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WESTERN CENTRAL ATLANTIC FISHERY COMMISSION

Report of the

ELEVENTH SESSION OF THE SCIENTIFIC ADVISORY GROUP OF THE WESTERN CENTRAL ATLANTIC FISHERY COMMISSION Virtual session, 25–27 April 2022

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PREPARATION OF THIS DOCUMENT

This is the official report of the eleventh session of the Scientific Advisory Group (SAG) of the Western Central Atlantic Fishery Commission (WECAFC), convened (virtually) from 25–27 April 2022.

The Food and Agriculture Organization of the United Nations (FAO) Secretariat to the session, consisting of Ms Yvette Diei Ouadi, and Ms Sonya Thompson, would like to thank the SAG members, Working Group members, experts, observers from partner organizations and others attending and supporting the organization of this session for their active contributions to the success of the session. The working and information documents used for the session are made available at:

https://www.fao.org/wecafc/advisory-bodies/sag/session11/en/

ABSTRACT

The eleventh session of the SAG of the WECAFC was held virtually from 25–27 April 2022. The SAG considered the outcomes of the work carried out by various joint Working Groups (WG) between 2019 and 2022 and their recommendations to the 18th Session of WECAFC (WECAFC18). The SAG also reviewed the status of the main fish stocks in Areas 31 and 41. A revised version (v0.8) of the Data Collection Reference Framework (iDCRF) was also reviewed.

During the meeting, the Working Groups and other regional experts presented reviews of draft fishery management plans and regional strategies, regional plan of action, as well as a guide and a study, as follows:

- reviews: State of fisheries and aquaculture in the WECAFC region; Biological data, the stocks spatial distribution and the ecological connectivity between the areas beyond national jurisdiction and the exclusive economic zones in the WECAFC region;
- fishery management plan: A draft on regional fish spawning aggregation fishery management plan (FSAMP) with focus on nassau grouper and mutton snapper; A draft Caribbean Regional Management Plan for the anchored (moored) fish aggregating device (aFAD);
- regional Strategy: A draft on the Management of bycatch and discards in Latin American and Caribbean WECAFC bottom trawl (shrimp and groundfish) fisheries;
- regional Plan of Action: A draft for the Conservation and Management of Sharks, Rays and Chimeras in the WECAFC area;
- guide: WECAFC guide for improved monitoring of aFAD catches and improved assessment of aFAD impact on stocks; and
- study: A study on health and safety in the dive fisheries of key species in the WECAFC region (Technical report).

Additionally, there was a review by the SAG of outputs from activities of the multiple WGs during the intersession, as summarized in the reports of the respective WGs, which also included draft recommendations to the 18th session of WECAFC, tailored terms of reference and 2022–2024 workplans.

A list of specific SAG recommendations for the attention of WECAFC18 is included in the preface of the report. Tailored terms of reference and workplans for 2022–2024 are provided for each WG as appendixes.

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ABBREVIATIONS AND ACRONYMS

aFAD anchored fish aggregating device

AOTTP Atlantic Ocean Tropical Tuna Tagging Programme

BAD bycatch and discards

BBNJ biodiversity beyond national jurisdiction

CARICOM Caribbean Community
CF conversion factor

CFMC Caribbean Fisheries Management Council

CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora

CLME+ Caribbean Large Marine Ecosystem project

COFI Committee on Fisheries
CPUE catch per unit of effort

CRFM Caribbean Regional Fisheries Mechanism
DCRF Data Collection Reference Framework

EAF ecosystem approach to fisheries management

FAO Food and Agriculture Organization of the United Nations

FDS-WG Fisheries Data and Statistics Working Group FIRMS Fisheries and Resources Monitoring System

FMP fisheries management plan FSA fish spawning aggregation

FSAMP fish spawning aggregation fishery management plan

GEF Global Environment Facility

GIES Global Information Exchange System

HMS highly migratory stocks

ICCAT International Commission for the Conservation of Atlantic Tunas

ICM Interim Coordination Mechanism

ICT information and communication technology

IFREMER French Research Institute for Exploitation of the Sea

ILO International Labour Organization

INFOPESCA Centre for Marketing Information and Advisory Services for Fishery Products in

Latin America and the Caribbean

IUCN International Union for Conservation of Nature IUU illegal, unreported and unregulated fishing

IWG Intersessional Working Group

IYAFA International Year of Artisanal Fisheries and Aquaculture

LME Large Marine Ecosystems

LOA Length Overall

MARPLESCA Caribbean Spiny Lobster Regional management and conservation plan

MCS monitoring, control, and surveillance

MPA marine protected areas NDF non-detriment findings

NGOs non-governmental organization

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

Isthmus

PBS Public Broadcasting Station

PROCARIBE Protecting and Restoring the Ocean's natural capital, building resilience and

supporting region-wide Investments for sustainable blue socioeconomic

development (in the Caribbean and North Brazil Shelf Large Marine Ecosystems)

PSMA Port State Measures Agreement QCWG Queen Conch Working Group

RDB regional database

RFBs regional fishery bodies

RFMO regional fisheries management organization

RPOA regional plan of action

RSS Regional Food Security System

RWG-IUU Regional WG on Illegal, Unreported and Unregulated Fishing

SAG Scientific Advisory Group
SIDS Small Island Developing States
SNPs single nucleotide polymorphism
SAP Strategic Action Programme

SAWG Working Group on Spawning Aggregations

SDGs Sustainable Development Goals

SOMEE State of the Marine Environment and Associated Economies

SSF small-scale fisheries

SSTAG Scientific, Statistical and Technical Advisory Group

STF small drafting Task Force

UNCLOS United Nations Convention on the Law of the Sea

UNEP, SPAW Specially Protected Areas and Wildlife United Nations Environment Programme

WECAFC Western Central Atlantic Fishery Commission

WG Working Group

RECOMMENDATIONS FOR THE ATTENTION OF THE COMMISSION

The Scientific Advisory Group recommends that the Commission:

- endorses five (5) recommendations from the (joint) Working Groups (WGs) and that have been thoroughly reviewed by the experts, while also requesting that each WG carefully reviews the workplans and indicate prioritizations and associated costs for each activity and identify where possible linkages to the Western Central Atlantic Fishery Commission (WECAFC) Strategic plan and provide resubmissions to the Secretariat. Additionally, SAG had minor text edits for bullet 2 of the draft Recommendations from the WG on anchored (moored) fish aggregating device (aFADs) requesting bullet 2 be edited to read "and, additionally explore validation methods (e.g. observers, cameras etc.) to validate information and communication technology (ICT) data'. SAG recommended further the inclusion of an Executive Summary in the aFAD management plan to facilitate managers in navigating through the large document. For the Conch WG SAG requested bullet 4 of the draft Recommendations as be edited to read: "Member states are strongly encouraged to participate in the development of this genetic work, and in order to be statistically robust, at least 15 countries would be required to provide genetic samples of Queen conch". Appendix D contains the final recommendations for the attention of the 18th session of WECAFC.
- endorses the further revisions of the interim Fishery Data and Statistics Working Group, Data Collection Reference Framework (iDCRF), as presented in v0.8. Additionally, SAG noted that further attention be given to the need for capacity needs regarding full implementation of the DCRF.
- requests that consideration of a standard template for WG workplans be considered for next SAG.
- requests that consideration of a hybrid format be made for future sessions as a mechanism to engage additional participation.

INTRODUCTION

- 1. The eleventh session of the Scientific Advisory Group (SAG) was convened virtually from 25–27 April 2022. The list of the members of SAG (six) who attended the meeting is attached as Appendix C. The experts were selected based on their specialized knowledge. They served in their personal capacities and not as representatives of their respective governments or organizations.
- 2. The Chairperson of the Western Central Atlantic Fishery Commission (WECAFC), the Secretary of the WECAFC, and technical and support staff from the Food and Agriculture Organization of the United Nations (FAO) Subregional Office and Headquarters (8) together with eight Working Groups (WG) conveners attended the meeting. Additionally, 26 observers attended the meeting representing national fisheries divisions, the Centre for Marketing Information and Advisory Services for Fishery Products in Latin America and the Caribbean (INFOPESCA), Academia (Nova Southeastern University), the Regional Security System (RSS) of the Organization of Eastern Caribbean States and Barbados, non-governmental organizations (SeaLife Law) and the Regional Activity Centre for Specially Protected Areas and Wildlife United Nations Environment Programme (SPAW, UNEP). Simultaneous translation (English, French, Spanish) services were provided for all days of the meeting.
- 3. The Secretary of the WECAFC gave the opening speech on behalf of the FAO Subregional coordinator, Ms Renata Clarke. She noted this SAG session is the last meeting opportunity of the selected experts before the foreseen 18th session of WECAFC. The central role of SAG as the scientific "arm" of WECAFC was also reiterated in the perspective of driving the development and implementation of well-informed and sound management measures, bolstering sustainable ecosystems services, social and economic benefits, including ensuring the livelihoods of the people depending on the living marine resources. She recalled the expectations from the meeting before thanking the Chair of WECAFC, Ms Deidre Warner-Kramer and Ms Nancie Cummings, Chairperson of the SAG for joining the meeting despite their hectic agendas.
- 4. Ms Yvette Diei Ouadi underlined the importance of the SAG meetings and especially this 11th Session, welcomed the participants, and thanked them for their attendance. In closing, the Secretary of the WECAFC expressed her gratitude to her FAO colleagues for their hard work, especially Ms Sonya Thompson, the actual institutional memory of WECAFC, in organizing the event with professionalism. She wished for successful and fruitful deliberations after she introduced the meeting arrangements, and before passing the floor onto the WECAFC Chairperson for some remarks. The speech is shown as Appendix B.
- 5. In her welcoming address, Ms Deirdre Warner-Kramer, Chairperson of WECAFC commended the tremendous voluntary work performed by SAG and the tasks ahead in the 11th Session of provision of reviewing recommendations from nine Working Groups that met within the intersession. She noted the challenges faced by the SAG and WGs during the recent period brought on by the pandemic and also praised the various teams in producing the high-quality products in spite of these stressors. She noted that the number and nature of the recommendations is a clear illustration of the WECAFC Working Groups' vitality and the will to truly address the challenges of conservation and sustainable development of the fisheries in the region, an asset to be acknowledged in the dynamics of WECAFC and for its evolution to a regional fishery management organization (RFMO). She then recalled the mission of the SAG, i.e. providing scientific advice to the commission and the Working Groups, the quality of its work being essential in helping build confidence in all the fisheries and aquaculture actors. She, however, warned that much remains to be achieved, including a sustained communication on these works and the scientific rigor which is needed. She ended her remarks by thanking the team of the WECAFC Secretariat for the professionalism in preparing the meeting, and the representative observers of the donor community who relentlessly support the work of the Working Groups.

6. A brief introduction of SAG members followed. Ms Nancie Cummings, from the United States of America introduced herself as a stock assessment scientist for over 35 years She is the Convener of the WECAFC-CRFM-OSPESCA Fishery Data and Statistics Working Group (FDS-WG). She noted her contribution scientifically would be in terms of stock assessment and statistics and data collection. She thanked all the SAG members for all their contribution. Mr Christopher Parker from Barbados followed, he has been the Fisheries Biologist at the Barbados Fisheries Division for the last 24 years. He provides scientific information and advice for the management of all fisheries in Barbados. Ms Beatrice Padovani Ferreira is a Professor at the Federal University of Pernambuco, in Recife, Brazil. She is a fisheries ecologist working on reef fishes and fisheries in the Brazilian tropical marine region. She is presently conducting research on fisheries and fish stocks to provide guidance for fisheries management in the region. Mr Fabian Blanchard has been the Director of French Research Institute for Exploitation of the Sea (IFREMER) laboratory in French Guyana since 2009. His background is in ecology but also ecological economics for fisheries. He works on the ecosystem approach in fisheries. His laboratory investigates habitat and fisheries production, impact of climate change and economic and human dimension for the small-scale fisheries (SSF). Fabian has also been the convener of the WG of shrimp and groundfish resources since 2015. Ms Karina Ramirez followed. She works at the fisheries institute of Mexico with highly migratory pelagic species and is currently one of the heads of the 14 research centres of fisheries and aquaculture in Mexico. Mr Servando Valle Gomez (Cuba) has worked with the Centro de Investigaciones Pesqueras since 1973. Servando is also a Professor at the Centro, has experience in bio-economic modeling of fisheries and benefits to management, and is a member of the ad hoc WECAFC WG on spawning aggregations. Mr Orlando Harvey (Grenada) was absent.

ELECTION OF CHAIRPERSON

7. The meeting agreed that Ms Nancie Cummings (United States of America) should act as Chairperson of the SAG. She introduced the approach to be used during the meeting, especially in the review of the recommendations, which involved allocating five minutes for reading, followed by ten minutes to collect SAG members' contributions to the specific recommendation/resolution.

ADOPTION OF THE AGENDA

- 8. The meeting approved the agenda given in Appendix A.
- 9. The documents that were presented and made available to the meeting are available at: SAG XI Meeting Documents.

MAIN DECISIONS AND RECOMMENDATIONS OF COMMITTEE ON FISHERIES 34 AND WESTERN CENTRAL ATLANTIC FISHERY COMMISSION 17

- 10. Ms Yvette Diei Ouadi introduced the document WECAFC/SAG/XI/2022/2, which contained the main discussion points of the 34th session of Committee on Fisheries (COFI) and the 17th Session of WECAFC. The document is available at https://www.fao.org/3/cb9300en/cb9300en.pdf. It was also flagged that given this context, though keeping to the traditional format, document WECAFC/SAG/IX/2018/2 should be seen as an information piece to SAG, which was subsequently endorsed as such.
- 11. The presentation first included a brief synopsis on matters that were of general interest presented at COFI 34 that included nine main points of interest. These addressed: 1) renewal of commitment to the Code of Conduct for Responsible fisheries; 2) request to FAO to continue supporting Members in developing national plans of action relating to illegal, unreported and unregulated fishing (IUU); 3) an emphasis on importance of accurate data and a request to FAO for continued support in strengthening capacities in statistical areas and data delivery; 4) requested increased work in

relation to supporting small-scale/artisanal fisheries; 5) a commitment to the International Year of Artisanal Fisheries and Aquaculture (IYAFA) in 2022; 6) called upon FAO to continue developing draft voluntary guidelines for regulation, monitoring and control of transshipment, 7) emphasized safety at sea and working conditions in the fisheries sector and welcomed collaboration between FAO and the International Labour Organization (ILO), including through the Joint Working Group on IUU fishing, 8) request FAO to continue working with Convention International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the International Union for Conservation of Nature (IUCN) and related fora, and agreements to continue a transparent and inclusive dialogue on the proposal relating to establishment of a new subcommittee on fisheries management.

- 12. Ms Yvette Diei Ouadi then summarized the COFI 34 report as it relates to global and regional processes. Matters of specific interest to WECAFC included: 1) continued technical support on fisheries subsidy negotiations as relates to subsidies contributing to overfishing/overcapacity and IUU; 2) acknowledging the increase in number of Parties to the agreement on Port State Measures to Prevent, Deter and Eliminate IUU; 3) commending FAO's deliberations on legally binding instruments (i.e. UN Convention on the Law of the Sea) in the conservation and sustainable use of the marine biological diversity of areas beyond national jurisdiction (BBNJ); 4) emphasis of members' need to ensure presence of fisheries and aquaculture experts within their delegations at international fora; and 5) highlighted recent developments in Latin America and the Caribbean on sport fisheries to generate new opportunities for small-scale and artisanal fisheries, and also highlighted the importance for FAO to continue providing follow-up and support to work on this topic.
- 13. Ms Cummings noted relating to Item 3 in the General Interest category the importance of accurate data to support decision-making and the relevant function of FAO in supporting data collection that this topic should also be included at the level of specific interest for the WECAFC region and in the global and regional process as well. The recent work carried out through the development of the Data Collection Reference Framework (iDCRF) has been done to inform scientific evidence in the region and COFI should take note of these recent improvements. Ms Diei Ouadi noted that this could be something that WECAFC 18 highlights.
- 14. Mr Lester Gittens (Bahamas) asked Ms Diei Ouadi if COFI considered the need for persons to feed themselves through aquaculture, since the COVID-19 pandemic has raised global inflation, and that families need to rely on themselves to supply their needs. He added that at this level, the region should identify ways for communities or people to do this themselves through fisheries or aquaculture. He queried whether there is any focus on the aquaculture at the COFI regional level and recommended that the region should put some emphasis strategically on meeting these objectives, that is, to supply those needs.
- 15. Ms Diei Ouadi responded that these objectives in the framework of this global pandemic uncover many challenges and opportunities. At the COFI/FAO level, there is a specific agenda item on this matter, aquaculture has a subcommittee to supply needs. The Subregional Office for Latin America has been supported by FAO headquarters (HQ) which is leading projects in aquaculture, including aquaponics. There is also the digital library where the resources and the challenges to meet our internal needs in the region are identified. In COFI there is more and more emphasis on this aspect as well and, at WECAFC18 in July, there will be dedicated discussion on this matter to help member countries to sustainably meet their needs.
- 16. Ms Diei Ouadi gave a summary of the main outputs from WECAFC17 (convened July 2019). Among the topics covered, a few of high interest included: 1) review of state of fisheries and aquaculture; 2) acknowledgement of the awareness of need to better understand climate change and sargassum influxes as relates management of fisheries, and in a manner consistent with an ecosystem approach to fisheries, taking into account poverty-reduction and small-scale fisheries;

- 3) acknowledging the need to strengthen instruments for improving infrastructure building and maintenance for low-income fishing communities towards adaptation and resilience to climate change; and 4) recognizing that there is an increased global awareness on climate change-related impacts on coastal fisherfolk communities, and therefore, it is important to recognize opportunities to properly address this problem.
- 17. Ms Diei Ouadi provided an update on other matters referred to the Commission including:
 1) expansion of the WG on Flying Fish in the Eastern Caribbean to include dolphin fish and other pelagic species; 2) awareness by the Commission of the need to review the terms of reference for both the SAG and the WGs towards improving overall performance and operations of the Commission and to ensure that WG duties aligned with the Commission's current work; and 3) a major concern on FAO's declining support to regional fisheries bodies (RFBs) and towards reversing this trend a call to each member to advocate at the national level and through members' respective diplomatic representations in Rome (FAO HQ) for more support from the FAO for the WECAFC Secretariat and the work of the Commission; and 4) and the Commission request relating to availability of all adopted recommendations and resolutions- requesting a dedicated space on the WECAFC website be made available for such materials in order to facilitate tracking as members' efforts to implement and follow up actions.
- 18. Ms Diei Ouadi concluded the summary of WECAFC17 highlighting: the status on the Roadmap for the Commission Progressing towards becoming an RFMO, status on developments on Queen conch under CITES and outputs from 4th meeting of the Queen conch Working Group, progress and future planned work on Spawning Aggregations management plan, regional plan of action on IUU, progress towards finalizing the iDCRF, financial and administrative affairs of the Commission, and Programme of Commission Work for 2019–2020, and highlights of issues and benefits of the State of the Marine Environment and Associated Economies (SOMEE).
- 19. The full document summarizing the main decisions and recommendations of COFI 34 and WECAFC17 is available at https://www.fao.org/3/cb9300en/cb9300en.pdf.

