developing and participating in regional MCS networks to enhance coordination and prevent IUU fishing.	Seychelles	Compliance	None	Proactively support ongoing regional initiatives aimed at sharing information regionally and undertaking joint surveillance in our capacity as an RFMO.	Include best practices by such a organisations in a comprehensive guideline to implement SIOFA CMMs	
12	Strengthening of port state measures in connection with the implementation of SIOFA CMMs	Mauritius	Compliance	None	Undertake in-country missions to conduct training in the SIOFA Port Inspection Scheme.	Develop an implementation manual for implementing the SIOFA Port Inspection Scheme.	Support integration of SIOFA Port Inspection Scheme into domestic port inspection procedures
14	Specialized training for enforcement officers on inspections, regulation enforcement, and species identification	Seychelles	Compliance	None		Facilitate <b>workshops</b> by a key expert on species identification of key SIOFA Species	Develop a species identification guidebook to be used by inspectors

*Options for capacity building in the Data theme*

Table 4 summarizes the options proposed by the Secretariat for the capacity building needs expressed by SIOFA CCPs during the consultation with the Executive Secretary, within the Data theme.

*Table 4 – Options for capacity building in the Data theme for the capacity needs expressed by SIOFA CCPs.*

<b>ID #</b>	<b>Need</b>	<b>CCP</b>	<b>Theme</b>	<b>CCP proposed activity</b>	<b>Secretariat proposed option 1</b>	<b>Secretariat proposed option 2</b>	<b>Secretariat proposed option 3</b>
21	Data management and processing to meet SIOFA's reporting obligations	Seychelles	Data		Gap analysis and in-country support workshop in the CCP Fisheries data collection and management centre. Identification of CMM requirements and relevant data available in CCP systems.	Provision of a sub sample fisheries logbooks as provided by the fishing industry for each fishing flag to the Secretariat, for identifying any missing data item to be collected and provided	Support to establish or enhance CCP fisheries information database, and assistance in building standardized queries or reports that would generate appropriate datasets ready for submission according to SIOFA CMM and templates.

*Options for capacity building in the General Capacity theme*

Table 5 summarizes the options proposed by the Secretariat for the capacity building needs expressed by SIOFA CCPs during the consultation with the Executive Secretary, within the General Capacity theme.

*Table 5 – Options for capacity building in the General Capacity theme for the capacity needs expressed by SIOFA CCPs.*

<b>ID #</b>	<b>Need</b>	<b>CCP</b>	<b>Theme</b>	<b>CCP proposed activity</b>	<b>Secretariat proposed option 1</b>	<b>Secretariat proposed option 2</b>	<b>Secretariat proposed option 3</b>
1	Strengthen exchanges between CCPs	China	General capacity				
2	Strengthen relevant cooperation between CCPs and developing countries	China	General capacity				
4	Strengthen resource conservation	China	General capacity				
5	Help to identify real and effective needs and propose sustainable solutions	Union of Comoros	General capacity				
6	English language capacity	Union of Comoros	General capacity				
20	Capacity building to address mandatory requirements under SIOFA	Seychelles	General capacity				

## Discussion

The assessment of capacity-building needs among SIOFA developing states highlights significant perceived gaps in scientific, compliance, and data-related capabilities. These gaps, identified through consultations with Contracting Parties (CCPs), directly impact the ability of developing states to meet their obligations under the Agreement. The responses indicate a strong demand for technical assistance in stock assessments, species identification, fisheries impact analyses, and compliance measures, notably in the implementation of the Port Inspection Scheme and the use of technology to strengthen fisheries monitoring. The diversity of needs reflects varying levels of institutional and technical capacity across the region, emphasizing the necessity for tailored and flexible capacity-building initiatives.

A key challenge in addressing these needs is the absence of some responses, which limits the ability of SIOFA to develop fully representative strategies and suggests potential barriers to participation, such as administrative constraints or limited awareness of available support mechanisms. Ensuring more comprehensive participation in future consultations will be crucial for designing effective capacity-building programs.

The options proposed by the Secretariat in this paper provide a structured framework for addressing the identified needs across all themes. Training programs on species identification, stock assessments, and fisheries impact evaluations represent a critical step toward strengthening the scientific foundation of fisheries management. This is also relevant for the other interventions proposed for the other themes. However, to ensure the long-term sustainability of these efforts, the development of mentorship programs and regional cooperation mechanisms should be prioritized. Additionally, a systematic evaluation of the effectiveness of implemented capacity-building initiatives will be necessary to refine approaches and maximize their impact.

