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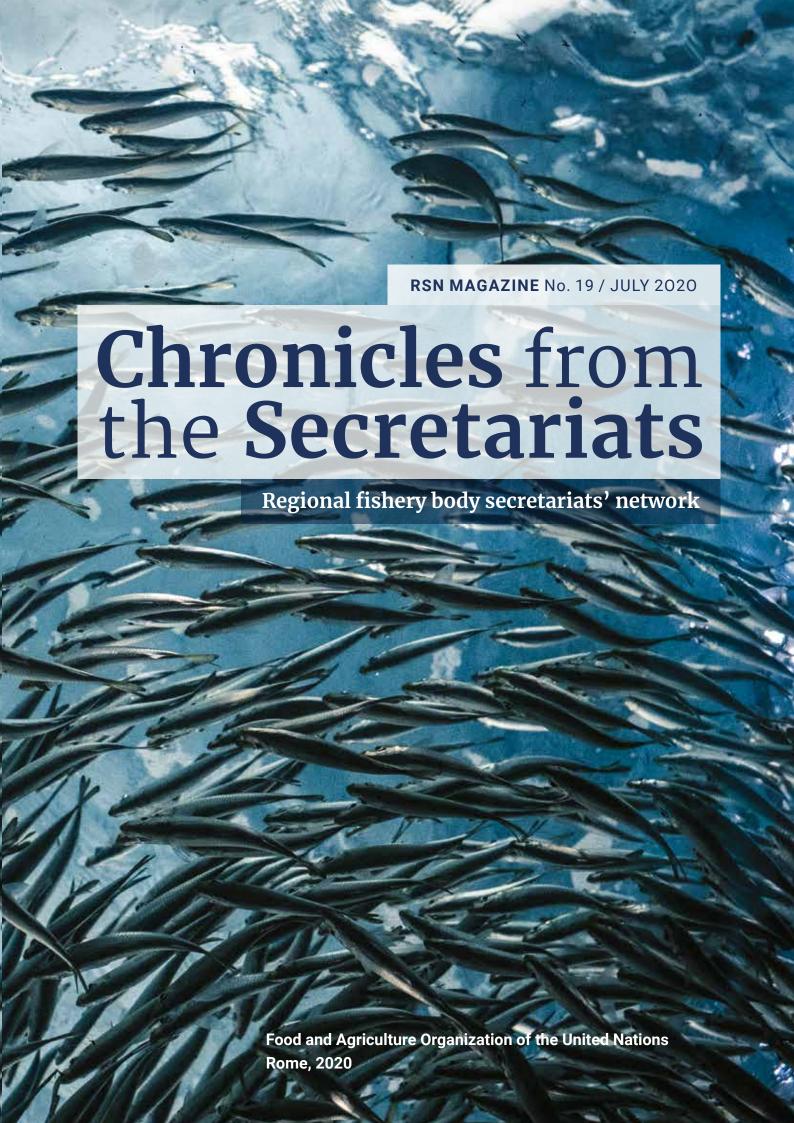
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SECTION 1



THE IMPORTANCE OF BEING A REGIONAL FISHERY BODY



PIERO MANNINI (FAO)

Photo: ©Giulio Napolitano



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egional ocean governance is not a new concept and the international community is increasingly acknowledging its importance because "it offers a way to bring together a wide range of issues and serves as a vehicle for thinking about and utilizing ecosystem-based management" (Hershman and Russell, 2005).

Some of these issues are of paramount importance and should be mentioned: food security, management of natural resources and marine scientific research. International cooperation is at the core of these issues since they are interlinked. Once effective cooperation is proven in one area, it will have an impact on another area because current global experiences indicate that cooperation in scientific research is the precursor to cooperation in active management. Ultimately, every country would be better off with cooperation than without it.

The role and function of regional fishery bodies (RFBs), both regional fisheries management organizations (RFMOs) and regional fisheries advisory bodies (RFABs) are essential to facilitate and reinforce regional collaboration. Thus, it is not possible to articulate successful ocean governance policies at any scale without considering the regional dimension as the engine that will drive meaningful results.

The negotiators of the 1982 United Nations Convention on the Law of the Sea (UNCLOS), fully aware of the importance of the regional sphere, established ad hoc regional mechanisms to ensure environmental protection and proper management of fish stocks to avoid overexploitation and political conflicts at a global scale.



Recent memory of incidents such as the cod wars – between the United Kingdom and Iceland, over the right to fish in Icelandic waters, from the 1950s and lasting for twenty years – ended almost at the outset of the UNCLOS negotiations and drove solutions such as the treaty recognition of the Exclusive Economic Zone.

Neighbouring states are likely to have more issues in common at the same time than issues in conflict; therefore, the impact of adequate regional ocean governance will benefit all parties involved. Moreover, Sustainable Development Goal (SDG) 14's of the United Nations (UN) zero overfishing target requires that within the fisheries and aquaculture sector, the commitment is to leave no one behind for the benefit of all fish workers, their families and their communities.

Regional fishery bodies (RFBs) are a key mechanism to promote regional cooperation planned for by UNCLOS, as they aim to the long-term sustainability of shared fisheries stocks and the pursue of SDG 14. Therefore, it is not only an effective tool to target ocean sustainability but also, and more importantly, it is a political instrument at the service of common regional interests. Indeed, while politicians may argue in strident contrast in a certain region, in that same region scientists are able to sit around a table and cooperate in an exemplary manner. RFBs, and particularly the RFMOs have proven to be a means to combat illegal, unregulated, and unreported (IUU) fishing, to ease the tensions among fishing nations in conflict, and to mediate between diverse interest groups. Therefore, in light of their versatility, some scholars refer to RFBs as "vehicles of good governance". An example of this is how many RFMOs regularly transmit information through circulars on IUU vessels to other regional fishery bodies, as appropriate, to enhance cooperation to prevent, deter and eliminate IUU fishing for the benefit of the international community.

Regional fishery bodies are increasingly connected through the regional fishery body secretariats' network (RSN), a mechanism supported by FAO, with functional autonomy from each RFMO and RFABs to serve the common interests of the network.

The RSN could become an effective platform to further regional ocean governance as it facilitates exchanges among RFAB and RFMO secretariats in order to promote sustainable regional fisheries management and aquaculture development and support their activities, including, when appropriate, coordination to represent and highlight their respective positions and policies for the implementation of their mandate.

SECTION 2

The academic's corner



RFMOs: DIVERSITY AND EVOLUTION

by E.J. Molenaar



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Photo: ©E. J. Molenaar

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egional fisheries management organizations and arrangements (RFMO/As) can at present be regarded as the predominant institutions of international fisheries law; at least regional fisheries law. This domain of international law relates specifically to the conservation and management and/or development of marine

capture fisheries. The origins of international fisheries law can be traced back to the end of the 19th century, when North Sea Coastal states adopted multilateral rules on fisheries enforcement at sea. The earliest precursor to the bilateral International Pacific Halibut Commission (IPHC) – established in 1924 – could be regarded as the first RFMO, avant la lettre. The earliest multilateral fisheries bodies were the precursors to the existing Northwest Atlantic Fisheries Organization (NAFO) and the North-East Atlantic Fisheries Commission, both established shortly after World War II.

The 1982 United Nations Convention on the Law of the Sea (UNCLOS) gives subregional and regional organizations a prominent role in intergovernmental cooperation on transboundary fish stocks and high seas fishing, and the 1995 Fish Stocks Agreement acknowledges international recognition of RFMO/As as the principal vehicles for regional fisheries regulation. This was subsequently confirmed in the 2009 Port State Measures Agreement, which also recognizes the critical role of RFMO/As in combating illegal, unreported and unregulated (IUU) fishing.

RFMO/As are a sub-set of the broader category of regional fishery bodies (RFBs). They can be distinguished from other RFBs as they (i) relate to marine fisheries, rather than inland fisheries; and (ii) have a mandate to impose legally binding conservation and management measures on their members, rather than merely exercising an 'advisory' mandate – whether primarily science-oriented (e.g. the International Council for the Exploration of the Sea) or management-oriented (e.g. the Western Central Atlantic Fishery Commission).



Moreover, the need for a dual mandate of conservation and management excludes instruments and bodies that are exclusively aimed at the conservation of fish species, for instance the global Memorandum of Understanding on Sharks adopted under the 1979 Convention on Migratory Species.

There is wide diversity among the RFMO/As in existence today. A key distinction is that RFMOs establish an intergovernmental organization, whereas the Arrangements commonly establish a Conference of the Parties or a Meeting of the Parties as their principal decision-making body. Examples of the latter are the 1994 Central Bering Sea Convention and the 2018 Central Arctic Ocean Fisheries (CAOF) Agreement.

Other key distinctions relate to:

- their institutional setting: whether they are 'stand-alone', part of, or established under, an overarching regime or institution (e.g. the General Fisheries Commission for the Mediterranean (GFCM) established under FAO's constitution);
- their geographical mandate: only coastal state maritime zones; only high seas; or both; and
- their species mandate: specific (groups of) target species or all 'residual' target species in a geographical area.

At the time of writing, there were five tuna RFMOs and 11 non-tuna RFMO/As whose regulatory areas include areas of high seas or consist entirely of high seas.

Whether or not a body qualifies as an RFMO or an RFMA determines the applicability of particular rights and obligations under international fisheries law. These rights and obligations are relevant for both members and non-members of RFMO/ As. Especially relevant for non-members are the rights to engage in fishing and fishing-related activities (e.g. provisioning of fuel, water etc., and transshipment of catch) on high seas pursuant to Articles 87(1)(a) and 116 of the UNCLOS, and the right of states with a 'real interest' to participate in RFMO/As pursuant to Article 8(3) of the Fish Stocks Agreement. Relevant rights for members include the mandate of RFMO/As to deal with nonmembers who undermine the efforts of RFMO/As due to their behaviour as 'free riders'.

The issue of the qualification as an RFMO or an RFMA has so far arisen in three cases: the Joint Norwegian Russian Fisheries Commission (JNRFC), the 2018 CAOF Agreement and the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR).

Further analysis indicates the former two arguably qualify as RFMAs and the latter as 'more than an RFMO'. The qualification of CCAMLR as 'more than an RFMO' is not only justified by its unique objective or the key role accorded to scientific research, but above all by its integration in the Antarctic Treaty System, whose principal role is safeguarding peace. It can therefore be regarded as performing a role in safeguarding peace in addition to its role on the conservation and management of fisheries resources.

This conclusion on CCAMLR lends to the proposition that RFMO/As can perform additional roles besides conservation and management of fisheries resources. This 'role-oriented approach to RFMO/As' is supported by the rules and practices of several other RFMO/As, namely GFCM – in relation to the exploitation of red coral and the regulation of aquaculture; JNRFC – in relation to the harvesting of marine mammals; and the North Atlantic Salmon Conservation Organization – in relation to the regulation of aquaculture and stock rebuilding.



The diversity among the RFMO/As today is also related to the significant evolution of their mandates. A paramount driver in this regard is the ecosystem approach to fisheries management (EAF). This approach arose in response to the various shortcomings of traditional target species-oriented fisheries management, for instance in relation to by-catch of non-target species (i.e. birds and marine mammals) and impacts on benthic ecosystems. Following the pioneering work within CCAMLR - whose 1980 founding treaty gives it an EAF mandate avant la lettre - EAF was incorporated in the Fish Stocks Agreement as the international community's preferred approach to fisheries management. Once participation in the Fish Stocks Agreement broadened, RFMO/As gradually modernized their rules and practices to ensure consistency with the minimum requirements of the Fish Stocks Agreement. In several instances, this occurred with a partial or complete overhaul of founding treaties (e.g. by NAFO).

The actual implementation and operationalization of EAF by RFMO/As has been a process where ecosystem considerations are integrated in a stepwise fashion. Whereas most RFMO/As currently address by-catch mitigation – even though better performance may well be viewed as desirable – so far only a few RFMO/As (e.g. CCAMLR and the South Pacific Regional Fisheries Management Organisation) are taking measures on waste generated by fishing. This despite the fact that abandoned, lost and discarded fishing gear can in some cases contribute to almost 50 percent of marine plastics volume.

Climate change is yet another challenge posed to RFMO/As. It is true that neither the UNCLOS nor the Fish Stocks Agreement mention climate change, and that neither the latter nor any other legally binding global fisheries instrument contain a generally accepted definition for EAF. However, given the holistic objective pursued by EAF, it is difficult to think of any argument that would excuse RFMO/As from taking account of climate change as part of EAF as a matter of principle.



Progress within RFMO/As on integrating climate change into their management processes has been very modest up until now.

Advances have been made in integrating climate change in scientific research, but only a few RFMO/As have managed to go beyond that. Among these is CCAMLR, where progress has unfortunately stalled completely in recent years, despite repeated proposals by some members. Finally, it is well known that climate change needs action in terms of mitigation as well as adaptation. Despite FAO's attention to climate change mitigation and fisheries for more than a decade, all climate change action within RFMO/As relates exclusively to adaptation. That might be due to lack of political support, but it could also be related to the mandates of RFMO/As and how these are viewed by their members. Some measures for reducing emissions

by fishing vessels, for instance on fuel content and efficiency, clearly fall within the mandate of the International Maritime Organization (IMO). Conversely, other measures are clearly outside IMO's mandate, and at first sight within the mandates of RFMO/As – for instance on fuel-use intensive fishing techniques, overcapacity and practices on the transfer and allocation of fishing opportunities.

It may well be that the stepwise evolution in the implementation and operationalization of EAF will at some time in the future culminate in general acceptance among states and within RFMO/As that EAF also requires climate change mitigation. That would be more likely if it becomes a generally accepted practice for all regulatory authorities to assume responsibility for the climate change impacts of the societal sectors or human activities under their purview. In such a scenario, RFMO/As would have to follow suit.





SECTION 3

Special COVID-19



IMPACT OF COVID-19 ON FISHERIES AND AQUACULTURE

A global assessment from the perspective of regional fishery bodies. Initial assessment, May 2020 - by Jon Lansley and Aurora Mateos

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he COVID-19 pandemic has triggered a public health crisis followed by an on-going economic crisis due to the measures taken by countries to contain the rate of infection, such as home confinement, travel bans and business closures, among others.

Although COVID-19 does not affect fish, the fish sector is still subject to indirect impacts of the pandemic through changing consumer demands, market access or logistical problems related to transportation and border restrictions. Each stage of the fisheries and aquaculture supply chain is susceptible to being disrupted or stopped by impacts arising from COVID-19. This in turn may have a damaging effect on fishers and fish farmers' livelihoods, as well as on food security and nutrition for populations that rely heavily on fish for animal protein and essential micronutrients. Similar constraints apply to science and management support operations, which include the functions and roles of regional fisheries bodies.

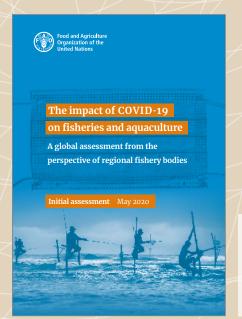
In April 2020, an assessment of the impact of COVID-19 on the work of regional fisheries management organizations (RFMOs) and regional fisheries advisory bodies (RFABs) was conducted in April following an initiative by the FAO Fishing Operations and Technology Branch (FIAO) and in collaboration with the regional fishery body secretariats' network (RSN).

The objective of this assessment was to provide a timely global overview and scale of the impacts from the perspective of the secretariats of RFMOs and RFABs, as well as share examples of good practice and collate suggestions for interventions that may inform and guide the development of mitigation measures.



The report of this assessment provides a summary of responses and was designed to capture initial impacts and restrictions imposed by COVID-19 upon fisheries management, monitoring, control and surveillance, research, employment, demand and price for fisheries products or supply, among others, of both capture fisheries and aquaculture. The results of the survey shed light on the current situation since almost all RFMOs participated in the survey and a significant number of RFABs as well.

The survey highlights the COVID-19 impact mitigation measures that organizations are currently undertaking, or planning to undertake, and also how organizations are designing scenarios for post-COVID-19.

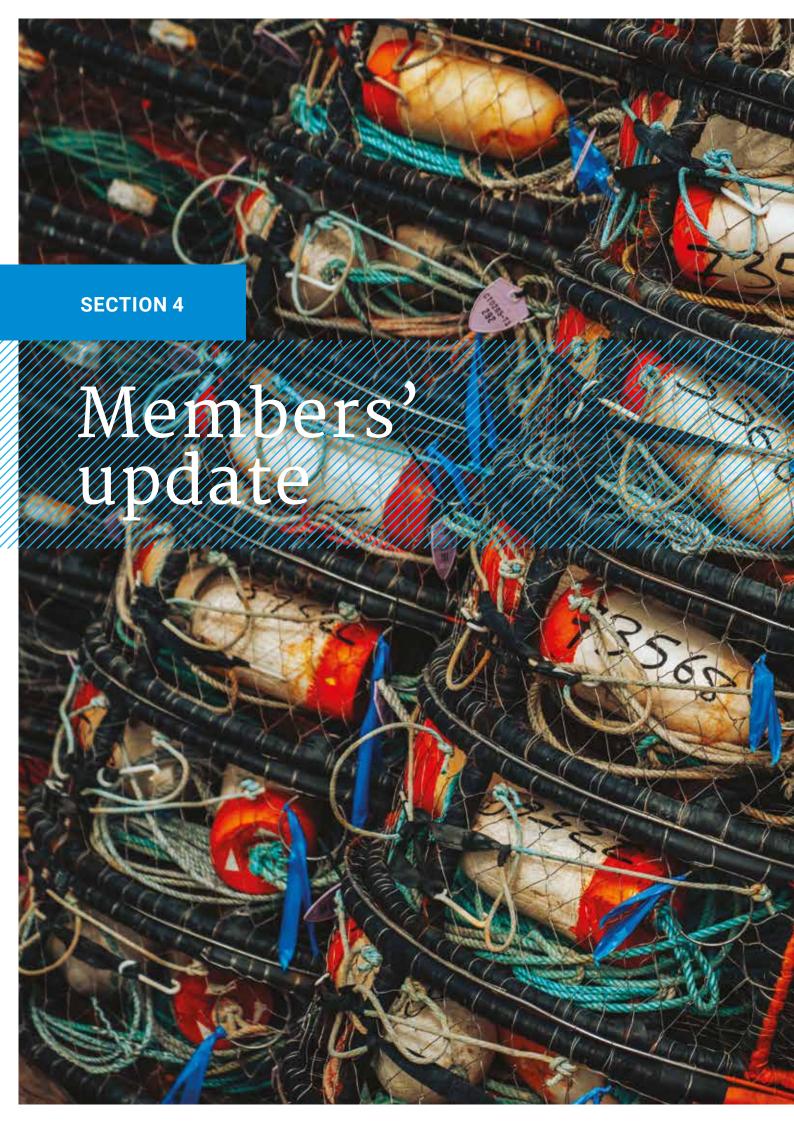


This assessment would not have been possible without the cooperation and participation of the RFMO and RFAB secretariats, whose prompt responses to this request for information is much appreciated.

All parties involved soon realized that as the situation is constantly evolving, follow-up assessments – both at regional and country level – will be required to fully understand the impact that COVID-19 has had on global fisheries and aquaculture.