REVIEW OF THE STATE OF FISHERIES AND FISHERIES RESOURCES IN THE WESTERN CENTRAL ATLANTIC FISHERY COMMISSION REGION

- 20. Mr Jeremy Mendoza (FAO consultant) presented the state of fisheries in FAO statistical Area 31 (Western Central Atlantic), which covers most of the WECAFC area of competence except for waters under Brazilian jurisdiction that are reported to FAO as part of statistical area 41 (Southwestern Atlantic). The information presented covered the most recent available FAO data until 2020, as well as recent stock assessment studies for a number of relevant species and an estimate of stock status for certain species based on landing histories and ancillary information.
- 21. The presentation was the second version and it was the second time this document has been prepared, the first one was presented at the 17th session of WECAFC in July 2019, and this one was the second iteration of this and is considered as a work in progress to probably evolve into something with a larger scope.
- 22. Further notes were made to the additions of the new material on Area 41 and recreational fisheries and inclusion of dolphin fish as was recommended by SAG IX and WECAFC 17.
- 23. The contents of the report include an estimate of the fishing fleet in the WECAFC region; exposition of the fisheries and the status of some of the main stocks, some information on the regional recreational fishery and aquaculture production and the value of this production; the utilization of fishery products and its trade; some data on fisheries and socioeconomics as well as safety at sea and decent work in the region. A section on challenges for the fisheries and aquaculture

sectors. Including IUU fishing, sargassum influxes, coastal and marine pollution, marine litter and the status of the impact of the covid-19 pandemic and extreme events that include hurricanes and volcanic eruptions.

- 24. A map of the WECAFC region presented including areas 31 and 41. The area includes at least five large marine ecosystems viz. the Eastern United States of America shelf, the Gulf of Mexico, the Caribbean Sea, the North Brazil shelf and part of the Eastern Brazil slope large marine ecosystem. About half of the area is high seas with the rest under national jurisdictions.
- 25. Most of the data available is for the Western Central Atlantic area. There are problems in obtaining data for the FAO databases for the northern part of area 41 as there is no spatial aggregation of the data to the level of the WECAFC area. Some researchers from Brazil have been working to reconstruct fisheries data for Brazil that can be spatially expressed, but it is still not an official source of data.
- 26. The number of vessels in the region is estimated at 125 520, but this does not cover all the countries in the area. For example, no estimate is available for the number of vessels in Brazil, France, Colombia or the United States of America.
- 27. Attempts were made to separate vessels into two categories for small-scale and industrial fisheries but it was not easy to do this for the Caribbean Regional Fisheries Mechanism (CRFM) member states. The criterion used for the CRFM states was listing vessels larger than 18 m in the Length Overall (LOA) as "Industrial" and those less than 18 m as "small-scale". For other countries other reports were used especially their Fisheries and aquaculture Country profiles.
- 28. For area 31 the data for main fish groups for the period from 1950 to 2020 was presented and the data showed a declining trend starting in 2016 and continuing until 2020. Current total landings recorded were in the order of 1 250 000 tonnes. It was also noted that a significant portion of these landings, about 43 percent, were small pelagics. Most groups show the declining trends in the recent period.
- 29. For the small pelagic fisheries, the two species comprising the largest landings are the Gulf Menhaden which is fished in the Gulf of Mexico and mainly reported by the United States of America. The largest fishery in the area with landings reaching slightly over one million tonnes in the mid-1980s but have decreased significantly by 2020 to slightly over 400 000 tonnes. The second largest fishery is for the round sardinella which is mainly reported by the Venezuela (Bolivarian Republic of). However, there have been no reports from Venezuela (Bolivarian Republic of) since 2016 and what is available in the recent period are carry-overs from FAO. The estimated landings for 2020 is around 127 000 tonnes. Gulf Menhaden is not considered to be overexploited but the status of round sardinella is unknown as there is not enough information available.
- 30. Flying fish is the major small pelagic for the Eastern Caribbean and there has been significant declines in recent years. Although the data still included FAO carryovers for recent years, the total landings are now below 1 000 tonnes. These landings have been affected significantly by sargassum influxes. However, the information available does allow a determination of the status of the stock.
- 31. The most productive of the large pelagic species was swordfish for which landings in the region have been declining since the mid-2000s when it reached about 5 000 tonnes and is currently around 1 000 tonnes. Blue Marlin has also been declining since the mid-2000s but not as strongly with recent landings also around 1 000 tonnes. Atlantic sailfish catches have also been decreasing since the mid-2000 until 2020 when landings were below 300 tonnes.

- 32. Atlantic sailfish and swordfish are not overexploited. Blue marlin is overexploited and considered as a single stock for the Atlantic Ocean. Sailfish is a western Atlantic stock and Swordfish is a North Atlantic stock, which is of interest to the WECAFC area. Yellowfin tuna comprise the main landings of the tunas around 20 000 tonnes; this increase in recent years is mainly due to reports from Brazil. Similarly, increased landings of big eye tuna in the region are due mainly to reports from Brazil. Species of skipjack, blackfin tuna and albacore have been decreasing. The Atlantic stock of yellowfin tuna is not overexploited, nor is skipjack tuna which is a western Atlantic stock of interest to the region. The Atlantic stock of bigeye tuna is overfished, while the north Atlantic stock of albacore is not overexploited. There is not enough information about the status of black fin tuna even though there is a decreasing trend in catches from the early 1990s until 2020.
- 33. King and Atlantic Spanish Mackerel have similar landings in order of 9 000 tonnes, while common dolphinfish has decreased from a maximum of 6 000 tonnes in 2010 to just above 2000 tonnes in 2020. Serra Spanish mackerel has been decreasing steadily since the early 2000s. Stock assessments are available for king mackerel and the Atlantic Spanish mackerel in the Gulf of Mexico and United States of America as well as for Eastern Coast of the United States of America where neither stock is considered to be overexploited. There are no stock assessments available for the other species, even though the declining landing trends are worrisome for Serra Spanish mackerel and common dolphinfish. Serra Spanish mackerel is very important in the northern portion of area 41 along the coast of Brazil, with landings around 8 000 tonnes.
- 34. For the continental shelf, the following finfish and invertebrate species, were selected. The most important being weakfishes and sea catfishes for which catches have declined significantly from mid- to late 1990s to 2020 when landings were hardly above 5 000 tonnes for both these groups. The white mouth croaker, fished mainly by Venezuela (Bolivarian Republic of) and Trinidad and Tobago which has been declining since the early 1990s and then the spotted weakfish exploited, mainly by Mexico and to a lesser degree, by the United States of America. Not much information of stock status of these species exist apart from the weakfish that has been assessed in the United States of America waters in the Gulf of Mexico where it is not considered to be overexploited. Nevertheless, the declining catch trends of these finfishes species are worrisome. The landings of weakfishes and catfishes in the northern part of area 41 are very significant in the order of 20 000 tonnes for each group along the north and northeastern coasts of Brazil.
- 35. Penaeid shrimp are the most important species among the invertebrate fisheries in the continental shelf fisheries. Northern brown, Northern white and Northern pink shrimp are the main species along the coast of the Gulf of Mexico and East coast of the United States of America and all show very high and relatively stable landings of around 50 000 tonnes in recent years for the Northern brown and Northern white shrimp and around 8 000 tonnes for the northern pink shrimp. None of these stocks in the area is overexploited. The Atlantic sea bob is exploited mainly by Guyana and Suriname and considered fully fished even though there has been a recent decline in catches from around 30 000 to less than 20 000 tonnes. Finally, the Penaeus nei comprising several species fished mainly along the Central and South American coasts there is no information on the stock status of these species, but landings have decreased significantly in the recent period.
- 36. Reef associated species include both finfish and invertebrates. The finfish species of relevance include the Lutjanidae (snappers) with increasing landings of Northern Red Snapper and yellowtail snapper in recent years, while the complexes of several species of snappers nei have been declining significantly since the mid-1990s. Lane snapper landings have been relatively stable in recent years at a low value of around 1 000 tonnes. Northern red snapper is overfished in the Gulf of Mexico as is the Lane snapper mainly fished in Cuba, while the yellowtail snapper is not considered to be overfished in the Gulf and the southeast United States of America.

- 37. Two of the most important invertebrates in the region are the Stromboid conchs and the Caribbean Spiny lobster both of which landings in recent years have been relatively stable, although with a decreasing trend since 2016–2017. Current landings for both are below 25 000 tonnes. There are not many assessments done for these species. The lobster has been recently addressed in the United States of America, Virgin Islands and Puerto Rico and considered not overfished in that area, as opposed to the northern part of area 41, where it has also been assessed and considered overfished. For the Queen conch a recent assessment in Nicaragua found it not to be overfished, while Jamaica closed their fishery in 2019 and 2020 based on survey results indicating stock overfishing.
- 38. Recreational fisheries are important in the region; however, apart from the United States of America, there is little information available. In the United States of America, the recreational fishery within the WECAFC area generated 224 000 jobs and around 132 million fishing trips generating around USD 50 billion in 2018. Mr Mendoza presented some of the other studies on recreational fisheries in other parts of the WECAFC region including for bonefish in the Bahamas generating around USD 169 million, supporting almost 7 800 fulltime jobs, the Mexican state of Quintana Roo, USD 45 million in 2019 and the Eastern Caribbean for large pelagics generating USD 6.8 million dollars. Fish landings from the larger recreational fisheries were also significant, for example in the United States of America recreational fishery landings of common dolphinfish and blackfin tuna in 2020 were greater than reported commercial landings of the same species for all countries in the Western Central Atlantic.
- 39. Aquaculture production in the region (marine and brackish water) mainly whiteleg shrimp and American cupped oyster valued at USD 260 000. The presentation was truncated at this point due to time constraints.
- 40. Conclusions and recommendations. A more accurate estimate of landings production in the WECAFC area is required; this includes fuller participation by countries not reporting in landings data reporting as well as non-disaggregation of data in area 41. There is reporting on the status of stocks and stock complexes in the region with around 60 percent being sustainably fished. The report concludes that it is important to activate the WECAFC/OSPESCA/CRFM/CFMC Working Group on Recreational Fisheries which held its last meeting in 2017 but actions are to be taken to do this. In relation to aquaculture, factors have been identified which have limited this activity in the region such as the need for better governance, adoption of adequate technologies and best practices as well as increased efforts for environmental sustainability and foresight to deal with climate and market changes. Small Island Developing States (SIDS) face additional challenges related to high production costs and extreme destructive weather events that frequently occur in the region as well as limited access to financial resources and expertise.
- 41. There are grounds or opportunities for diversifying marine and brackish water fisheries for example some countries in North and Central America are producing finfish and seaweeds in the Eastern Caribbean.
- 42. Safety at sea and decent working conditions need to be incorporated in the WECAFC 18 agenda for the coming years especially considering the context of climate change and the need to increase resilience of coastal communities to the impacts of extreme weather events. A suggestion that the Commission may consider developing an action plan that may incorporate support and design of social protection programmes for member states. Numerous challenges could not be addressed here but noted extreme weather conditions, such as hurricanes, have been more active in recent years and have significantly impacted on fisheries such as in the Bahamas, the United States of America and Central America. In addition, the recent eruption of the St. Vincent Soufriere volcano impacted on local fisheries.

- 43. The SAG commended the significant review of work done, which led to the working document WECAFC/SAG/XI/2022/3. The document is available at www.fao.org/3/cb9592en/cb9592en.pdf.
- 44. Mr Fabian Blanchard (SAG) commended the second version of the report that was more comprehensive, noting the addition of several elements, a number of which could not be dealt with during the presentation due to time constraints. He suggested including a table with species and stock status. He also noted that information on vessel numbers existed in countries that needed to include this data in the FAO database.
- 45. Mr Blanchard also queried why assessments on shrimp and groundfish conducted by the FAO Shrimp and Groundfish Working Group were not included in the report.
- 46. Mr Mendoza agreed that the WECAFC Secretariat send questionnaires to countries to obtain additional vessel information especially for countries where for specific reasons the data would have been disaggregated to get the data for the WECAFC area.
- 47. Mr Mendoza acknowledged that the report was not exhaustive and did not deal with all fisheries in the continental stocks that were assessed by the Working Group as some relevant to that area such as Southern Red snapper was not reported to FAO and these stocks were not considered.
- 48. Ms Nancie Cummings (SAG Chair) indicated that the FDS-WG is working to resolve the data gaps. She supported the tabular reporting of species and stocks status as well as an additional column being added identifying the data assessment or source that can be incorporated into later editions of the report.
- 49. Ms Beatrice Ferreira (SAG) asked for clarification of the difficulty in reporting due to lack of disaggregated data for WECAFC 41 area.
- 50. Dr Mendoza explained that Brazil does not present the disaggregated data by state to FAO; however, work has been done by researchers in Brazil that disaggregate the data by state and this can be used as the basis to identify the area and report for the WECAFC area. However, this is not documented officially at the moment, but will probably be used in the future.
- 51. Mr Christopher Parker (Chris Parker, SAG) commended the excellent comprehensive report and presentation but questioned the use of vessel length (18 m LOA) for defining "small-scale" and industrial" vessels and the need for using the term industrial, given that size is not necessarily a defining factor for use of a vessel at the industrial scale and what did the term "industrial scale" really mean, noting that this will convey a certain message. He suggested that it would be preferred that the term not be used but simply "Greater than" and "Less than" 18 m be used.
- 52. Mr Mendoza explained that the reason was that some CRFM countries do use the terms industrial and small-scale in the 2019 report and that was adopted here.
- 53. Mr Jorge Paramo asked if the data presented include the shallow waters. Most came from coastal and continental shelf, little from deep sea and none for demersal deep sea.
- 54. Mr Mendoza explained that most data come from coastal and continental shelf very few reports or info are reported for demersal fisheries deeper than 200 m in WECAFC area.
- 55. Chris Parker (SAG) commented that whereas he agreed with the concern over the recent decline in dolphinfish catches and noted Dr Mendoza's recognition of catchability issues in the fishery in the written document he wanted to note that an additional part of the observed reduction in catch weight may be due to effect of the increased proportion of juveniles in the catches as more juveniles

- are being taken around sargassum and the concomitant reduction in catch weight. This increase in the catches of juveniles was the reason for the recent proposed setting of a minimum size for dolphinfish.
- 56. Mr Mendoza explained that while he was aware of the sargassum impacts on fisheries in the area, it was still concerning that for example in Venezuela (Bolivarian Republic of), where sargassum impacts is not a major problem, catches had still declined, indicating that something else is at play.
- 57. It was noted that following the meeting, the author would revise the document in keeping with a number of the substantive suggestions made at the meeting.

INTERSESSIONAL ACTIVITIES – REVIEW OF THE WESTERN CENTRAL ATLANTIC FISHERY COMMISSION WORK PROGRAMME 2019–2021

- 58. Ms Diei Ouadi introduced document WECAFC/SAG/XI/2022/4 on Intersessional activities Review of the WECAFC Work Programme 2019–2021, which contained a summary of the recent activities of the WECAFC. The document discussed the five thematic areas in line with the activities under the three technical focal areas of the approved 2018–2021 work programme. The Secretariat pointed out that a sizable share of the 2018 activities includes the undertakings and outputs from the joint Working Groups meetings.
- 59. Ms Diei Ouadi noted in her review of the work programme that the executive committee is a body of the commission, which ensures that the intersessional work programme is implemented as agreed. This body has the duty to supervise the activities, the terms of reference of the scientific groups and harmonize the terms of reference of the Working Groups. The commission issued these recommendations, and for the working groups it was decided at WECAFC 17, to review TORs of three or four Working Groups, but the intersessional work was extended to all the Working Groups with harmonization of specific sections by each Working Group. The executive committee also led the development of the commission's new strategic plan, which will be presented at the close of this meeting and in document WECAFC/SAG/XI/2022/16 (https://www.fao.org/3/cb9298en/cb9298en.pdf).
- 60. The schedule of everything done during the intersessional meetings was presented, according to the SAG mandate, with recognition of the work of the previous chair, for the draft terms of reference for the Working Groups. The terms of reference must be finalized at the next meeting of the commission in July in Nicaragua.
- 61. The other activities of the Executive Committee included strategic planning. Following the course of the process, the rules of procedure should be reviewed so that the committee can make decisions during intersessions, considering the COVID-19 situation and its implications, and the work that the committee has been doing. The Commission meetings must take place in person, according to regulations, but given the pandemic this has not been possible. For this reason, the rules must be amended to take these aspects into account for work that must be carried out in the future, including tasks to be carried out by the Executive Committee.
- 62. Regarding the Working Groups, they have time available during this meeting of SAG XI to present their activities. Seven of the 11 Working Groups were able to meet during the intersessional period and two aspects are highlighted here. There are four Working Groups that met twice or more during that period namely, the FDS-WG, Working Group of Fish Spawning Aggregations (SAWG), the Working Group on Queen Conch (QC-WG) and the Working Group on shrimp and ground fish (SGF-WG). What is important is that these groups have established regular tasks and meetings.

- 63. In the last meeting of the Commission, a roadmap was issued towards considerations on the Commission becoming a regional fishery management entity/arrangement (RFME/A), the ad hoc Working Group is chaired by the chair of WECAFC, with a facilitating role by the Secretary including sending of questionnaires, participating in meetings, the purpose being the definition of draft text options for the mandate and objectives of the fisheries management entity. This group met twice, but still without starting its actual tasks. It is expected to be implemented in the short term, after informing the Commission about said work.
- 64. Additionally, new projects were developed, such as support to the transversal FDS-WG, for monitoring work with direct support to member countries to develop a workplan on anchored (moored) fish aggregating device (aFADS), and the international year for artisanal fisheries and aquaculture.
- 65. Contribution has been made to the documentation of the 37th FAO Regional Conference for the Latin America and the Caribbean, and of documents of 34th session of COFI, and the recommendations for FAO members in terms of supporting the work of regional fisheries bodies.
- 66. A member of the SAG brought attention to aquaculture, an aspect related to COFI issues and presented the day before this meeting.
- 67. It was also noted that a restructuring of the WECAFC website was undertaken. The new website with completely different features from the previous one, particularly captivating and user-friendly as information sharing tool and visibility mechanism of the work of the Commission, can be accessed on the link https://www.fao.org/wecafc/en/.
- 68. It was also noted that in relation to the sustained coordination work and tasked with development of the fisheries and aquaculture programme of 13 Caribbean Community (CARICOM) countries that "FAO and WECAFC members need to be mindful of the commitments made at the 17th plenary of the Commission and are once again called upon to make all necessary efforts to strengthen the capacity of the Secretariat whose staff consists only of two persons.
- 69. The SAG expressed appreciation to the Secretariat for organizing and completing within the intersession period all these Working Groups' sessions and other activities.

DRAFT REGIONAL FISH SPAWNING AGGREGATION FISHERY MANAGEMENT PLAN: FOCUS ON NASSAU GROUPER AND MUTTON SNAPPER

- 70. Ms Martha Prada presented, on behalf of the FSAWG, the work the group has accomplished in the intersession, highlighting that the work represents the product of collaborative efforts by experts from across the region (WECAFC/SAG/XI/2022/7). The work of the fish spawning aggregation fishery management plan (FSAMP) Working Group was focused on two species: Nassau grouper and Mutton snapper. These species were selected because they are commercially important and have shown declines regionally.
- 71. The resulting draft management plan presented is the result of a process that started in 2008 and included the development of the Fisheries Spawning Aggregation (FSA) Working Group in 2012, with the first version of the management plan presented in 2019 to the FSA Working Group meeting. The approval for the management plan was obtained in 2020 from the WG, after addressing comments and suggestions. The draft management plan also includes a list of species covered by the FSA as an appendix. This was requested by country representatives.
- 72. Ms Prada provided background information on the status of spawning sites as justification for the importance of the regional management plan. She noted that in most countries, the spawning area has been reduced by approximately 10 percent. She added that several isolated activities are taking

place regionally and these activities are being leveraged to develop regional best practices. She also acknowledged that this resource (Nassau Grouper and Mutton Snapper) is being utilized by fishing communities and therefore, the activities of the FSAMP include activities that can counteract negative effects.

