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SIOFA SC Workshop: Window of Opportunity - Research Vessels in SIOFA (WS2025-ORS)

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Past, current and upcoming research cruises in SIOFA

The Workshop Conveners

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Abstract

This document provides a summary of Scientific Committee and Meeting of the Parties discussions on Past, current and upcoming research cruises in SIOFA.

To create this summary, all the reports of the annual meetings of the Scientific Committee since 2013 (and the 2025 report of the Meeting of the Parties) were searched for references to "research cruises" or "research surveys". Relevant paragraphs in these reports are described below.

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Results

a. Discussions on past scientific surveys (from 2013 to 2024)

1. 2018 FAO Nansen programme habitat survey in the Saya de Malha bank -

- SC3 Report
  - Para 133. The SC was informed that from the 4th May to 4th June 2018 there is a bottom habitat survey planned under the EAF-Nansen Programme on the Saya de Malha bank, which may help assess habitat and VMEs in this area. It was noted that Seychelles and Mauritius are involved in this survey.

  - Para 264. The Executive Secretary gave an update on the EAF-Nansen program, reporting that the R.V Dr Fridtjof Nansen is currently undertaking scientific surveys in the southern Indian Ocean focusing on fisheries impacts, oil and gas pollution impacts and climate change impacts. Mauritius and Seychelles are participating in the 4th May – 4th June 2018 survey. FAO has indicated a willingness to discuss informal collaboration with SIOFA around this program. Cook Islands noted that it was working with this program to address absorption issues with acoustic data.

- SC4 Report
  - Para 167. The SC was informed that Seychelles had been involved in the most recent EAF- Nansen cruise which took place from May to June in 2018. In 2008 there was also a survey that covered Mascarene Plateau. The SC was advised of a Nansen data policy which may be used by SIOFA to request data and that benthic mapping data collected could be of interest. It was explained that the owners of the data are the lead participating countries and Mauritius is the current owner of the data. The report from the most recent cruise was due to be finalised in December 2018 but has not yet been completed. Once the report has been finalised this can be shared with SIOFA.

2. 2022 Monaco Exploration research cruise on the Saya de Malha bank

- SC9 Report
  - Para 386. The SC noted the preliminary report of the Monaco Exploration research cruise on the Saya de Malha Bank in 2022 (SC-09-INFO-25).

  - Para 387. The SC thanked Monaco Exploration for submitting the preliminary report.

  - Para 388. The SC requested the Seychelles and Mauritius to continue efforts to contact Monaco Exploration, through the JMA, on accessing the data collected by the research cruise.

3. 2023 Chinese scientific surveys on squid

- SC9 Report
  - Para 18. … In addition, China registered two scientific research vessels that combine pelagic trawling, squid jigging and pelagic longline fishing to conduct scientific surveys on fishery resources in the SIOFA Area in 2023. As of February 12, 2024, the two research vessels were still conducting a fishery resource survey in the SIOFA Area and nearby waters. China plans to elaborate on the relevant survey data and catch data in next year's national report.

  - Para 19. Some CCPs noted that they had only learned of China's research surveys in the SIOFA Area for the first time from China's National Report. The SC discussed the process by which research vessels can conduct activities in the SIOFA Area and the process by which such activities are notified to the Secretariat. The SC noted that there are currently no such processes in place and agreed to discuss this matter further under agenda item 4.

4. 2024-2025 Chinese scientific surveys on multiple fishery resources

- SC10 Report
  - Para 19. … In addition, China registered two scientific research vessels that combine pelagic trawling, squid jigging and pelagic longline fishing to conduct scientific surveys on fishery resources in the SIOFA Area in 2024. As of 1 February 2025, the two research vessels were still conducting a fishery resource survey in the SIOFA Area and nearby waters. China plans to elaborate on the relevant survey data and catch data in next year's national report.