Full details including findings and outcomes are available through these links:

- → Card page: http://www.fao.org/documents/card/en/c/ca9279en
- → PDF URL: http://www.fao.org/3/ca9279en/ca9279en.pdf





CONTRIBUTIONS FROM:

ACAP: Agreement on the Conservation of Albatrosses and Petrels

ATLAFCO: Ministerial Conference on Fisheries Cooperation among African States bordering the Atlantic Ocean

BOBP-IGO: Bay of Bengal Programme, Intergovernmental Organisation

CPPS: Permanent Commission for the South Pacific

CECAF, CIFAA: Fishery Committee for the Eastern Central Atlantic (CECAF) and the Committee for Inland Fisheries and Aquaculture of Africa (CIFAA)

EIFAAC: European Inland Fisheries and Aquaculture Advisory Commission

GFCM: General Fisheries Commission for the Mediterranean

IATTC: Inter-American Tropical Tuna Commission

ICCAT: International Commission for the Conservation of Atlantic Tunas

ICES: International Council for the Exploration of the Sea

IWC: International Whaling Commission

LVFO: Lake Victoria Fisheries Organization

NAFO: Northwest Atlantic Fisheries Organization

NAMMCO: North Atlantic Marine Mammal Commission

NASCO: North Atlantic Salmon Conservation Organization

NEAFC: North-East Atlantic Fisheries Commission

NPAFC: North Pacific Anadromous Fish Commission

NPFC: North Pacific Fisheries Commission

OSPESCA: Organization for the Fishing and Aquaculture Sector of the Central American Isthmus

SEAFO: South East Atlantic Fisheries Organisation

SIOFA: Southern Indian Ocean Fisheries Agreement

SPC: Secretariat of the Pacific Community

SPRFMO: South Pacific Regional Fisheries Management Organisation

WECAFC: Western Central Atlantic Fishery Commission



ACAP

Agreement on the Conservation of Albatrosses and Petrels



Agreement on the Conservation of Albatrosses and Petrels and World Albatross Day 2020

by John Cooper, ACAP Information Officer, 25 December 2019

The Agreement on the Conservation of Albatrosses and Petrels (ACAP – www.acap.aq) is a multilateral agreement which seeks to conserve

listed albatrosses, petrels and shearwaters by coordinating international activity to mitigate known threats to their populations. Development of the Agreement commenced in 1999 following recognition especially of the numbers of albatrosses being killed by longline fisheries as they became caught and drowned after seizing baited hooks. ACAP was concluded rapidly with only two meetings required to agree its formal text. ACAP was opened for signature in Canberra, Australia on 19 June 2001 and entered into force on 1 February 2004 when five countries had become parties by ratification. Currently, there are 13 parties to the Agreement - Argentina, Australia, Brazil, Chile, Ecuador, France, New Zealand, Norway, Peru, South Africa, Spain, the United Kingdom and Uruguaywhich includes 31 listed species of albatrosses, petrels and shearwaters. The Secretariat is based in Hobart, Tasmania, Australia and consists of an Executive Secretary, a Science Officer and an honorary Information Officer.



ACAP's Advisory Committee, at its most recent meeting held in Brazil in May 2019, declared that a conservation crisis continues to be faced by the 31 listed species, with thousands of albatrosses, petrels and shearwaters dying every year as a result of fisheries operations. To increase awareness of this crisis within the general public, ACAP is inaugurating a World Albatross Day (WAD), to be held annually on 19 June, the date the Agreement was signed. This date does not appear to overlap with any other internationally-recognized animal days. Among seabirds, there seems to be only a World Penguin Day in existence, marked on 25 April, so there appears to be scope for a day for the procellariform seabirds, which are an equally threatened group.

In the 12-month build up to WAD2020, the Secretariat has been reaching out to communities around the world, but especially within the 13 parties, to consider undertaking their own activities to mark the occasion. To increase awareness of the day, artists and illustrators have been approached to produce posters and a logo, field researchers have been making banners to display next to albatross colonies, and statements of support are being received from environmental organizations, all on a zero budget! ACAP thanks all those who have donated their time and effort to advertising the inaugural World Albatross Day.

Left: Researchers Alexis Osborne, Michelle Risi and Chris Jones display their WAD2020 banner on Gough Island behind a Critically Endangered Tristan Albatross chick.



ATLAFCO

Ministerial Conference on Fisheries Cooperation among African States bordering the Atlantic Ocean

In 2019, ATLAFCO was busy with activities and events centred around its core objectives:

- capacity building for sustainable fisheries resources and fisheries and aquaculture development;
- → implementing international fisheries regulations;
- improving maritime safety and security.

Seminar: "Training of trainers on the tools of the monitoring, control and surveillance (MCS) system for fishing activities" 27–28 May, 2019 – El Jadida (Morocco)

The meeting was attended by officials and MCS experts from the fisheries training departments of the following member states: Angola, Benin, Cabo Verde, Cameroon, Congo, Côte d'Ivoire, Gabon, the Gambia, Ghana, Guinea Bissau, Equatorial Guinea, Guinea, Mauritania, Morocco, Nigeria, the Democratic Republic of Congo, Sao Tome and Principe, Sierra Leone and Senegal.

The meeting adopted an integrated approach that included awareness raising, knowledge building and support for the development, adoption and implementation of common training and procedures for all regional ATLAFCO actors.

The participants developed recommendations in terms of MCS capacity building and to reposition its actions enabling it to seek and mobilize funds for the sustainability of its activities and, therefore, to be more independent.

They also considered that the Coalition of African Maritime Training Institutions (REFMA) as a regional maritime training system offers a unique opportunity to strengthen the skills of agents responsible for MCS missions and that it constitutes the appropriate framework for cooperation, sharing know-how and pooling much needed resources.





Workshop: "Information and Communication Technologies: Their role in achieving sustainable fisheries in the ATLAFCO Zone?"

4-5 July, 2019 - Tangier (Morocco)

The workshop was attended by:

- → The delegates of the following member states: Angola, Benin, Cabo Verde, Cameroon, Congo, Côte d'Ivoire, Gabon, the Gambia, Ghana, Guinea Bissau, Guinea, Equatorial Guinea, Liberia, Morocco, Nigeria, Senegal, Sierra Leone, Togo;
- → The National Institute of fisheries resources (INRH);
- → The regional Fishery Body Secretariats Network (FAO-RSN);
- → The General Fisheries Commission for the Mediterranean (GFCM);
- → Subregional organizations: Regional Fisheries Commission for the Gulf of Guinea (COREP); Subregional Fisheries Commission (SRFC) and Fisheries Committee for the West Central Gulf of Guinea (FCWC);
- → Media Observatory for Sustainable Fishing in Africa (MOFSA).

This workshop focused on:

→ Reviewing the main threats facing marine resources in general and fisheries in particular, which seriously jeopardize their sustainability;

- → Determining the scope and impact of the main uses/applications of ICT tools in the management of marine resources in order to stop their degradation and ensure their sustainability;
- → Clarifying the problematic nature of ICTs in the dynamics of fisheries management and related activities, particularly in the context of countries with a level of development comparable to those of the ATLAFCO zone: and
- → Suggesting ways to properly implement ICT applications that can effectively contribute to the sustainability of marine resources in the region.

Training workshop for members of the African Network of Women in Fisheries (RAFEP) under the theme: "Processing of fish and other fish products'

22-23 February, 2019 - Agadir (Morocco)

This workshop is part of efforts to build the capacity of African women directly or indirectly involved in fishing and related activities to improve their social status and advancement, as well as promoting trade in fishery products.

The theme focused on the quality and safety of processed fishery products.



- → The training workshop was attended by women from the following countries: Benin, Cabo Verde, Cameroon, Côte d'Ivoire, Gabon, the Gambia, Guinea, Guinea Bissau, Equatorial Guinea, Liberia, Mauritania, Nigeria, the Democratic Republic of Congo, Sao Tome and Principe, Senegal, Sierra Leone and Togo; and Japan as observer.
- → Higher Institute of Marine Fisheries of Agadir (ISPM), provider of the venue and trainers.

Workshop objectives:

- Strengthen the managerial and technical capacities of African women operating in the fishing sector through training of RAFEP members;
- → Assimilate techniques for preserving seafood;
- → Exchange experiences between African women; and
- Promote the marketing of seafood in the subregion.

5th Coordination Meeting of Regional Fisheries Organizations and Institutions under the theme "Strengthen institutional cooperation, in favour of coherent regional integration of resource management fisheries in the ATLAFCO region"

This meeting was organized in accordance with the provisions of the Memorandum of Understanding signed on 22 February 2015.

February 18, 2019 - Agadir (Morocco)

The fifth session was considered to be a new step to revitalize this cooperation platform involving Regional Economic Communities (RECs), through the adoption of functional mechanisms for coordination and joint institutional cooperation, aiming to accelerate the implementation of coherent and harmonized political management of fisheries and aquaculture.



Meeting participants:

- → The Economic Community of Central African States (ECCAS);
- → The Regional Fisheries Commission for the Gulf of Guinea (COREP);
- → The Subregional Fisheries Commission (SRFC);
- The Intergovernmental Information and Cooperation Organization for marketing of fishery products in Africa (INFOPECHE);
- The West African Association for the Development of Artisanal Fisheries (WADAF).
- The Media Observatory for Sustainable Fisheries in Africa (MOSFA);
- Ministerial Conference on Fisheries Cooperation among African States bordering the Atlantic Ocean (ATLAFCO).

The following institutions/organizations, although not present, forwarded communications which were presented by the ATLAFCO Secretariat:

- → The Inter-African Bureau for Animal Resources (AU/IBAR);
- → The Fisheries Committee for the West Central Gulf of Guinea (FCWC);
- → The regional fishery body secretariats' network (RSN).

At the end of the meeting the participants issued a declaration:

→ To seek the support of the AU through the Inter-African Bureau for Animal Resources, the Planning and Coordination Agency for the

- New Partnership for Africa's Development (NEPAD Agency) and the Secretariat of the Conference of African Ministers of Fisheries and Aquaculture (CMAPA), to facilitate regional collaboration and integration in the management of the region's fishery and aquaculture resources;
- → To commit to the follow-up and support of existing initiatives or those in the process of constitution, for the reinforcement of the collaboration between the regional economic communities and regional fishing organizations, in coordination with the various stakeholders and the competent authorities of the AU;
- → To support the active participation, in a transparent, responsible and effective manner, of non-state actors and their regional coalitions regarding matters of good governance, coherence and coordination of public policies, and regional integration for fisheries and aquaculture;
- → To affirm our readiness to strengthen synergies, through collaboration with technical and financial partners on subjects of common interest, in particular with the competent bodies of the UN for active participation in major processes of regional and global scope, and in international fora which are intended to deal with questions relating to the sustainable development of fisheries and aquaculture (COFI, CITES, etc.);

→ To integrate the "communication" dimension for better information, awareness and regional coordination and for better coherence and harmonization of fisheries and aquaculture policies.

Training session in Mass Rescue Operations in the ATLAFCO area 22–25 April, 2019 – Tangier (Morocco)

This session was co-organized by ATLAFCO, the IMO and the Moroccan Fisheries Department, under the framework of the capacity building of maritime rescue structures of the ATLAFCO countries on maritime security and preserving human lives at sea.

Representatives of the following ATLAFCO members participated in this session: Cabo Verde, Côte d'Ivoire, Cameroon, Congo, Ghana, the Gambia, Liberia, Morocco, Nigeria and Senegal.

In addition to theoretical training, participants attended a real-life exercise on mass rescue (MRO).

Seminar: "For access to decent and secure jobs in fisheries in West Africa" 3-4 October, 2019 - Tangier (Morocco)

This seminar was organized due to the depressing conclusion on the deplorable conditions faced by workers in the bustling fishing industry in many countries of the region, particularly in the artisanal sector.

The meeting was attended by:

- Delegates from the following members: Angola, Benin, Cabo Verde, Cameroon, Côte d'Ivoire, Gabon, the Gambia, Equatorial Guinea, Guinea, Equatorial Guinea, Mauritania, Nigeria, the Democratic Republic of Congo, Sao Tome and Principe, Senegal and Sierra Leone;
- → The Subregional Fisheries Commission (SRFC);
- > Representatives of civil society:
 - The Media Observatory for Sustainable Fisheries in Africa (MOSFA);
 - The EU Long Distance Advisory Council (LDAC);
 - The Moroccan Society of Maritime Medicine (SMMM).





By organizing this meeting, ATLAFCO proposed exchanges between the participants to assess and characterize the labour situation of fishers in terms of working conditions, safety, and welfare in order to identify and propose feasible recommendations to improve the condition of this occupational group in the countries of the region.

The recommendations included:

- → Place the improvement of seafarers' working conditions at the centre of national and regional economic and social policy objectives with a view to the sustainable reduction of poverty and improvement of the living conditions of our coastal communities;
- → Support the implementation of international standards related to social development, the improvement of working conditions as well as social protection in the fishing sector;
- → Establish coherent policies and develop coordination mechanisms between all the social partners involved in social development in the fisheries sector;

- → Ensure harmonization of fisheries policies with those concerning maritime safety, and health and safety on board fishing vessels;
- → Adapt social protection systems (payment methods) so that they are more flexible for the specificity of fishing activities, especially artisanal fishing (informal nature, seasonality/irregular income);
- → Generate particular interest in improving the protection of women, youth and children associated with poor health and safety they face at work, particularly in the artisanal and informal fishing sub-sector;
- Include data on working conditions and social protection in the fisheries sector in labour market information systems;
- → Promote regional cooperation in the areas of social protection of workers in the fisheries sector, through the sharing of experiences, the dissemination of good practices and the strengthening of capacities in the area of labour inspection;
- Flag states and port states to establish systematic inspection procedures for living and working conditions in fishing vessels.



Workshop: "Fight against piracy: What solutions for eradication of maritime piracy in ATLAFCO zone" 21–22 October, 2019 – Rabat (Morocco)

The meeting was attended by:

- → Delegates from the following member states: Cabo Verde, Côte d'Ivoire, Gabon, Ghana, the Gambia, Guinea Bissau, Equatorial Guinea, Liberia, Morocco, Sao Tome and Principe, Senegal, and Sierra Leone.
- → The Media Observatory for Sustainable Fisheries in Africa (MOFSA);
- → Institute of Maritime Fisheries Technology / Laarache (Morocco).

The workshop was attended by the various institutional actors involved in the fight against crime at sea and focused on better understanding the causes of the persistence and worsening of this scourge in the region, with the aim of preventing and effectively and sustainably punishing illegal offenses.

Issued discussed:

→ Reasons for the worsening of the phenomenon of maritime piracy in the region;

- → SAR contribution in the fight against piracy in the region;
- An appropriate approach to enhancing maritime security in the region; and
- → An integrated multidimensional approach to the fight against piracy in the region.

The following recommendations were made by the participants regarding the fight against piracy in the ALAFCO (Gulf of Guinea) region:

- → To involve the MRCC's/JRCC in the fight against piracy;
- Signatory countries to nationalize laws to support and provide technical assistance to vulnerable African states to enhance their capacity to ensure effective coastal and maritime patrol with priority given to the development of effective navies/ coastguards;
- → To upgrade the judicial capacity as well as increase the operational capabilities in terms of equipment, infrastructure, manpower and budget;
- → To disrupt and dismantle pirate operation units ashore (piracy at sea can only be abated if pirate operation units ashore are disrupted or dismantled);



- To ensure effective awareness is created among coastal communities on the dangers piracy poses on the region;
- → To have effective communication and information sharing among members;
- → To conduct regular regional military exercises in high-risk areas.

Workshop: "Sustainable development of aquaculture in the context of the United Nations SDGs"

13-14 December, 2019 - Agadir (Morocco)

Organized in collaboration with the National Agency for Aquaculture Development (ANDA) of Morocco, this workshop was part of the ATLAFCO's Action Plan, and in line with the relevant international recommendations for a development strategy to ensure a positive contribution to the United Nations Sustainable Development Goals (SDGs).

The meeting was attended by:

→ The following members: Benin, Cameroon, Côte d'Ivoire, Equatorial Guinea, Gambia, Ghana, Guinea, Liberia, Mauritania, Morocco, Nigeria, Sao Tome and Principe, Senegal and Sierra Leone.

- → Institutions: ANDA (Morocco), ANA (Senegal), ANAG (Guinea) and the Delegation of the European Union to Morocco (maritime affairs and fisheries).
- Experts and resource persons involved in the field of marine aquaculture: Media Observatory for Sustainable Fishing in Africa (MOSFA) and a Singapore-based company specialized in deeptech (UMITRON).

The workshop reflected on the implementation of an Aquaculture Development Strategy aligned with the objectives of sustainable development, taking into account the environmental, economic and social context of the ATLAFCO region. It was also an opportunity to formalize a collective commitment to the sustainable development of aquaculture while enhancing synergies between stakeholders and fostering multi-stakeholder partnerships that can generate inclusive growth and coherence with national priorities.

During the workshop, the members called for the creation of a network of national institutions in charge of promoting aquaculture in ATLAFCO member states. The network, through the sustainable development of this sector as a means of combating poverty, ensuring food and nutritional security, creating wealth, income and employment for young people, will among other things:

- → Adopt aquaculture as an environmental solution to global challenges;
- Encourage cooperation between countries to formulate integrated and bankable projects;
- Promote the implementation of training centres of excellence in the various countries; and
- Encourage small-scale projects of a social and united nature integrating women and young people.

"The relevance and practical modalities for moving ATLAFCO towards a Regional Fisheries Management Organization (RFMO)" May 2019

The last Conference of Ministers of ATLAFCO in August 2018, adopted the "Declaration of Abidjan" which stresses the need "to examine the possibilities of raising ATLAFCO to the statute of a Regional Fisheries Management Organization" for more involvement in the management and conservation of marine resources in the region.

For the implementation of this recommendation, the Secretariat launched a study (see section 6 – Publications and papers)

High-Level Meeting: "The Blue Belt, a Platform for Action for the Sustainability of Fisheries and Aquaculture in Africa" 19 February, 2019 - Agadir (Morocco)

Several African and European officials as well as international experts commended the Blue Belt initiative, launched by Morocco at COP 22 in Marrakech, which aimed at establishing a platform for action to promote fisheries in Africa.

The relevance of this initiative was highlighted at a high-level conference held in Agadir under the theme "The Blue Belt, a platform for action to promote the sustainability of fisheries and aquaculture in Africa". Participants in this international meeting convened on the eve of the 5th edition of the Halieutis Show, held in Agadir, 21–24 February, and underlined the strategic dimension of the Blue Belt initiative, which is in line with the Sustainable Development Goals (SDGs) adopted by the United Nations.





The meeting also shed light on the various aspects of the Moroccan initiative, which provides for many tools to ensure the sustainability of resources, preserve ecosystems, promote scientific research, and enhance the value of seafood products. The initiative also seeks to ensure food security for the African peoples, create more jobs, and generate wealth.

Participants included:

- → Delegates and experts from several countries including Russia, Norway, Spain, Portugal, France, Côte d'Ivoire, Gabon, Guinea-Bissau, Sierra Leone, Ghana, Angola, the Democratic Republic of Congo and Togo; and
- → Representatives of the European Union, the Food and Agriculture Organization of the United Nations (FAO); the ATLAFCO Secretariat and several research institutes specialized in oceanographic studies.

The Blue Belt Initiative, announced at World Oceans Day at COP22 (November 2016), is meant to boost sustainable fisheries and bolster coastal resilience to climate change.



High-Level Conference of the General Fisheries Commission for the Mediterranean (GFCM) on MEDFISH4EVER initiatives: Progress and renewed commitments 11–12 June, 2019 – Marrakech (Morocco)

At the invitation of the GFCM, ATLAFCO participated in the High-Level Conference on the themes of improving working conditions in the fishing community as well as the fight against illegal, unreported and unregulated (IUU) fishing. ATLAFCO and GFCM had already signed a MoU in 2015 formalizing their commitment to the fight against IUU fishing.

Participants at the Conference agreed to focus their collective efforts on some critical points, and committed to take further action in the following ways:

- → Enhancing research and data collection, so management efforts are based on detailed and reliable science;
- Curbing IUU fishing, which harms stocks, undermines data and distorts markets; while exacerbating socio-economic problems on shore;
- Improving social protection to reflect the risks and uncertainties of livelihoods in the sector, particularly in small-scale fisher communities;
- Securing urgent funding for priority actions towards sustainable fisheries and aquaculture; and
- → Sharing and spreading best fisheries management practices and technologies across the whole region.





BOBP-IGO

Bay of Bengal Programme, Intergovernmental Organisation

Regional Consultation on the Development of the Regional Plan of Action (RPOA) to Combat Illegal, Unreported and **Unregulated Fishing** 14-15 October 2019, Chennai, Tamil Nadu (India)

It is widely acknowledged that IUU fishing contributes to the overexploitation of fish stocks and is a hindrance to the recovery of fish populations and ecosystems to more productive levels and can have large negative impacts on food security, both socio-economically and environmentally.