- 73. The regional plan takes an Ecosystem-based Management (EBM) approach. At the same time, it prioritizes the collaboration with fishing communities and promotes collaborative work and harmonized management. In addition, the regional plan includes consideration of stakeholders at the national and regional levels, and other WECAFC WGs. The plan also includes consideration given to the life cycle of the species.
- 74. The plan includes six main objectives. At the core, it aims to increase the participation of the fishing community along with the scientists to better understand the complex processes that are occurring. The plan aims to increase awareness of the effect of the present decline of the spawning areas on the adult population, not only on the juvenile part of the population. She noted that in some countries there are regulations in place, but they have not been harmonized and are not fully enforced. To counteract these challenges, the plan contemplates activities to change that situation, for example, more coordinated and harmonized actions. Dr Prada continued that those objectives are not possible without a strong education and outreach component. She noted positive experiences in Cayman Islands where education and outreach has been carried out for more than ten years at all levels along with stricter regulations. At the same time, the protection of these sites will need to be integrated into broader activities such as marine protected areas (MPA) that are affecting the FSA.
- 75. There are 16 actions being recommended by the management plan grouped by priority actions, low, medium, and high priority. The implementation of all 16 measures need to start by year one, but some actions can be accomplished in shorter terms; all need to be implemented as soon as possible.
- 76. The WG has approved a communication strategy named Recovering Big Fish. It is a strategy that started a year ago with the production of short documentaries presented at different regional and global meetings. This activity is now being led by the organization BelugaSmile with support by the WG. The strategy is the result of three-year production. Currently, a one-hour documentary is being produced to present to Public Broadcasting Station (PBS) and other nature programmes.
- 77. The management plan implementation approach also contemplates different mechanisms for coordination. It is expected that existing regional mechanisms, like those of Caribbean Large Marine Ecosystem project (CLME+) and Protecting and Restoring the Ocean's natural capital, building resilience and supporting region-wide Investments for sustainable blue socioeconomic development (in the Caribbean and North Brazil Shelf Large Marine Ecosystems) (PROCARIBE+) (https://www.clmeproject.org/) will support establishing a regional coordination sub-group within the WG to facilitate the implementation of the management plan. Within the WG, there is also a special group for educational and outreach and another group for the development of legal advice taking into consideration transboundary impacts. Work is also ongoing to improve coordination within WECAFC WGs, with participation from IUU, and the shrimp and groundfish WG.
- 78. The next step of the group is to strengthen the partnership for more coordination and support for the collection of data as most of the data are not aggregated at the species level. There is also an additional call for country representatives to start implementing recommendations at WECAFC like regional closed seasons from previous sessions. Ms Prada noted that the implementation is slow, and actions must be faster to see the desired result.
- 79. She closed by highlighting that priority is being given to the identification of priority SPAW sites by guidelines and standardizing monitoring protocols.

- 80. Ms Beatrice Ferreira (SAG) congratulated for the comprehensive and important work and asked for clarification regarding co-management options for FSA considering that there are a lot of difficulties in enforcement and monitoring and that as fisheries decline fishers become more dependent on exceptional catches such as those. She noted that spawning aggregations sites may be even more of a target as they represent areas where the highest catch per unit of effort (CPUE) may be obtained, thus proper enforcement may be a problem. She also specifically asked if the group had considered an agreement where special rights could be given to special traditional groups to fish in these areas and thus, participate in the protection and regulations enforcements of these sites.
- 81. Ms Prada noted the need to tackle the issue from different perspectives. The plan calls for the inclusion of fishers and fishing communities through the different steps and not just for generating information but having them participate in research and education and outreach. She continued that the spawning aggregations sites may also have high value in tourism in comparison to the value of the fishery. Given the present value of the aggregations to tourism, and the fishing communities, the group believes that co-management is needed and that it needs to be an adaptive process.
- 82. Ms Ferreira raised the point of caution on disclosing mapping information of FSA sites as, in lack of proper enforcement, this may make those areas more vulnerable to illegal fishing.
- 83. Ms Prada clarified that mapping would not make the information public but to make the data available for characterizing the context and produce a regional idea of where the aggregation can occur and not identifying specific sites.
- 84. Ms Prada indicated that she is aware of the Cuban experience based on the literature. She noted that one of the main actions of the plan is to consider a standardized stop time in the region even though the need for the precautionary approach that can be adaptable over time is understood.
- 85. Ms Sandrine Pivard (Observer SPAW RAC/UNEP), noted the interest in the big fish strategy that has been done in Belize and Bahamas and the radio kits deployed. She asked how this is connected to what has been presented by the group. She also inquired whether the film project is available as a media for public viewing.
- 86. Ms Prada said the radio kits are being developed and they are looking for opportunities to expand to a Spanish version, in addition to the current one in English. She indicated that she does not know when it will be completed, but hopefully in the coming months.
- 87. Ms Cummings (SAG) in her comments noted the timeline of the actions but indicated that she did not see those priorities in the logbook matrix submitted by the Working Group. She continued that for the recommendations, it would be helpful if those priorities are attached to the logbook matrixes. In terms of resources necessary to carry out these activities, those should be put in the logbook.

REGIONAL STRATEGY ON THE MANAGEMENT OF BYCATCH AND DISCARDS IN LATIN AMERICAN AND CARIBBEAN WESTERN CENTRAL ATLANTIC FISHERY COMMISSION BOTTOM TRAWL (SHRIMP AND GROUNDFISH) FISHERIES WECAFC/SAG/XI/2022/8

88. Mr Fabian Blanchard (convener of the SGF-WG and SAG Member) presented a draft Regional Strategy on the management of bycatch and discards in Latin American and Caribbean (WECAFC) WECAFC/SAG/XI/2022/8. Referring to various considerations, which include the need to review all aspects related to discards, seeking to implement reduction of discards, whose original plan was applied in Latin America and the Caribbean (LAC).

- 89. He started his presentation by providing a background on the topic noting that WECAFC, CRFM, and OSPESCA have all passed resolutions for the implementation of international guidelines on management of bycatch and discards (BAD).
- 90. He noted that the strategy being presented was developed during the project on Sustainable Management of Bycatch in Latin American and Caribbean Shrimp Fisheries, (REBYC-II LAC). A reference framework for support and cooperation was established to improve the sustainability of these fisheries. Thus, the definition of accompanying fauna, target catch, and discards was reached.
- 91. Mr Blanchard then provided an overview of the vision and strategy objectives and actions of the regional strategy. He highlighted sections on management of BAD through the ecosystem approach, data collection, monitoring, and evaluation, bycatch reduction, sustainable bycatch utilization (non-endangered, threatened, and protected species), strengthened communication, coordination, and information training, and for strategy implementation.
- 92. In his presentation he highlighted that member countries should work to develop country specific guidelines to incorporate and enforce regional bycatch technologies.
- 93. He presented an overview of the variables that were identified as important by the group including catch and discard variables (biological); economic: production and earning variables; fishing gear and effort variables; socioeconomic variables; and governance.
- 94. He referred to the importance of the participation of the private sector, fishing associations, to consider all the information and exchange contacts among all areas set aside for recovery.
- 95. Ms Beatrice Ferreira (SAG Member) asked a question regarding MPA and areas set aside for recovery. She noted that those are mentioned as a part of strategy, but she was not sure if they are a form of bycatch strategy or if they were being highlighted simply because they already exist.
- 96. Mr Blanchard noted that protected areas that exist in the different countries must be considered in the national plan. Each country must implement their own strategy that incorporates their MPA plan.
- 97. Ms Ferreira asked how and whether MPA creation and implementation is part of the strategy and how it is being considered.
- 98. Mr Blanchard noted that if the bycatch cannot be reduced, that an assessment would still be useful as it would provide some expectations as to whether the stock was being negatively impacted.
- 99. Ms Cummings noted that in order for the regional strategy to be effective, national measures need to be part of the objectives and that they have to be cohesive and collaborative management of developing the sampling protocols (in section III of the document). She also noted that national strategies should be part of Section B of the document.
- 100. Mr Marcelo Vasconcellos (Observer FAO) highlighted that the Global Environment Facility (GEF) has recently approved the REBYC-III to be implemented by FAO at the start of next year. It will have the capacity to meet the goals of the strategic actions highlighted by Mr Blanchard. He noted that a second sister project will focus on the adoption of Ecosystem Based Approach to Fisheries. The target countries are Suriname, Trinidad and Tobago, Guyana, and Barbados.

DRAFT REGIONAL PLAN OF ACTION FOR THE CONSERVATION AND MANAGEMENT OF SHARKS, RAYS AND CHIMERAS IN THE WESTERN CENTRAL ATLANTIC FISHERY COMMISSION AREA

- 101. Mr Mauro Gongora presented a draft Regional Plan of Action on behalf of the Working Group on Shark Conservation and Management (Sharks WG) prepared to WECAFC/SAG/XI/2022/9.
- 102. Mr Gongora provided an overview of the process leading to the adoption of a Regional Plan of Action for sharks to the establishment of the Working Group in 2014.
- 103. In 2019, the Western Central Atlantic Fishery Commission adopted the recommendation WECAFC/XVII/2019/5+6+7 "on the conservation and management of sharks and rays in the WECAFC Area" (WECAFC, 2019).
- 104. The first recommendation adopted is that "WECAFC members develop their National Plan of Action (NPOA) for sharks in line with the IPOA for sharks, in support of more effective conservation and management of sharks and rays in general".
- 105. Mr Gongora then summarized the second meeting of the joint WECAFC/CITES/OSPESCA/CRFM/CFMC Working Group on Shark Conservation and Management, convened virtually from 20–22 October 2021, noting the WECAFC members agreed to establish a Task Force tasked with developing further the WECAFC RPOA Sharks.
- 106. The IPOA for Sharks proposes a structure and contents for the NPOAs (including the description of the current state of shark stocks and fisheries as well as a framework, objectives and strategies for the management of sharks), stresses the use of the precautionary approach for the management of shark fisheries, and suggests that a Shark Assessment Report (SAR) is prepared concurrently with the development of the NPOA sharks.
- 107. Mr Gongora also presented the most relevant global and regional treaties and agreements involved in the conservation and/or management of sharks for the WECAFC region.
- 108. The overall objective of this RPOA is to ensure the conservation and management of sharks and their long-term sustainable use in the WECAFC area. The purpose of the RPOA is to encourage sustainability of shark fisheries in the region, to ensure the long-term provision of the economic, social and environmental benefits that productive and sustainable shark resources provide people [coastal communities] and the environment. Sub-objectives include:
 - a. Objective 1. Improving understanding of the status of shark populations in the WECAFC geographic area of competence through research, monitoring and data collection;
 - b. Objective 2. Ensuring that targeted and non-targeted fisheries are sustainable and that sharks species/stocks with poor conservation status or protected status have appropriate conservation measures in place;
 - c. Objective 3. Foster regional cooperation and improved governance for the conservation and management of sharks in the WECAFC region;
 - d. Objective 4. Promote communication and increased public and stakeholder awareness about shark management and conservation; and
 - e. Objective 5. Capacity building and financing mobilization for the effective implementation of the RPOA sharks.

- 109. Mr Gongora also presented a table listing the five specific objectives, related needs, actions, timeframe for implementation and actors involved.
- 110. It was also noted that the Task Force for drafting the RPOA-sharks was established due to the lack of response of members on the initial draft of the RPOA. Since October 2021, the Task Force has focused all its efforts on the finalization of the Regional Plan of Action for the Conservation and Management of Sharks, Rays and Chimeras in the WECAFC area.
- 111. This regional work is considered a key output of the Working Group and the major challenge ahead will be the execution of the workplan for the period 2022–2024.
- 112. Chris Parker (SAG member) commented that given that it is not necessary to have a Plan of Action (POA) before implementing conservation measures, including those based in legislation (i.e. the actual tools for achieving the conservation objectives), it would have been useful to report on the existence of any controls/regulations (including legislation) that may already be in place at the national levels within the WECAFC region for shark species, especially for those species of most concern listed in Annex 1. This noting that such conservation actions are the primary objectives for any shark conservation POA in the first place! Perhaps conducting such a survey could be a next step in the process to first understand what already exists and better advise the next steps of shark conservation in the region.
- 113. Mr. Parker further noted that perhaps conducting such a survey could be a next step in the process to first understand what already exists and as an initial "litmus test" to better advise the next steps e.g. what is acceptable and appropriate and would actually work, etc. and the areas that need to be focused on to achieve the objective of shark conservation in the region.
- 114. Mr Parker noted regarding Section 6, Appendix 1 of the RPOA. that it would be useful to include a ist of common names, not just scientific names in the table.
- 115. Mr Murray noted that Mr Parker's suggestion for including common names may be considered further as a suggestion of including 'local' names.
- 116. Mr Parker recommended adding a column indicating the current conservation status (endangered, protected, etc.) of each species in the Appendix and also developing a summary of what is required from the international conventions or regulations for each shark species. This is in addition to what one wants to be implemented at the national level, as national regulations do not yet exist in some countries.
- 117. Ms Ferreira (SAG member) suggested that consideration of possible integration between the RPOA (Sharks, Rays and Chimeras) and the Regional Strategy on the Management of bycatch and discards in Latin American and Caribbean [WECAFC] bottom trawl [shrimp and groundfish] fisheries could be informative, noting that the word discard appears 15 times in the latter document, reinforcing this connection. She emphasized that cooperation, linkages, bridges must be built between RPOA and BAD management plan and written in the RPOA.
- 118. Ms Ferreira then emphasized that accurate and detailed information about catch and effort is another of the key data inputs for stock assessment models. Therefore, it is imperative to obtain reliable estimates of the catch and effort exerted by all fisheries contributing to shark fishing mortality whether directed or as bycatch. Estimates of total catch should include landings, dead discards, and live releases and should be provided at the species level, whenever possible. This implies that proper training and tools (e.g. identification guides) must be provided to those (e.g. fishermen, observers, inspectors) involved in data collection. Existing species identification guides and training tools should be shared to minimize costs and maximize the effectiveness of data collection activities.

- 119. Ms. Ferreira further noted other key areas of research emphasizing the identification of pupping and nursery grounds of relevant species. An important additional area of research is related to the reduction of bycatch through the development and evaluation of appropriate mitigation methods, as well as adequate handling and safe release guidelines.
- 120. Ms Cummings also encouraged the collaboration with other conservation plans and WGs, particularly relating to control and surveillance that are a challenge and thus, some ideas such as the use of new tools (e.g. cameras on board) could be effective in quantifying and reducing bycatch.
- 121. Ms Ferreira also noted relating to the Actions' Table of the WECAFC RPOA Sharks it was important to prioritize activities and gave as an example the "Regional Fish Spawning Aggregation Fishery Management Plan: FSAMP". While it is needed to have short-, medium- and long-term priorities, in practice often one or two measures will account for sometimes more than 50 percent of the work so indication of how to measure progress is important.
- 122. She further noted that consideration be given to the use of decision supporting tools to evaluate the most adequate measures to be implemented in face of monitoring and enforcement limitations. Overfishing due to disproportionate high profits received for some fish parts is hard to control and could require regulatory measures and campaigns (realizing promoting full utilization may be hard and ineffective in such situations).
- 123. Ms Ferreira also noted that economic value chain evaluations and socioeconomic assessments are probably needed to highlight the medium- to long-term losses and promote local agreements.

DRAFT CARIBBEAN REGIONAL MANAGEMENT PLAN FOR THE ANCHORED FISH AGGREGATING DEVICE FISHERY

- 124. The draft Caribbean Regional Management Plan for the aFAD Fishery was presented by Dr Henri Vallès.
- 125. The plan was developed based on information collected via desk review of published reports and an online aFAD survey and interviews with key informants to collect the information needed to assess the current state of the aFAD fishery in the WECAFC region. Due to travel restrictions resulting from the Covid-19 pandemic, the consultant was unable to collect "on the ground" information via in-country visits.
- 126. Survey results were collected from 20 countries/overseas territories namely: St Eustatius, Dominica, Bonaire, Haiti, Antigua and Barbuda, Guadeloupe, Martinique, Saint Lucia, Puerto Rico, Bermuda, Montserrat, St. Vincent and the Grenadines, Florida (United States of America), Saba, Anguilla, Tobago (Trinidad and Tobago), the Dominican Republic, Curaçao, Cayman Islands, and Grenada. Seventy percent of the respondents were affiliated with national/local fishery and/or coastal management authorities.
- 127. Currently, there are twenty-six locations across the region with significant aFAD fisheries. Nearly all these locations (92 percent) of these are Caribbean islands with more than 3 600 aFADs deployed across the WECAFC region with the Dominican Republic and Guadeloupe accounting for 86 percent of the aFADs. Ninety-seven percent of aFADs are privately owned. Over 6 200 fishers and 2 700 fish on aFADS. Florida is the only location with aFADs that are used mainly for recreational fisheries.
- 128. Public aFADs are more likely to be aligned with best practices in aFAD design and will tend to last more years after deployment than private aFADs. Few biodegradable materials are used in either public or private aFADs. Public aFADs generally cost around USD 8 000+ whereas private aFADs

- cost around USD 1 000–2 000. Public aFADs take longer to be replaced (if lost) than private aFADs. Public aFADs are more likely to be recovered (if lost) than private aFADs.
- 129. Across the region, fishing on aFADs is usually from small vessels on one-day trips with 2–3 fishers. Most fishing occurs within 100 m from the aFAD during daylight hours. Typical fishing techniques include surface and sub-surface trolling using artificial lures and deep drifting drop-lines using live small pelagic species or small tunas as live bait.
- 130. Catch composition varies strongly within and across locations. Catches are often dominated by juveniles of some species, notably tuna and dolphinfish. Sharks are the most frequent bycatch and incidental bycatch of marine mammals, seabirds and sea turtles appear to occur rarely on aFADs.
- 131. There are few published reports of landings of large pelagics around aFADs; Guadeloupe and the Dominican Republic likely jointly account for most catches. Anchored/moored fish aggregating devices in the Dominican Republic contributes around three percent of the total regional large pelagic landings (all gears combined), but 20 percent of total blue marlin landings. Yields per fishing trip can differ markedly across the region for example 55–85 kg per fishing trip in Martinique versus 23 kg in Dominica. Fisher crowding on aFADs likely affects yields, but this effect remains poorly studied.
- 132. There are few comparisons of the economic performance of aFAD fishing versus other types of fishing. Nevertheless, available data supports that aFAD fishing provides greater revenue, although the extent depends on local context. The aFAD fishery operates in very different socioeconomic contexts across the region e.g. fisher access to funding, to jobs outside fishing, to government subsidies, to training, etc.
- 133. There is great need for fisher training in various areas of fishing on aFADs.
- 134. The use of public versus private aFAD differs markedly across the region. Some locations only have private aFADs, some locations only have public aFADs, and some locations have both. However, 97 percent of currently deployed aFADs across the region are private. In Guadeloupe and the Dominican Republic, individual fishers own 11–15 aFADs.
- 135. Reports of conflicts appear to be infrequent across the region, although there are differences across locations. Most conflicts are between aFAD owners and non-owners, recreational vs commercial fishers and local and foreign fishers fishing in local waters.
- 136. There is a lack of comprehensive and well-enforced regulatory frameworks for aFADs across the region. Only four aspects of aFAD use are enforced in most of the locations surveyed. Only two out of 20 locations reported having aFAD management plans. Fishers might be unaware of rules governing public and private aFAD use when such rules exist.
- 137. Several of the locations do not currently collect data on aFAD landings. Most locations collect aFAD data on time spent fishing, number of fishers on boat, fishing techniques used, total weight landed, and total weight landed by species. Half of the locations record the number of fishing lines used. Few locations record the location of the aFAD used or fuel consumption expenses.
- 138. Lack of effective aFAD management tends to result in informal fishing territories around private aFADs and multiplication of private aFADs; lack of equity of access to fishing grounds; excessive marine debris; dilution of economic benefits; decrease of safety at sea; fishers fishing on aFADs in local waters.