- Para 303. Dr Yue Jin (China) presented SC-10-54 (restricted), which provided a scientific fisheries survey report from cruises conducted by China in the SIOFA Area in 2023-2024. From November 2023 to March 2024, two Chinese fisheries scientific research vessels, Lanhai 101 and Lanhai 201, conducted comprehensive fisheries resource surveys in the SIOFA Area, covering waters between 59°–68°E and 4°S–9°N. The survey involved mid-water trawling, squid jigging, and tuna longlining to study fisheries resources, as well as the distribution of plankton and fish eggs and larvae, and measurements of oceanographic physical characteristics. A total of 145 stations were surveyed to analyse biological community structures, resource distributions, and the relationship between environmental factors and fishing ground formation. Initial findings revealed a high density of fish eggs in the northern waters, indicating potential spawning grounds, and significantly enriched plankton communities during night-time. In the southern waters, relatively higher temperatures and dissolved oxygen levels were observed, suggesting favourable habitats for midwater fisheries and potential migration pathways. Economically important species were identified, and their distributions were found to be closely linked to hydrological conditions, offering insights into ecosystem and population dynamics. This survey provided a scientific foundation for stock assessment and sustainable management in the region.

- Para 304. The SC thanked China for conducting these research surveys and submitting the data to the SIOFA Secretariat, and noted that China plans to conduct further surveys in the same area in 2025 and 2026.

- Para 432. The DSCC presented SC-10-INFO-22, which provided a review of different management arrangements to protect VMEs from significant adverse impacts. The DSCC proposed a review of encounter thresholds and the taxa subdivision for trawl and longline encounters with VME indicator taxa. The DSCC also looked at the Saya de Malha Bank and supported the protection of the area and the inclusion of sea grasses and rhodolith beds as VME indicator taxa. The DSCC noted that a Greenpeace research cruise of Saya de Malha in March 2021 had information that would be useful to SIOFA deliberations and expressed its intention to present the findings to a future meeting.

- SC10 Report, Para 483. The SC noted that China presented information from its scientific fisheries surveys during cruises conducted by China in the SIOFA Area in 2023-2024 under agenda item 7.5.3 (SC-10-54) (restricted).

- SC10 Report, Para 484. The SC reiterated its thanks to China for presenting this work and its plans for conducting future cruises.

- SC10 Report, Para 485. China informed the SC that it has recently completed another cruise from October 2024 to March 2025 and that it intends to submit the data to the SIOFA Secretariat and to present the results at SC11. China also expressed its intention to present the plans for its next research cruise to the MoP.

b. Discussion on current and upcoming scientific surveys (2025-2026)

5. 2025 FAO Nansen programme research cruise

- SC9 Report
  - Para 391. The SC noted the proposal for a research cruise for the R.V. Dr Fridtjof Nansen to be conducted in June 2025. The SC noted that the research vessel could provide valuable data for SIOFA but that there was currently limited information available on its activities for SIOFA SC to consider.

  - Para 392. The SC requested that the proponents of the research cruise provide a more detailed cruise plan to the MoP for consideration.

  - Para 393. The SC recommended that the MoP should consider the type of fishing gear, the areas proposed to be fished, potential benthic impacts, the species proposed to be caught and the amount of catch proposed to be taken before approving the R.V. Dr Fridtjof Nansen research cruise.

  - Para 394. The SC endorsed the proposal by the DSF Project for collaboration on climate change work.

  - Para 395. The SC requested that the DSF Project communicate with the SIOFA Secretariat and relevant experts on progressing this work.

- Para 396. The SC requested that the DSF Project work with the SIOFA Secretariat to assess the interest level among SIOFA CCPs to engage in:
  a. partnering in stock assessment/rapid change work with DSF Project/ICES.
  b. working with FAO on stock status for SOFIA 2026.
  c. planning a joint R.V Fridtjof Nansen cruise in the SIOFA Area.
  d. identifying opportunities for training/capacity development.

- Para 486. The Data Officer introduced SC-10-33, which provided a report on efforts to obtain data from past cruises of the Nansen Project in the SIOFA Area. In 2024, the SC requested the Secretariat to contact the FAO and the EAF Nansen Programme staff to retrieve data collected in the SIOFA Area that could be of use or value. The Secretariat had been in communication with FAO since August 2024, but at the time that SC-10-33 was submitted to the SC, progress had stalled and the Secretariat had yet to receive the data. The Secretariat provided a subsequent update that the Nansen Project has submitted the data on March 11.