The Bay of Bengal (BoB) region is highly susceptible to IUU fishing according to anecdotal information and studies. A 2015 Report of the Asia Pacific Fishery Commission (APFIC) identified nine IUU hotspots in the BoB region with an approximate loss of USD 1 600 million per year. Outdated legal frameworks, ineffective vessel registries and related controls, uncertain maritime boundaries, official tolerance to IUU fishing and limited monitoring, control and surveillance (MCS) capacity were identified as the underlying drivers and factors that enable IUU fishing to occur in the region.

To curb IUU fishing in the region, the first regional consultation on 'Development of a Regional Plan of Action to Combat Illegal, Unreported and Unregulated Fishing (RC-IUU)' by the member countries of the Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO), viz., Bangladesh, India, Maldives and Sri Lanka, was held in Chennai, India from 14-15 October 2019. The RC-IUU was jointly organized by FAO and the

BOBP-IGO. The consultation addressed FAO's Strategic Objective 2: making agriculture, forestry and fisheries more productive and sustainable, and BOBP's Goal: enabling environment for sustainable fisheries governance is in place in the region under its Strategic Plan of Action 2014-18. In addition, the RC-IUU consolidated the regional efforts towards meeting the objectives of Sustainable Development Goal 14.4: by 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.

Within these broad objectives, the specific objectives of the RC-IUU were to:

- sensitize stakeholders on the issues associated with IUU fishing and the need for urgent action;
- > evaluate the scope and challenges in addressing IUU fishing at national and regional
- > prepare an information, needs and policy matrix for drafting of RPOA-IUU; and
- enlist the support of all stakeholders for timely completion and implementation of RPOA-IUU.

Participants included twenty-three member State representatives of the Ministry/Department of Fisheries; Ministry/ Department of Environment; Coast Guard/Navy; and community-based organizations (CBOs)/non-governmental organizations (NGOs) in addition to experts from FAO and BOBP.



Workshop recommendations

Benefits and costs from RPOA-IUU

An RPOA-IUU would overall benefit the countries. Countries are likely to accrue some costs in terms of allocation of human resources, policy harmonization, technology up-gradation, etc. However, such costs would be outweighed by better enforcement, regional relations and policy coordination. The groups also cautioned that the specific interests of the small-scale and artisanal fisheries should be considered while adopting a regional approach.

Nature of Regional Cooperation

To ensure full compliance, a binding agreement on RPOA-IUU should be considered. As a binding agreement might take time, it was suggested that initially a non-binding instrument be developed, which could later be progressed into a binding agreement

Provision of regional cooperation in NPOA-IUU

The Maldives and Sri Lanka have already developed their corresponding NPOAs, which among other things, categorically emphasise regional cooperation. Since the NPOA-IUU of India and Bangladesh are in the making, it was recommended that the two countries consider the scope of regional cooperation in their NPOAs. The RC-IUU also noted that there were existing cooperative mechanisms amongst the countries, including Joint Working Groups (bi-lateral) on fisheries and joint patrolling by the Coast Guards of India and Sri Lanka and India and Maldives.

Scope for developing a regional cooperative mechanism to report IUU fishing activity

RC-IUU proposed setting up a regional mechanism for monitoring and reporting IUU fishing. This mechanism would include joint patrolling, sharing of information, preparation and maintenance of a IUU vessel list, establishment of protocols for

seizure, boarding, detention, prosecution and release of fishing vessels (including crew). It was also proposed that the protocols could provide for a different set of directions for vessels from neighbouring/friendly countries. It was also agreed that a Joint Working Group of all four member states should be established to deal with the above issues on a regular basis.

Development of a regional vessel registry

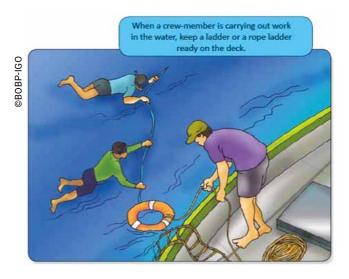
It was recommended that the registered vessel records of one member State should be shared with other member states in the RPOA. In this regard, first inter-ministerial and later intergovernmental coordination would be necessary. Further, such records should also be carried forward to the global record of fishing vessels.

Regional framework for information, knowledge and technology sharing

It was recommended to establish a mechanism for exchange of information through relevant national agencies and a coordinating agency at the regional level. Such information, inter alia, would include details on fishing vessels and their real-time tracking, stocks, their catch and landing, etc. Further, it was recommended that capacity enhancement in areas such as patrolling, resource monitoring (including monitoring through satellites) and law enforcement should be undertaken.

Cooperating Agencies and Coordinating Agency

RC-IUU recommended that the Ministry/Department of Fisheries in each member State should be the focal point for coordinating the national effort in conjunction with the Ministry of Environment, Coast Guard, customs, R&D organizations, etc. It was further recommended that the BOBP – as an existing regional mechanism – would serve as the regional coordinating body for the RPOA-IUU.



Way forward

Based on the recommendations of the workshop and international best practices, BOBP will develop a draft RPOA-IUU to share with the members and FAO and based on their feedback, a second regional workshop would be organized for validation and adoption of the RPOA-IUU.

Members also nominated focal points in their respective countries to coordinate and facilitate the process.

FAO/BOBP brings out illustrated manuals on Safety at Sea for small-scale fisheries

Fishing is one of the riskiest occupations of the world

FAO and the Bay of Bengal Programme Inter-Governmental Organisation (BOBP) have collaborated to produce an illustrated manual on occupational safety of small-scale fishers for fishing vessels less than 12 metres in length. The aim is to contribute to a culture of safety awareness among fisherfolk, reduce the number of accidents and increase the chances of survival if accidents occur. The manual provides guidance on safety matters related to the work on a small-scale fishing vessel (e.g. fire safety, deck safety, lifesaving equipment, lighting and ventilation), personal safety and navigation safety. Checks and procedures to be performed before a fishing trip, as well as guidance for survival at sea are also included in this manual.

The manual is available in multiple languages: English, French, Spanish, Tamil and Sinhala and there is a revised version for use of Small Island Developing States in the Caribbean region. Electronic copies of the manual are available from FAO and BOBP-IGO websites and hard copies are available upon request.

During the launch of the publications, Dr Yugraj Singh Yadava, Director of BOBP-IGO said that small-scale fishers are often the most vulnerable sections of the society, especially in the coastal countries surrounding the Bay of Bengal. Poor standards of safety at sea often led to fatal accidents leading to the destitution of fishing families. The manual, illustrated like comic books, is easy to read and understand even with little education. It can help fishers to self-improve their safety regime while for fisheries officials it provides a checklist which can be used for awareness building, training and monitoring safety standards in fishing vessels. He added that FAO and BOBP-IGO are also planning more vernacular versions of the guidelines in the near future to reach a larger audience and benefit small-scale fishers globally.

The manuals are produced under an FAO Trust Fund project: "Enhancing the contribution of small-scale fisheries to food security and sustainable livelihoods: FAO SSF Guideline Implementation Support Project (GCP/GLO/645/NOR) with technical backstopping from Dr Raymon VanAnrooy, Senior Fishery Officer, FAO Fishing Operation and Technology Branch.

FAO and BOBP-IGO have a longstanding collaboration in progressively improving safety standards, especially in small-scale marine fisheries sector. Safety at sea for fishers is, and continues to be, a thrust area of BOBP-IGO. In the past, the Organization provided effective technical solutions such as 'Life Float' to improve the safety standards in fisheries. In 2001, through a FAO/BOBP regional workshop on Safety at Sea for small-scale fisheries, eight countries surrounding the Bay of Bengal agreed on Chennai Declaration¹, which is a landmark agreement on Safety at Sea for small-scale fisheries in the Bay of Bengal region. Later in 2006, FAO and BOBP implemented the Bay of Bengal component of the 'Global safety at sea programme for small-scale fisheries in developing countries (GCP/GLO/200/MUL)' to improve the livelihoods of small-scale fishing communities by decreasing the number accidents at sea and their effects.

- → For further information on the safety of small-scale fish vessels of less than 12 metres in length and undecked fishing vessels see:
 - www.fao.org/3/i3108e/i3108e.pdf
- → Fisheries operations. Best practices to improve safety at sea in the fisheries sector. FAO Technical Guidelines for Responsible Fisheries. No. 1, Suppl. 3. Rome, available at: www.fao.org/3/a-i4740e.pdf
- → FAO/SIDA/IMO/BOBP-IGO. Safety Guide for Small Fishing Boats. BOBP/REP/112 available at: http://bobpigo.org/webroot/img/uploaded/pdf/safety_guide-rep112.pdf











Left to right: Cover pages of English, French, Spanish, Sinhala and Tamil version of the Manual.

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¹ www.fao.org/tempref/FI/CDrom/bobp/cd2/Bobp/BBN/BBN9912.pdf



CPPS

Permanent Commission for the South Pacific

Regional Action Plan for the Conservation and Management of Sharks, Rays and Chimeras in the Southeast Pacific (called PAR TIBURÓN)

The Permanent Commission for the South Pacific (CPPS) promotes coordinated initiatives among member states considering, among others, the ecosystem approach, the precautionary principle and the international instruments for the protection of the seas and oceans respecting national policies and mechanisms in force in each country. There is a need for fishery resources management for sustainable use through administration measures as well as chondrichthyes conservation – where there is fishing pressure or high rates of interaction (bycatch) – and it is necessary to advance in an integrated vision at regional level for the conservation of these resources.

The Scientific Technical Committee's objective is to advise CPPS on scientific, technological, technical, planning (priority setting, implementation of measures and monitoring), and organizational fields; for the permanent implementation and execution of the Regional Action Plan for the Conservation and Management of Sharks, Rays and Chimeras in the Southeast Pacific Region (PAR TIBURÓN), as well as recommending and proposing economic or funding procedures which support and maintain the Plan.

The goal of PAR TIBURÓN is to contribute to the conservation of sharks, rays and chimeras, and their habitats through voluntary agreements for coordinated management of common chondrichthyes fisheries and other species not subject to fisheries.





The four guiding principles of PAR TIBURÓN are:

- promote sustainable fisheries development with an ecosystem approach or application of an ecosystem approach in fisheries management;
- establish management and administration measures based on geographic units;
- 3) comprehensive use of the resource;
- 4) implementation of control systems in fisheries.

PAR TIBURON's Action Plan aims at the protection and conservation of the whale shark (*Rhincodon typus*) and conservation of the giant stingray or giant manta (*Mobula birostris*) in the Southeast Pacific.

XIII Meeting of the Scientific Technical Committee of the PAR Shark

Santiago Chile, 9-13 September, 2019

The XIII meeting of the PAR-Shark Scientific Technical Committee held in Santiago, Chile was organized by the Permanent Commission of the South Pacific (CPPS), and scientists from Chile, Colombia, Ecuador and Peru took part. The purpose of this event was to analyse the progress of the Regional Action Plan, whose objective is to contribute to the conservation of sharks, rays and chimeras, and their habitats.

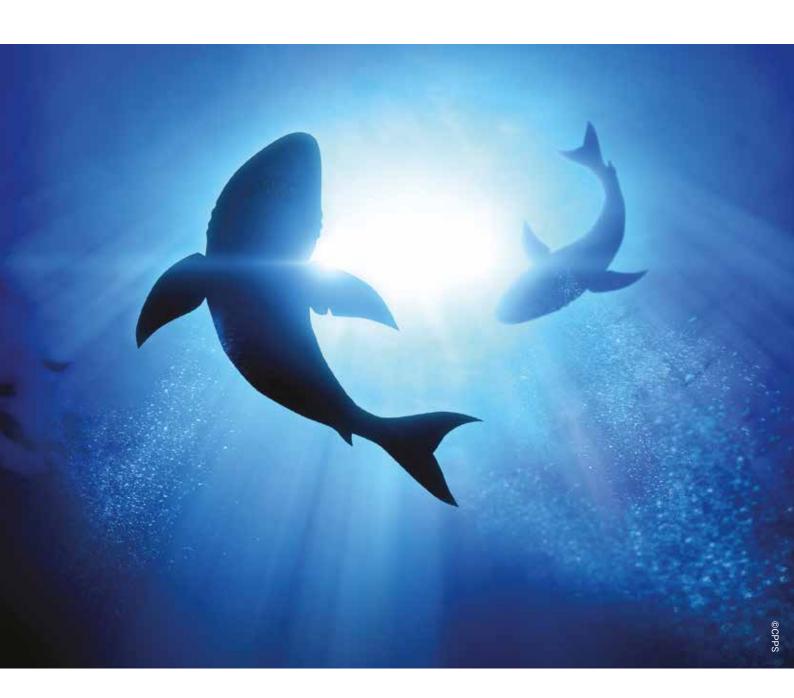
The activities focused on the coordination of mechanisms aimed at promoting the conservation

and sustainable use of sharks in the South Pacific Ocean and analysing the progress of each country with respect to the five strategic areas:

- 1) research for management and conservation;
- fisheries management, conservation and/or protection of species and ecosystems;
- 3) control and surveillance;
- 4) social and economic aspects; and
- 5) training, communication and dissemination.

Along with the above, the scope and future scenarios related to the implementation and impacts of international conservation agreements involving these species were analysed, and in particular referring to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).









CECAF/CIFAA

Fishery Committee for the Eastern Central Atlantic (CECAF) and the Committee for Inland Fisheries and Aquaculture of Africa (CIFAA)

Highlights and recommendations of the Fishery Committee for the Eastern Central Atlantic (CECAF) and the Committee for Inland Fisheries and Aquaculture of Africa (CIFAA)

The FAO Regional Office for Africa, in collaboration with headquarters, established two thematic regional statutory committees on Fisheries and Aquaculture in the region: the Fishery Committee for the Eastern Central Atlantic (CECAF) and the Committee for Inland Fisheries and Aquaculture of Africa (CIFAA). The committees are key in providing a platform for countries to engage in dialogue and deliberate collective direction of their thematic area of work in Africa.

The twenty-second session of the Fishery Committee for the Eastern Central Atlantic (CECAF) took place in Libreville, Gabon, from 17–19 September 2019. The session attracted the participation of 21 committee members including the European Union, as well as observers from different regional and subregional fisheries organizations, cooperation agencies and non-governmental organizations. The Committee endorsed the assessment and management advice from the eighth session of its Scientific Sub-Committee held in Abidjan, Cote d'Ivoire, 23–26 October 2018, stressing the continued need to improve research and data collection in the region, review the format of the scientific advice and management recommendations and enhance the dialogue between scientists and managers.

The Committee highlighted strengthening of Monitoring, Control, and Surveillance at country level as a foundation for the development of efficient cooperation towards combating IUU fishing at subregional and regional levels as well as all CECAF members becoming parties to the



Port State Measures Agreement. The Committee expressed concern about the recurring issue of inadequate financial and human capacities for the CECAF Secretariat to pursue its mandate across the region and the associated rare and limited management advice provided by CECAF to its member countries. The Committee reviewed a preliminary report on Cost and Benefit Assessment (CBA), which concluded that with financial and organizational enhancements, the benefits to strengthening CECAF would far outweigh the economic costs. The session called upon all partners especially African countries to enhance their commitment into CECAF activities including implementation of decisions on management advice and financial support.

The Eighteenth Session of the Committee for Inland Fisheries and Aquaculture of Africa (CIFAA) took place in Bamako, Mali, from 26 to 28 November 2019. Forty-seven (47) delegates from 29 member countries and three observers participated in the session. This session was particularly successful as it attracted a high level of participation of senior country managers in comparison to the previous sessions – when there was a lack of adequate financial resources.

The session covered the main topics of:

- sustainability of aquaculture production (profitability and socio-economic considerations);
- → role of organizations in the management of inland fisheries;
- the voluntary guidelines to ensure Sustainability of Artisanal Fisheries in the Context of Food Security and poverty eradication (SSF Guidelines); and
- > fish disease and environmental constraints.

The Committee invited members to:

- promote aquaculture including small-scale and large-scale private farms and all environments/ systems, support research including in feed and seed, enforce research-extension linkages, promote digital aquaculture, post-harvest/ marketing and enhance experience-sharing including exchange visits; and
- support small-scale inland fisheries to increase the contribution of the sub-sector to food security, sustainable development and poverty eradication by promoting the implementation of the SSF Guidelines and organization of a workshop to raise awareness and develop action plans to facilitate implementation SSF Guidelines for inland fisheries in Africa.





EIFAAC

European Inland Fisheries and Aquaculture Advisory Commission





Science-based policies for Europe's inland fisheries and freshwater aquaculture

by Victoria Chomo, Secretary of EIFAAC, Senior Fishery Officer (FIAP), Food and Agriculture Organization of the United Nations

Background

Inland waterway management is complex and faces unique challenges. Freshwater resources in Europe's rivers and lakes have a variety of users and some of these can interfere with the health and diversity of aquatic ecosystems. The mixture and overlap of local, regional, national and at times international regulations exacerbate the problem of sustainable management of inland water resources, including the development of freshwater aquaculture. The lack of accurate valuation of inland fisheries and aquaculture's contribution to food security, riparian livelihoods and the economics of the fish value chain prevents sound decisions regarding the allocation of these scarce natural resources among the competing uses. In the face of changing climatic conditions that already have had impact on the availability and quality of freshwater resources in Europe, finding solutions to these conflicting uses is becoming more urgent.

The European Inland Fisheries and Aquaculture Advisory Commission (EIFAAC)¹, a statutory body established under Article VI of FAO's Constitution, is the only pan-European platform for addressing

Members: Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, European Union, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland, Turkey, United Kingdom.





the issues facing Europe's inland fisheries and aguaculture. Although EIFAAC has existed for over sixty years, the last decade has been a challenging period for the Commission, which changed its operational structure from working groups to a "project approach" in 2010. In its new structure, the Commission continues to provide members with a forward-looking international platform for the collation, validation, and dissemination of sciencebased policy recommendations on challenges and opportunities to European inland fisheries and aguaculture, leading to region-specific solutions and harmonized approaches to common problems. The FAO Secretariat facilitates collaboration among the various EIFAAC member research institutions, universities, technical experts in the FAO Fisheries and Aquaculture Department, and other regional and international stakeholders.

EIFAAC Research

EIFAAC projects are funded by members and monitored by the EIFAAC Technical and Scientific Committee (TSC). Project proposals can be submitted for consideration by any member, donor, partner organization, independent partner institution, or the TSC. Projects should be linked to one of EIFAAC's seven strategic objectives:²

- Management-related issues and principles for inland fisheries and aquaculture;
- Interactions and avoidance or resolution of conflicts in inland fisheries and aquaculture;
- → Harmonization of cross-border and crosssectoral governance and legal aspects of inland fisheries and aquaculture;
- → Protection and restoration of the environment and species;
- → Trade and economic aspects of inland fisheries and aquaculture;
- Development of databases on inland fisheries and aquaculture and;
- Climate change.

EIFAAC's ongoing projects include: Monitoring the Performance of Fish Passes (United Kingdom); Management/Threat of Aquatic Invasive Species in Europe (Croatia); Development of Eel Stocks in Norway and Ireland (Norway); and Workshop on Citizen Science in Fisheries (Ireland). Welfare of Fish in Aquaculture (Switzerland) was completed in 2019 and the project results are disseminated in an FAO circular (available at: www.fao.org/publications/card/en/c/CA5621EN).

The scientific data and conclusions generated by EIFAAC projects play an important role in policy development at regional, national and sub-national level. They also contribute to UN Sustainable Development Goal 17 on Partnerships, by facilitating Triangular and South-South Cooperation between the various research institutes of Northern, Central and Eastern Europe and the economies-in-transition in Western Balkans and Caucasus. In addition, the joint EIFAAC/ICES/GFCM Project on Eels provides EIFAAC technical expertise for improved joint management of European eels, a critically endangered species.

More recently, EIFAAC has contributed expertise to FAO events on inland fisheries. In 2018, FAO and EIFAAC organized a conference on "River Habitat Restoration for Inland Fisheries in the Danube River Basin and Black Sea Adjacent Areas", jointly with EUROFISH, the Romanian Ministry of Waters

The 30th Session document "Report from the Technical and Scientific Committee", EIFAAC/XXX/INF/2019/4, also maps EIFAAC project contributions to the UN Sustainable Development Goals.

and Forests, the Romanian Ministry of Agriculture and Rural Development, the Danube Sturgeon Task Force, and the International Association for Danube Research, in Bucharest, Romania, 13–15 November 2018. Conference abstracts and recommendations are available in FAO Fisheries and Aquaculture Proceedings No. 63, 2019 (available in English and Russian at: www.fao.org/documents/card/en/c/ca5741en).