- 139. In the context of the exploited stocks in aFAD fisheries, the billfishes (blue marlin and Atlantic white marlin) and bigeye tuna are of particular concern, while yellowfin tuna, skipjack, albacore, and dolphinfish do not warrant special concern.
- 140. The overall objective of this plan is to guide the implementation of a set of identified management measures that can be applied at the regional, subregional, and national level for the sustainability of large oceanic and coastal pelagic fish stocks, while ensuring a healthy aFAD fishery and the improvement of the livelihoods of the people that rely on the fishery. To this end, the plan included a logical framework matrix for its implementation following the conventional format of specific objectives, outputs, activities, indicators, and means of verification to reach the planned outputs along with associated timelines. For the purpose of the presentation, only the five specific objectives and the associated outputs and activities were presented as follows.
- 141. The five specific objectives are: (1) To increase coordination and collaboration between aFAD fishery stakeholders locally and between nations regionally, by improving the national and regional governance frameworks for the aFAD fishery; (2) To increase coordination and collaboration between aFAD fishers and fishery authorities locally, and between nations regionally, by improving the collection and integration of fishery dependent data needed to help determine the population status of target species; (3) To improve the monitoring, control, and surveillance (MCS) of aFAD fisheries across the region to effectively address IUU fishing; (4) To improve the sustainable socioeconomic performance of aFAD fisheries; (5) To help assess and mitigate the impacts of aFADs on target and non-target species and ecosystems.
- 142. For the first objective, the first output is a legal national/local regulatory framework to support adoption of the aFAD management plan at the local level. The associated recommended activity is to draft and adopt into law provisions to support implementation of local/national aFAD management plans.
- 143. The second output is to engage aFAD management plan implementation in fisher groups actively engaged in decision-making. To this end, the four recommended activities are: Conduct local/national level consultations and public awareness campaigns; strengthen aFAD fisher groups and other aFAD fishery stakeholders to facilitate effective collective representation; strengthen multi-stakeholder organizational structures to support effective dialogue among stakeholders; and identify and test co-management arrangements best suited to local context.
- 144. The third output is adaptive local aFAD fishery management plans anchored on ecosystem approach to fisheries management (EAF) approach are developed, harmonized across the region, and effectively implemented. The three recommended activities are: Develop and implement adaptive local/national aFAD management plans that align as much as possible with best practices in EAF; gradually harmonize local/national management plans (and associated regulations) across the region to increasingly align with EAF best practices and the recommendations of relevant management bodies/instruments, including the Caribbean Billfish Management and Conservation Plan, CRFM, OSPESCA and WECAFC and International Commission for the Conservation of Atlantic Tunas (ICCAT); and critically evaluate adaptive local/national aFAD management plans across the region within five-year cycles.
- 145. The fourth output for this objective is increased participation of countries in regional decision-making with the two activities being increased representation in ICCAT of Caribbean countries and increased scientific contributions from aFAD Working Group to relevant ICCAT Working Groups.
- 146. For the second specific objective, the first output is that minimum fishery-dependent data requirements are harmonized across the region. The three associated activities are: standardize, test, validate, and adopt minimum data requirements and data collection protocols for catch and fishing effort data and biological data for target and non-target species caught on aFADs; test and

- gradually integrate the use of low-cost electronic data collection tools ICT into the fishery data collection process; and train data collectors and fishers on fishing trip data collection (catch and effort and biological) and better species identification.
- 147. The second output for the second objective is data collection efficiently conducted, and data quickly processed and returned to relevant users. The one associated activity is for ICT to return personalized catch and effort summary to fishers in short timeframes.
- 148. The third output is fishery-dependent local data collection coverage is expanded and/or refined with the associated activity being to expand spatial and temporal coverage of data collection.
- 149. The fourth output for the second specific objective is national databases and a regional CRFM-OSPESCA-WECAFC aFAD database are operational, the activity being integrated national and regional databases for catch, fishing effort and biological data and aligned with WECAFC DCRF.
- 150. For the third objective, the first output is fishing effort on aFADs and aFAD location being mapped. The associated activity is to test and gradually implement the use of Vessel Tracking Systems (VTS) for aFAD motorized vessels (>9 m).
- 151. The second output of the third objective is an aFAD registry, aFAD fisher licensing, and aFAD vessel registry systems in place. To this end, the activities are to implement aFAD registry, aFAD marking, aFAD vessel registry, and aFAD fishery licensing systems and test and gradually implement the use of low-cost electronic data collection tools ICT to facilitate time efficient aFAD registry, aFAD vessel registry, and aFAD licensing.
- 152. The third output associated with the third objective is improved local knowledge of the contribution of aFADs to livelihoods and national economies. For this the four activities are: systematically collect relevant economic data of aFAD fishing trips (revenue, expenses, aFAD location) to assess fishing economic performance and variability among aFADs in productivity; test and gradually integrate the use of low-cost electronic data collection tools ICT into the fishing trip economic data collection process; train data collectors and fishers on fishing trip economic data collection; use ICT to return personalized electronic economic performance summary to fishers in short timeframes.
- 153. For the fourth objective, two outputs are identified, the first being Improved economic returns and working conditions of aFAD fishers. To this end, the seven activities are to: Train aFAD fishers on (1) safety at sea; (2) navigation; (3) aFAD use and fishing techniques; (4) large fish handling and conservation; (5) business management; and (6) ICT systems; develop ICT systems with, and for, fishers to increase fishing efficiency and safety at sea; set guidelines for aFAD vessel minimum requirements and personal protection equipment; improve landing facilities and infrastructure to facilitate handling and post-harvest processing of large fish; explore export markets and value-added processing for pelagic fish to avoid market gluts; test and implement use of satellite-linked echosounder buoys and other electronic equipment on strategically selected aFADs locally to inform cooperating fishers on local fish abundance; and control fish imports to support local fish production.
- 154. The second output for the fourth specific objective is improved long-term persistence of public or public-private partnership aFAD programmes. The four associated recommend activities are: use aFAD economic performance data to develop a national public and/or public private partnership aFAD programme using best practices aFAD designs and including a contingency plan in case of high aFAD loss due to extreme weather events; secure local funding to support aFAD programme, including license fees, support from national budget, donors, tax-free concessions,

- and/or stakeholder contributions; secure regional funding to support aFAD programme by integrating aFADs into regional research networks (as observatories); and implement national aFAD programme.
- 155. The first output for the fifth specific objective is understanding of how aFAD fishing interacts with coastal/reef fishing with the single associated activity to monitor aFAD fisher fishing activity on AFADs and on coastal/reef habitats.
- 156. The second output is improved regional understanding of abundance and movement of target and non-target species on aFADs with the associated activity to partake in research programmes implementing use of satellite-linked echo-sounder buoys and other electronic equipment on strategically selected public aFADs across the region along with tagging studies to generate fishery-independent biological data.
- 157. The third output is improved regional understanding of factors that affect catch composition and fishing yields on aFADs. For which three activities were cited: inform research programmes using fishery-dependent and -independent data to model drivers of catches on aFADs; and partake in research to identify fishing techniques and practices that minimize catches of vulnerable fish groups and maximize catches of sustainably exploited fish groups.
- 158. The fourth and last output for the fifth specific objective is improved local aFAD designs to reduce aFAD losses, animal entangling, and marine litter. The two activities were: Engage in research to identify suitable biodegradable and non-entangling materials for aFAD construction; and partake in research to optimize aFAD designs to minimize both aFAD losses and aFAD costs.
- 159. A tentative timeline for each of the above specific activities was also presented.
- 160. Practical measures to promoting a sustainable aFAD fishery across the region were given as: Strengthening aFAD fisher participation in the management process; strengthening Fisher Advisory Committees or similar intersectoral coordinating mechanisms; update legal instruments to support effective (co-)management arrangements and align with best practices; explore using Territorial Use Rights for Fishing (TURFs) arrangements for improved aFAD governance; develop, implement, and harmonize local/national adaptive aFAD fishery management plans; implement aFAD fisher licensing, vessel registry, and aFAD registry systems; harmonize minimum catch and effort and biological data requirements across the region and integrate national data sets into a regional database; integrate low-cost ICT into the monitoring system; improve aFAD fisher training; improve post-harvest and infrastructure support; improve aFAD designs to minimize marine litter; explore public-private partnerships (PPP) to support long-term aFAD use that complies with best practices; and integrate local aFAD networks into regional research programmes to inform management.
- 161. Adaptive management mechanisms for implementing and reviewing the plan should be in alignment with the interim Coordination Arrangement for Sustainable Fisheries developed under the CLME+ project in collaboration with WECAFC, CRFM and OSPESCA and an arrangement like the one proposed by the Caribbean Billfish Management Plan.
- 162. Christopher Parker (SAG) congratulated the authors on what was a well written and comprehensive plan. However, in the context of improvement, he suggested that the report needed the inclusion of a summary of the most pertinent points and key recommendations, detailing and prioritizing exactly what is required, especially for policy makers. The timelines presented in the report are quite broad and the connections between the activities need to be clearly presented to allow policymakers to get a holistic view of the plan i.e. what exactly has to be done, the priorities

- identified, both in the context of what is most important overall, but also what has to be achieved before the next steps are taken.
- 163. Beatrice Ferreira (SAG) agreed that prioritizing actions is important particularly for decision-makers, since financial and human resources may be short and in this way, it perhaps could be possible to establish funding priorities based on a cost benefit analysis in combination with indications of priorities.
- 164. Lester Gittens (Bahamas) noted in the chat that "The draft aFAD plan shows that there is uncertainty about marine mammal bycatch levels. In line with the need to identify what data should be collected as stated in Table 1, I suggest that the collection and reporting of marine mammal bycatch should be prioritized. This would be supported by the data and statistics Working Group suggestions."
- 165. Nancie Cummings (SAG) concurred with Bahamas on the need to include efforts to monitor marine mammal resources.
- 166. Fabian Blanchard (SAG) wondered if the Working Group on aFADs had not prioritized this topic (mammal bycatch), if actually the survey did not make provision to collect these data, this can really be proposed as a priority?
- 167. Lester Gittens explained that this is food for thought; however, he recalled that the draft plan also states that "the appropriate data will be identified" suggesting that what has been identified thus far is not the end.
- 168. Peter Murray (CRFM Secretariat) agreed with Fabian Blanchard and noted that priorities must be supported by data, notwithstanding that we may agree with the need to look at marine mammal bycatch, political support will not be garnered without a basis in data. This is especially in countries where marine mammal capture is still a subsistence (and culturally based) activity. Perhaps, the plan should speak to initiating data capture regarding marine mammals, as a point of departure.
- 169. While noting that this was true, Lester Gittens (Bahamas) said there are implications when one considers the NMFS-LOFF (List of Foreign Fisheries), if countries hope to export to the United States of America. Data and trade requirements are important.
- 170. Peter Murray (CRFM Secretariat) concurred but he stated that he was reticent about prioritizing something absent on a data-driven basis.
- 171. Lester Gittens (Bahamas) noted and understood.
- 172. Peter Murray (CRFM Secretariat) suggested that a slight revision of the plan to note the importance of capturing data on marine mammals (including in light of trading requirements for the FAD spp.) and speak to initiating data capture going forward, could be considered.
- 173. Géraldine Conruyt (SPAW) noted that the marine mammal action plan of SPAW and also the IWC identified that bycatch is a major threat. The lack of data on marine mammal bycatch in the wider Caribbean region is also an important gap and needed to be a priority.
- 174. Sandrine Pivard (SPAW-RAC/UNEP) queried whether Lester's point was not to prioritize the collection and reporting of marine mammal bycatch as they are not sufficiently documented.
- 175. Fabian Blanchard offered that the problem was not to suggest or to recommend to initiate data collection on mammals in the workplan, the problem/question is about "prioritizing" this action.

176. Peter A. Murray (CRFM Secretariat) reiterated that Mr Gittens' suggestion was that "the collection and reporting of marine mammal bycatch should be prioritized"; but it comes down to the same thing: whether we say "marine mammal data collection should be prioritized" or simply say "marine mammal data needs to be collected".

WESTERN CENTRAL ATLANTIC FISHERY COMMISSION GUIDE FOR IMPROVED MONITORING OF ANCHORED FISH AGGREGATING DEVICES CATCHES AND IMPROVED ASSESSMENT OF ANCHORED FISH AGGREGATING DEVICES IMPACT ON STOCKS

- 177. A guide on improved monitoring of aFAD catches and improved assessment of aFAD impact on stocks was presented by the author, Dr Henri Valles. The document was WECAFC/SAG/XI/2022/11 and is available at https://www.fao.org/3/cb9490en/cb9490en.pdf
- 178. The Guide was developed in response to the need for better harmonized monitoring on aFADs across the region to address: catches of juvenile fish (tuna, dolphinfish); catches of species considered to be overexploited (blue marlin); incidental bycatch of marine mammals, seabirds and sea turtles; incidental bycatch of sharks; aFAD numbers, turnover rates, and location; hyperstability of catches on aFADs (A challenge to using CPUE as a reliable index of total population abundance around aFADs, as aFADs, might still attract a stable number of individuals subject to catch resulting in a pseudo-stable CPUE through time even though the total population abundance might really be declining under over-exploitation); and the development of fishery-independent indicators of stock abundance to supplement fishery dependent data CPUE.
- 179. The results of a survey of aFAD monitoring systems across the region indicated that: several of the locations surveyed do not currently collect data on aFAD landings; only half of these locations provided data on the number of fishing lines used (a measure of fishing effort); fewer locations record the location/identity of the aFAD used or fuel consumption expenses; half of locations reported foreign fishers fishing on aFADs in local waters.
- 180. Guidance document was presented to improve monitoring at the regional level, made up of three components: 1) background; 2) thinking ahead; and 3) improving evaluations. These refer mainly to the minimum data requirements, which include logbooks in the eastern Caribbean, in addition to the use of communication tools to improve data and evaluations of the impact of the use of aFADs on the stocks. Minimum data requirements may be collected with the CRFM Logbook for FAD fisheries in the Eastern Caribbean. Suggested additions were expanding coverage to fish aggregating objects other than aFADs (wrecks, old nets, abandoned tanks, Sargassum rafts, whale sharks etc.) in line with ICCAT Recommendation 19–02 (Appendix 3).
- 181. The data collected in the CRFM log sheets were compared with a list of the increased ICCAT data requirements contained in ICCAT Recommendation 19–02 (Appendixes 2 and 6) showing that the logbook would satisfy at least ICCAT's minimum data collection requirements.
- 182. A table describing the relationship between a number of important broad management objectives typically associated with aFAD fisheries in the Caribbean and performance indicators that can be derived using the minimum data collected in the log sheets of the final version of the CRFM logbook for aFAD fisheries was displayed. For example in the socioeconomic domain, the success of achieving the objective of increasing fisher revenue would be based on the indicators: Total revenue per fishing trip; profit per fishing trip (revenue minus expenses); profit per fisher per hour per fishing trip; the objective to reduce fuel consumption would be assessed by the indicator fuel consumption and cost per fishing trip; the objective to increase fishing efficiency for fishers would be adjudged by CPUE and the value of catch per unit effort; the objective to support food security would be based on the indicator total weight landed and total weight landed would be indicator used for the objective to increase local availability of fish products.

- 183. Similarly, the biological and ecological domain achievement of the objective to reduce catches of juvenile fish would be assessed by the indicators of average individual fish weight caught per species per fishing trip; the objective to reduce catches of overexploited species indicated by total weight caught per species per fishing trip; total number of individuals caught per species per fishing trip; and CPUE per species. Finally, the objective to reduce incidental bycatch of key groups would be indicated by the number of individuals caught per group per fishing trip.
- 184. However, the data collected in the log sheets are only of medium, low or no relevance in addressing a number of objectives and associated performance indicators.
- 185. In the area of data sharing and integration across the region, the standardized data collection form developed for the CRFM logbook aligns well with the catch and effort data requirements component of the WECAFC interim DCRF, which was endorsed by WECAFC 17.
- 186. Dr Valles then introduced the subject of the use of ICT to improve data collection and aFAD monitoring. In this regard, Dominica is leading the way by currently using an electronic data collection system based on the KoboToolbox with data collectors using tablets at the landing sites and the data being automatically uploaded into a database. An overview of the operation of the ICT system was presented.
- 187. A simple chart was presented to illustrate data flow starting with the data originating from the fishers that is protected by confidentiality agreements and is sent first to a local database from which it was passed to a sub-regional database before being passed to WECAFC-OSPESCA-CRFM database. The data may then be processed and analyzed, as necessary. Continued cooperation of the fishers could be maintained by passing the processed information to the fishermen frequently via the reverse pathway for their use in for example developing strategies to generate higher income etc.
- 188. It was recognized that despite the potential of ICT to facilitate the development and implementation of fishery data collection systems, countries will differ in their capabilities to do so. In this regard there should be adaptive implementation that is commensurate with country capacity. This was recognized by a CRFM/JICA (2012) study, which proposed a Plan for data integration with short- (1–3 years), medium- (3–5 years) and long- (5–10 years) term goals for different groups of countries where all countries improved their respective capabilities over time. An excerpt from this study, with a table showing the proposed integration of fishery statistic systems over time across countries with markedly different monitoring capacities, was presented.
- 189. The presentation ended with an overview of the potential for equipping aFADs with electronic instruments (e.g. as hydrophones, echo-sounders and underwater cameras) as research tools for recording information on (tagged and untagged) fish aggregated under the aFAD and transmitting that information via satellite as part of fishery independent to help assess the impacts of aFADs on stocks.

INTERIM DATA COLLECTION REFERENCE FRAMEWORK

190. Ms Nancie Cummings and Mr Marc Taconet presented on the work and achievements relating to finalizing the DCRF for final review and endorsement by the 18th session of WECAFC (WECAFC18). The document is WECAFC/SAG/XI/2022/12 and is found at <u>iDCRF v0.8</u>. The work entitled, "Interim Data Collection Reference Framework" was presented. This work began in 2016, with the support of the commission members, regional fisheries organizations (WECAFC, CRFM, OSPESCA) and support from the EU-DG MARE.

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- 191. Ms Cummings presented the status of the data collection framework previously presented at SAG9 in 2019 and during the 17th meeting of the Commission and the process the group has followed since that period. She then noted that there have been updates in the main document, appendices, subareas, and species and, specifically in groups of species and statistical sub-area delineations, organization of tasks and clarifications of priorities in data collection by task/sub-area/species.
- 192. She recalled that at WECAFC17, the commission: 1) endorsed as interim data reference collection framework together with the regional data access and sharing policies, and the list of main species, and that 2) the member states called for some further refining of the appendix list of species, in particular, the reference to RFMO and reporting to ICCAT, and 3) acknowledged the usefulness of the regional database for improving data collection, data management, including visualization and sustainable management of fisheries resources.
- 193. In 2019, its presentation was carried out and subsequently, it has been processed in the various meetings of the Working Group, which unfortunately due to COVID 2019 was convened in a virtual environment; thus, ten meetings of the Working Group were held between July 2020 and March 2022, with the aim of bringing together all the countries and harmonizing the technical aspects for decision-making in data collection. Some technical aspects included advancing the definition of the lists of species, and subareas for statistical reporting, re-organization of several of the modular tasks, clarifying priority data to be collected by species/task/subarea, and organizing meetings of the two intersessional subgroups.
- 194. In all, it was noted that the second meeting of the FDS-WG (held virtually) comprised a total of ten online meetings held under FDS-WG2 from July 2020–March 2022. Further, five preparatory sessions were held between July and September 2020 and finally, FDS-WG2 consisted of three sessions (Session 1–October 2020, Extended session–May 2021; and a conclusion session–March 2022). In addition to these meetings, two intersessional sub-group meetings were held with Brazil and EU/France (March 2021) and Honduras under coordination of OSPESCA (April 2021) to inform short- and medium-term subarea delineations.
- 195. She introduced the current version of the DCRF (v.08), noting that it was approved by the FDS-WG2 Conclusion meeting in March 2022.
- 196. During the intercession, various rounds of review of the work were carried out, with the reference framework of alignment and harmonization within the WECAFC mandate framework, to be gradually implemented in stages, accompanied by capacity building, and in which many countries are involved. Said work implied its organization in three categories, which were also implemented, in addition to the incorporation of contents in the report, so that they were more understandable and applicable to WECAFC's mandate.
- 197. Mr Marc Taconet (Working Group member, representative of FAO Fisheries and aquaculture Division/NFI, observer) then provided an overview of what DCRF should do to ensure compatibility and harmonization of data collection frameworks and to be aligned with the mandate of WECAFC.
- 198. Six specific tasks were developed, with different capacities that include the capture of fishing boats and the information of the tasks by species, including the socioeconomic part, which has implied improvements within the work subgroups are vital, with the feasibility of aligning it to the WECAFC's mandate in an operational way, so that the data is delivered and integrated in a specific way. This will also ensure that the document is more coherent and robust in terms of its content, and operational, so that the tasks are reflected in the species of the different groups, in addition to the physical characteristics of the vessels, as well as the fishing areas defined. During this work, the list of appendices has been modified, highlighting some additions, in terms of improved structure.