- Para 487. The FAO DSF Project explained that because SIOFA was not a partner for these cruises, SIOFA had to go through the standard data request process, which can sometimes be lengthy. Furthermore, although data from the first two cruises could be made readily available, it was more difficult preparing and providing data from the third cruise, as this cruise entered and exited EEZs, which meant that there were data confidentiality requirements that had to be adhered to.

- Para 488. The Data Officer produced a revised paper with the updated information (SC-10-33- Rev1).

- Para 489. Dr Tony Thompson, FAO DSF Project presented SC-10-59 on the upcoming R.V. Dr Fridtjof Nansen cruise in the Indian Ocean on 20 November to 10 December 2025, which provided details of the draft work plan. This cruise was presented to SC9 (SC-09-32-Rev1) and to MoP11 (MoP-11-27-Rev1). The MoP noted the potential benefits of the R.V. Dr Fridtjof Nansen research cruise and agreed to approve the cruise plan, with certain conditions (para 108, MoP11 Report).

- Para 490. The SC reviewed the draft work plan.

- Para 491. The SC noted that the R.V. Dr Fridtjof Nansen cruise is operated by Norwegian officers, crew and lead scientists, and invites up to 18 scientists and observers to attend the cruise in various counterpart and training positions. The SC proposed the following personnel join the cruise representing SIOFA: Scientist in charge (Tony Thompson), fishing master (Phil Gaugler), acoustics (Marco Milardi), benthos (Alexis Martin), and deepwater sharks (Paul Clerkin). An acoustic expert (Gavin Macauley) will provide support in developing the sailing orders and post-cruise analysis. The sailing orders is the primary document used to guide the work programme and will be developed by Tony Thompson with support of the counterpart leaders mentioned above and the EAF Nansen programme. The Cook Islands, Thailand, China, and the EU expressed interest in participating in the cruise, and the SC welcomed others to express their interest, preferably by the end April 2025, to the Science Officer. The SC also suggested that a seabird/marine mammal expert be carried, and a potential person identified from France (OT). The SC noted that a gender target of at least 40% women among participants is desirable.

- Para 492. The SC noted that sailing orders should be completed by the end of April 2025.

- Para 493. The SC suggested including benthic sampling in the proposed Banana BPA, in addition to the proposed Walter's Shoal BPA and potentially the proposed Atlantic Bank BPA. The SC noted the long sailing times and suggested that sampling sites could be adjusted to shorten these.

- Para 494. In addition to capacity building during the cruise, the SC suggested that the DSF Project could support training in data analysis and submitting primary publications.

- Para 495. The SC requested a revised work plan for the R.V. Dr Fridtjof Nansen research cruise be submitted that included the above suggestions.

- Para 496. The SC reviewed the revised draft work plan (SC-10-59-Rev1) and recommended that the MoP note that the SC approved the draft work plan subject to further development in collaboration with the EAF Nansen programme and key scientists.

- Para 497. The SC recommended that the MoP note that the R.V. Dr Fridtjof Nansen will operate according to the conditions approved by the MoP (para 108, MoP11 Report), including that:
  a. the data are submitted to SIOFA within 9 months of the cruise (i.e. by October 2026).
  b. information placed in the public domain must be in accordance with SIOFA data rules.
  c. CCPs participate in work and capacity building.

- Para 498. The SC noted that SIOFA is the principal partner to this collaboration with the EAF Nansen programme and will benefit from the information acquired during the cruise.

- Para 499. The SC noted the potential value of holding a workshop to explore opportunities for collaboration with research cruises by CCPs and other organisations to enhance SIOFA's scientific knowledge, including joint design of sampling programs to ensure consistency across different vessels and maximum utility of sampling data. The SC agreed to include such a workshop in its work plan.

- Para 500. The SC noted the MoP's initial discussions on the development of a specific research cruise CMM and reaffirmed the SC9 recommendation that such a CMM be developed (para 105, SC9 Report).

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