Please note that the Secretariat was not tasked with estimating the resource needs for these options and/or of the potential sources of funding that could support any action undertaken, so these considerations were not within the scope of this paper. When considering the options proposed by the Secretariat, the SC, the CC and the MoP should recall that SIOFA has recently embarked in a capacity building project financed by the EU under the SWIO Programme, where some of the developing states included in this paper (Mauritius, Seychelles) have also expressed similar needs for their capacity building. Therefore, it is recommended to exercise some care when discussing the financing of selected options to ensure that there are no overlaps between the SWIO Programme and any other actions that SIOFA might undertake.

Ultimately, enhancing the technical and institutional capacity of developing states is essential for the equitable and effective implementation of SIOFA's Conservation and Management Measures (CMMs). By fostering stronger scientific collaboration and compliance capabilities, these initiatives will contribute to the sustainable management of fisheries resources in the Southern Indian Ocean.

## Annex 1 – Executive Secretary’s request to provide feedback

### **Subject: Consultation for input on capacity-building needs for developing states**

Dear [SIOFA CCP],

During the Eleventh Meeting of the Parties (MoP11), it was emphasized that additional measures are required to address the specific needs of developing states, with particular attention to the least developed countries and small island developing states. This decision is in accordance with Article 13 of the Agreement, which underscores the importance of supporting these States that borders the Area.

A Contracting Party is classified as a developing country if it falls under the "Low" or "Middle" income categories of the World Bank's latest classification, in accordance with the sources outlined in the Rules of Procedure. As India falls within this classification, it is directly impacted by this consultation, which seeks input on capacity-building needs for developing states.

In alignment with this commitment, and as detailed in paragraph 246 of the MoP11 final report, the Secretariat has been tasked with developing a comprehensive document outlining strategic options for facilitating and addressing the capacity-building needs of Contracting Parties that are developing States.

This document will serve as a reference for discussions at the upcoming meetings of the Scientific Committee (SC10), the Compliance Committee (CC9), and the Meeting of the Parties (MoP12).

To guarantee that this framework addresses the unique challenges encountered by developing States, the Secretariat is hereby seeking your input on the above. Your insights will be important in developing a document that properly captures your unique challenges and ensures the proposed options adequately addresses them. As such the Secretariat kindly request a detailed outline of your requirements.

We kindly request that you submit your needs and wishes by October 31<sup>st</sup>, to ensure they are included in our review process. If you already have views on how best to achieve such needs, you can also suggest it.

Should you need more information or want to discuss any part of this initiative further, please do not hesitate to contact us ([secretariat@siofa.org](mailto:secretariat@siofa.org)). We are also available to schedule an online meeting if you prefer a more direct discussion with the Secretariat.

Sincerely,

Thierry CLOT

SIOFA Executive Secretary

## Annex 2 – Responses received to the Executive Secretary inquiry on capacity building needs of developing states

### SUMMARY OF THE RESPONSES RECEIVED CONCERNING THE CAPACITY BUILDING NEEDS OF DEVELOPING STATES

#### *CHINA*

Fri, 18 Oct 2024 17:56:05 +0800 (CST)

#### 渔业局远洋渔业处

China greatly appreciates the information provided by the Secretariat regarding the need to promote capacity building of developing states and seek China's opinions. As the world's largest developing country, China has always been committed to the scientific conservation and sustainable utilization of marine fisheries. China also promotes the sustainable development of fisheries in the world, and works with members to assume corresponding responsibilities and obligations in RFMOs. China actively promotes "A Marine Community with A Shared Future" and supports the development of fisheries in other developing countries.

As a CCP and one of the developing countries in the Southern Indian Ocean Fisheries Agreement, China hopes to strengthen exchanges between CCPs, cooperates developing countries in fishing, resource conservation, investigation, monitoring and evaluation technology in fishery area. In addition, China is willing to strengthen relevant cooperation between CCPs and developing countries, actively plays an important role, jointly safeguard the sustainable development and utilization of fisheries in the SIOFA Area in order to promote its development.

#### *COOK ISLANDS*

[No response received]

#### *UNION OF COMOROS*

Thu, 28 Nov 2024 16:26:19 +0400

#### **Rachad Mohamed Ali Mohamed**

In response to circular 2024-09-27/SIOFA/ES, the Union of the Comoros requests two things :

- 1- The support of secretariat for very in-depth exchange in order to help the Union of the Comoros to identify real and effective needs and propose sustainable solutions
- 2- The Union of the Comoros us exposed to the problem of the English language barrier and expresses its wish to benefit from practical training in an English-speaking country abroad allowing its representatives at APSOI to improve English.