- 199. One of the modifications was that of the subareas, in which delimitations on economic exclusion borders are identified as a prevailing principle. Although progress has been made in this process, there are still pending decisions on the delimitation of some borders between countries. On the other hand, the precautionary approach to area limitations is based on scientific and ecosystem conditions and requires further discussion.
- 200. In the case of applications with determination of three groups of species, it was established that within each group, the tasks have been organized by subareas and by species, through decisions made on subareas: Group 1 'main reference species'; group 2 'other reference species'; and group 3, 'other species'. A major project of this Working Group will be to advance in the next intersessional period, the Appendix of biological parameters and conversion factors, which will require strong support from the commission and the available financial funds and leveraging collaborations with the species' Working Groups. It should be noted that, during the development of this work, it was observed that the amount of work and the actions taken resulted in a very good participation of more than 20 members of WECAFC.
- 201. Mr Taconet also shared that the DCRF is serving two purposes: (1) as a capacity-building tool and (2) an instrument to support science-based conservation and management of marine biological resources under the mandate of and priorities of WECAFC and CRFM/OSPESCA partners of Interim Coordination Mechanism (ICM).
- 202. He concluded with an overview of the main changes in the document, clearly identifying changes from the version first endorsed at WECAFC 17 (v0.5). He noted that the task descriptions were improved by 1) articulating each task on well-defined WECAFC assessment and/or management strategies and 2) defining a scope clearly aligned with WECAFC objectives, mandate and taking into account capacities of members, and 3) precising for the regional database (WECAFIS) workable data access and sharing rules.
- 203. Finally Mr Taconet outlined the next steps on operationalizing the DCRF and identified primary work tasks on this topic including: a) continuing refinements on: Subareas delimitations for the unresolved cases; subareas longer-term options, in consultation with FAO, Coordinated Working Party on Fisheries Statistics (CWP); Task descriptions, as per actual feedback from members on preparing data for the regional database (WECAFIS), on the Reference list of WECAFC species, including from members' feedback on priority species x subareas, the Endangered Threatened and Vulnerable (ETP) species; and b) work to be undertaken regarding informing biological parameters and conversion factors by species/sub-areas in close interaction with the species' Working Groups.
- 204. Christopher Parker (SAG) congratulated the Working Group on the effort as this information is very important. Likewise, satisfaction was expressed about taking into account the issue of subareas and their jurisdictions, in addition to the data work that continues to be consolidated by the Working Group.
- 205. Ms Cummings (SAG) referred to a proposal for the information obtained to group the species through the Working Group aligned with the inventories and to be able to offer information, in addition to emphasizing the need to obtain data, although WECAFC is not an RFMO, they require information on preparatory actions.

REVIEW OF RECOMMENDATIONS AND RESOLUTIONS TO WESTERN CENTRAL ATLANTIC FISHERY COMMISSION18

206. The Secretariat introduced the document WECAFC/SAG/XI/2022/6 on Recommendations and resolutions to WECAFC18 for SAG review.

- 207. The SAG reviewed and amended the five (5) draft recommendations prepared by the (joint) Working Groups and subject experts presented in WECAFC/SAG/XI/2022/6 (available at SAG XI draft recommendations).
- 208. The SAG amended the draft recommendations as listed in the following paragraphs and noted there were no resolutions submitted for review.

Draft recommendations for review by the Western Central Atlantic Fishery Commission18 included:

- a) RECOMMENDATION WECAFC/XVIII/2022/1 Amendment to recommendation WECAFC/17/2019/21 "on the sustainability of fisheries using moored/anchored fish aggregating devices in the WECAFC area". SAG XI endorses the three parts of the recommendations (fisheries governance, data collection and information sharing and research). With respect to part 1 (governance), SAG XI encourages "consideration of specific aFAD management actions and recommendations for conservation and management within the context of relevant national Fishery Management Plans";
- b) with respect to part 2 (data collection and data and information sharing, SAG XI encourages inclusion of text in bullet 3 similar to: "WECAFC members explore integrating the use of ICT systems in their fishery statistic systems to facilitate collection and standardization of catch and effort and biological data and, additionally explore validation methods (e.g. observers, cameras etc.) to validate ICT data";
- c) another overall suggestion made by SAG on the aFAD Management Plan was the inclusion of an executive summary in the document, which could be very helpful for managers in navigating through large and sometimes complicated documents;
- d) RECOMMENDATION WECAFC/XVIII/2022/2 "fisheries governance, transshipment and information-sharing". SAG endorsed the recommendation in full;
- e) RECOMMENDATION WECAFC/XVIII/2022/3 "increased efforts in the implementation of the regional Queen conch fishery management and conservation plan in the WECAFC region". SAG endorsed the recommendation in full, noting the need for a minor textual edit to bullet 4 to read as follows: "Member States are strongly encouraged to participate in the development of this genetic work and in order to be statistically robust, at least 15 countries would be required to provide genetic samples of Queen conch";
- f) RECOMMENDATION WECAFC/XVIII/2022/4 CFMC/WECAFC/OSPESCA/CRFM-SAWG. SAG endorsed the recommendation in full; and
- g) RECOMMENDATION WECAFC/XVIII/2022/5 on WECAFC fisheries data, statistics, and information. SAG endorsed the recommendation in full.

The full content of the draft Recommendations is presented in Appendix D.

INTERSESSIONAL REPORTS BY WORKING GROUPS, TO INCLUDE DRAFT RECOMMENDATIONS TO WESTERN CENTRAL ATLANTIC FISHERY COMMISSION18, TAILORED TERMS OF REFERENCES AND 2022–2024 WORKPLAN

209. The activities of the individual Working Groups are captured in the document WECAFC/SAG/XI/2022/13 available at WECAFC/SAG/XI/2022/1 and is highlighted for each separate Working Group below.

1. Intersessional Report moored/anchored fish aggregating devices (Convener, Julian Defoe)

- 210. The report was presented by the convener of the aFAD Working Group Jullan Defoe and is found at pages 152–181.
- 211. Mr Defoe first presented the history of the development of the Working Group. In 2010, the ad hoc Working Group on the Development of Sustainable Development of aFAD fishing in the Lesser Antilles was established with the primary reason being to exchange information, practices and experiences in the management and exploitation of large pelagics using aFADs in the WECAFC area. The first meeting held in Martinique hosted by IFREMER and IFREMER assumed the role as co-convener of the Working Group until the third meeting held in May 2019. At the third meeting held in Puerto Rico, the new Terms of Reference (TOR) were proposed and subsequently endorsed during the 17th Session of WECAFC in July 2019 in Miami. These intersessional activities were largely a continuation of the Working Group's workplan endorsed by the 17th Session of WECAFC.
- 212. Objectives of the report included a synopsis of achievements, challenges and lessons during the period 2019 to 2021. Activities implemented within the context of the TOR of the aFAD WG, as proposed at the third meeting and endorsed at the 17th Session of WECAFC, and review of data on aFAD fisheries and conducting of analyses of pelagic fish resources including through collaboration with the Fisheries Data and Statistics Working Group.
- 213. The primary tasks prescribed in the workplan of the aFAD WG, endorsed at the 17th session of WECAFC, were to: provide technical advice and guidance based on the outputs of the JICA-CARIFICO Project and the Billfish Project; to collaborate with IFREMER, academia, and other research institutions to encourage pluridisciplinary research on aFADs, including ecological, socioeconomic, and governance issues, and to consolidate information on aFAD fisheries in order to accurately characterize aFAD fisheries in the region; to develop and finalize manuals on best practices, which was one of the core tasks on (1) fishing and business strategies for sustainable aFAD fisheries, (2) safety and working conditions of aFAD fishers, and (3) governance of aFAD fisheries. These manuals should be presented during training sessions with fishers; to collaborate on co-management within aFADs fisheries, noting the successful examples in Grenada, Dominica, and Bonaire, and strengthen ties with the Recreational Fisheries Working Group; to collaborate on use of low-cost ICT for improved monitoring of aFAD fisheries, noting the promising examples of Dominica and Montserrat and strengthen ties with the Fisheries Data and Statistics Working Group; to facilitate the sharing of data, information, and experiences related to aFAD fisheries in the region in collaboration with the Fisheries Data and Statistics Working Group; to facilitate the sharing of information and experiences related to aFAD designs in the region and outside the region.
- 214. It was noted that a lot of the tasks were similar in terms of sharing collaboration in design and in data and experiences.

- 215. The main accomplishments were: the third Meeting of the Joint CRFM/WECAFC/JICA/ IFREMER Working Group on Development of Sustainable Anchored/aFAD fishing held in April/ May 2019; the WECAFC Regional Caribbean Anchored (or Moored) FAD fishery management plan; the guide for monitoring of aFADs, these two documents were presented earlier, the SAG 11 meeting by Dr Henri Valles; activities were supported by an EU-funded project "Support to the Secretariat of WECAFC in implementing targeted actions of the 2019–2020 Workplan on improved regional fisheries governance".
- 216. The challenges were the well-known impacts of the Covid-19 pandemic, including restriction of movement which prevented the consultant (Dr Valles) from making in-country visits and constrained the development of the aFAD management plan and the guide for the monitoring of aFADs. Because of this inability to gather "on the ground" information the necessary information had to be collected through surveys and virtual communications via various media. Nevertheless, excellent products were still developed. Similarly, this hindered finalization of aFAD manuals on best practices on (1) fishing and business strategies for sustainable aFAD fisheries, (2) safety and working conditions of aFAD fishers, and (3) governance of aFAD fisheries as had been identified in the workplan. However, one of the most critical challenges was the decision of IFREMER to discontinue playing a leading role in the aFAD Working Group after almost two decades. Their input is well-recognized and appreciated, and their departure has created a large void. While Dominica has taken over this role, the country does not have the capacity as IFREMER. This issue needs to be addressed.
- 217. In conclusion, the period in review (2019–2021) undoubtedly was overshadowed by the global impact of the COVID-19 pandemic; nevertheless, the Working Group was able to produce some key deliverables namely, the draft WECAFC Regional Caribbean anchored aFAD fishery management plan and the draft guide for monitoring of aFADs. The decision of IFREMER to discontinue playing a leading role in the aFAD WG requires members with the technical, human and financial resources to provide greater support to the current convener.

218. Proposed workplan for 2022–2024 includes:

- a. Collaboration with IFREMER, academia, and other research institutions on the use of technology on aFADs (e.g. satellite-linked echosounders) for improved assessment of abundance of key fish stocks associated with aFAD fisheries which includes: establishment of points of contact, including research groups with expertise in drifting aFAD fisheries; request and share information on the use of technology on ongoing aFAD fishery products and research; consolidating and compiling information related to ongoing projects and research; develop proposals for regional research projects using aFAD technology in the WECAFC region in collaboration with the ICCAT Atlantic Ocean Tropical Tuna Tagging Programme (AOTTP) and the Fisheries Data and Statistics Working Group in order to improve the knowledge of tuna movements in the Atlantic Ocean and the Caribbean Sea.
- b. To develop and finalize manuals on best practices on (1) fishing and business strategies for sustainable aFAD fisheries, (2) safety and working conditions of aFAD fishers, and (3) governance of aFAD fisheries. These manuals should be presented during training sessions with fishers which includes: editing and publishing draft manual on safety and working conditions in aFAD fisheries; seek funding and identify experts to draft manuals on fishing, business strategies and governance of aFAD fisheries and edit and publish these manuals.
- c. To collaborate on use of low-cost ICT for improved monitoring of aFAD fisheries, noting the promising examples of Dominica and Montserrat and strengthen ties with Fisheries Data and Statistics Working Group which includes encouraging the transfer of peer-to-peer practices through learning exchanges of Fishery Officers and Fishers.

- 219. To facilitate the sharing of data, information, and experiences related to aFAD fisheries in the region in collaboration with the Fisheries Data and Statistics Working Group through the transfer of peer-to-peer practices through learning exchanges of Fishery Officers and Fishers.
- 220. To review and finalize the Regional Management Plan for aFAD Fisheries in the Caribbean, the guide for improved monitoring of aFADs, and the guide for implementation of local aFAD fishery management plans by requesting WECAFC members to review the documents for their finalization.
- 221. To support members' efforts to develop sub-national FAD co-management plans and improved monitoring systems for aFADs including seeking funding and expertise to support development of local management plans and improved monitoring systems for aFADs.
- 222. Mr Defoe ended his presentation by listing the nine recommendations of the aFAD WG followed by its task and functions in the ToRs for the group.

Questions:

- 223. Christopher Parker (SAG) suggested that rather than requesting that all countries develop management plans specifically for aFADs, the same management recommendations be included within other relevant more overarching national fisheries management plans in which aFAD fisheries would be naturally relevant, for example, a management plan for pelagic species, etc. He also noted that the timelines for the activities and prioritizing the activities as well as describing linkages should be included.
- 224. Nancie Cummings (SAG) also noted that some thought there should be systems such as observer based to validate the fisheries data being collected from the aFADS.
- 225. The draft Recommendations are presented in Appendix D.
- 226. The Tailored TORs are presented in Appendix E.
- 227. The WG's workplan is presented in Appendix F.

2. Intersessional Report of the Illegal Unregulated and Unreported Working Group (Convener Peter Murray)

- 228. The intersession report of the IUU-WG was presented by Mr Peter Murray. He summarized activities since SAG IX and WECAFC 17, noting the activities performed by the group. The report is found on pages 47–60.
- 229. As requested by the Secretariat and WECAFC 17, the IUU WG also reviewed the original TORs and prepared revised tailored TORs developed for the purpose of improving coordination and cooperation between national organizations/institutions responsible for fisheries-related MCS in support of the common efforts to prevent, deter, and eliminate IUU fishing.
- 230. The presentation included the background on development of the regional plan of action (RPOA-IUU) which took place between 2018 and 2019 with the ad hoc WG meeting intersessionally to finalize actions of the plan. The RPOA-IUU was endorsed by WECAFC 17.
- 231. Mr Murray further noted the WGs main objectives and accomplishments since WECAFC 17:

- assessment of WECAFC Members readiness to implement the RPOA-IUU;
- determination of the implementation status in Member states (CRFM, OSPESCA, other Member States (Brazil, Colombia, United States of America, Venezuela (Bolivarian Republic of)));
- convening the 4th Meeting of the Regional WG on IUU (September 2020);
- organizing a small drafting Task Force within the IUU (STF-IUU). The function of the STF was to prepare draft documents for the WG to review in progressing the group's work as it relates to tasks set by the WECAFC Secretariat (e.g. Report of the Intersession, tailored TORs, Recommendations); and
- additionally, the STF-IUU proposed Strategic Interventions regarding IUU fishing and Transnational Organized Crime in Fisheries for incorporation into WECAFC strategic plan thus functioning as providing alerts and critical content towards the Commission's mission.
- 232. Mr Murray gave a summary of the challenges incurred by the IUU WG during the Intersession:
 - determination that some Member countries are not yet ready to develop national IUU prevention strategies and that the timeframe for preparing NPOAs is variable across the region. It was noted that countries which have signed Port State Measures Agreement (PSMA) are more ready to achieve actions/measures of the RPOA-IUU than other WECAFC Member States;
 - resource limitations exist that hamper countries' abilities to establish adequate enforcement units and to formalize interagency information sharing agreements;
 - resource limitations were considered as one of the two main factors affecting achieving RPOA-IUU objective;
 - impact of climate change considered a significant factor in MCS performance;
 - impact of pandemic on ability of countries to have fully successful and operational MCS systems; and
 - limitations in national capacities including training to analyze data the second main factor affecting meeting the RPOA-IUU objectives including implementation of PSMA.
- 233. The draft Recommendations for the IUU WG are presented in Appendix D.
- 234. The tailored TORS for the IUU WG are presented in Appendix E.
- 235. The IUU WG workplan is presented in Appendix F.

3. CFMC/OSPESCA/WECAFC/CRFM/CITES Working Group on Queen conch (Convener, Dr Maren Headley)

236. The work of the joint WG on Queen conch (QCWG) was summarized in the document and is available at https://www.fao.org/3/cb9894en/cb9894en.pdf (see pages 2–5). The Joint QCWG was established in 2012 by WECAFC14. WECAFC17 adopted Recommendations WECAFC/17/2019/12 on improved compliance with trade measures for Queen conch and WECAFC/17/2019/13 on Queen conch conversion factor. Following WECAFC 17, the Fourth and Fifth meetings of the QCWG were held during 16–17 December 2019 and 13–14 December 2021 respectively.

- 237. The fourth meeting adopted five recommendations on:
 - improving data collection/transparency;
 - improving diver safety;
 - study on domestic consumption of Queen conch;
 - updating the Queen conch stock assessment manual; and
 - preparation of a CITES Resolution on Queen conch for consideration at the next meeting of the CITES Animals Committee and next meeting of WECAFC.
- 238. Additionally, the Scientific, Statistical and Technical Advisory Group of the Queen conch Working Group (QCWG/SSTAG) offered several priority recommendations that were endorsed by the group including:
 - increasing efforts that would result in better country QC landings reports using the new;
 - conversion factor (CF) (dirty weight) by processing grades;
 - a proposal to determine the genomic connectivity across the Caribbean using the single nucleotide polymorphism (SNPs) technique that will be developed, capitalizing on the significant support already received from University of Rhode Island. Two sub-groups will continue addressing recommendations needed for simplifying the process of generating non-detriment findings (NDFs), integrating the 2012 QC Working Group recommendations. One will work with the update of the NDF flow chart, while the other group will develop and assess the merits of potential scientific criteria that could be used, with respect to developing simplified NDFs; and
 - QC socioeconomic and reproductive aspects are among the priority research areas recommended to be developed in the short term.
- 239. The fifth WG meeting adopted several recommendations, including the following key recommendations:
 - genetic toolkit to trace illegal Queen conch in trade;
 - prioritize genetic identification of Queen conch—establish a Task Force comprised of members from the QCWG and Regional Working Group on IUU fishing to draft during the intersession a recommendation prioritizing genetic identification of Queen conch to improve traceability and combat IUU fishing of Queen conch in the region for potential endorsement by the Commission at its 18th meeting;
 - simplified Guidance for making NDFs;
 - training on Queen conch stock assessment modules; and
 - promotion of decent work and health and safety in the fisheries sector.
- 240. The document also summarized challenges encountered during the intersession that included: a lack of financial resources for fisheries data collection, field research, and enforcement programmes related to Queen conch at the national level.

- 241. The COVID-19 pandemic and natural disasters also resulted in a disruption of activities related to the conservation and management of queen conch. Countries also continued to experience difficulties in completing NDFs as required for the export of Queen conch under CITES.
- 242. In terms of mitigation, the QCWG Task Force met a number of times during the 2019–2021 period to support the implementation of activities as set out in the 2019–2021 workplan.
- 243. The draft Recommendations are presented in Appendix D.
- 244. The Tailored TORS are presented in Appendix E.
- 245. The WG workplan is presented in Appendix F.