Through a letter of agreement between the Natural Resources Institute Finland (Luke) and FAO's Regional Office for Europe and Central Asia (REU), EIFAAC scientists conducted research on data methodologies for inland waterbodies under a regional Technical Cooperation Programme project (TCP/RER/3706).

Five case studies were prepared (Croatia, Czechia, Denmark, Finland, and Ireland) and findings will be disseminated in a FAO Fisheries and Aquaculture Technical Publication under the title "Data collection systems and methodologies for the inland fisheries of Europe" (available at: www.fao.org/3/ca7993en/CA7993EN.pdf).

This study is important for sustainable resource management, given the lack of organized regional data on inland fisheries and the wide variety of data systems used to manage the water bodies of Europe, some of which are shared resources between neighbouring countries.

EIFAAC Sessions and Symposium

EIFAAC organizes an international symposium every two years, immediately preceding the EIFAAC session. The symposiums are sponsored by the host government and address topical issues of interest to the region, for example: "Recreational fisheries", Lillehammer, Norway, June 2015; "Adaption of inland fisheries and aquaculture to climate change", Stare Joblanki, Poland, September 2017; and "Food safety and conservation in inland fisheries and aquaculture", Dresden, Germany, September 2019. For the first time, the 2019 EIFAAC symposium included panels on post-harvest issues such as food safety and eco-labels, which have grown in importance for European producers and consumers of freshwater fish.

During the 2018–2019 biennium, the FAO Secretariat focused on raising the visibility of the Commission by drafting a communication strategy approved by the 30th Session of the Commission and securing funding for FAO events and projects that utilized EIFAAC expertise.



GFCM

General Fisheries Commission for the Mediterranean

The GFCM countries adopted 15 decisions to ensure conservation and sustainable use of marine living resources in the Mediterranean and the Black Sea

The GFCM is a regional fisheries body of FAO with competence for all marine waters of the Mediterranean and the Black Sea. Its main objective is to ensure the conservation and the sustainable use of living marine resources, as well as the sustainable development of aquaculture. The Commission's recommendations are binding for all countries fishing in the Mediterranean and the Black Sea. The annual session is the occasion for all members to meet, discuss and adopt the recommendations.

Athens, November 2019. At the forty-third session of the General Fisheries Commission for the Mediterranean (GFCM), representatives of 22 countries and the European Union, met in Athens to review recommendations and resolutions to improve the management and conservation of marine resources across the region.

After a week of intense discussions based on scientific data and analysis from across the region, the GFCM members reaffirmed their commitment towards achieving environmental, economic, and social sustainability of fisheries and aquaculture. "Inaction is not an option" said the Greek Vice Minister of Rural Development and Food, Fotini Arampatzi. "It is time for bold decisions and more effective cooperation for a better future in the Mediterranean, our sea."



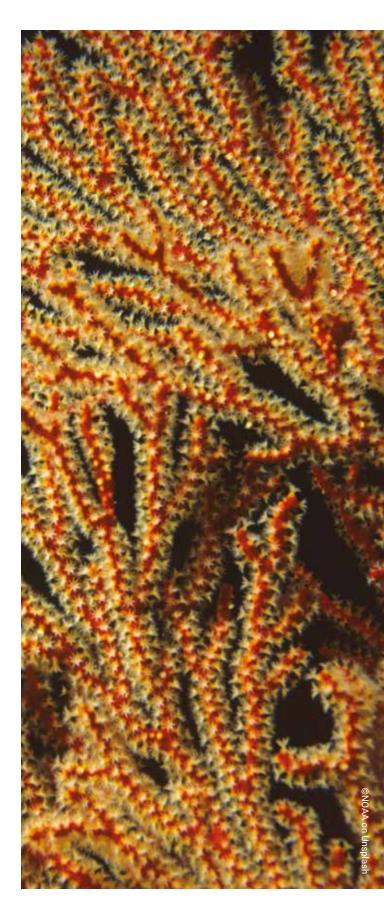
In the presence of intergovernmental, non-governmental and civil society organizations, a wide consensus was reached among countries to adopt a series of binding decisions establishing multiannual management measures for red coral and key fisheries, such as turbot, blackspot seabream, Adriatic demersal fisheries, deep-water red shrimp fisheries in the Strait of Sicily and dolphinfish fisheries with Fish aggregation devices (FADs), as well as measures to protect vulnerable marine ecosystems and cetaceans.

It is the first time the GFCM has established catch certification and traceability systems for the fishery of red coral in the Mediterranean and turbot in the Black Sea. Moreover, GFCM has made progress on the implementation of effective management tools, such as catch and effort quotas for Black Sea turbot and for Adriatic demersal fisheries.

"78 percent of the assessed fish stocks are overexploited in the Mediterranean and the Black Sea" said Abdellah Srour, Executive Secretary of the GFCM. "Through these decisions, the countries commit to pursue their efforts towards the reduction of overfishing in the region with the final goal of long-term fish stock sustainability." The GFCM members also agreed to step up the fight against IUU fishing particularly through the adoption of two binding recommendations obliging countries to submit and share information on fishing agreements and fishing activities.

Finally, the session underlined the importance of reinforcing the science-policy nexus and acknowledges the significance of the Fish Forum as a key catalyst, following its recognition by the UN General Assembly as a case of best practice.

"With the mid-term strategy for the sustainability of Mediterranean and Black Sea fisheries wrapping up in 2020, there is the need to take stock of how much was accomplished and to set an even more ambitious vision for the coming years," emphasized FAO Assistant Director-General for fisheries and aquaculture, Árni M. Mathiesen.



IATTC

Inter-American Tropical Tuna Commission

Using drones to improve estimation of dolphin abundance in the eastern tropical Pacific Ocean

The Inter-American Tropical Tuna Commission (IATTC – www.iattc.org), in coordination with the Comision Nacional de Acuacultura y Pesca (CONAPESCA) of the Government of Mexico, and with the support of the Instituto Nacional de Pesca y Acuacultura of Mexico (INAPESCA), the Mexican tuna industry, and the Centre for Research into Ecological and Environmental Modelling (CREEM – www.creem.st-andrews.ac.uk) at the University of St. Andrews (USTAN), is undertaking a ship-based survey to estimate the abundance of dolphin populations in the eastern tropical Pacific Ocean (EPO) and improve management of those populations and the EPO ecosystem.

The ecology of this region is very unusual due to the association between tunas and dolphins, which come together to form dynamic aggregations, a result of special oceanographic conditions.

This association allows purse-seine fishers to locate tunas by searching for schools of dolphins on the sea surface, particularly schools of spotted, eastern spinner and common dolphins (Figure 1). The first phase of the survey, which has been recently completed, lasted 14 days during which research

was carried out with the use of drones operated from an oceanographic vessel. This unprecedented experiment will make it possible to establish the appropriate technology and methods to be used in the next phase of the project.

A novel research plan using drones

Armed with a novel research plan developed by researchers at CREEM 37, on the morning of 17 November 2019, an international research team sailed out from Mazatlán, Mexico, aboard the research vessel Dr Jorge Carranza Fraser of INAPESCA for the 14-day research trip.

The team was led by Dr Cornelia Oedekoven of USTAN and Dr Cleridy Lennert-Cody of IATTC and included scientists, drone pilots and mechanics from four different countries (Mexico, United States of America, Germany and Taiwan Province of China).

The team headed out into a small study area between Mazatlán and Acapulco where they expected to find high numbers of spotted and spinner dolphins (Figure 2).

The project had two goals:

 test whether drones can 'see' dolphin schools directly ahead of the survey vessel that might be missed by ship-based marine mammal observers; and







Figure 1: Eastern spinner dolphins (left), spotted dolphin (centre) and common dolphins (right) encountered during the ETP trial survey.

 test whether drones can be used to collect data on dolphin school size and species composition, data essential for calibrating estimates made by the ship-based observers.

To achieve these goals, the research vessel had to be outfitted with a special observation platform on the level above the bridge, called the 'flying bridge,' that included four sets of high-powered binoculars mounted on pedestals, a data recorder station, a wind dam and a canopy for sun protection (Figure 3). The vessel was also outfitted with a special platform on the stern for launching and landing the drone (Figure 4).

"Seeing" all dolphin schools on the survey transect lines

During previous surveys, conventional distance sampling methods had been used to estimate the abundance of dolphins. During such surveys, the ship travels sequentially along each transect line placed in the study area (such as those shown in Figure 2), and trained marine mammal observers record the location of cetacean schools using measurements of the radial distance to the dolphin schools from the transect line and angle in relation to the ship's heading (Figure 5), as well as the size and species composition.

This methodology allows for observers missing dolphin schools that pass the beam of the ship at greater distances, however, it assumes that observers detect all schools directly on the transect line. If schools on the transect line pass undetected, the abundance estimates will be too low. Because the dive intervals of the dolphin species of interest are relatively short, it has generally been assumed that all schools on the transect lines are detected, regardless of weather conditions. However, a recent analysis of previous survey data provided evidence that this may not be the case, and that the probability of missing schools on the transect line increases when wind speeds increase and viewing conditions deteriorate.

During the 14-day trip, scientists tested if the drones can be used to estimate transect line detection probability. For this purpose, the drone flew in a zigzag pattern across the transect line 4 nm ahead of the ship and sent video footage back to the ship in real-time. Observers on the ship monitored the drone footage, recording dolphin schools and their locations (Figure 6). These detections were then compared with those made by the marine mammal observers on the flying bridge. To supplement this real-time video

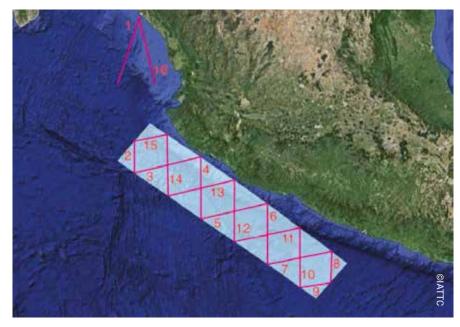


Figure 2: Study area (shaded area) and transect lines for the trial survey. Transects 1 and 16 were designed to lead in and out of Mazatlán, while transects 2-15 are in an area where high numbers of spotted and spinner dolphins were expected.



Figure 3: Observers on the flying bridge: three main observers, Suzanne Yin, Ernesto Vazquez and Andrea Bendlin scan the forward 180° with bigeyes binoculars and naked eye. Tracker Braulio Bernal on the right focuses on the central areas within 15° on either side of the ship.



Figure 4: Platform for launching and landing drones on the back deck of the R/V Dr Jorge Carranza Fraser with a Seahawk S drone operated by pilots from GttNetCorp ready for take-off.

analysis, further analyses of the drone footage will be done in the coming months using sophisticated computer algorithms designed to find schools of dolphins. If these analyses determine that the flying bridge observers saw all detections that the drone 'saw', then we may have evidence that the flying bridge observers have perfect detection on the transect line. If they missed some of the drone detections, we may have evidence that observers have less than perfect detection on the transect line and a correction factor should be applied.

Calibrating dolphin school size estimates

Estimating the number of individuals in a school of dolphins accurately poses another challenge as the schools vary in size from a few dolphins

to several hundred. For observers who are tasked with estimating school size, it is unknown how many animals are below the surface at any given time, making it difficult to obtain accurate estimates of school size. Marine mammal observers who participate in surveys in the EPO have their estimates compared and calibrated against the true number of dolphins. This true number can be obtained by taking high resolution imagery (video or photo) of the school from above. On previous surveys, photos of calibration schools were taken from helicopters or small aircraft. During the present study, suitable video footage was taken with drones that will allow determination of the true number of dolphins in the calibration schools (Figure 7). Two views of dolphin schools



Figure 5: Bigeye binoculars (25 x 150): the angle ring and the reticule scale in the right ocular allow determining the angle and radial distance of the detection in relation to the ship.



Figure 6: Drone observers Dr Cleridy Lennert-Cody and Juan Carlos Salinas monitor the drone video footage transmitted back to the ship in real-time. Drone engineer Lin Jia-Huei (Jason) of GttNetCorp, on the left, ensures that video footage and GPS data are recorded.

were required: imagery from a relatively high altitude that allowed the whole dolphin school to be observed for some time, and imagery using a zoom lens to obtain species identification.

Because the Seahawk S drone is highly manoeuvrable, it was able to hover over and follow dolphin schools for extended periods of time. Once observer estimates have been calibrated using the imagery, their estimates of school size for all dolphin schools can be used in abundance estimation analyses. We will still rely on observers making school size estimates for all schools as it is not practical to use the drone to get true counts for all schools.

What's next?

During this first phase of the survey, high-resolution imagery was collected with the drone on almost 90 flights and over 200 cetacean schools were

recorded by the ship-based marine mammal observers.

The data represents a wealth of information that will be carefully analysed in the coming months to evaluate the benefits of using drones for improving estimates of dolphin abundance. The analytical tools that will be developed for these analyses and the results of these analyses will benefit scientists all over the world working on estimation of abundance of marine mammals. Following the analyses of the first phase of the project, the planning and development of the second phase will include a 120 sea-day survey of the entire EPO, scheduled for the second half of 2020.

The objective will be to estimate dolphin population abundance, which will improve the conservation and management of dolphin populations in the EPO.



Figure 7: Aerial view of part of a school of Risso's dolphins encountered during the study.

ICCAT

International Commission for the Conservation of Atlantic Tunas

Protocol to amend the International Convention for the Conservation of Atlantic Tunas

The major achievement of the International Commission for the Conservation of Atlantic Tunas (ICCAT) in 2019 was the finalization of the Protocol to Amend the International Convention for the Conservation of Atlantic Tunas, following six years of negotiation. This new Convention modernizes the Commission and provides a mandate to manage migratory species of sharks and rays.

The Commission has also approved three MoUs (with SEAFO, GFCM, and WECAFC) which have been submitted to these organizations for their approval and signature.

Other decisions

ICCAT adopted a new conservation and management programme for tropical tunas, which will be further refined in 2020. ICCAT has also ensured greater safety of ICCAT regional observers and took measures regarding lost and abandoned gear, proving its commitment to the ecosystem approach. All measures adopted by ICCAT can be found at www.iccat.int/en/RecRes.asp.

Progress in Science

The ICCAT Standing Committee on Research and Statistics (SCRS) continues to advance with the development and implementation of Management Strategy Evaluation (MSE) protocols for several important stocks in the Atlantic Ocean. An updated workplan has been adopted by the Commission which encompasses the participation and discussions of all stakeholders within the process.



Ms. Deirdre Warner-Kramer, Chair of the Working Group on Convention Amendment, signs the adopted Protocol on behalf of the United States of America at the 26th Regular Meeting of the ICCAT Commission.

The SCRS continues to work on approaches for an ecosystem-based management approach, adopting an Ecosystem Report Card and evaluating the impact of ICCAT fisheries on bycatch of sea turtles, sea birds and on the vulnerable ecosystems in the Convention area. Several recommendations from the tuna RFMO meetings have been integrated into the management actions adopted in 2019.

The ICCAT Secretariat organized a meeting of the tuna RMFO Working Group on bycatch in Porto, Portugal, in December 2019. This meeting was the first such meeting dedicated to stock assessment and management of sharks across all the RMFOs.

The ICCAT Atlantic-Wide Research Programme for Bluefin Tuna (GBYP) will continue throughout 2020. In addition to historical lines of research such as biological studies, tagging programmes or development of fishery independent indices from aerial surveys, it is worth highlighting a broad international study on bluefin tuna growth in farms which is being developed under this programme since 2019.

The Atlantic Ocean Tropical Tuna Tagging Programme (AOTTP)

The AOTTP is a five-year oceanic fish tagging programme implemented by ICCAT and funded by its Contracting Parties and Cooperating non-Contracting Parties, Entities or Fishing Entities (CPCs). It will bring together students, scientists, managers, NGOs and other stakeholders to present and discuss AOTTP results. This will provide an opportunity for dialogue and collaboration among stakeholders with a special focus on reinforcing local capacity and ensuring better conservation and management of tropical tunas.



ICES

International Council for the Exploration of the Sea

ICES launches a new Advisory Plan

The International Council for the Exploration of the Sea (ICES) has launched a new Advisory Plan, which maps the priority areas for the Organization to further strengthen its advisory role.

The Advisory Plan will improve the resilience of ICES advice to future challenges, as well as recognizing and embracing opportunities. It complements ICES' Strategic and Science Plans, introduced in 2019.

Three goals are highlighted for the Organization's advisory function: enhanced credibility and transparency of advice; a move towards ecosystem advice and better utilization of the science and data available in ICES; and improved communication of advice to better meet stakeholders' needs.

"I am excited about the launch of the Advisory Plan. It focuses on improving our processes and prepares us for future challenges when delivering the evidence base to meet conservation, management, and sustainability goals. Supporting ecosystem-based decisions for our seas and oceans is now central to ICES advice", explains Mark Dickey-Collas, Chair of ICES Advisory Committee (ACOM). "The plan challenges us to maximize the use of our science and data to deliver more credible and transparent advice in an iterative partnership with clients and stakeholders", he continues.

"We hope that the new plan gives insight to RSN on how we envisage our advisory function in the near future", adds Lotte Worsøe-Clausen, Head of Advisory Support at ICES Secretariat.

- → Find ICES Advisory Plan online: https://issuu.com/icesdk/docs/ices_advisory_plan
- → Read more about ICES: http://ices.dk/Pages/default.aspx





IWC

International Whaling Commission

The IWC's successful cooperation initiatives

The IWC's Entanglement Response Initiative is celebrating success with safe and effective response workshops for 1300 participants from thirty+ countries. The latest training took place in Ullapool, Scotland, supporting a collaboration to reduce entanglements occurring in the region's inshore fisheries.

The IWC has built on the success of this initiative to offer extended apprenticeships. These cover more advanced aspects of entanglement, from boat safety regulations and custom built tools, to studying the approaches taken by different response teams around the world.

This year's apprentices from Peru and Norway witnessed real entanglement responses including a critically endangered North Atlantic right whale towing 300 feet of heavy rope.

The IWC's Bycatch Mitigation Initiative (BMI) is another global programme, collaborating at all levels to address cetacean bycatch.

Bycatch is recognised as the most significant conservation issue for cetaceans globally.

Last May, the BMI held a workshop in Nairobi focused on the Indian Ocean, where gillnets are extensively used and cetacean bycatch is estimated to be very high. This regional approach identified shared challenges and opportunities for collaboratively addressing cetacean bycatch, regional priorities and bycatch 'hotspots.'

The BMI continues to engage with FAO on draft guidelines to reduce bycatch of marine mammals. The BMI also participated in the Indian Ocean Tuna Commission's working party on ecosystems and bycatch and held a side event during the joint tuna-RFMO bycatch working group. Earlier in the year IWC participated in a US National Oceanic and Atmospheric Administration (NOAA) workshop on Economics of Bycatch, learning about approaches which could be rolled out in other locations.

The IWC's third workshop held in December focused on understanding and addressing the threat from marine debris. There is growing evidence of marine debris impacts on cetaceans, and the workshop assessed the latest information on ingestion, entanglement, micro-debris and toxicology.





LVFO

Lake Victoria Fisheries Organization

News from Lake Victoria

Lake Victoria Fisheries Organization (LVFO) is an institution of the East African Community (EAC).

Its objective is to foster cooperation among the partner states through harmonization and development of national measures aimed at conservation, management and utilization of the living resources of Lake Victoria in a coordinated and sustainable manner.

Given the worrying trend of declining fish stocks and increasing illegalities in capture and trade of fish and fishery products, the partner states have stepped up their efforts in combating illegality in Lake Victoria through interagency enforcement operations. These operations have brought remarkable improvement in fish stocks, leading to the re-opening of some fish processing plants that had been closed due to inadequate fish supply.

In 2018–2019, LVFO developed guidelines for the establishment and management of fish breeding and nursery areas for Lake Victoria, and guidelines for fish traders in fish, fishery and aquaculture products and inputs in the EAC. The Organization also revised the co-management guidelines of 2009 to provide for elections and tenure of office for Beach Management Unit (BMU) networks, inclusion of the networks in national legislations, the need to strengthen linkages and institutionalize a reporting system between the co-management institutions and national governments, and the need to provide for funding of BMU networks.