#### *INDIA*

[No response received]

*MAURITIUS*

Fri, 29 Nov 2024 11:03:43 +0400

**Doorvanand Kawol**

In line with the recommendations of the Performance Review Panel to consider capacity building activities for developing states, Mauritius proposes the following:

1. Identification of deep-water sharks. The catch of deep-water sharks as bycatch in trawl fishery is usually observed and as Mauritius will shortly embark in bottom fishing, a training on the identification of sharks is important.
2. Identification of VMEs is also a great challenge and appropriate training will be very helpful for better management of endangered ecosystems.
3. It is also understood that undertaking stock assessment studies for deepwater demersal species like alfonsino, orange roughy and toothfish are great challenges for developing states. In this context, to better understand the stock assessment process, Mauritius proposes that in this field, some training can be dispensed by experts working in collaboration with SIOFA.
4. Mauritius also considers that the preparation of a BFIA report requires better understanding of the BFIA Standards as the conditions and requirements need an efficient interpretation of this document. Therefore, Mauritius wishes to develop its capacity in this field.
5. Training on the collection and analysis of biological samples such as gonads and otolith of deep-water demersal species.
6. A training programme on strengthening of port state measures in connection with the implementation of SIOFA CMMs in order to achieve maximum compliance level.

*SEYCHELLES*

Thu, 19 Dec 2024 05:47:44 +0000

**Vincent Lucas**

Thank you for your letter dated November 29, 2024, regarding the consultation for capacity-building needs of developing states under the Southern Indian Ocean Fisheries Agreement (SIOFA). We appreciate the Secretariat's efforts to address the unique challenges faced by Contracting Parties, particularly the least developed countries and small island developing states.

In response, please find below the key capacity-building priorities for Seychelles:

1. Enhancing Monitoring, Control, and Surveillance (MCS) Techniques:
  - a. Capacity-building programs for advanced surveillance operations, data collection, and analysis.
  - b. Specialized training for enforcement officers on inspections, regulation enforcement, and species identification.
2. Advanced MCS Technologies:
  - a. Support for acquiring and maintaining satellite monitoring systems, electronic monitoring systems (EMS), and automated reporting systems.
3. Regional Cooperation and Networks:
  - a. Strengthening regional cooperation for information sharing and joint surveillance efforts.

- b. Support for developing and participating in regional MCS networks to enhance coordination and prevent IUU fishing.
4. Management and Scientific Development:
  - a. Training on CPUE standardization processes.
  - b. Capacity building for the development and implementation of Harvest Control Rules (HCR) and Management Strategy Evaluations (MSE).
5. Compliance with SIOFA Requirements:
  - a. Capacity building to address mandatory requirements under SIOFA.
  - b. Training on data management and processing to meet SIOFA's reporting obligations.

We believe these measures will significantly enhance Seychelles' ability to sustainably manage its fisheries resources and meet the obligations under the Agreement. Should you require further details on any of these points, we are happy to provide additional information or discuss further.

Thank you for this opportunity to contribute to the development of the capacity-building framework.

*THAILAND*

Wed, 30 Oct 2024 12:15:02 +0400

**Kanyarat Woraprayoth**

Thailand proposal on capacity building needs for developing states in SIOFA

Recommendation #6 of the Performance panel

The Panel recommends SIOFA CCPs consider capacity building activities for developing States to undertake BFIA as per the SIOFA standards.

As requested by the secretariat on input on capacity building needs for developing states, Thailand would like to propose the capacity building needs as follows

1. Capacity building on VME identification. This is due to difficulty on identification of VMEs caused by morphological complexity, limited identification resources, as well as limited knowledge and inexperience in VME identification of data collectors. Therefore, trainings for identification methodologies, updating identification guides are crucial for fishery resource management in SIOFA. Also, translation of the SIOFA VMEs identification guide to local languages will help facilitate using the guideline by local observers.

2. Capacity building on impact and risk assessment methods to incorporate in BFIA. As one of the key elements of BFIA is the impact analysis on fishing activities on habitats, fishing grounds and targeting fishery resources. We saw that several impact assessment methods were used in BFIA provided by SIOFA CCPs. Some methods are simple but some are complicated, and different methods gave different aspects. It is crucial that the impact assessment methods should be well understand and can be undertake efficiently by every CCPs, to ensure the BFIA are met the SIOFA standards.

3. Capacity building to improve onboard data collection in trawl fishery. Due to characteristic of trawls which usually catch multiple species in an operation, that cause many challenges in trawl data collection e.g., inaccurate species identification, underreport catch of some species, aggregated catch report, time consuming for collecting data manually, etc. Also, this gear is currently used by many SIOFA CCP vessels nowadays. Addressing these challenges, it is needed for capacity building or sharing experience among CCPs to enhance trawl data collection which may include data collection technology, data management and data analysis.