4. Intersessional Report of the WECAFC-CRFM-OSPESCA Fisheries Data and Statistics Working Group (Convener, Nancie Cummings)

- 246. Ms Nancie Cummings presented the report of the FDS-WG Intersessional Activities. The report can be found at pages 103–109. The presentation summarized the work of the WG which focused during the intercession on two main areas: a) progressing the development of the interim iDCRF towards endorsement by SAG and at WECAFC18 and b) national capacity building in statistics and data collection and operationalizing of the regional database WECAFIS.
- 247. She briefly described the history of development of the iDCRF which was begun under the collaboration programme of the WECAFC-FIRMS Collaboration, highlighting the major milestones.
 - acknowledging the lengthy history of the lack of sufficient data and statistics for use in management and stock assessment has existed in the region (at least since WECAFC14 and 15);
 - WECAFC15 endorsed the WECAFC-FIRMS Partnership/Collaboration (2015 Corpus Christi);
 - WECAFC16 (Guadeloupe) endorsed the establishment of the WECAFC-CRFM-OSPESCA Fisheries Data and Statistics Working Group FDS-WG;
 - recognizing the support from the EU on development of a DCRF and progressing on FAO-FIRMS inventories of fisheries and marine resources since 2016 (now in Phase III, moving towards Phase IV);
 - SAG IX and SAG X endorsed the DCRF and appendices for further consideration at WECAFC17;
 - WECAFC17 (Miami, 2019) endorsed the iDCRF and appendices; and
 - FDS-WG2 endorsed recommendations for DCRF, Regional database and capacity-building initiatives for consideration by SAG XI (March 2022).
- 248. She then outlined the main objectives for the intersession:
 - Convene the Second meeting of the FDS-WG, hereafter referenced as FDS-WG2. Due to the Covid-19 situation, it was necessary to convene the FDS-WG2 via an online (Virtual) environment.

- Organize a series of preparatory sessions (5) to carry out the full complement of FDS-WG2 meeting tasks relating to progressing the iDCRF:
 - i. preparatory sessions (5) September 2020-October 2020 (Virtual);
 - ii. FDS-WG2 Session 1 (October 2020) (Virtual);
 - iii. FDS-WG2 Extended Session (May 2021) (Virtual);
 - iv. FDS-WG2 Conclusion Session (March 2022) (Virtual); and
 - v. regional database (RDB) and Fisheries and Resources Monitoring System (FIRMS) stocks and fisheries inventories sessions from November 2021–February (2022) (Virtual).
- Continue the national capacity-building initiatives initiated through the EU-DG Mare funding and under the WECAFC-FIRMS Partnership.
- 249. She next summarized the main products on the iDCRF:
 - Modification of the DCRF structure since FDS-WG1 (through SAG 9, 10 (virtual), WECAFC 17) from interim DCRF endorsement to full endorsement at WECAFC18 via.
 - production of more flexible and organized structure better aligning tasks and incorporating countries' capacities in information requested;
 - alignment of species' lists clustered and organized to identify priority lists and tasks by subarea and task; and
 - utilization of standard notations relating to disclaimers in preliminaries of final DCRF document (e.g. subarea disclaimers).
- 250. Following this Ms Cummings summarized the main objectives on the national capacity building objectives that included:
 - national capacity building in statistics and data collection;
 - regional database WECAFIS;
 - advancing the work on WECAFC-FIRMS inventories of fisheries and stocks;
 - · operationalization of RDB; and
 - capacity building initiatives (ongoing).
- 251. She then gave an accounting of the main products achieved as related to three main focus areas:
 - coordinating efforts and investments in capacity building for statistics data collection;
 - coordinating and organizing regional training workshops (five training workshops were held between November 2021 and March 2022; and
 - developing a criteria and scoring system for identifying WECAFC Members for support for capacity building.
- 252. Main achievements included:

Capacity building:

• Overall, during period 2019–2022, 6 WECAFC Members are receiving capacity building support through various projects (Trinidad and Tobago, Suriname, Grenada, Dominica, Saint Lucia, Panama).

Regional Database:

- statistics submitted by eight countries; three more expected to provide. Statistics provided include data on Task 1.2 landings, II.1 catch, II.2 effort and III. participation in fisheries;
- statistics submitted by eight countries; 3 more expected to provide;
- forty-three fisheries inventoried by 10 countries (for some this includes updates), three more countries expected to submit inventories in 2023 Q3; and
- inventoried fisheries are published in FIRMS and information accessible through the WECAFIS maps viewer (WECAFC-FIRMS data viewer (d4science.org)).
- 253. Ms Cummings concluded the presentation, emphasizing the primary factors considered as challenges to the WG's efforts during the intercession and also delivered an abridged version of the WG workplan.
- 254. Ms Cummings noted that it was difficult to apply cost estimates to the activities of this Working Group as many of the activities were accomplished under co-funded projects of the FAO and also with a significant component of in-kind contributions from NOAA for the work of the FDS-WG Convener.

Challenges included:

- Advent of the COVID-19 pandemic necessitated coordination of a virtual Second Meeting of FDS-WG spanning 2021–2022 as a follow-up to the First Meeting (May 2018).
- The pandemic also prevented convening one-on-one outreach meetings relating to capacity building initiatives and in finalizing sub-area draft proposals.
- Necessity of increasing the number of meetings held virtually in preparation for final FDS-WG2; the WG also faced issues with funds available for required translation of documents.
- Additional resources will be needed to: 1) further advance members' capacities to report statistics to the Regional DataBase (RDB) and FIRMS products; 2) conduct intersessional meetings between FDS members and key WGs towards informing Appendix 6 of the DCRF (biological conversions); 3) ensure publishing and dissemination of products from FDS-WG activities; and 4) to convene the FDS-WG3.
- 255. It was noted that this joint WG is organized through the collaborations of the regional fishery bodies (WECAFC, CRFM, OSPESCA) and work is identified and prioritized through governance of the WECAFC-FIRMS collaboration taskforce providing guidance, oversight and performance checks. The work achieved during the intersession was supported through the EU-DG MARE Phase 3 funding, FAO-FIRMS collaboration, WECAFC and in-kind support from CRFM, OSPESCA and NOAA.
- 256. It was also noted that full operationalization of the DCRF will require additional resources and continued building of strong collaborations, particularly the WGs. Additional resources will be needed to: 1) further advance members' capacities to report statistics to the Regional DataBase (RDB) and FIRMS products and 2) ensure publishing and dissemination of products from FDS-WG activities.

- 257. Ms Cummings completed the presentation with a request to the SAG composed of three parts:
 - DCRF;
 - · WECAFC Regional Database; and
 - WECAFC Capacity Building for collection and production of data, statistics, and information.
- 258. The draft Recommendations for the FDS-WG are presented in Appendix D.
- 259. The Tailored TORS are presented in Appendix E.
- 260. The FDS-WG workplan is presented in Appendix F.

5. CFMC/WECAFC/OSPESCA/CRFM Working Group on Spawning Aggregations (Convener, Myles Phillips)

- 261. The intersession report of the SAWG was presented by Mr Myles Phillips. The report can be found at pages 86–91.
- 262. This intersessional report presents activities accomplished since SAG X under SAWG 2018/2020 workplan. Due to COVID-19 pandemic, the 2018–2020 workplan was expanded to 2018–2021.
- 263. Implementation of activities was within the context of its TORs as enshrined in the report of the Fourth Meeting of the SAWG in November 2020, with the following objectives:
 - compile and analyze data on spawning aggregations in the member countries and monitor any changes;
 - partner with other institutions that could provide assistance in the monitoring, evaluation, and recommendations for management for protection and conservation of spawning aggregations;
 - advise on the management and implementation of regional strategies and regulations to protect spawning aggregations; and
 - report to the appropriate institutions at each session.
- 264. Major Accomplishments in the 2019–2022 period included: Third Meeting of SAWG (2019; Fourth (Virtual) Meeting of SAWG (2020); The elaboration of the Regional Fish Spawning Aggregation Management Plan and the Regional Communication Strategy "Recovering Big Fish".
- 265. During the Third Meeting of the Spawning Aggregation WG (held in December 2019), the group advanced the development of the Regional FSAMP, conducted updates on Regional Communications Strategy and decided on a Regional Survey of Parrotfishes to assess the feasibility of parrotfish inclusion.
- 266. The Fourth Meeting of the Spawning Aggregation WG (November 2020) was held virtually due to the Covid 19 pandemic. As outcomes, there was the Review of Advanced draft FSAMP and some updates on: Regional Communications Strategy; Implementation of WECAFC/XVIII/2019/24 Recommendation; Outputs of Caribbean Fisheries Management Council (CFMC) and results of the Parrotfish Surveys.

- 267. A Regional Fish Spawning Aggregation Management Plan was concluded. The Plan aimed to stop and reverse the declines associated with uncontrolled exploitation of vulnerable fish spawning aggregations. It was presented to the 74th meeting of the Gulf and Caribbean Fisheries Institute (2021) and translated into English, French and Spanish.
- 268. The Regional FSAMP brought up a novel approach, noting that FSAs are highly susceptible to uncontrolled fishing; Transboundary larval dispersal and adult migration indicate the need to harmonized management; Data sharing frameworks needed to inform national and regional approaches not yet established; and that socioeconomic, scientific and traditional knowledge equally.
- 269. The Regional Communications Strategy "Recovering Big Fish", was launched in 2021 with two short films "Nassau Grouper against the clock" and "Fisher to Fisher Advice: Fish Smart". Future Outputs include: 1 hour film "Secret Crown", Radio Kits and a Digital Hub.
- 270. Challenges encountered in the period and mitigating measures included the COVID-19 Global Pandemic, so the 4th Meeting of SAWG was held virtually and the filming of "Secret Clown" delayed. Funding for some 2018–2021 objectives were not found.
- 271. Recommendation to WECAFC/17/2019/14 on the Sustainable Management of Spawning Aggregations and Aggregating Species" included 10 recommendations emerging from 2018–2020 workplan:
 - national adoption and strategic implementation of a Regional Fish Spawning Aggregation Fisheries Management Plan by all member states;
 - unified regional monitoring programme utilizing standard protocols;
 - determine and report the status of all known FSA;
 - standardized measures to protect FSAs at the national, regional and international scale;
 - regional seasonal closure for all commercial and recreational fishing of Nassau grouper (*Epinephelus striatus*);
 - assessment of the economic value of FSAs and the socioeconomic impact of proposed management measures;
 - fishers (displaced due to FSA closures) should be trained in monitoring, research, assessment, and suitable economic alternatives and involved in cooperative research and FSA management;
 - regional outreach and communication strategy;
 - prioritize FSAs for management; and
 - mobilize resources to assist the Members in the implementation of FSA Management measures.
- 272. A detailed workplan for the 2021–2025 period and updated terms of reference were also presented.
- 273. The draft Recommendations of the SAWG are presented in Appendix D.
- 274. The Tailored TORS of the SAWG are presented in Appendix E.
- 275. The SAWG workplan is presented in Appendix F.

6. CFMC/WECAFC/OSPESCA/CRFM Working Group on Sharks (Convener, Mauro Gongora)

- 276. The report of the Sharks Conservation WG was presented by Mr Mauro Gongora and can be found at pages 30–31.
- 277. The group was established by the fifteenth session of WECAFC held in Trinidad and Tobago in 2014 on the specific request of the members. The Commission requested the WG to support the development of at least two national plans and a regional plan of action for the management and conservation of sharks.
- 278. During the period 2014–2015, the WECAFC Secretariat mobilized resources to carry out the work requested by the Commission and supported the development of a Caribbean Sharks and Rays identification guide, as well as sharks and rays' assessments and the development of National Plans of Action (NPOA sharks) in Antigua and Barbuda and Barbados. NOAA kindly agreed in 2016 to support the first meeting of the WG through the Trust Fund project "Conservation and Management of Sharks and Rays in the Wider Caribbean Region".
- 279. The First meeting of the WECAFC/OSPESCA/CRFM/CITES/CFMC Working Group on shark conservation and management was held in Barbados on 17–19 October 2017.
- 280. During that meeting a second "Draft Regional Plan of Action for the Conservation and Management of Sharks and Rays in the WECAFC Area" was presented and discussed by the meeting participants. The revisions suggested that the document needed additional information to be finalized, with further inputs the participants agreed to provide after the meeting, but this did not materialize, as was expected.
- 281. Pending the finalization and endorsement of the final Regional Plan of Action for the Conservation and Management of Sharks, the Commission discussed, amended as appropriate and adopted at its 17th Plenary held 15–18 July 2019, the recommendations WECAFC/17/ 2019/5-6-7 on the conservation and management of sharks and rays.
- 282. The 18th Conference of the Parties to CITES (CoP 18 which took place from 17–28 August 2019 added more shark species, including shortfin mako *Isurus oxyrinchus* and longfin mako *Isurus paucus* to CITES Appendix II. Silky sharks *Carcharhinus falciformis*, Thresher sharks *Alopias* spp and Devil Rays *Mobula* spp were added to CITES Appendix II at CoP 17 in 2016.
- 283. At its 26th Regular Meeting held 18–25 November 2019, ICCAT discussed the conservation and management of sharks. This work continued during the 2020–2022 correspondence period.
- 284. Mr Gongora then presented some background. The objectives of the Sharks Working Group are:
 - share data and information on shark and ray stocks, fisheries, conservation and management among the WECAFC member countries;
 - create awareness on international agreements and measures for sharks and rays' conservation among key stakeholders in the Caribbean region;
 - discuss, review and work toward finalizing the second draft Regional Plan of Action for the Conservation and Management of Sharks and Rays in the WECAFC area;
 - in building on the new standard TORs of WECAFC Working Groups, finalize the relevant sections tailored to the sharks and rays WG and develop a workplan for the period 2022–2024; and

- make recommendations, as appropriate, on sharks and rays conservation and management.
- 285. The main accomplishments of the group during the intersessional period 2020–2021 were:
 - a. In October 2021 a second meeting of the WECAFC/OSPESCA/CRFM/CITES/CRFM Working Group on Shark Conservation and Management was held, with the valuable contribution of the International Commission for the Conservation of Atlantic Tunas.
 - b. The purpose of the second meeting was to contribute to the conservation, responsible management and sustainable use of sharks and rays in the Caribbean region, through the finalization of the Regional Plan of Action for the Conservation and Management of Sharks and Rays in the WECAFC Area. Particular attention was placed on conservation of those shark and ray species listed under CITES Appendix II.
 - c. A Task Force, comprised of Stamatis Varsamos (EU DG Mare), Ms Laura Cimo and Ms Chery McCarthy (United States of America) Mr Yoeri de Vries (Caribbean), and Ms Yvette Diei Ouadi WECAFC Secretary, FAO Subregional Office for the Caribbean (FAO SLC) and the Sharks Working Group Convener, was established during this meeting.
 - d. Since October 2021, the Task Force focused all its efforts on the finalization of the Regional Plan of Action for the Conservation and Management of Sharks, Rays and Chimeras in the WECAFC area, planned for review by SAG XI and eventually, the Commission.
- 286. The most persistent challenge of the Sharks Working Group is the general lack of response by members to provide inputs such as comments and recommendations to the draft Sharks Regional Plan of Action for the Conservation and Management of Sharks, Rays and Chimeras in the WECAFC area. This lack of response was resolved through the establishment of a Task Force, which ultimately was responsible for the preparation and delivery of the RPOA document to be reviewed by the SAG and finally, by the Commission.
- 287. The Sharks Working Group through the Task Force achieved a major accomplishment in the finalization of the "Regional Plan of Action for the Conservation and Management of Sharks, Rays and Chimeras in the WECAFC area" This regional work is considered key output of the Working Group and the major challenge ahead will be the execution of the workplan for the period 2022–2024.
- 288. This Working Group, with the support of FAO, WECAFC Secretariat, CFMC, CRFM and OSPESCA, will provide, among others, a platform for supporting the conservation and sustainable management of shark fisheries in the Wider Caribbean region until an RPOA is adopted, the actions of the Working Group will be guided by the guidelines laid out in the FAO IPOA Sharks, with the following objectives:
 - a. improving understanding of the status of shark populations in the WECAFC geographic area of competence through research, monitoring and data collection;
 - b. ensuring that shark catches are sustainable and that sharks' species/stocks with poor or protected conservation status, have appropriate conservation measures in place;
 - c. foster regional cooperation and improved governance for the conservation and management of sharks in the WECAFC region;
 - d. promote communication and increased public and stakeholder awareness about shark management and conservation; and

- e. Promote capacity building and financing mobilization for the effective implementation of the RPOA.
- 289. The Tailored TORS are presented in Appendix E.
- 290. The WG workplan is presented in Appendix F.

7. The report of the Shrimp and Groundfish Working Group was presented by Dr Fabian Blanchard

- 291. This report is contained in WECAFC/SAG/XI/2022/8. The report focuses on the Large Marine Ecosystems (LMEs) in the Wider Caribbean Region by GEF, UNDP, CLME sponsors.
- 292. The background included a summary of the processes that this Working Group suspended from 2000 until the meeting that took place in September 2015, following the recommendation of the fifteenth WECAFC session, with the aim of reactivating group work.
- 293. The objective of this WG is to provide scientific and management advice for the sustainable development of shrimp and groundfish of the northern platform of Brazil-Guianas, using a multidisciplinary approach, based on the best available science.
- 294. During the first WG session in 2015, the group mainly discussed the existing terms of reference, as well as pointing out the need to guarantee regular meetings, and implement the CLME++ Strategic Action Programme (SAP), the status of shrimp and groundfish actions, as well as the identification of opportunities to harmonize sustainable fisheries management measures. Likewise, recommendations were issued with the objective of increasing collaboration between countries, strengthening capacity, contributing to a regional action plan to combat IUU fishing, and developing a subregional fisheries management plan for countries north of the Brazil-Guianas Platform.
- 295. Successive meetings of the WG were held in 2018, 2019 and 2020, among which the work with The FAO CLME+ Subproject on shrimp and groundfish of the Great North Brazilian Shelf Ecosystem (NBSLME) and the REBYC-II LAC was included. At these sessions, there was an important participation of various scientists, fisheries officials, fisheries representatives, FAO, CRFM, CERMES, International conservation non-governmental organization (NGOs), REBYC II-LAC, CLME+, adding a total of four meetings (face to face and virtual meetings).
- 296. Included among the main achievements in 2019 were: 1) the updating of the status of the stock for each country (shrimp, red snapper, weakfish species, marine catfish sp.), 2) the genetic analysis of the population of the Atlantic seabob (*Xiphopenaeus kroyeri*), 3) the update on the status of the stock and fisheries inventories of WECAFC-FIRMS and its publications, 4) preparation of draft records for the shrimp and groundfish fisheries of the Guianas platform of North Brazil, 5) update on the status and development of the national fisheries management plans, with the aim of developing a sub-regional EAF management plan for shrimp and groundfish, 6) significant progress in gender analysis along the value chain of artisanal fisheries in Guyana, Suriname and Trinidad and Tobago, 7) preparation of a draft regional strategy for the management of bycatch in the WECAFC Area (REBYC II LAC), and 8) identification of needs and priorities to combat IUU fishing in the northern shelf from Brazil-Guianas.
- 297. Achievements in 2020 included: 1) the review of the final draft of the EAF Subregional Strategy and fishery management plan (FMP) for the shrimp and groundfish was carried out fisheries of the North Brazil-Guianas Shelf; 2) development of discussions for considerations for the implementation of the strategy and FMP; 3) progress was also made regarding the current state

- and perspectives of national fisheries and FMPs; 4) discussions on the FAO Fishing Area 31; 5) FIRMS inventories were updated: 29 resource sheets and 35 fishing sheets for the WECAFC region; however, it is important that member states continue to present updates to it. On the other hand, an update was presented on the classification of fishing vessels according to the predominant gear used, in the WECAFC region; and 6) a discussion was held on the proposed, modified structure of the iDCRF and data policy.
- 298. Additionally, good results were obtained from the pilot application of the Framework for the Evaluation of the Effectiveness of Governance in fisheries, pollution, and habitats and biodiversity in the North Brazil Platform and the need to improve data collection was highlighted. However, great concern about IUU fishing, in the context of human and labour rights, rapes and undocumented immigrant workers, was also identified. Finally, and in follow-up to the GEF, it is intended to strengthen the capacity to implement national and subregional shrimp and groundfish management plans for the EAF in Brazil, Guiana, Suriname and Trinidad and Tobago.
- 299. Derived from all the results presented, important challenges were also identified, regarding the lack of data availability for stock assessment (a fortiori for the EAF approach) and capacity building and stability of skills, as well as the need to organize new workshops and continue implementing methods adapted to limited data stocks.
- 300. Finally, the WG's workplan was presented for the period 2022–2023, and in which the active participation of all the countries involved is necessary to advance in the aforementioned development processes.
- 301. The Tailored TORS are presented in Appendix E.
- 302. The WG's workplan is presented in Appendix F.