Capacity building was carried out to a number of fish traders and inspectors through training on cross-border fish trade aimed at promoting market

access, improved revenue collection and enhanced fish quality and safety assurance.

Through regional working groups, LVFO conducted a survey to update the annually collected information on the status of the fish stocks and the trends in distribution and details on the means of harvesting and quantities harvested. The findings from the Hydro-acoustic Survey for FY 2018/2019 indicated an increase in the mean size of Nile perch from 16.0 cm to 25.2 cm total length between 2017 and 2018, suggesting a shift in size structure. The biomass distribution of species in Lake Victoria was composed of Nile perch (25 percent), dagaa (30 percent), haplochromines (19 percent), Caridina nilotica (26 percent), while the remaining 19 percent were composed of other species.

LVFO has developed an Electronic Catch
Assessment system in which catch and price
data is collected using mobile technology. This
has reduced the cost of conducting the surveys
and reporting. Catch data is very important to
estimate fish removal (fishing mortality) from the
lake to guide sustainable management of fishery
resources and calculate contribution of fisheries
to the national economies. A comprehensive value
chain analysis study was undertaken to cover Nile
perch fishery at local, regional and international
markets, including the fish maws trade. The
study has contributed to better understanding
of the contribution of the sector to the national
economies of the partner states.

LVFO has continued building the capacity of regional fisheries and aquaculture scientists and managers by organizing several short- and long-term training sessions.

In collaboration with FAO, the Organization built capacity of regional staff in collecting, analysing and reporting aquaculture data in their respective countries. In addition, a series of hydroacoustic and pelagic trawl trainings were organized both within the region and in Scotland in which capacity was built for several scientists and two are pursuing PhD studies on the same.

Aquaculture production in the EAC region is still low, contributing only about 13.5 percent of total fishery output.

The main challenges include inadequate supply of quality fish fingerlings and feed, limited extension services and limited support on credit facilities because aquaculture is considered to be a high-risk business by financial institutions. Furthermore, imported Tilapia, which is cheaper than the one produced in the region, provides unfair competition.

Whilst human population in the LVFO partner states was only 23.5 million in 1954 (a reference period when Nile Perch was introduced in Lake Victoria), the human population has grown seven times to 165.5 million in 2018. However, peak fish production from the main water bodies has remained virtually unchanged, hence creating an ever-increasing imbalance between production and demand. This imbalance compels partner states to step up their effort in aquaculture fish production for nutritional and food security.



NAFO

Northwest Atlantic Fisheries Organization

News from Northwest Atlantic Fisheries Organization

The Northwest Atlantic Fisheries Organization (NAFO) had a very busy and productive 2019. Over the course of the year, multiple meetings of the NAFO bodies took place leading up to the 41st Annual Meeting in Bordeaux, France, from 23 to 27 September 2019.

At the meeting, decisions were made to support the long-term conservation and sustainable use of fisheries resources in the NAFO Regulatory Area and advance the review of the NAFO Precautionary Approach Framework. NAFO also agreed to reopen the Flemish Cap shrimp fishery (Division 3M) after an increase in stock to levels above Blim. The fishery for this shrimp stock had been closed since 2011.

Additionally, NAFO agreed to a process to address the recommendations of the 2018 performance review, along with an annual progress reporting procedure at each upcoming annual meeting.

NAFO continued its commitment to transparency and agreed to post its vessel registry on the NAFO website and increased its monitoring, control and surveillance data availability to at-sea and in-port inspectors. It also continued to make progress on the NAFO Observer Application for the instantaneous reporting of scientific and catch data to the NAFO Secretariat.

Lastly, NAFO re-elected Stéphane Artano (France, in respect of St. Pierre et Miquelon), as NAFO President, and Temur Tairov (Russian Federation) as Vice-Chair of the NAFO Commission, for an additional two-year term.

Following the Annual Meeting, NAFO continued its commitment to the ecosystems in the northwest Atlantic with the meeting of the Scientific Council Working Group on Ecosystem Science and Assessment (WG-ESA). This working group met to discuss NAFO's continued efforts to develop and refine its ecosystem approach framework to fisheries management.





Left: NAFO Annual Meeting Opening Ceremony. Right: Frédéric Gueudar Delahaye, French Director General for Fisheries and Aquaculture, Stéphane Artano, NAFO President, and Fred Kingston, NAFO Executive Secretary. Right: NAFO Heads of Delegation 2019.



NAMMCO

North Atlantic Marine Mammal Commission



Creative approaches to facilitating conversations on controversial topics: A success story

by Fern Wickson, NAMMCO Scientific Secretary

NAMMCO has had success using creative approaches to discuss the potential contribution of marine mammal harvesting to sustainable food systems.

The North Atlantic Marine Mammal Commission (NAMMCO) has had several success stories such as the oft-cited examples of the recovery of beluga and walrus populations following management advice and a general increase in animal welfare and safety during hunts. Indeed,

the majority of whale and seal populations in the North Atlantic are now increasing or stable and the ability to have sustainable hunts has been verified.

However, a widespread perception remains that whale and seal hunting is an environmental travesty, with many stocks still on the brink of extinction. Shifting this view is difficult and discussions tend to become antagonistic.

NAMMCO has therefore been experimenting with new creative approaches to facilitating conversations, which has proved to be very successful.

In 2019, NAMMCO Scientific Secretary, Fern Wickson, was lead facilitator for Homeward Bound –

a leadership initiative for women in science, technology, engineering, mathematics and medicine (STEMM), empowering them to have greater influence on decision-making on issues that shape the planet. For a session on science, ethics and politics, NAMMCO prepared a roleplay instead of a standard presentation.

The 100 participants were divided into different actor groups (e.g. commercial hunters, indigenous communities, animal rights activists, scientists) and asked to discuss whether the harvest of marine mammals could be part of a sustainable food system. The context was a meeting of a hypothetical global sustainability council, with a mandate to advise the UN on future directions for environmental policy.

By using roleplay, participants were encouraged to step back from their own opinions to understand different perspectives and negotiate across diverse interests and values in a constructive manner. The outcome led to reconsideration of their existing views and they engaged with the issue in new ways. Following this success, NAMMCO is committed to further exploring creative modes of communication in various settings.







NASCO

North Atlantic Salmon Conservation Organization

Highlights of The International Year of the Salmon 2019

The International Year of the Salmon (IYS) is an initiative launched by the North Pacific Anadromous Fish Commission (NPAFC) and the North Atlantic Salmon Conservation Organization (NASCO) and partners. It aims to stimulate outreach and research that will establish the conditions necessary to ensure the resilience of salmon and people throughout the Northern Hemisphere. IYS has brought people together to share and develop knowledge, raise awareness and take action. 2019 was the focal year, with research and outreach continuing through to 2022. Here are just a few highlights.

Sir David Attenborough narrated a short video on the plight of north Atlantic salmon and what could be done to address the pressures they face.

NASCO collaborated with the NGO – Salmon and Trout Conservation Scotland – to produce the video, which is available on the NASCO website.

The photo on the right was taken by the winner of the IYS photo competition, Pekka Tuuri. This beautiful photo 'Under Yellow Foliage' was taken on a tributary of the River Teno in Finland in 2015.

The IYS Symposium brought salmon experts together in June 2019 in Tromsø, Norway, to discuss management challenges and possible responses. Whilst much of the programme related to climate change, management challenges from the perspective of different groups was a key theme. The report of the Symposium will be published soon.

The State of North Atlantic Salmon Report, with a foreword by His Royal Highness The Prince of Wales, is a colourful and accessible analysis of a species in crisis. This report tells the story of salmon, setting out their lifecycle, the decline in numbers and the pressures they face. Crucially, it focuses on the connections that people have with salmon, and the value the species have for communities across the north Atlantic.

But, most importantly, the IYS has stimulated a huge number of education and outreach projects across the north Atlantic. From art projects in Canada, radio programmes in Ireland, expeditions in Alaska and exhibitions in Portugal, communities and stakeholders have shared and developed knowledge, raised awareness and taken action to conserve the wild north Atlantic salmon.





NEAFC

North-East Atlantic Fisheries Commission



Update from the North-East Atlantic Fisheries Commission (NEAFC)

This update from NEAFC is in the context of the ongoing developments in international fisheries and oceans governance. NEAFC continues to achieve effective measures to manage fisheries while taking due account of impacts on other species and marine ecosystems and taking necessary conservation and management measures to minimise harmful impacts.

NEAFC is the intergovernmental organization responsible for fisheries management in international waters in the North East Atlantic. Its contracting parties are Denmark (in respect of the Faroe Islands and Greenland), the European

Union, Iceland, Norway and the Russian Federation. As in each year, NEAFC has adopted measures for 2020 for its main stocks such as blue whiting, herring, mackerel, Rockall haddock and certain grenadiers. While the focus for the management measures is related to the economic, social and environmental objectives of these fisheries, NEAFC has also taken fisheries measures focused solely on conservation. These include extensions to 2023 of current prohibitions of fisheries directed at basking shark and porbeagle and also on fisheries directed at deep-sea sharks, rays, and chimaeras.

In order to enforce these fisheries management measures, NEAFC continues to enhance its monitoring, control and enforcement capacity.

This is currently being done in particular through developing an Electronic Reporting System (ERS) with the focus of work in 2020 being on technical solutions and implementation.

NEAFC has also underlined its concerns on environmental issues such as ghost fishing and plastic pollution by expanding its regulation on the removal and disposal of all unmarked or illegal fixed fishing gears to all fishing gears. This also complies with garbage and pollution regulations under the International Convention for the Prevention of Pollution from Ships.

International cooperation on combatting Illegal, Unreported and Unregulated (IUU) fisheries continues to be a priority. NEAFC has revised its regulations to ensure lists of IUU vessels from other regional fisheries bodies can be more quickly integrated into NEAFC's own lists. In order to improve transparency for all, NEAFC has also agreed to make available on its website the list of vessels authorised to fish resources regulated by NEAFC.

The protection of vulnerable marine ecosystems (VMEs), such as deep-sea corals and sponges, continues to be an important issue for NEAFC. The Commission has for many years closed bottom fisheries in all areas where VMEs are known to occur, or likely to occur, according to independent scientific advice from the International Council on Exploration of the Seas (ICES). In addition, every five years, NEAFC reviews the effectiveness of its binding recommendation on protection of VMEs. The last review was carried out in 2019 and the NEAFC measures in place were found to be effective in keeping bottom fishing from impacting areas outside defined existing fishing areas. Nevertheless, NEAFC has put in place plans for 2020 to further improve its performance in protecting these ecosystems. These will include monitoring, control and surveillance, science, management and taking into account other international developments, for instance by the United Nations.

NEAFC already cooperates with other international organizations through meetings and governance processes. Nevertheless, NEAFC has now also set up an internal process to carry out more strategic thinking on the implications for NEAFC of current international oceans developments, including on fisheries and the environment, and how the Organization can best engage with these.



NPAFC

North Pacific Anadromous Fish Commission

Building connections for salmon resilience and sustainability in a changing climate: The role of International Year of the Salmon

by L.R. Tessier (IYS Coordinator)
M. Saunders (IYS Director, North Pacific)
Anadromous Fish Commission (NPAFC)
V.I. Radchenko (Executive Director, NPAFC)

Pacific salmon are a vital species for ecosystem health, as sustenance and as a culturally-significant fish for indigenous peoples, and they also contribute greatly to Pacific rim economies both commercially and recreationally. Unfortunately, despite successful sockeye salmon returns in certain areas such as Bristol Bay and the Kamchatka coasts, many populations of Chinook,

sockeye, coho, cherry and steelhead trout are declining. In many regions of the Atlantic basin, Atlantic salmon have even been extirpated or are listed as endangered, despite drastic management strategies including severe restrictions and fishery closures. The unique and incredible migrations of salmon can span multiple nations and result in stocks from multiple origins being present in the same place (mixed stocks).

Therefore, countries must work together cooperatively to ensure stocks have the ability to recover and remain healthy for future generations, and to prevent vulnerable stocks from being over-harvested. However, increasing ocean temperatures, ocean acidification and other related climate change stressors continue to threaten both Pacific and Atlantic populations.



Therefore, with the hemispheric scale of these challenges, it makes real sense to build collaborations between the basins and work cooperatively to enhance knowledge and establish best management practices in this rapidly changing world.

Regional fisheries management organizations (RFMOs) are the only international mechanisms built to foster such broad scale international collaboration and the salmon-related RFMOs have been doing just that. Intergovernmental organizations such as ICES (International Council for the Exploration of the Sea), PICES (North Pacific Marine Science Organization), NPAFC (North Pacific Anadromous Fish Commission), NASCO (the North Atlantic Salmon Conservation Organization) and the Pacific Salmon Commission together have key roles to play in this effort. The mission of PICES/ ICES is to advance and share impartial scientific evidence for the sustainable use of our ocean resources and the impacts of human activities/ climate change. These organizations hold annual meetings and are a platform for the rapid exchange of scientific research, conservation and discussions about the state of our oceans.

One effort to strengthen the collaboration among these organizations is the International Year of the Salmon (IYS), a joint initiative between NASCO and NPAFC.

The IYS was established as a five-year initiative (2018–2022), to build partnerships and establish communication between various organizations across the salmosphere for the resilience of salmon under these changing conditions.





The NPAFC is a non-commercial entity established by a convention between Canada, the United States of America, the Republic of Korea, Japan and the Russian Federation. The primary objective of the Commission is to provide a mechanism for international cooperation promoting the conservation of anadromous stocks in the NPAFC Convention Area of the North Pacific Ocean, including all aspects of scientific inquiry related to salmon and enforcement activities on the high seas. The IYS has thus far been successful at establishing collaborations with over 35 partners in the North Pacific representing governments and scientists from five countries, academia, First Nations, NGOs and industry, who are participating in the development and implementation of IYS on a broad scale.

In both basins, one of the priorities for the IYS is to close a gap in understanding Pacific salmon during their most vulnerable and critical life history periods in the coastal and high seas period Surprisingly, little information is available on these keystone species during their first months and winter at sea, which is hypothesized to be a critical period for survival. To gather comprehensive baseline environmental and ecosystem-level data on Pacific salmon during their critical winter period, the IYS and its partners organized an innovative expedition to the Gulf of Alaska (GoA) in 2019.

This successful research expedition brought together scientists from across the Pacific Rim and fostered relationships among the five countries. To summarize, present and share their findings with the scientific community, the participating oceanographers, ichthyologists, climatologists and resource managers gathered in Victoria, BC in October 2019 for a joint workshop organized by IYS and PICES. An additional IYS workshop was hosted at Ocean Networks Canada to discuss the results and plan next steps which will include a pan-Pacific survey with up to five vessels participating in late winter of 2021.



Members of the 2019 Gulf of Alaska Expedition science team along with NPAFC-IYS members and attendees of the North Pacific Marine Science Organization (PICES) 2019 Annual Meeting in Victoria, BC, Canada.

The overall defining feature of this meeting was the level of enthusiasm and international collaborations and connections that were built during the expedition and reaffirmed at the workshop. This is an example of how partnerships can be built and maintained despite geographic distances and is a leading success story of working together for salmon research and conservation. The IYS is moving forward with two additional signature projects. Partners in the Atlantic and Pacific basins are conducting a "Likely Suspects Project" to jointly develop methods to document the major bottlenecks and test the mechanisms that affect salmon survival across life history stages from freshwater to the high seas. Additionally, they are working on a Data Mobilization Project to harmonize salmon and environmental/climate data across the hemisphere. At present, effective access to data is limiting scientific inquiry that is essential in a fastpaced and changing world.

Intergovernmental organizations have played significant roles in addressing conservation issues affecting marine species for decades.

With initiatives like the IYS, intergovernmental organizations are showing that they can be agents for change as we move into a new decade where we collectively face the ultimate challenge of climate change. Open communication, data sharing and scientific and management collaborations among organizations from local to hemispheric scales is the most promising way to give salmon and people the best chance of resilience to climate change. By the completion of IYS in 2022, the collaborative mechanism is expected to be firmly in place.

NPFC

North Pacific Fisheries Commission



2019 in review

The year 2019 marks the fifth year of operation for the North Pacific Fisheries Commission (NPFC) with the successful conclusion of a series of official meetings and launching important events.

Meetings

The 5th meeting of the NPFC took place in Tokyo, Japan on 16–18 July 2019, and was attended by more than 130 participants from eight members and seven observer organizations. The Commission discussed and adopted the reports of the Scientific Committee, Technical and Compliance Committee and Finance and



Administration Committee meetings held prior to the Commission meeting, including the recommendations therein. The key decisions made by the Commission were: adoption of four new conservation and management measures (CMMs) (Sablefish, Japanese Sardine and Japanese Flying Squid, Vessel Monitoring System, and Compliance Monitoring Scheme), revision of six CMMs (Vessel Registration, IUU fishing vessels, Pacific Saury, Chub Mackerel, Bottom Fisheries NW and NE Pacific), and adoption of the NPFC IUU vessel list for 2019 by adding six new vessels to the current NPFC IUU. The Commission also discussed the development of a strategic plan and the implementation of a performance review of the Commission in accordance with the Convention.

Pursuant to the High Seas Boarding and Inspections (HSBI) Implementation Plan and NPFC CMM 2017-09, NPFC officially launched HSBI operations on 01 April 2019.

Currently, eighteen inspection vessels from four Members – Japan, United States of America, Taiwan Province of China, and the Russian Federation – are active and are providing relevant authorities boarding reports within three days of the completion of the inspection.

The Memorandum of Cooperation was signed by NPFC and the North Pacific Anadromous Fish Commission (NPAFC) on 13 May 2019, which is the first formal cooperation agreement to foster and strengthen the long-term relationship between the two intergovernmental organizations. In addition, the NPFC partnered with the North Pacific Marine Science Organization (PICES) in 2019 through a framework for enhanced scientific collaboration in the North Pacific.



OSPESCA

Organization for the Fishing and Aquaculture Sector of the Central American Isthmus

Regional regulation for the implementation of the Port State Measures (PSM) Agreement

The Council of Ministers of the Organization of the Fisheries and Aquaculture Sector of the Central American Isthmus (OSPESCA), an institution of the Central American Integration System (SICA), approved Regulation OSP-10-2019 on Port State Measures (PSM) to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated (IUU) Fishing.

This Regulation establishes a set of regionally harmonized rules regarding PSM to prevent, deter and eliminate IUU fishing in response to the PSM Agreement which entered into force in 2016.

The Regulation, according to the Tegucigalpa Protocol that established SICA, is binding to all its members: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama and the Dominican Republic.

SICA authorities work together against illegal fishing

The Central American Security Commission (CSC), represented by the Deputy Ministers of Foreign Affairs and the Deputy Ministers or competent authorities in Defence and Public Security, agreed to join efforts with OSPESCA to establish a protocol for the implementation of regional regulations related to IUU fishing.

In this way, the member countries of SICA will have a regional protocol to improve the implementation of national, regional and international regulations related to IUU fishing. This will occur through concerted efforts and reviewed procedures in all fields, especially including the effective prosecution of IUU fishing activities carried out by national, regional or extra-regional actors in internal waters, territorial waters, contiguous zone, exclusive economic zone, and international waters.





The Protocol seeks to ensure the positive and real impact on the sustainable use of the fisheries resources and the conservation of the environment in compliance with national and regional rules aimed at regulating fishing activities.

Clima Pesca, fishing with smartphones

Clima Pesca, an initiative of the Organization of the Fisheries and Aquaculture Sector of the Central American Isthmus (OSPESCA), is in its seventh year providing information that highlights climate impacts on the fisheries sector, as well as developing adaptation efforts to increase production and guarantee food security, despite climate change and climate variability.

Thanks to the contribution of the fisheries and aquaculture authorities of SICA countries, other national, regional and international bodies, and the collaboration of fisherfolk and aquaculture producers, meteorological and oceanographic

information is provided. This includes sea surface temperatures, winds, chlorophyll, waves, marine currents, atmospheric pressure, climate impact on fisheries and aquaculture, fisheries products prices, cyclones probability and other information such as the inventory and use of inland water bodies in the region.

In April 2017, Clima Pesca's digital platform was made available to users. To date, there are 121 761 users in 144 countries, of which 64.1 percent are women, 42.9 percent use mobile devices, 52 percent use desktop computers and two percent use tablets.

During the first quarter of 2020, the platform will be available in the iOS system, mobile operating system of Apple Inc. for smartphone, and can be viewed at www.climapesca.org.

Clima Pesca is a "Regional Public Good" of SICA countries, which supports responsible and safe fishing.



Central American subregional meeting on the implementation of the Voluntary Guidelines for the Sustainability of Small-Scale Fisheries

The "Central American subregional meeting on the implementation of the Voluntary Guidelines for the Sustainability of Small-Scale Fisheries" was held on 30 and 31 October 2019, with the support of FAO and the sponsorship of the Government of Panama.

The meeting was widely attended by 34 key actors from fishing institutions, such as the national associations that are members of CONFEPESCA, the Alliance of Indigenous Fishers of Central America, the Indigenous Council of Central America (CICA), the World Forum of Fishermen (WFF), the organizations and artisanal fishers of Colombia and Mexico, the Community and Biodiversity (COBI) of Mexico, FAO and OSPESCA.

The meeting was an important turning point in the analysis of implementation of the Guidelines, as well as the establishment of priorities to be jointly addressed through programmes, projects, and the use of communication mechanisms on issues related to organization, governance, management, social security, fisheries security, capacities, gender, information, value chains and information platforms, among other topics.

At the request of a Central American initiative, FAO approved the International Year of Artisanal Fisheries and Aquaculture, which will be held in 2021.

As agreed immediate actions, coordination has been taking place between the member organizations of the working group, to consolidate the proposals and establish the update of the regional roadmap for the implementation of the guidelines and the incorporation of new actors in the process at regional and national level.











SEAFO

South East Atlantic Fisheries Organisation

How SEAFO uses research information to enhance management in the Southeast Atlantic Ocean

In areas beyond national jurisdiction (ABNJs) the main fishing activities are bottom fisheries targeting deep-sea species and the main management body is the South East Atlantic Fisheries Organisation (SEAFO).

Some of the fishing gears used to catch these species such as bottom trawls and longlines, can produce significant adverse impacts on the ecosystems. The benthic ecosystems that include organisms with these characteristics are referred to as Vulnerable Marine Ecosystems (VMEs) and the organisms as VMEs indicator species.

Concerns have been expressed with several calls to take action. One of these calls is the FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas (2009) developed with the involvement of Members, the fishing industry, NGOs and scientists and researchers. These guidelines include some of the following recommendations:

- Call upon countries and RFMO/As to identify areas where VMEs are known or likely to occur, and to take action using the best information available
- → Encourage fishery-independent research surveys to provide relevant information on VMEs and how they are affected by anthropogenic activities.

In 2006, the SEAFO Scientific Committee (SC) adopted the closure of 12 areas where VMEs occurred. These areas were all on seamounts and seamount complexes with summit depths shallower than 2000 m.

A research survey undertaken in 2015 with the R/V Dr. Fridtjof Nansen (related information available at www.fao.org/3/a-i7652e.pdf) supported SEAFO by collecting information on the occurrence and distribution of VME indicator species. Survey results were used to improve understanding of the SEAFO and to make informed decisions on the status of existing closed areas and closing new areas.

In three of the closures there was evidence of coral gardens that would likely satisfy the definition of VMEs as described in the FAO Guidelines (2009). The Commission accepted the recommendation from the SC to maintain the current closures.

In some knolls to the south and southeast of the Valdivia bank, the density and diversity was such that it would in all likelihood be classified as VMEs. The Commission accepted the recommendation from the SC to close this area to fishing for all fishing gears except pots and longlines.

Two of the existing fishing areas on the Walvis ridge were identified as practically bare rock without VME indicators. The SC and the Commission recommended that they remain open to fishing.

This emphasises the continued need for ground-truthing as well as a need for science-based advice underpinning fine-scale spatial management, preferably based on observations. With continuous support from the EAF Nansen programme, another survey was done in 2019 and a further survey is proposed for 2020.



SIOFA

Southern Indian Ocean Fisheries Agreement

An update from the Indian Ocean

The Southern Indian Ocean Fisheries Agreement (SIOFA) entered into force in June 2012. To date, SIOFA has ten contracting parties: Australia, the Cook Islands, the European Union, France – on behalf of its Indian Ocean Territories, Japan, the Republic of Korea, Mauritius, the Seychelles, Thailand and since the 22 October 2019, China.

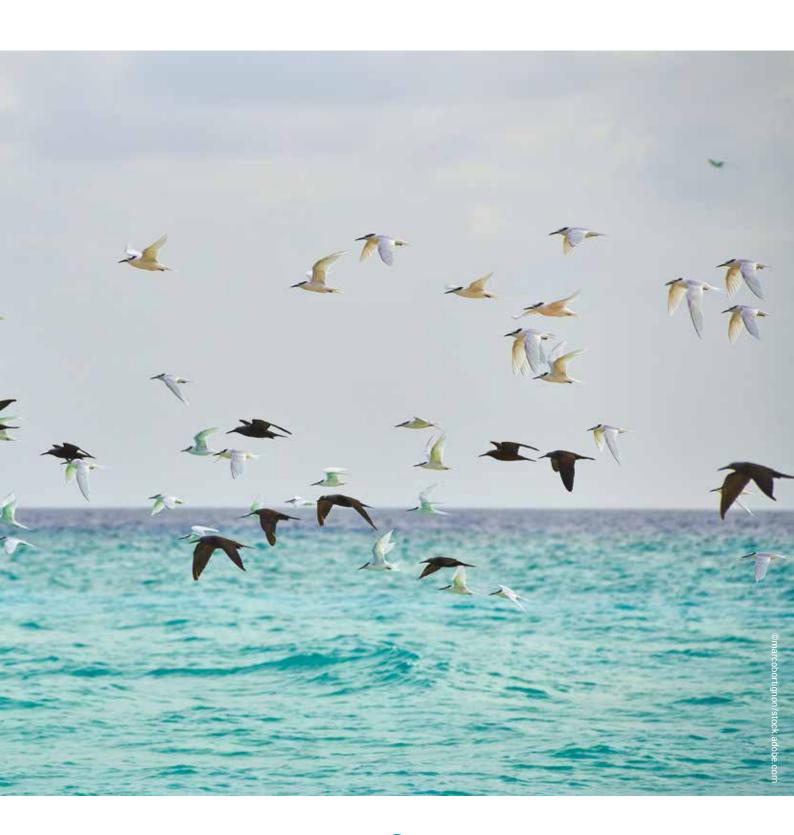
Comoros is a cooperating non-contracting party and Taiwan Province of China is a participating fishing entity: Kenya, Madagascar, Mozambique and New Zealand are also signatories to this Agreement but have not yet ratified it.

The sixth meeting of the parties to SIOFA was held in Mauritius in July 2019. Some of the key achievements include:

- the adoption of a new measure for the management of orange roughy, alfonsino and toothfish;
- the adoption of the High Seas Boarding and Inspection Procedures, expected to significantly improve SIOFA's capacity to monitor regional fishing activities effectively; and
- the strengthened bottom fishing measure, including Vulnerable Marine Ecosystem (VME) taxa indicators and thresholds for triggering VME move-on rules.

SIOFA also adopted its first prohibition of direct shark fishing and mitigation measures for seabirds.





SPC

Secretariat of the Pacific Community

Enhancing fishery officers' communications skills

In December 2019, the Pacific Community (SPC) organised an attachment training programme aimed at reinforcing the strategic communication and information skills of Pacific Island fisheries officers. Five fisheries officers from Tuvalu, Kiribati and Tonga took part in this two-week workshop, learning about and exchanging ideas on how to build and implement an efficient, culturally-adequate communication plan, and how to design information tools that address fisheries management issues.

For the vast majority of Pacific Island communities, the lack of access to information tailored to their needs is a barrier to their engagement

and participation in decision-making, including decisions related to their marine resources.

To address this challenge, SPC is implementing communication, information and outreach activities that target coastal communities through its Fisheries, Aquaculture and Marine Ecosystems (FAME) Division. These activities are part of the Coastal Fisheries Governance Project and the Pacific European Union Marine Partnership (PEUMP) programme and are delivered through national governments and relevant local networks and partners.

Reinforcing local capacity is part of the challenge. For the five Pacific Island fisheries officers – Eria Taatie and Joseph Teuea from Kiribati; Amanda Le'ota and Siosi Matanga from Tonga; and Matelina Stuart from Tuvalu – the opportunity to



From left to right: Fisheries officers Joseph Teuea and Taatie Eria, from Kiribati, and Amanda Le'ota and Siosi Matanga from Tonga.

learn innovative approaches and practices during four participatory sessions was provided by SPC's information and communications officers.

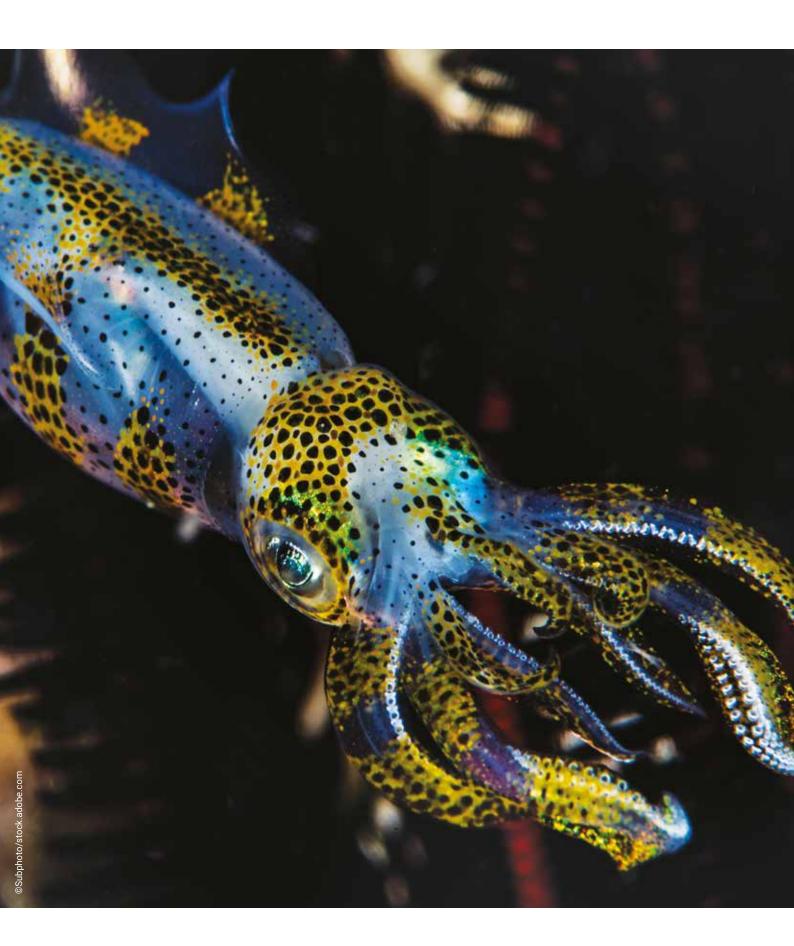
The training comprised several sessions:

- → Session 1. Assessing the context and analysing the situation: The objective of this session was to analyse the current strategic communications and approaches used in trainees' respective countries and discuss their comparative strengths and weaknesses.
- → Session 2. Building social and behavioural change communication: the theory of social and behavioural change communication (SBCC) was explained. Thisis the interactive process of any intervention that involves individuals, groups or community members who are developing communication strategies to promote positive behaviours that are appropriate to their settings.
- → Session 3. Social media and video production training: the session included basic theory and practical exercises and included the production of a short interview video for social media.
- → Session 4. Recording for radio programmes and videos: In this final session, fisheries officers were trained in voice recording. This session included tips on how to use the tone of the voice while speaking on radio awareness programmes.

The course placed special emphasis on "why do we need to think "change?" (in particular Session 2).

Coastal marine resources are declining everywhere, and the main reasons for this decline includes overfishing, the use of destructive fishing methods (e.g. dynamite, chemicals and poisons) and environmental disturbances, which are all human induced. Establishing regulations to prevent these destructive practices may not be efficient if resource users do not fully understand the cause and effect of their actions.





SPRFMO

South Pacific Regional Fisheries Management Organisation

News from SPRFMO

In 2019, SPRFMO held its 7th Commission meeting, 6th Compliance and Technical Committee (CTC) meeting, and the 6th Finance and Administration Committee (FAC) meeting in The Hague, the Netherlands, as well as the 7th Scientific Committee meeting, in Havana, Cuba, which was preceded by a Squid Workshop and a Habitat Monitoring Workshop.

The meeting re-elected the Commission's Chair and elected a new vice Chair: Ms Kate Sanderson (Faroe Islands). Chairs and vice Chairs of the FAC and CTC were also re-elected for a further period.

New conservation and management measures were adopted on deep-water species (CMM 03a-2019) and marine plastic pollution (CMM 17-2019).

In embracing international cooperation and positive exchange with other organizations, SPRFMO attended meetings of ABNJ, ICSP, FIRMS, CCAMLR. MoUs were signed with CCAMLR (extension), CPPS, and Network IUU (REDEPESCA INDNR). Intersessional work was done to finalise an MoU with WCPFC and IATTC. SPRFMO and FIRMS signed the Partnership Agreement in May 2019.

The Commission also highlighted the importance of effective communication and supported a communications strategy proposed by the Secretariat, and as a result, a quarterly SPRFMO newsletter started to be issued in May 2019. The newsletter contents are aimed at members and CNCPs initially, but it is planned to address a wider public in 2020–21. Introduction meetings between the Secretariat and the representatives

of several SPRFMO members in New Zealand were held in 2019.

The SPRFMO Observer Programme (OP) is starting, with a call for proposals to OP Accreditation Evaluators successfully completed.

A healthy improvement in the status of the Jack mackerel and deep-water fisheries occurring in the SPRFMO Convention Area is clear. Significant work has been done to increase the knowledge and science available in respect of the Giant Squid.

The Secretariat has moved to new offices, bid farewell to the Secondment Officer, Mr Jongkwan Ahn (Korea), and has welcomed Mr Pablo Ortiz (Chile) as the new Compliance and VMS Officer.



WECAFC

Western Central Atlantic Fishery Commission

Towards a cohesive fight against IUU fishing by countries in the WECAFC region: The 17th Session of the Commission endorsed the Regional Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (RPOA-IUU) 2019–2029

Background

The objective of the Western Central Atlantic Fishery Commission (WECAFC) is to promote the effective conservation, management and development of the living marine resources within its area of competence. This, in accordance with the FAO Code of Conduct for Responsible Fisheries, the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication and to address common fisheries management and development problems faced by members of the Commission.

One of the major challenges undermining the sustainability of marine fishery resources in the region is posed by IUU fishing. The importance of combatting IUU fishing is widely recognized and the range of national and international instruments directed at combatting IUU fishing has evolved considerably since the adoption of the FAO International Plan of Action to Prevent, Deter and Eliminate IUU fishing in 2001. The adoption of the 2009 FAO Agreement on Port State Measures to Prevent, Deter and Eliminate IUU Fishing (PSMA), the first international legally binding instrument to target IUU fishing, and its entry into force in 2016 mark major milestones in the global fight against IUU fishing. Under the United Nations Sustainable Development Goal (SDG) 14 on Conserving and Sustainably Using the Oceans, Seas and Marine Resources, one of the specific targets refers to effectively ending IUU fishing by 2020 in order to ensure prosperity, food security and sustainable development for all.





There is a legitimate concern in the WECAFC region about this pervasive threat, because IUU fishing in this region is estimated between 20 and 30 percent of total reported harvests, representing a value of USD 450 to 750 million annually. It is now well documented that IUU fishing has dire implications for millions of peoples' livelihoods and entails, among others, adverse impact on national economies, food security, and the environment. IUU fishing operations can be linked to other criminal activities such as document fraud, tax evasion, money laundering or even forced labour and human rights abuses. Other crimes that have been associated with vessels engaged in IUU fishing operations are smuggling activities, including of drugs, wildlife and even weapons (more relevant information is available at: www.fao.org/iuu-fishing/background/linksbetween-iuu-fishing-and-other-crimes).

Mindful of the significance of this challenge, the members of the sub-regional fisheries frameworks, the Caribbean Regional Fisheries Mechanism (CRFM) and the Organization for Fisheries and Aquaculture of Central America (OSPESCA), have already taken important steps to build capacity for combatting IUU fishing in the region, most of which featured the deliberations of the 15th Session of the Commission in 2014:

- → Adoption of Resolution WECAFC/15/2014/6 on region-wide support to the implementation of the CRFM Castries, St Lucia, (2010) Declaration on Illegal, Unreported and Unregulated Fishing.
- → Adoption of Resolution WECAFC/15/2014/9 on the implementation of the Port State Measures Agreement and the FAO Voluntary Guidelines for Flag State Performance in the Region, and particularly the application of the Voluntary Guidelines in areas beyond national jurisdiction.
- → WECAFC members' agreements to establish a Regional Working Group on IUU Fishing (RWG-IUU), a joint working group of WECAFC, CRFM and OSPESCA with the aim of improving coordination and cooperation among national and regional organizations responsible for fisheries-related monitoring, control and surveillance (MCS) in support of their common efforts to combat IUU fishing. This RWG-IUU has been tasked to work on appropriate legal frameworks and protocols for the cooperation



among countries to ensure the effective implementation of the PSMA and other relevant international instruments and to strengthen effective regional cooperation to combat IUU fishing, in line with the Castries Declaration on IUU Fishing (Resolution WECAFC/15/2014/6 on region-wide support for the implementation of the CRFM "Castries, Saint Lucia" - 2010), the Caribbean Community Common Fisheries Policy (CCCFP) and the OSPESCA IUU Action Plan (Regional Regulation OSP-08-2014 to Prevent, Discourage and Eliminate Illegal, Unreported and Unregulated Fishing in SICA Member Countries). The terms of reference of the RWG-IUU were endorsed at the 16th Session of the WECAFC in 2016.

Consistent with these efforts, the WECAFC's 17th Session endorsed a Regional Plan of Action (2019–2029) to prevent, deter and eliminate IUU fishing (WECAFC RPOA-IUU) through effective regional cooperation among its 34 member states and other subregional organizations to boost healthy marine environment, the economic

development and the social well-being of coastal communities. The plan further underscores the importance of harmonizing policies, encouraging information sharing, identifying capacity development needs, and better facilitating the implementation of international instruments and tools to prevent, deter and eliminate IUU fishing through effective regional and international collaboration as already foreseen in the Caribbean Community Common Fisheries Policy (CCCFP).

A snapshot of the Regional Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated (RPOA-IUU) Fishing in WECAFC Member States (2019–2029)

The RPOA-IUU was developed by the joint WECAFC/CRFM/OSPESCA RWG-IUU. This was done under a coordinated collaborative framework of two projects: the European Union Directorate General for Marine Affairs and Fisheries (EU DG Mare), through the project "Support to implementation of the Regional Plan of Action



to deter and eliminate Illegal, Unreported and Unregulated Fishing in the Western Central Atlantic", and the UNDP/GEF-funded UNOPS-FAO collaborative execution of the CLME+ Project "Catalysing Implementation of the Strategic Action Programme for the Sustainable Management of shared Living Marine Resources in the Caribbean and North Brazil Shelf Large Marine Ecosystems".

The plan identifies 28 measures and actions to combat IUU fishing in the region and to fulfil the WECAFC members' obligations in their different capacities as port, flag, coastal and market states through regional cooperation, consistent with relevant international fisheries instruments.

Four main aspects are considered:

- policy and legal framework as an overarching component to National Plans of Action, National Legislative Frameworks, and Regional Policies and Tools, all consistent with the relevant international instruments;
- operations and monitoring, control and surveillance (MCS);

- regional cooperation and information-sharing;
 and
- capacity development to the Commission's overall objective.

The timeframe for this RPOA-IUU is ten years, commencing in 2019, with systematic reviews at regular intervals, using the joint WECAFC/CRFM/OSPESCA RWG-IUU as a mechanism for this.