8. OSPESCA/WECAFC/CRFM/CFMC Working Group on Caribbean Spiny Lobster (Convener, Yesuri Pino)

- 303. The Report of the Intersessional Work of the Caribbean Spiny Lobster was summarized in the document WECAFC/SAG/XI/2022/13 and is available at: https://www.fao.org/3/cb9894en/cb9894en.pdf (see pages 139151).
- 304. The document provided some background information on the WG that first met in 2014 and met the last time only in 2018. At that time the WG made recommendations to the ICM for Sustainable fisheries, updated the TORS and developed a workplan for 2018–2019.
- 305. Among the main activities that were accomplished through the time of the second WG meeting were: a) Finalization of the Caribbean Spiny Lobster Regional Management Plan (MARPLESCA Plan); b) Presentation of the Caribbean Spiny Lobster Regional Management Plan (MARPLESCA Plan) at the 17th meeting of WECAFC; c) Approval of /Recommendation WECAFC/XVII/2019/9 on the Management of the Caribbean Spiny Lobster in the WECAFC area during WECAFC 17.
- 306. The intersessional report noted that Recommendation WECAFC/XVII/2019/9 states: "WECAFC members approve and implement the Caribbean Spiny Lobster Regional Management and Conservation Plan (MARPLESCA Plan) updated and presented at the second meeting of the Joint Working Group held recently (March 2018)".
- 307. Further, it was noted that the MARPLESCA Plan provided advice for the WECAFC/OSPESCA/CRFM/CFMC CSLR WG as a follow-up technical support body, and that the Plan also established a tentative timeline for its full implementation by 2020. Considering the last workplan presented by the group for the 2019–2020 period, the following objectives were not

- achieved: 1. Conduct the third meeting of the Caribbean Spiny Lobster Regional Working Group. 2. Implementation of selected actions of the Caribbean Spiny Lobster Regional Management Plan.
- 308. The main achievements since WECAFC17 have been to compile the most important characteristics of the fishery and management in the countries with lobster fisheries throughout the WECAFC area in the MARPLESCA Plan. Thus, allowing the establishment of a systematic process for the management of the Caribbean spiny lobster (*Panulirus argus*) fishery in the countries where it is distributed, within a framework of sustainable use, promoting ecological balance and social and economic benefits for stakeholders.
- 309. Challenges experienced during the intersessional period that were closely related to the lack of continuous monitoring of the activities of the CSL-RWG, due to departure of the WG Convener in mid-2021, producing a lack of communication within the WG.
- 310. In late 2021, the WG reorganized into three subgroups that focused on reviewing and adapting the TORS and reviewing the WECAFC strategic plan.
- 311. The Tailored TORS are presented in Appendix E.
- 312. The WG's workplan is presented in Appendix F.

9. Working Group on the Management of Deep-sea Fisheries (Jorge Paramo)

- 313. The work of the Joint WG on the Management of Deep-Sea Fisheries was summarized in the document and is available at: https://www.fao.org/3/cb9894en/cb9894en.pdf (see pages 152–159).
- 314. Mr Paramo gave a brief account of the WG development that began in 2014 with the first WG meeting which was a Technical Workshop (https://www.fao.org/3/i4329e/i4329e.pdf). He also presented an overview of the WG functions and tasks (as shown in the document at www.fao.org/3/cb9894en/cb9894en.pdf.
- 315. There were a few achievements during the intersession in connection with the deep-sea fisheries, as follows:
 - presentation made on "Conservation strategies for potential new deep-sea crustacean fisheries in the Colombian Caribbean under an ecosystem approach" at the World Fisheries Congress Conference (September 2021, Adelaide Australia);
 - development of ecosystem indicators to advise management and conservation strategies for possible new deep-sea crustacean fisheries in the Colombian Caribbean using baseline data collected from commercial trawl surveys collecting CPUE, size composition, sex ratio information, species composition, reproductive biology information;
 - surveys conducted (n=87 stations between 200–700 m) off Colombia provided opportunity to evaluate which gear was the best option for deep-sea capture and informed research strategies for minimizing habitat damage;
 - development of a proposal for a management strategy under EAF for deep-sea fisheries, utilizing multiple indicators (biodiversity, ecosystem structure/function, ecosystem stability/resistance to perturbations, maintenance of resources)"; and
 - the research conducted during the intersession emphasized the need for comprehensive understanding of growth, recruitment, mortality, areas and seasons of spawning, nursery regions and associated biodiversity, before the beginning of a new commercial fishery.

- 316. Mr Paramo noted that the next meeting of the WG would be a hybrid mode.
- 317. The Tailored ToRs are presented in Appendix E.
- 318. The WG workplan is presented in Appendix F.

10. Flying Fish-Dolphinfish (Convener, Maren Headley)

319. The Joint Flyingfish-Dolphinfish WG did not meet during the intersession. It was emphasized that this WG was newly established by replacing the historical flying fish WG with this combined species Flying Fish-Dolphin fish WG at WECAFC17.

11. Recreational Working Group (Convener, Erik Martinez Avila)

320. The recreational WG did not meet during the intersession.

REVIEW OF THE BIOLOGICAL DATA, THE STOCKS SPATIAL DISTRIBUTION AND THE ECOLOGICAL CONNECTIVITY BETWEEN THE AREAS BEYOND NATIONAL JURISDICTION AND THE EXCLUSIVE ECONOMIC ZONES IN THE WESTERN CENTRAL ATLANTIC FISHERY COMMISSION REGION

- 321. The review describes a group of species considered to be of significant importance to member countries of the WECAFC region. Its classification into transboundary and straddling and highly migratory stocks (HMS) and their fisheries including information of the state of exploitation of the selected species. It also considers the issues of ecological connectivity between the high seas and the EEZ of coastal states. Lastly, it highlights issues that need to be addressed to generate the sound, scientific knowledge of the species and support the strategic reorientation of the WECAFC.
- 322. The species for review were selected first from the species listed as "Main" or "other Reference" species in Appendix 3.1 Reference list of aquatic species in the interim WECAFC interim DCRF, 196 in total. In the end, 69 species were selected, 65 from the WECAFC reference list and 4 others not included in any of the WECAFC reference lists (namely the gag grouper, smalleye croaker, bonnethead shark and the pelagic stingray) based on their relative importance in the region's fisheries. In the end, this represented 31 straddling (and HMS) and 38 transboundary species.
- 323. The classification of stocks into transboundary, straddling and HMS stocks was based on a recent (2019) study that lists 633 exploited transboundary species worldwide. For the WECAFC region this resulted in three major groups for demersals, which included 27 transboundary species, 23 straddling pelagic species, 7 transboundary and 12 straddling elasmobranch stocks. However, based on a literature review the Queen conch is considered to be a shared stock with transboundary issues and not a true transboundary stock.
- 324. For the species review, FAO catch statistics for the period 2015 to 2019 were used. Updated information on the distribution, life history, stock identification and stocks status. Updated spatial distribution of catches, catches by year, the relative abundance of most straddling species and fishing areas for most of the transboundary species. Fishery data obtained from several sources including FAO, ICCAT and on country fishery specific data from published reports.
- 325. In case of transboundary several species clearly show exploitation relevance within and between LMEs in the region. Lobster for example is distributed throughout all of the LMEs, and shrimp are split into northern and southern zones. Northern shrimp are mainly in the Gulf of Mexico and southeast United States of America LME Southern shrimp are mainly in the CLME and the North Brazil shelf LME. The groundfishes mostly croakers and weakfishes are mostly distributed

along the North Brazilian shelf LME and the southern part of the CLME however one species is distributed throughout all LMEs. Snappers are groupers throughout all LMEs but in localized areas. Most coastal sharks are along the North Brazilian shelf LME and southern part of the CLME with a few exceptions. The mackerels are distributed across all the LMEs in the WECAFC region and are managed by ICCAT.

- 326. For the straddling species, of the 31 species only, two (four wing flying fish and Dolphinfish) are not under the ICCAT mandate. Flying Fish is generally distributed throughout the region with the highest abundance based on fisheries data being in the southern Caribbean. Based on accumulated catch data during the period considered in the study, 90 percent of the region's flying fish catch is landed at Barbados, with the rest being landed at four other countries in the region. Dolphinfish is also generally distributed throughout the region. Dolphinfish was under ICCAT's mandate for three years which helped in the collection of data during the period of 1990 to 2019 and getting a picture of the accumulated catch in the region. Using the data illustrated in 5x5 degree squares, it can be seen that the highest catches were also in the area of the Eastern Caribbean and Venezuela (Bolivarian Republic of) and around Brazil. However, relatively few catches are seen in the United States of America area because most of the United States of America catches are from the recreational fishery and that data was not reported to ICCAT. In addition, the accumulated catches by major gear showed that in the Northern part, most of the dolphinfish were bycatch of longlines but around the islands were most likely taken by trolling or fished around aFADs. Around Brazil most of the catch is by handline gear with some by baitboat and longline.
- 327. 92.19 percent of dolphinfish are taken in only 11 countries in the Caribbean and Eastern Caribbean within the WECAFC region. There are unresolved reporting issues in the area. For example, there is uncertainty due to the reporting catches of French departments of Martinique and Guadeloupe; whether catches are reported, as included, or separate from the total for France. This needs to be resolved. In ICCAT documents Costa Rica declares that it does not take fish pelagics in the WECAFC area, yet catches (2.3 percent of the catches) are reported to FAO. It is believed that Costa Rica is now working with ICCAT to resolve these issues as they do have a fleet of mid-size artisanal vessels fishing in the WECAFC area. Brazil does not report catches disaggregated to allow for separate reporting of the portion of catch taken in the WECAFC region alone.
- 328. The only RFMO in the region is ICCAT that has a mandate for the highly migratory species in the WECAFC area. There are four regional fisheries advisory bodies in the area (COPACO (WECAFC), CRFM, OSPESCA and COPPESAALC). In this section, Dr Arocha noted that in his report he had tried to explain how ICCAT works and the groups which operate within and to point how beneficial it would be for the WECAFC countries to join ICCAT or be observers because how they function would be beneficial for most of the species, at least, the straddling species that are under ICCAT management or those that are not managed by ICCAT but have been in the past. There are ways to attract ICCAT's attention to do assessments of those species particularly, dolphinfish.
- 329. Ecological connectivity between distant marine ecosystems as the case for EEZs and ABNJ is affected through two types of connection, circulation which is passive facilitated by ocean currents and migratory connectivity achieved by active swimming by marine species. The ecological connectivity between the high seas and the EEZs in the region are mainly dominated upstream by the North Brazil current, the NBC rings and the Northeastern current downstream that seems to have an influence in some of the straddling highly migratory species exploited in the region. These two major currents are likely to be responsible for the connection of the straddling and highly migratory species like tunas and tuna-like species exploited in the region. However, it is very much less evident for some of the other transboundary species.

- 330. Migratory connectivity by active swimming can be inferred by species moving from breeding to feeding grounds downstream and back. However, dispersal patterns can only be estimated by biophysical models that combine oceanographic data with an understanding of the biology of the stock. The straddling species represent a good example of migratory connectivity of adults between ABNJ and the EEZs in the WECAFC. Most of the species selected spend most of their lifecycle in the WECAFC region and into the ABNJ within and outside the WECAFC region. The billfishes and some of the major tunas were used to illustrate the migratory connectivity in the region including areas of high catches and the locations of spawning grounds. For example, albacore is spawning in the Caribbean area (two areas east of the island chain), while yellowfin spawns at one area west of the island chain and another area in the Gulf of Mexico. All the billfishes (white and blue marlins, swordfish and sailfish), dolphinfish, wahoo and black fin tuna also were shown to have spawning grounds within either the EEZs or boundaries of EEZs and the ABNJ within the WECAFC region.
- 331. Given the presence of these spawning areas within the region, pre-juveniles and young of year of these species inhabit the specific areas before migrating out of the region as adults to feed in more productive waters beyond the WECAFC region.
- 332. Ecological connectivity between distant marine ecosystems can also be explored as a dependence of coastal nations on their neighbors for recruitment that is the risk of losing part of their catches if the fisheries in the sources outside of their jurisdiction are poorly managed.

General Recommendations and way forward:

- 333. The review found that most of the economically important and food security resources for which there are directed fisheries within the ABNJ of the WECAFC region are straddling/highly migratory stocks of the WECAFC region that are under the mandate of ICCAT.
- 334. The common dolphinfish is a straddling/highly migratory stock that is widely fished across the region by commercial and recreational fisheries. In terms of economic importance and food security in the region, it was considered that the common dolphinfish was a prime candidate to explore region-wide binding conservation management measures. This would require that states take the necessary measures to collect, record and report essential fisheries statistics to a regional entity with a regional mandate to analyze and report on the status of the stock. It was queried if WECAFC could be that entity.
- 335. A final major step would be to advance in a multiple-scale approach to enhance our understanding of the interaction between the key physical and biological processes driving the connectivity and/ or isolation between habitats and populations of key species or groups of species in the region. The effort would require validated biophysical models that consider ocean circulation and larval dispersal.
- 336. Presently, no published literature nor reports indicate the existence of deep-sea fishing operations in the ABNJ area of WECAFC in the past decade. Potential deep-sea fishing in the ABNJ of the WECAFC region is likely to be conducted by bottom and mid-water trawl, and squid jigger fleets, but very poor data is available. Alfonsino was named as a potential key species in an ICCAT report, but the species was only taken occasionally by foreign fleets in the northeastern corner of the WECAFC area, but they have never established any operations to fish this species in the past ten or five years.
- 337. Christopher Parker (SAG) praised the excellent quality of the report but sought clarification on if dolphinfish was no longer under ICCAT mandate.

- 338. Dr Arocha explained that the species list for ICCAT was updated recently and dolphinfish was dropped. While countries are still to collect data on dolphinfish, instead of going to the small tunas group where it was to be tracked, it was put into the bycatch group, although the statistics will still be in the ICCAT database.
- 339. Beatrice Ferreira (SAG) asked if there was any consideration given to fishing around the seamounts.
- 340. Dr Arocha answered no, because it used available data. The connectivity studies are new and limited, although it is recognized that connectivity around seamounts is important but without the information not much can be done.
- 341. Nancie Cummings (SAG) asked if species in the ICCAT bycatch list that are in the WECAFC DCRF List of Aquatic Species will likely be elevated in importance by ICCAT.
- 342. Dr Arocha noted that there was only one (dolphinfish) in the ICCAT bycatch list, but there were others in the small tuna list such as blackfin tuna, wahoo and some mackerels. It was important to collect and present data to make ICCAT interested in conducting stock assessments.
- 343. Peter Murray warned that while representation has to be made to ICCAT to get species of interest discussed, countries need to present at the meetings to ensure that after doing this, the countries in the region are not disadvantaged by the management steps taken by ICCAT.
- 344. Ms Headley noted that the new Flying fish-dolphinfish Working Group will address these issues. The group could not meet last year and it is planned that its first meeting will occur in November or December this year.

STUDY ON "HEALTH AND SAFETY IN THE DIVE FISHERIES OF KEY SPECIES IN THE WESTERN CENTRAL ATLANTIC FISHERY COMMISSION REGION" (TECHNICAL REPORT)- WECAFC/SAG/XI/2022/15

- 345. Ms Claudia Stella Beltrán, FAO Consultant responsible for the study, presented the results and findings of the study "Health and safety in the dive fisheries of key species in the WECAFC region".
- 346. As background to the study, Ms Beltrán explained that the issue of diver safety and working conditions in dive fisheries was first raised by the conch Working Group at the 17th Session of WECAFC, where the scope was extended to include the lobster and sea cucumber fisheries to formulate recommendations through a comprehensive approach.
- 347. In 2020, the WECAFC Secretariat joined efforts with the FAO SSF Umbrella Programme in commissioning a study to assess the diving conditions in these fisheries and prepare a funding proposal on: "Health and safety in dive fishing of key species in the WECAFC region".
- 348. The project involved a technical analysis of diving (SCUBA, hookah and apnea) in spiny lobster, Queen conch and sea cucumber in the WECAFC region.
- 349. In total, eight countries participated in the study namely: Honduras, Nicaragua, Dominican Republic, Colombia, Mexico, The Bahamas, Jamaica and Saint Lucia.
- 350. The methods of data and information collection included remote interviews with key informants, review of secondary sources and analysis of statistics.

- 351. The main findings of the study, as presented by Ms Claudia Beltran, were as follows: a) Autonomous dive fishing has been occurring for more than 40 years; with divers involved having little formal training in diving and safety measures; b) The activity has caused thousands of accidents, resulting in death or disabilities due to decompression sickness. Those included physical (paralysis or loss of limbs); motor (articular, muscular and/or nervous system failures); and sensorial (blindness, deafness, muteness or olfactory) problems.
- 352. It was noted that while some countries have banned professional diving for fishing, others just discourage it. Governments have also made efforts to regulate it and promote activity diversification, but generally, divers have refused to conform to proposed rules or abandon the activity.
- 353. It was also noted that autonomous both diving and trap fishing coexist over the same resources, while diving is more profitable for ship owners because divers can access deeper areas compared to those reached by vessels with traps, and sellers' pots are better to obtain more expensive lobster products (live and whole frozen for European and Asian markets). Lobster catches from diving, on the other hand, supply tails exported to the United States of America.
- 354. Further, it was noted that accidents due to unsafe diving practices are aggravated by a lack of access to immediate medical attention. Many countries do not have specialists and/or experience in hyperbaric medicine or hyperbaric chambers.
- 355. Biosafety on board due to COVID-19 has added to the traditional problems.
- 356. Many divers lack health insurance, training, good equipment, control of depths and dive times (8–12 tanks/day) in addition to cases of alcohol/drug use.
- 357. SCUBA has been used to fish lobster and conch since the 1970s and sea cucumber since the 2000s due to population declines of these resources in the Eastern Pacific Ocean (China, Hong Kong SAR, Singapore, China, Democratic People's Republic of Korea (the)). Sea cucumber is not sold in Latin America and the Caribbean and IUU fishing could be abundant. Direct business between Asian agents and the fishers is conducted near fishing areas often at the landing sites.
- 358. Although the problem is common for many fisheries and countries of the region, it has not been addressed with a specific and coordinated approach at national/regional level.
- 359. Initiatives and laws existing in the area include OSPESCA Regulation 02/2009, St George CRFM/2015 Declaration, MARPLESCA-ECOLANGOSTA+ Plan (OSPESCA 2018, WECAFC 2019), national standards/plans (Honduras, Nicaragua, Dominican Republic, Colombia, Mexico, Bahamas, Saint Lucia, among others).
- 360. The study proposes some guidance to deal with problems and help divers, as follows:
 - design/review legal and policy framework recognizing diving as a risky activity;
 - include divers and assistants in labor and occupational safety legislation according to the particularities of each country. (Reference guidelines to legislate or regulate diving in artisanal fishing or of small scale in the Region of Latin America and the Caribbean (FAO, 2017)";
 - promote awareness and training in safe diving;
 - design practical guidelines with drawings and simple language in English, Spanish, French and most used native languages;

- design an app (for smartphones) with instructions on safe diving, first aid, real-time location of hyperbaric chambers, and communication with search and rescue authorities;
- negotiate hyperbaric medicine programmes with health authorities and academia, particularly near to critical dive areas; and
- in order to achieve changes in decision-making and behavior of divers/ families, recruiters/ captains, provide first aid training and positive influence aimed at influencing people not to risk their lives.
- 361. The study described the experiences of autonomous diving in eight countries of the WECAFC region (Honduras, Nicaragua, the Dominican Republic, Colombia, Mexico, The Bahamas, Jamaica and Saint Lucia), that however are not the only countries sharing the need to advance in promotion of safe diving measures. In this sense, it was recommended that the actions proposed in an eventual international cooperation project about health and safety in diving fishing promoted by FAO, may include other countries and territories of the WECAFC region.
- 362. Closing her presentation, Ms Claudia Beltran presented some details including the budget for the proposed project entitled "Health and safety in dive fishing of key species in the WECAFC region".
- 363. Beatrice (SAG member) thanked Ms Claudia for the important study and asked if the study had included any analysis of safety issues related to the use of artificial attraction devices (like the "casitas") in the study area.
- 364. Ms Beltrán answered that in Nicaragua where the fleet has divers that use fish traps have such a relationship. However different countries have different realities, and because deeper diving is profitable, it is a cultural change difficult to make.
- 365. Christopher Parker (SAG member) also congratulated on the good study and report in an important area that has often received little attention. In relation to costs involved in issuing health insurances and hyperbaric chambers, he asked who would finance those costs and how those costs would impact the fisheries.
- 366. Ms. Beltrán answered that probably the private health system or National social health system when available (like in Colombia).
- 367. Some discussion was held in the chat. Christopher Parker (SAG member) commented that "probably none of the available dive certifications would cover the specifics for some of the dive fishing activities and that this would be the problem if pursuing any commercially available health insurance (individual or even at group levels), considering the extra risk associated with these dive fishing activities (depth range, submersion time etc.). Covering the medical costs will ultimately fall to government financing arrangements. Which is thankfully the plan here".