To strengthen MCS activities in the region and to contribute effectively to the fight against IUU fishing activities in line with this plan, the Commission had already endorsed three recommendations:

- 1) WECAFC/17/2019/15 on the monitoring and control of transshipment at sea;
- WECAFC/17/2019/16 on the application in the region of the technical guidelines on methodologies and indicators for the estimation of the magnitude and impact of IUU fishing; and
- 3) WECAFC/17/2019/17 on the marking of fishing gear.



From endorsement to implementation of the WECAFC RPOA-IUU – what's next?

The Commission acknowledged that IUU fishing is a complex problem; it is often linked to poverty in coastal communities, but also threatens the livelihoods of law-abiding fisherfolk. In endorsing the RPOA-IUU, the Commission recommended that a deeper analysis of the root causes be carried out for a more comprehensive approach in solving the issue, especially in consideration of artisanal and small-scale fisheries that are operating for subsistence purposes. The Commission also recommended regular review of members' implementation of the RPOA-IUU to assess and advance progress.

One of the unfolding efforts in addressing these concerns is the survey questionnaire, which would provide a clear snapshot of the region with regard to the 28 measures. A survey questionnaire aiming at setting the baseline indicators to gauge progress as well as enable the development of a sound implementation plan was launched in January 2020. The findings are expected to be discussed at subsequent regional fora, specifically the ad hoc regional workshop of the Flag State Performance.

Together with this initiative of taking stock of members' readiness for the implementation of the RPOA-IUU, estimation of the magnitude and impact of IUU fishing will be conducted by the CLME+ sub-project in selected beneficiary countries to generate accurate information for evidence-based policy advice and improvements in socio-economic conditions of legitimate fishers. There is great expectation that these two initiatives will pave the way for wider scale undertakings supported by dedicated donor funding to be sought to sustainably control this global challenge.

The second preparatory meeting of the transformation of WECAFC

Following the agreement reached at the 17th Session of the Commission (15–18 July 2019) and in line with the endorsed roadmap for progressing towards the development of a model for a Regional Fisheries Management Entity or Arrangement in the WECAFC area, a second preparatory meeting will likely be held in the second semester of 2020. It will work on developing options and recommendations that will be submitted to the next session of WECAFC in 2021. This member-driven and inclusive (of all key stakeholders, including fisherfolk) process will entail gathering in advance of this second preparatory meeting information, best practices, and options for the development of such an entity or arrangement.



The CC4FISH Project

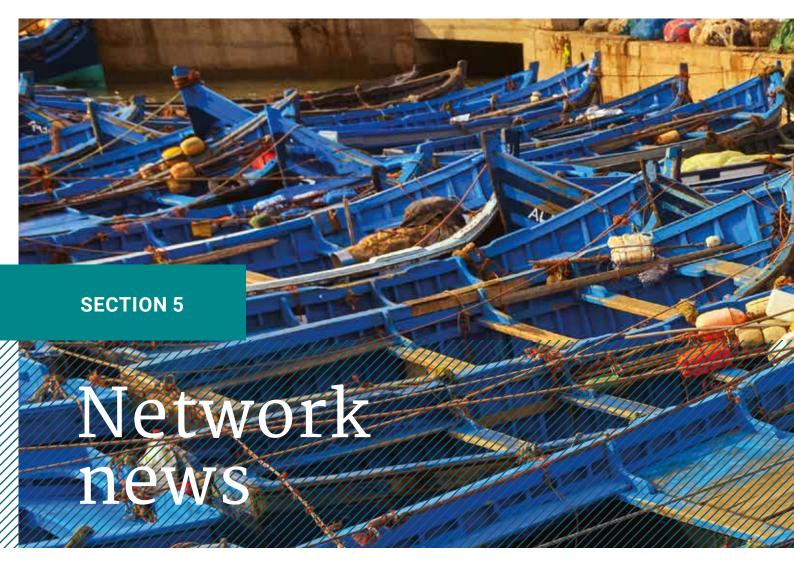
The Climate Change Adaptation in the Eastern Caribbean fisheries sector Project (CC4FISH), a GEF-funded project, which started on 1 January 2017, is spearheaded by the Western Central Atlantic Fishery Commission (WECAFC) and carried out in seven Eastern Caribbean countries. Fishing is one of the most dangerous occupations in the world and climate change is expected to exacerbate this through more unpredictable weather patterns and increases in the frequency and intensity of hurricanes.

Under CC4FISH, an improved regional safety at sea training has been developed which includes modules such as emergency preparation, outboard engine repair and maintenance, safety risk management, boat handling and basic marine traffic as well as first aid and communication. In addition, the project carries out specific ICT workshops focused on the three ICT devices most important to safety at sea for small-scale fishers: VHF radio, Global Positioning System (GPS) and mobile phones.

The preliminary assessment of uptake of these devices in the Eastern Caribbean showed that current adoption and understanding of how to use these devices, in particular to improve safety at sea, is still limited. Many fishers, for example, might own a VHF radio but are unaware of the correct procedure to make a distress call. In addition, they might not know how to find, read or communicate their GPS location to rescue agents such as the Coast Guard. However, communicating their location is critical for swift and urgent rescue when caught in emergencies at sea.

Fishers have been taught instrumental, technical and procedural skills while also performing drills on radio, GPS and cell phone in a classroom environment as well as at sea.

To date over 250 fisherfolk have been trained in Grenada, Trinidad and Tobago, St. Vincent and the Grenadines, and Dominica. The CC4FISH project thus supports innovative technological adaptation measures to climate change.



CONTRIBUTIONS FROM:

DOALOS: United Nations Division for Ocean Affairs and the Law of the Sea

JFMC: Zambia, Zimbabwe Joint Fisheries Management Committee

UILA PESCA: Italian Union of Fish and Aquaculture Workers





DOALOS

United Nations Division for Ocean Affairs and the Law of the Sea



Updates on General Assembly developments and on the work of the Division for Ocean Affairs and the Law of the Sea relevant to the work of RFBs

Within the framework of the two annual United Nations General Assembly (UNGA) resolutions on oceans and the law of the sea and on sustainable fisheries, the UNGA continues to address multiple ocean-related matters. The most recent of these annual resolutions, resolution 74/18 on sustainable fisheries and resolution 74/19 on oceans and the law of the sea, were adopted on 10 December 2019. These resolutions, inter alia, address the following issues of key importance to the work of RFBs.

Resumption of the Review Conference on the United Nations Fish Stocks Agreement (UNFSA) and the Informal Consultations of States Parties to the United Nations Fish Stocks Agreement (ICSP)

As agreed at the fourteenth round of Informal Consultations of States Parties to UNFSA (ICSP-14), and reflected in General Assembly resolution 74/18, the Review Conference on UNFSA will be resumed for the third time in May 2021. As per

past practice, preparations for this Conference will span the one-and-a-half-year period leading up to its resumption.

ICSP-14 was held from 2 to 3 May 2019, focusing on the topic of "Performance reviews of regional fisheries management organizations and arrangements". The Consultations agreed that the Review Conference on the Agreement would be resumed in 2021, and also approved revised Terms of Reference for the Part VII Assistance Fund with the aim of facilitating future contributions to assist developing states in implementing the Agreement. The report of the Consultations and other relevant documents, contributions and presentations can be found on the Division's website at:

www.un.org/depts/los/convention_agreements/ fish_stocks_agreement_states_parties.htm

The Consultations agreed that the topic of focus for the fifteenth round (ICSP-15) to be held from 19 to 21 May 2020, would be "Implementation of an ecosystem approach to fisheries management", with two days dedicated to considering the topic of focus and one day for preparing for the resumed Review Conference in 2021. It was also decided that the sixteenth round of Informal Consultations (ICSP-16), to be held in 2021, would be exclusively dedicated to preparations for the resumed Review Conference. However, due to the ongoing COVID-19 pandemic and following consultations with Members, the Chair of ICSP-15 has notified the Secretariat that the fifteenth round will be postponed until March 2021. The scope of ICSP-15 is to be reviewed by Members in the context of the informal consultations on the draft General Assembly resolution on sustainable fisheries in November 2020. Accordingly, the deadline for contributions on the topic of focus for ICSP-15,



"Implementation of an ecosystem approach to fisheries management', has been extended to 15 January 2021. Any written contributions from states and regional fisheries management organizations and arrangements (RFMO/As) received in advance of this date will be posted in accordance with General Assembly resolution 74/18, with the option to provide updates in due course.

Workshop on Bottom Fishing

The General Assembly will conduct the next review of actions taken by states and RFMO/As to implement the provisions of General Assembly resolutions 64/72, 66/68 and 71/123 on the impacts of bottom fishing on vulnerable marine ecosystems and the long-term sustainability of deep-sea fish stocks in November 2020. This will be part of the informal consultations on the draft General Assembly resolution on sustainable fisheries. The review will be preceded by, and informed by, a two-day multi-stakeholder

workshop, to be held in New York, from 5 to 6
August 2020. Should conditions not allow an
in-person meeting due to the continued COVID-19
pandemic, contingency arrangements for holding
the workshop may be considered by the Secretariat
in coordination with the Moderator. The documents
for this workshop will be made available on the
Division's website. A report of the SecretaryGeneral will also be prepared in connection with
the review. Invitations to contribute to this report
were sent to states and relevant RFMO/As in
January 2020.

Informal Consultative Process on Oceans and the Law of the Sea (ICP-20)

The twentieth meeting of the United Nations Openended Informal Consultative Process on Oceans and the Law of the Sea (ICP-20), held in New York from 10 to 14 June 2019, focused on the topic: "Ocean Science and the United Nations Decade of Ocean Science for Sustainable Development". The General Assembly, in resolution 74/19 decided that

the twenty-first meeting of the ICP, to be held from 22 to 26 June 2020, would focus on the topic "Sea-level rise and its impacts". However, the co-Chairs of ICP have notified the President of the General Assembly that, in light of the evolving situation concerning the COVID-19 pandemic, and after consulting with delegations, it was agreed that ICP-21 should be postponed to 2021, at a date to be later decided by the Assembly. A corresponding General Assembly decision is expected to be adopted shortly. All relevant documents for this meeting can be found on the Division's website at: www.un.org/depts/los/consultative_process/consultative_process.htm

Biological diversity of areas beyond national jurisdiction

Pursuant to General Assembly resolution 74/19, it was decided that the fourth session of the Intergovernmental Conference on an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, would be held in New York from 23 March to 3 April 2020. However, in light of the evolving situation concerning the COVID-19 pandemic, the General Assembly has recently decided to postpone the fourth session of the Conference to the earliest possible available date to be decided by the General Assembly (decision 74/453). All relevant documents for the upcoming session, including a note from the President of the Conference accompanying the revised draft text of an agreement for discussion at the next session, as well as documents from the previous three sessions, can be found on the Division's website at: www.un.org/bbnj/content/fourth-substantive-session

Regular process for global reporting and assessment of the state of the marine environment, including socio-economic aspects (Regular Process)

The second World Ocean Assessment (WOA II), one of the major outcomes of the second cycle of the Regular Process (2016–2020) will be completed in 2020. While the first World Ocean Assessment (WOA I) provided a baseline study of the state of the world's oceans, the second world ocean assessment will extend to evaluating trends and identifying gaps (more information available at www.un.org/regularprocess).

The twelfth meeting of the Ad Hoc Working Group of the Whole on the Regular Process, was held from 29 to 30 July 2019, and approved, inter alia, the possible outcomes and building blocks of the third cycle of the Regular Process (available at: www.un.org/regularprocess/sites/www.un.org. regularprocess/files/possible_outcomes_and_ building_blocks_3rd_cycle.pdf). Subsequently, the General Assembly, through resolution 74/19, adopted on 10 December 2019, decided to launch the third cycle of the Regular Process to cover five years from 2021 to 2025. It requested the Bureau, with the assistance of the Group of Experts and the Secretariat, to develop a draft programme of work for the third cycle which would be discussed at the thirteenth session of the same Working Group to be held on 9 and 10 September 2020.

United Nations Decade of Ocean Science for Sustainable Development

As a follow up to the declaration of the United Nations Decade of Ocean Science for Sustainable Development (the Decade) by the 72nd Session of the UNGA, the DOALOS in its capacity as the Secretariat of the UN-Oceans and of the UN Regular Process, is supporting the Intergovernmental Oceanographic Commission of UNESCO (IOC) with, inter alia, the development of the Science Action Plan.

United Nations Conference to support Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources sustainable development

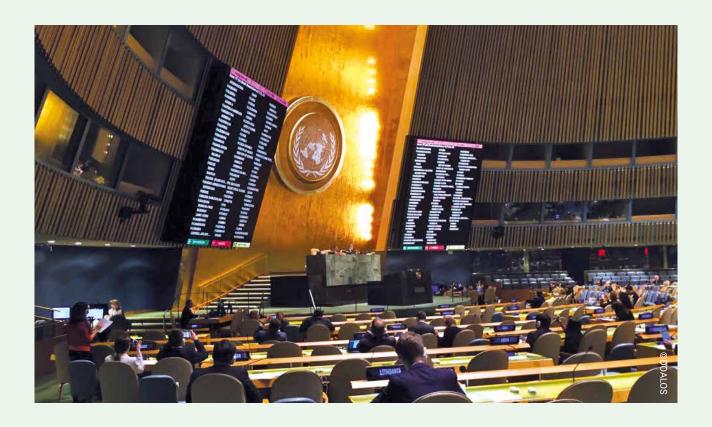
Through resolution 73/292, the General Assembly decided to convene the 2020 United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development. The overarching theme of the Conference is "Scaling up ocean action based on science and innovation for the implementation of Goal 14: stocktaking, partnerships and solutions". The Conference was originally scheduled to take place in Lisbon, Portugal from 2 to 6 June 2020. However, due to the ongoing COVID-19 pandemic, the General Assembly has recently decided to postpone the Conference. The co-hosts of the Conference, the Governments of Kenya and Portugal, in consultation with the General Assembly, will decide on possible future dates for the Conference, including timelines for the preparatory process. More information is available at:

https://oceanconference.un.org

World Ocean Day

The theme of the 2020 UN World Oceans Day (WOD) is "Innovation for a Sustainable Ocean." The WOD celebration will shed light on innovations from around the globe in areas of need that are both promising and proven, those that instil optimism, and those that have demonstrated the ability to be effectively scaled-up.

World Oceans Day and events taking place throughout World Ocean Week in New York City will also provide an opportunity to dive deeper into the themes considered at the 2020 United Nations Ocean Conference and to amplify and build upon its outcomes. Additional information can be found at https://unworldoceansday.org/index.php/about



JFMC

Zambia, Zimbabwe Joint Fisheries Management Committee



Moving international cooperation forward in Lake Kariba and Zambezi River

About Lake Kariba fisheries

Lake Kariba is one of the largest man-made water bodies in the world with a surface area of approximately 2 665 square kilometres and 156 cubic kilometres. It lies between Zambia and Zimbabwe and was created in 1958 for the purposes of hydroelectric power generation by damming the Zambezi River. As a shared resource, the lake is jointly managed by Zambia and Zimbabwe.

The lake has two main fisheries, an inshore (near-shore) and offshore (distant from the shore for kapenta). Kapenta is a freshwater sardine (Limnothrissa miodon). The kapenta fishery has been overcapitalised over a period of time. Bioeconomic modelling on the fishery – which offers practical methods for controlling the present overcapacity of fishing fleets and for improving economic performance – has estimated that the optimum economic rent (value of the kapenta fishery) would be accrued using 500 vessels and currently the number of kapenta rigs operating on Lake Kariba is approximately three times above the optimum.

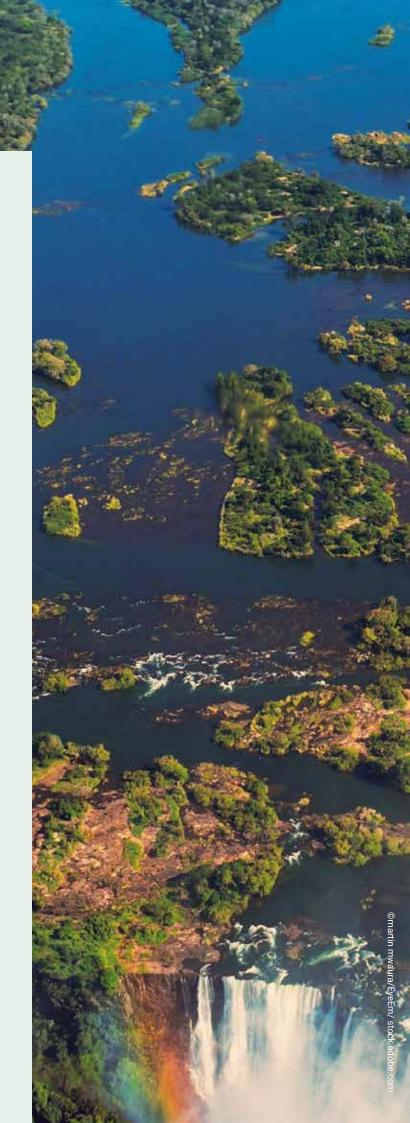
The kapenta (offshore) fishery, artisanal (inshore) fishery and aquaculture sectors play a very important role in both countries in providing a source of protein, guaranteeing food security and employment creation. Kapenta is a fast grower and regenerates rapidly which means that this fishery can be highly productive. The commercial kapenta fishery uses rigs equipped with lift nets and is a capital-intensive fishery.

In the artisanal fishery sector of Lake Kariba there are approximately 50 different fish species caught. Some stocks of important species of the artisanal fishery such as tiger fish and bream are probably overexploited. Research is clearly required to inform management of this fishery and it is equally very important to support co-management approaches (involving the lake communities), building their resilience by improving adaptive capacities of fishery-dependent communities.

The lake is also a very important resource for aquaculture production. Zambia is the biggest producer of tilapia in the Southern Africa Development Community (SADC) with much of the aquaculture operated on Lake Kariba. At a technical consultation held in 2019 between the two countries preceding the first Joint Fisheries Management Committee meeting, it was reported that Lake Kariba aquaculture produces approximately 17 000 metric tonnes of tilapia (2018), and on the Zambian side of the lake, a new project planned is targeting an additional yearly production of 10 000 metric tonnes.

News on international cooperation

The first Zambia, Zimbabwe Joint Fisheries Management Committee (JFMC) meeting on the management of fisheries and aquaculture of Lake Kariba and transboundary waters of the Zambezi River was held to take important decisions on the protocol for economic and technical cooperation.



Several recommendations had been prepared by technical consultations facilitated by FAO between the two countries, regarding joint management measures of commercial and artisanal fisheries as well as aquaculture on the lake, for consideration by this high-level committee constituted on 6 December 2019 in Lusaka, Zambia.

The meeting was attended by decision-makers and observed by fisheries industry representatives of Zambia and Zimbabwe as well as the SADC and Common Market for Eastern and Southern Africa (COMESA).

Lake Kariba, a shared water body between Zambia and Zimbabwe, requires joint efforts if the resource is to be sustainably exploited and managed. A past SADC initiative played a critical role in facilitating co-operation on fisheries development between the two riparian states by establishing the Zambia/Zimbabwe Fisheries Protocol.

The objective of this Protocol is to enhance fisheries management and conservation by compelling fisheries authorities in the two states to implement measures and actions aimed at improving the management of fish stocks. Information-sharing and joint research is at the core of the cooperation, which is supported by FAO.

Some of approved actions adopted by the Zambia-Zimbabwe JFMC meeting include:

With respect to the institutional arrangements, the meeting:

- → agreed to reviewing and amending the Protocol;
- recommended to the Zambia/Zimbabwe Joint Permanent Commission (JPC) the creation of a fisheries and aquaculture sub-committee;
- revised and adopted the Terms of Reference of the JFMC; and
- → approved the establishment of the Zambia/ Zimbabwe Joint Operations Team (JOT).



Regarding the kapenta fishery, the meeting:

- → approved the proposal on a joint rig survey;
- → requested to develop an initiative to improve safety of kapenta vessels;
- approved the implementation of a stoppage of all rig construction, as well as putting in place an effective control and monitoring system;
- approved the suspension of licensing/permits of new entrants into the fishery;
- directed a taskforce to develop a comprehensive programme so as to phase out kapenta fishing rig numbers as recommended to the JFMC meeting and in consideration of economic as well as social implications;
- approved the proposal on a joint Vessel Monitoring System; and
- directed the JOT to prepare and conduct joint surveys such as on the number of kapenta rigs and biomass on a frequent basis.

Regarding the artisanal (inshore) fisheries, the meeting:

- → approved banning of monofilament nets by end of 2019; and
- directed JOT to develop the concept note on artisanal (inshore) fisheries incorporated in Appendix 8 of the full record of the first JFMC meeting into a full project proposal.

With respect to aquaculture management and development, the meeting:

directed JOT to identify areas for harmonising legislation and develop joint programmes for implementation for sustainable aquaculture management and development.

With respect to the transboundary movement of fishers, the meeting:

approved to follow up with JPC so as to resolve issues relating to transboundary movement of fishers in an amicable way.

Additionally, the Government of Zimbabwe agreed up until 2021 to harmonize its lunar/full moon stoppage for kapenta fishery monthly cycle to the 10-day lunar/full moon stoppage observed in Zambia.

The two riparian states constituted the JFMC on 6 December 2019 and approved the establishment of a Joint Operations Team (JOT) to more effectively manage and develop fisheries and aquaculture activities. This important decision is conducive to more cooperation and collaboration in a joint management system and development activities, expected to result in a higher economic value and social benefit of fisheries and aquaculture sectors shared by Zambia and Zimbabwe.



UILA

Italian Union of Fish and Aquaculture Workers



IUU fishing and decent work – a new challenge for regional fisheries bodies

by S.H. Marashi, International Law of Fisheries Consultant / F. De Pascale, National Secretary of UILA Pesca

The entry into force, in 2016 and 2017 respectively of the 2009 FAO Port States Agreement and the

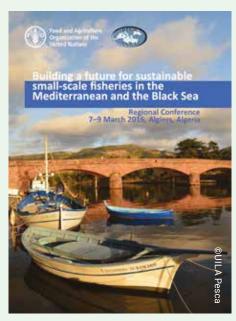
2007 ILO Convention C188 on working in fisheries, have opened a new era in the development of international law of the sea. This new era emphasises two new subjects: the conservation and sustainable management of resources, and the need for decent work. Since 2010, UILA Pesca has conducted a number of studies on these subjects and has been actively involved in this process by collaborating with the relevant activities of FAO, ILO and GFCM.

Ten years after Montego Bay, the Rio Agenda 21 (1992) pointed out that sustainable development should be at the same time environmental, economic and social and that it should involve workers and trade unions. The issues related to the subjects of IUU fishing and decent work emerged in 2000 within two different UN Agencies: FAO and ILO. In 2016, the Holy See and FAO celebrated the International Day of Fishers denouncing "the violation of human rights in IUU Fishing" and



Speech of Enrica Mammucari, general secretary of UILA Pesca at the World fisheries day 2019







Left to right: Audun Lem (Deputy Director FAO Fisheries Department) speech at the UILA Pesca meeting on March 2019; Conference on "Building a future for sustainable small-scale fisheries in the Mediterranean and the Black Sea" (Algiers, Algeria 7–9 March 2016); Fabrizio De Pascale, National Secretary of UILA Pesca.

calling for international cooperation to promote decent work. In 2017, the Holy See affirmed that fish workers' rights are human rights and that the sustainable development of fisheries should be based first on social and then economic and environmental factors.

Sustainable development depends on the success of conservation and management measures. But the success depends on the participation, approval and consent of fishers when deciding such measures. Otherwise, they can provoke negative reactions from fishers who simply do not respect the measures adopted without their approval and consent. Since 1958, the attention of the international community has been given exclusively to resources and to the legal frameworks while fishers and the social dimension of fisheries have been completely ignored.

However, the 1995 FAO Code of Conduct for Responsible Fisheries considered the importance of the social aspect of fisheries and the need to involve fishers in sustainable development. UILA Pesca strongly believes that if we don't address the problem of the respect of labour rights, we will never successfully fight IUU fishing. Moreover, we believe that real sustainable development of fisheries should involve fishers in the process of defining conservation and management measures.

The 1982 the UN Convention on the Law of the Sea recognized the role of regional fisheries bodies in the sustainable management of fisheries; a role that has since been endorsed by all the subsequent agreements (voluntary or binding) on fisheries, including Agenda 21. FAO lists more than 50 organizations around the world with different degrees of competence and powers. Under the new developments in international law, the regional fisheries bodies, together with Members (flag and port States), are responsible for the conservation and management of marine living resources.

Regional fisheries organizations can play an important role as legislative innovators, both in promoting the concept of decent work and in involving fishers in their activities.

The public "blacklist" of IUU fishing vessels represents an example of important and innovative "best practice" introduced by these organizations. In the latest study, published in October 2019, UILA Pesca received replies from some regional fisheries organizations to two questions asked of them: the degree of participation of fish workers in their activities and the engagement of the organization on promoting decent work and the ILO Work in Fishing Convention.

GFCM was the first RFMO to be committed to this issue, and since 2013, has opened its activities to workers' unions. In March 2016, the Marrakesh Conference on small-scale sustainable fisheries officially introduced decent work and the ILO C188 convention into the agenda of the organization.

In September 2018 in Malta, the Conference adopted a declaration and a plan of action with explicit reference to the need to ensure decent working conditions for fishers.

Finally, UILA Pesca believes that the new era in the development of international law of the sea presents a new challenge to RFMOs. They are at the forefront of fight against IUU fishing and they could play an important role in the implementation of the provisions of C188 by:

- Allowing active participation by fishers and fish workers in the activities of their organizations; and
- Declaring that any infringements of the provisions of the ILO C188 convention would be regarded as amounting to IUU fishing.







CONTRIBUTIONS FROM:

ATLAFCO: Ministerial Conference on Fisheries Cooperation among African States bordering the Atlantic Ocean

BOBP-IGO: Bay of Bengal Programme, Intergovernmental Organisation

GFCM: General Fisheries Commission for the Mediterranean

IWC: International Whaling Commission

NAFO: Northwest Atlantic Fisheries Organization

NAMMCO: North Atlantic Marine Mammal Commission

NPAFC: North Pacific Anadromous Fish Commission

SPC: Secretariat of the Pacific Community

SPRFMO: South Pacific Regional Fisheries Management Organisation





Publications and papers





ATLAFCO

Ministerial Conference on Fisheries Cooperation among African States bordering the Atlantic Ocean

- → Newsletter related to the 30 years (1989-2019) of the existence of ATLAFCO. www.comhafat.org/en/files/publications/doc_publication_096.pdf
- → Study on "The relevance and practical modalities for moving ATLAFCO towards a Regional Fisheries Management Organization (RFMO)"

BOBP-IGO

Bay of Bengal Programme, Intergovernmental Organisation

→ **FAO**. 2019. Safety at sea for small-scale fishers. Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (available also in French, Spanish, Sinhala and Tamil). www.fao.org/3/a-i4356en.pdf

GFCM

General Fisheries Commission for the Mediterranean

- → **FAO.** 2019. Monitoring discards in Mediterranean and Black Sea fisheries: Methodology for data collection. FAO Fisheries and Aquaculture Technical Paper No. 639. Rome. www.fao.org/gfcm/data/discards/en
- → **FAO**. 2019. Monitoring the incidental catch of vulnerable species in the Mediterranean and the Black Sea: Methodology for data collection. FAO Fisheries and Aquaculture Technical Paper No. 640. Rome. www.fao.org/publications/card/en/c/CA4991EN
- → **FAO.** 2018. The State of Mediterranean and Black Sea Fisheries 2018. General Fisheries Commission for the Mediterranean. Rome. 172 pp. (available in English, French, Spanish and Arabic). www.fao.org/3/ca2702en/CA2702EN.pdf
- → **FAO.** 2019. The State of World Fisheries and Aquaculture 2018 Meeting the Sustainable Development Goals? Rome. www.fao.org/publications/sofia/en

- → **FAO.** 2019. Toolkit on allocated zones for aquaculture: benefits, implementation and management. General Fisheries Commission for the Mediterranean. Rome. www.fao.org/3/ca5736en/CA5736EN.pdf
- → Carbonara, P. & Follesa, M.C., eds. 2019. Handbook on fish age determination: a Mediterranean experience. Studies and Reviews. No. 98. Rome, FAO. 2019. 192 pp. www.fao.org/3/ca2745en/ca2745en.pdf?eloutlink=imf2fao
- → Follesa, M.C. & Carbonara, P. eds. 2019. Atlas of the maturity stages of Mediterranean fishery resources. Studies and Reviews N. 99. Rome, FAO. 268 pp. www.fao.org/documents/card/en/c/CA2740EN
- → Macias, J.C., Avila Zaragozá, P., Karakassis, I., Sanchez-Jerez, P., Massa, F., Fezzardi, D., Yücel Gier, G., Franičević, V., Borg, J.A., Chapela Pérez, R.M., Tomassetti, P., Angel, D.L., Marino, G., Nhhala, H., Hamza, H., Carmignac, C. & Fourdain, L. 2019. Allocated zones for aquaculture: a guide for the establishment of coastal zones dedicated to aquaculture in the Mediterranean and the Black Sea. General Fisheries Commission for the Mediterranean. Studies and Reviews. No 97. Rome, FAO. 90 pp. www.fao.org/3/ca7041en/CA7041EN.pdf
- → FAO & ACCOBAMS. 2019. Good practice guide for the handling of cetaceans caught incidentally in Mediterranean fisheries. Leaflet available in English, French and Arabic. www.fao.org/documents/card/en/c/CA0015EN
- → **FAO & ACCOBAMS**. 2019. Good practice guide for the handling of seabirds caught incidentally in Mediterranean pelagic longline fisheries. Leaflet available in English and Arabic. www.fao.org/3/i8937en/I8937EN.pdf
- → FAO & ACCOBAMS. 2019. Good practice guide for the handling of sea turtles caught incidentally in Mediterranean fisheries. Leaflet available in English, French and Arabic. www.fao.org/3/i8951en/l8951EN.pdf
- → **FAO & ACCOBAMS**. 2019. Good practice guide for the handling of sharks and rays caught incidentally in Mediterranean pelagic longline fisheries. Leaflet available in English and Arabic. www.fao.org/3/i9152en/l9152EN.pdf
- → **Koen-Alonso, M., Pepin, P., Fogarty, M. J., Kenny, A. & Kenchington, E.** 2019. The Northwest Atlantic Fisheries Organization Roadmap for the development and implementation of an Ecosystem Approach to Fisheries: structure, state of development, and challenges. Marine Policy, 100, 342–352. www.sciencedirect.com/science/article/pii/S0308597X18305694

IWC

International Whaling Commission

- → At the end of 2019, the IWC published the first edition of a new bulletin focusing on Conservation Management Plans. These plans bring together the best available science and management expertise and provide a tailored framework and are currently in place for four of the most vulnerable cetacean populations.
 - You can read the news bulletin at https://iwc.int/document_3705
- → Report of the IWC Workshop on Bycatch Mitigation Opportunities in the Western Indian Ocean and Arabian Sea https://archive.iwc.int/?r=9612

NAFO

Northwest Atlantic Fisheries Organization

→ Koen-Alonso, M., Pepin, P., Fogarty, M. J., Kenny, A., & Kenchington, E. 2019. The Northwest Atlantic Fisheries Organization Roadmap for the development and implementation of an Ecosystem Approach to Fisheries: structure, state of development, and challenges. Marine Policy, 100, 342–352. www.sciencedirect.com/science/article/pii/\$0308597X18305694

NAMMCO

North Atlantic Marine Mammal Commission

→ **Lockyer, C; Pike, D.**, eds: North Atlantic Sightings Surveys. Counting Whales in the North Atlantic (1987–2001). Nammco Scientific Publications n.7. Available at: https://nammco.no/topics/vol-11

NPAFC

North Pacific Anadromous Fish Commission

NPAFC Technical Reports mainly contain extended abstracts of scientific presentations given at NPAFC workshops but also a review of discussions, programmes, plans, and proposals. The publication language is English. Since 2011, the NPAFC Technical Reports are published electronically. Starting Technical Report #11, D.O.I. is assigned to the scientific publications. All NPAFC Technical Report issues are available from the Commission's website at https://npafc.org/technical-report

Three Technical Report issues were published in 2019:

- 1 NPAFC. 2019. Report of the Proceedings for the IYS Workshop: International Year of the Salmon. Workshop on Salmon Status and Trends, Vancouver, BC, Canada, Jan 23–24. 2019. Edited by J.R. Irvine, K. Chapman, and J. Park. N. Pac. Anadr. Fish Comm. Tech. Rep. 13: 91 p. https://npafc.org
- 2 NPAFC. 2019. Report of the Proceedings for the IYS Workshop: First International Year of the Salmon. Data Laboratory (ISDL) Workshop, Vancouver, BC, Canada, January 25, 2019. Edited by S. Akenhead, N.Bendriem, and J. Park. N. Pac. Anadr. Fish Comm Tech. Rep.14:31 p. https://npafc.org
- 3 NPAFC. 2019. Second NPAFC-IYS Workshop on Salmon Ocean Ecology in a Changing Climate. Portland, Oregon, United States of America, May 18–20, 2019. Edited by J. Park and L. Tessier. N. Pac. Anadr. Fish Comm. Tech. Rep. 15:204 p. https://npafc.org

Feel free to email	l to secretariat@npai	fc.org with question	ns or to order a ha	rdcopy of Technical
Reports 4-7.				

SPC

Secretariat of the Pacific Community

- → Newsletter Number 160 (September-December 2019) https://coastfish.spc.int/en/publications/bulletins/fisheries-newsletter/508
- → New shark and ray identification manual (PSC, 2019)

 https://coastfish.spc.int/en/component/content/article/44-handbooks-a-manuals/507-shark-and-ray-identification-manual

The Pacific Community (SPC) has just released a new shark and ray identification manual detailing 44 species of pelagic sharks and rays encountered in tropical tuna fisheries. The manual features a completely new set of colour illustrations by renowned shark and ray scientist and scientific illustrator Dr Lindsay Gutteridge (née Marshall), of Stick Figure Fish fame. Lindsay's previous work includes 633 illustrations for the book "Rays of the World" published by the Commonwealth Scientific and Industrial Research Organization and over 1200 illustrations for the online "Chondrichthyan tree of life" project. She also developed a fin morphology protocol for identifying shark species and produced "Shark fin guide – Identifying sharks from their fins" for the Food and Agriculture Organization of the United Nations.

SPRFMO

South Pacific Regional Fisheries Management Organisation

- → 2019 COMM 7, The Hague, The Netherlands
- → 2019 SC 7, Havana, Cuba
- → 2019 CTC 6, The Hague, The Netherlands
- → 2019 FAC 6, The Hague, The Netherlands
- → 2019 SCW9, Second Habitat Monitoring Workshop, Havana, Cuba
- → 2019 SCW8, Second Squid Workshop, Havana, Cuba
- → SPRFMO Newsletter Vol. 1, May 2019
- → SPRFMO Newsletter Vol. 2, September 2019
- → SPRFMO Newsletter Vol. 3, January 2020

FAO

- → **FAO**. 2020. The impact of COVID-19 on fisheries and aquaculture. A global assessment from the perspective of regional fishery bodies. Initial assessment May 2020. www.fao.org/3/ca9279en/ca9279en.pdf
- → **Hershman, M.J. & Russell, C.W.** 2005. Regional Ocean Governance in the United States: Concept and Realty. Duke Envtl. L. & Pol'y F., 16, 227 pp.











NORTH AMERICA



LATIN AMERICA AND THE CARIBBEAN

MEMBERS	The state of the s
ACAP	Agreement on the Conservation of Albatrosses and Petrels
ACFR	Advisory Committee on Fishery Research
APFIC	Asia-Pacific Fishery Commission
ATLAFCO	Ministerial Conference on Fisheries Cooperation among African States bordering the Atlantic Ocean
BCC	Benguela Current Commission
BOBP-IGO	Bay of Bengal Programme, Intergovernmental Organisation
CACFISH	Central Asia and Caucasus Fisheries and Aquaculture Commission
CBLT	Lake Chad Basin Commission
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CCBSP	Convention on the Conservation and Management of Pollock Resources in the Cental Bering Sea
CCSBT	Commission for the Conservation of Southern Bluefin Tuna
CECAF	Fishery Committee for the Eastern Central Atlantic
CIFAA	Committee on Inland Fisheries and Aquaculture of Africa
COPPESAALC	Commission for small-scale and artisanal fisheries and aquaculture of Latin America and the Caribbear
COREP	Regional Fisheries Committee for the Gulf of Guinea
CPPS	Permanent Commission for the South Pacific
CRFM	Caribbean Regional Fisheries Mechanism
CTMFM	Joint Technical Commission for the Argentina/Uruguay Maritime Front
CWP	Coordinated Working Party on Fishery Statistics
EIFAC	European Inland Fisheries and Aquaculture Advisory Commission
FCWC	Fishery Committee for the West Central Gulf of Guinea
FFA	Forum Fisheries Agency
FIRMS	Fisheries and Resources Monitoring System
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection
GFCM	General Fisheries Commission for the Mediterranean
GLFC	Great Lakes Fishery Commission
IATTC	Inter-American Tropical Tuna Commission
ICCAT	International Commission for the Conservation of Atlantic Tunas
ICES	International Council for the Exploration of the Sea







AFRICA



OCEANIA AND AUSTRALIA

	MEMBERS	
	IOTC	Indian Ocean Tuna Commission
	IPHC	International Pacific Halibut Commission
	IWC	International Whaling Commission
	JOINTFISH	Joint Norwegian-Russian Fisheries Commission
	LTA	Lake Tanganyika Authority
	LVFO	Lake Victoria Fisheries Organization
	MRC	Mekong River Commission
	NACA	Network of Aquaculture Centers in Asia-Pacific
	NAFO	Northwest Atlantic Fisheries
	NAMMCO	North Atlantic Marine Mammal Commission
	NASCO	North Atlantic Salmon Conservation Organization
	NEAFC	North-East Atlantic Fisheries Commission
	NPAFC	North Pacific Anadromous Fish Commission
	NPFC	North Pacific Fisheries Commission
	OLDEPESCA	Latin American Organization for Fisheries Development
	OSPESCA	Central America Fisheries and Aquaculture Organization
	PICES	The North Pacific Marine Science Organization
	PSC	Pacific Salmon Commission
	RAA	Red de Acuicultura de las Americas
	RECOFI	Regional Commission for Fisheries
	SEAFDEC	Southeast Asian Fisheries Development Center
	SEAFO	South East Atlantic Fisheries Organisation
	SIOFA	Southern Indian Ocean Fisheries Agreement
	SPC	Secretariat of the Pacific Community
	SPRFMO	South Pacific Regional Fisheries Management Organisation
	SRFC	Subregional Fisheries Commission
	SWIOFC	Southwest Indian Ocean Fisheries Commission
	WCPFC	Wester and Central Pacific Fisheries Commission
	WECAFC	Western Central Atlantic Fishery Commission
-		

Regional fishery body secretariats' network

A unique coordination mechanism bringing together 58 key fishery and aquaculture actors from across the globe



- Promoting sustainability of fisheries and aquaculture
- Learning and sharing best practices on critical issues of common concern
- Unlocking the potential of regional cooperation for regional and global fisheries governance
- Focusing on communication and visibility of regional fisheries bodies' work

58 RSN members and partners achieving the 2030 Agenda!



- Delivering effective, inclusive and sustainable fisheries and aquaculture development
- Working with member states and multi-stakeholder partnerships to establish efficient accountability frameworks
- Tackling challenges and developing capacity of members

























Regional action, global impact.



This magazine is developed by the RSN contributions from secretariats of regional fisheries management organizations, regional fisheries advisory bodies, and related networks and partners, as well as colleagues from FAO and other agencies and organizations working on matters relevant to these bodies.

The Fisheries and Aquaculture Department of FAO hosts and provides the RSN Secretariat services, the venue for biennial meetings, and has a day-to-day collaboration with the network on technical and operational issues. In this context, the Secretariat will continue working with its members, partners and colleagues, to ensure, as much as possible, that voices and experiences from different regions are being considered.

GET IN TOUCH

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- www.fao.org/fishery/rsn



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