REVIEW OF THE WESTERN CENTRAL ATLANTIC FISHERY COMMISSION STRATEGIC PLAN 2022–2027

- 368. Ms Yvette Diei Ouadi presented the Review of the WECAFC Strategic Plan for 2022–2027, Document WECAFC/SAG/XI/2022/16 (https://www.fao.org/3/cb9298en/cb9298en.pdf).
- 369. The document began with some general background information on the formation of the WECAFC Commission in 1973 by Resolution 4/61 of the FAO Council under Article vi (1) of the FAO Constitution. The Statutes were amended in 1978 and again in 2006.

- 370. The document also provided context on the current review of the Strategic Plan that is ongoing. COFI 31 (2014) conducted a review of FAO Article VI and XIV RFBs concluding that FAO would continue to provide a framework and technical support for Article vi and xiv RFBs. Additionally COFI noted that further strengthening and increased institutionalization of the regional level coordination function of WECAFC was needed in the future. Since the 2014 review at each of its subsequent sessions, COFI has reiterated the call for FAO to further increase its support to WECAFC and other marine and inland RFBs.
- 371. Subsequent to the 2014 review, several strategic (reorientation) workshops were held. At COFI 33 (2018) the FAO was requested to continue supporting the reorientation of RF advisory bodies specifically for CECAF and WECAFC. This led to the first WECAFC Preparatory meeting (March 2019) and later endorsement at WECAFC17 of the process towards WECAFC becoming an RFME/A. Later milestones included: development of an intersessional Working Group (IWG) to further the reorientation process, convening of the Second Preparatory Meeting for the Strategic Reorientation of WECAFC, and establishment of a drafting group to develop options related to the mandate and objectives of WECAFC.
- 372. Ms Diei Ouadi provided background on the WECAFC area geographically; objectives, principles; and functions of WECAFC, laid out the structure of the commission which included the governance background.
- 373. Next the process taken to review and prepare the draft strategic plan was presented, which included oversight of the Executive Committee, a need for open-ended feedback from WGs and SAG. It was noted that the draft strategic plan has been prepared by the WECAFC Secretariat in close cooperation with the WECAFC Executive Committee. The review exercise was discussed at the first and second meetings of the Executive Committee of WECAFC (2 and 3 June 2021). There was agreement for open-ended feedback from the Working Groups' conveners and the SAG members. The Secretariat was asked to circulate the 2014–2020 strategic plan for the review of the Working Group conveners.
- 374. In the overall context of the plan, seven guiding principles were identified as:
 - the members of the Commission shall have ownership of and responsibility for this strategic plan and the intersessional work programmes to be developed in support of its implementation;
 - the WECAFC Strategic Plan shall first and foremost reflect the common interests and priorities of all members to the Commission. Implementation arrangements will however strive to address unique problems of WECAFC members;
 - the strategic plan and related work programmes shall be implemented (as much as possible) through technical cooperation in line with the principles of South–South Collaboration, Technical Cooperation among Developing Countries (TCDC);
 - technical Cooperation among Countries in Transition (TCCT) advocated by FAO;
 - this strategic plan shall be implemented by the Commission, which will operate it as a programme for: collecting and analyzing data and exchanging, producing and disseminating relevant information and advice; linking policymakers, managers, scientists and private sector fish producers; and working in marine fisheries and/or aquaculture with the aim to achieve the objectives of the Commission;
 - the core resources (human resources, core funding and institutional participation) to implement the strategic plan and related work programmes will be provided by the members of the Commission and FAO;

- the work programme shall consist of activities and projects that are implemented with the assistance of FAO and other donors and resource partners and shall outline the specific indicators and targets for the purpose of monitoring and evaluating implementation of the strategic plan; and
- the development and implementation of specific projects and activities driven by the strategic plan shall be undertaken by the members with the assistance of the Secretariat and Executive Committee of the Commission.
- 375. Four focus areas were identified as follows, with priorities identified for each focus area:
 - improve regional fisheries governance;
 - increase regional information and collaboration in fisheries;
 - strengthen regional fisheries management and best-practice approaches for fisheries and aquaculture; and
 - management focus area.
- 376. Peter Murray asked if there could be any value of incorporating indicators as a way of measuring if progress in implementation of the actions was being made.
- 377. Ms Diei Ouadi said this was a good question. During the preparation process, that was raised in some of the sessions of developing the strategic plan, there have been consideration to introduce indicators. In the document, indicators for progress that can be measured have been maintained for Working Groups, this would be a recommendation from SAG for all Working Groups to attempt to provide a few indicators.

ANY OTHER MATTERS

- 378. Developing from the discussions under this agenda item, the following should be noted:
 - The upcoming SAG meeting will probably be held in 2023 prior to WECAFC19.
 - Ms Cummings made a suggestion for SAG to work with the FDS-WG and also seek inputs from other WGs on the topic of elevating some species from group 2 (*Other Reference Species*') to group 1 ('Main Reference Species') as it relates to data collection under the DCRF framework.
 - In terms of further guidance from SAG to WGs and other presenters regarding finalizing draft Recommendations, tailored TORs and workplans for submission to WECAFC18, SAG will communicate within seven days with each WG specific guidance. Additionally, WGs were reminded in their workplan reviews to indicate priorities and linkages to strategic objectives and workplan cost estimates. The Secretariat suggested developing a template for WGs to follow and the SAG Chair agreed that guidance would be forwarded soon to the WG Conveners with a request to provide resubmissions within 15 days.
 - Ms Cummings encouraged SAG to consider SAG organizing informal sessions intersessionally, with individual WGs progressing capacity within SAG and increasing comprehensive knowledge regionally. This would also allow individual WG performance to be better tracked and thus, overall contribution to strategic objectives. Ms Beatrice supported this recommendation.

- Mr Parker noted the need to pay attention and carefully consider the way to present the documents that are adapted for managers/decision-makers to facilitate comprehension of the material being presented, which is often complicated and very technical. In particular, he noted for documents of such complexity and large scope that an Executive Summary was vital for both a full holistic understanding of the content and increasing efficiencies in the work of SAG.
- Ms Cummings noted that now WECAFC has 11 WGs and pointed out the logistical time difficulties in presenting on all the important matters brought to the SAG by the WGs as well as the other important conservation and management matters highlighting that pragmatically limiting the virtual sessions to three days of 5 or 6 hours does not provide sufficient time to deliver, discuss and consider fully.

TIME AND PLACE OF NEXT MEETING

- 379. In accordance with the Rules of Procedure, the exact dates will be determined by the Director-General of FAO in consultation with the WECAFC Executive Committee and the competent authorities of the host institution.
- 380. Dr Diei Ouadi further noted the SAG meets the year that precedes the WECAFC plenary. Possibly, WECAFC 19 will be held in 2023 to align with the meeting cycle of the FAO regional conference. If this is the case, then SAG XII will have to meet early next year. If WECAFC is held in 2024, then SAG can meet later in 2023. It is hoped that the next meeting can be face-to-face.
- 381. Ms Cummings also recalled that previously SAG was organized to take place just before the Gulf and Caribbean Fisheries Institute (GCFI) annual conference (early in November) noting this timing allowed the SAG and Observers an important calendar opportunity for important collaborations to take place.

ADOPTION OF THE REPORT

- 382. The refined key recommendations from the SAG were presented by Ms Yvette Diei Ouadi, Secretary of WECAFC. It was also decided that the revised recommendations with tracked changes and a clean version would be circulated to the SAG members and observers for further review.
- 383. Ms Cummings thanked the SAG members for their support, the Secretariat for logistical support, and all the observers for their patience and their good and informative inputs.
- 384. Dr Diei Ouadi thanked everyone, consultants, FAO Staff, WG conveners, observers, the interpreters (excellent new team) and the members of the SAG.
- 385. The meeting was adjourned at 13.30 hrs on 27 April 2022 following closing remarks by the Chair, who thanked all present, and expressed the hope that she could count on their support in the upcoming SAG.

APPENDIX A

Agenda

Day 1:	25 April 2022
9.00	1. Housekeeping and ZOOM logistics
9.30	2. Opening of the session and welcoming remarks
9.45	3. Introduction of SAG members
10.00	4. Election of chairperson and Adoption of the agenda
10.15	5. Main decisions and recommendations of WECAFC17 and the Thirty-fourth session of COFI
10.45	6. Review of the state of fisheries and aquaculture in the WECAFC region
11.15	Break and zoom photo
11.30	7. Intersessional activities – review of the WECAFC Work programme 2019–2021
12.00	8. Regional Fish Spawning Aggregation Fishery Management Plan: Focus on Nassau Grouper and Mutton Snapper"
12.45	9. Regional Strategy on the Management of bycatch and discards in Latin American and Caribbean WECAFC bottom trawl (shrimp and groundfish) fisheries
12.30	End of the first day of the meeting
Day 2:	26 April 2022
9.30	1. Summary notes/Reflection on Day 1
9.45	2. Regional Plan of Action for the Conservation and Management of Sharks, Rays and Chimaeras in the WECAFC area
10.30	3. The Caribbean Regional Management Plan for the aFAD
11.15	Break and zoom photo
11.30	4. WECAFC guide for improved monitoring of AFAD catches and improved assessment of AFAD impact on stocks
12.00	5. DCRF
12.45	6. Intersessional report by WGs, to include draft Recommendations to WECAFC18, tailored TORs and 2022–2024 workplan
13.30	End of the Day 2
Day 3:	27 April 2022
9.30	1. Summary notes/Reflection on Day 2
9.45	2. Intersessional report by WGs, to include draft Recommendations to WECAFC18, Tailored TORs and 2022–2024 workplan cont'd
10.30	3. Intersessional report by WGs, to include draft Recommendations to WECAFC18, Tailored TORs and 2022–2024 workplan cont'd
11.30	4. Review of the biological data, stocks spatial distribution, the ecological connectivity between ABNJ/High Sea and EEZ/Coastal waters in the WECAFC region
12.00	5. Working conditions in the dive fisheries in the WECAFC region
12.30	6. WECAFC 2022–2027 Strategic plan
13.00	Any other matters
13.05	Time and place of next meeting
13.03	Time and place of next meeting

APPENDIX B

Opening Address by the WECAFC Secretariat

Ms Deirdre Warner-Kramer, Chairperson of WECAFC, distinguished experts of the Scientific Advisory Group (SAG), WG Conveners, observers from member countries and partner organizations, and FAO colleagues:

- First and utmost, please accept my cordial greetings from cloudy Bridgetown, Barbados.
- It is also my pleasure to deliver opening remarks, the first of its kind at a meeting of the SAG of the WECAFC, since my entry on duty (April 2019) as the FAO Subregional Coordinator for the Caribbean, the office hosting the Secretariat of WECAFC. Indeed, the SAG met once on an exceptional basis, since my arrival. This was in June 2019, just before the 17th Session of the Commission held in July 2019; while I was on mission to present the letters of credence to governments in the region.

Distinguished participants,

- We all concur that the meeting of SAG is as essential as the Plenary session of the Commission, which it usually precedes. The role it plays as the scientific "arm" of WECAFC is of high value, given the important support this Commission provides to FAO member countries in the region, especially the 13 members of CARICOM that my office covers, whether from the perspective of the regional instruments, guidance and capacity development tools and data, or in targeting individual countries for direct assistance. This assistance is consistent with Sustainable Development Goal 14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development, an Sustainable Development Goals (SDG) for which FAO is a custodian agency. We have therefore increased our responsiveness to the needs of WECAFC. I must recall that despite limited regular programme funds, my office, from its own resources allocation, has increased by almost 25 percent the portfolio of the ring-fenced funds of WECAFC over the past couple of years.
- The contribution of the Commission to the management and development of the fisheries based on the best available information and data, is primarily driven by this advisory body led by selected resource persons endowed with suitable scientific qualifications and experience in fisheries, who serve in their personal capacity to generate key advice to the Commission and its ad hoc WGs; and this, in keeping to its independence and integrity.
- I must highlight that member countries from CARICOM are highly mindful of the necessity to attain the objectives of WECAFC. Their unwavering support in assuming the role of conveners is an illustration of their dedication to the WG. These WGs assist in referring all documents in need of scientific review to the SAG. On this specifically, I am told that six of the 11 WGs have a convener from CARICOM countries. This has been sustained over years, since the 15th Session of WECAFC, which marked the existence of the majority of the WGs, and despite the global COVID-19 pandemic. This intersession recorded 10 meetings by seven WGs; this is equal to one regional meeting per quarter since the second half of 2019 that has mobilized the WG members and the coordination time and resources of the Secretariat of WECAFC.

Ladies and gentlemen,

As you may know, this team of SAG is new. It was established in March 2021 and its Chair
was elected on 29 December 2021. Despite the tight timeline before this 11th Session, it already
worked diligently to bring innovations in the format of the meeting, by framing a template and
specific agenda item for WG conveners, setting the framework for greater accountability of the

presentations by all the statutory bodies of the Commission, while reducing the work pressure on the Secretariat.

- The agenda is extremely enriching, with scene setting topics on: the Review of the State of fisheries and aquaculture resources in the WECAFC region, the highlights of the Thirty-fourth session of COFI and WECAFC17, and a report on the intersessional activities. It also covers the very specific scientific and technical items connected to the outputs from the joint WGs, which met after WECAFC17. The deliberations on the latter will build on several documents of such importance as:
 - Regional Fish Spawning Aggregation Fishery Management Plan: Focus on Nassau Grouper and Mutton Snapper, two species considered to be undergoing declines, and listed as threatened in several international conventions;
 - Regional Strategy on the Management of bycatch and discards in Latin American and Caribbean [WECAFC] bottom trawl (shrimp and groundfish) fisheries, which is important to ensure the sustainability of resources, resilient livelihoods, while fostering healthy oceans;
 - Regional Plan of Action for the Conservation and Management of Sharks, Rays and Chimaeras in the WECAFC area, developed in response to concerns over expanding fisheries for these species and the potential negative impacts on their populations;
 - the Caribbean Regional Management Plan for the aFAD, predominant island states fisheries that have their benefits, but require better governance and consistent management regimes than currently exists;
 - WECAFC guide for improved monitoring of aFAD catches and improved assessment of aFAD impact on stocks;
 - DCRF: the importance of timely and accurate data and statistics for evidence-based fisheries management and development policy cannot be overstated. Harmonizing their collection, processing, and reporting across the region is an important milestone;
 - intersessional report by WGs, to include draft Recommendations to WECAFC18, tailored TORs and the 2022–2024 workplan;
 - Health and safety in the dive fisheries of key species in the WECAFC region: a report findings of a study targeting specifically the spiny lobster, Queen conch and sea cucumber fisheries. We are all cognizant of the socioeconomic importance of these fisheries. Indeed, despite the relatively low production, it must be considered that the fish catch in the WECAFC area concentrates on high value species, such as spiny lobster, Queen conch and shrimp; and
 - WECAFC 2022-2027 Strategic plan.

This very comprehensive agenda mirrors an extremely productive plenary of the Commission, to be held 26–29 July in Managua, Nicaragua.

In closing, I would like to thank you all for your attention. My special thanks to the Chair of WECAFC, Ms Deirdre Warner-Kramer for joining in delivering an opening statement, and to Ms Nancie Cummings, Chairperson of the SAG.

Finally, I would like to thank my FAO colleagues for their hard work in organizing this meeting. I wish you successful and fruitful deliberations.

APPENDIX C

List of participants

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APPENDIX D

Recommendations to the 18th session of Western Central Atlantic Fishery Commission for review

The Scientific Advisory Group is invited to review and discuss the following draft recommendations and propose actions for WECAFC and its membership to follow up at the 18th plenary session of the Commission:

- 1. (Draft) Recommendation WECAFC/XVIII/2022/XX amendment to recommendation WECAFC/17/2019/21 "On the sustainability of fisheries using aFADS in the WECAFC area"
- 2. (Draft) recommendation WECAFC/XVIII/2022/XX on "Fisheries governance, transshipment and information-sharing"
- 3. (Draft) recommendation WECAFC/XVIII/2022/XX on "Increased efforts in the implementation of the Regional Queen conch Fishery Management and conservation plan in the WECAFC region"
- 4. (Draft) recommendation WECAFC/XVIII/2022/XX CFMC/WECAFC/OSPESCA/CRFM-WG on SAWG
- 5. (Draft) recommendation WECAFC/XVIII/2022/XX on WECAFC Fisheries Data, Statistics, and Information

1. (Draft) Recommendation WECAFC/XVIII/2022/XX Amendment to Recommendation WECAFC/17/2019/21 "On the Sustainability of fisheries using aFADS in the WECAFC Area"

Abbreviations and acronyms

AFAD Moored/anchored fish aggregating device CARIFICO Caribbean Fisheries Co-management Project CFCM Caribbean Fisheries Management Council

CLME+ Caribbean and North Brazil Shelf Large Marine Ecosystems project

CPUE catch per unit of effort

CRFM Caribbean Regional Fisheries Mechanism

FAD fish aggregating device

FAO Food and Agriculture Organization of the United Nations

ICCAT International Commission for the Conservation of Atlantic Tunas

IATTC Inter-American Tropical Tuna Commission ICT information and communication technology

IFREMER French Research Institute for Exploitation of the Sea

IOTC Indian Ocean Tuna Commission

JICA Japan International Cooperation Agency

MAGDELESA Moored/anchored fish aggregating devices in the Lesser Antilles

MCS monitoring, control, and surveillance

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

RFB regional fishery body

RFMO regional fisheries management organization
WECAFC Western Central Atlantic Fishery Commission

Cover note

The use of aFADs by small-scale commercial and subsistence fishers has rapidly grown over the last thirty years in the insular Caribbean, contributing to improve fisher livelihoods and incomes and food security by facilitating the capture of large oceanic and coastal pelagic species. However, the development of the aFAD fishery has also brought important challenges at the governance, socioeconomic, biological, and ecosystem levels, which threaten the long-term profitability of the fishery and the sustainable exploitation of regionally shared stocks.

The proposed action draws largely from previous recommendations from the Joint WG on AFADs (WECAFC, 2019) and from the recent findings of the draft Regional aFAD Fishery Management Plan and the 2015 CRFM Subregional FAD Fishery Management Plan for the Eastern Caribbean. It seeks to help address some of the most urgent challenges. In particular, it seeks to strengthen the current (formal and informal) national and regional governance frameworks as it recognizes that effective progress on this ground will also facilitate addressing many of the challenges affecting the other dimensions (socioeconomic, biological, ecosystem). It also seeks to strengthen national fishery data collection systems and to increase harmonization and integration of data across the region to facilitate assessment of the stock status at the appropriate (regional) scales to better guide management. Finally, it recognizes the need for increased research collaboration across the region to address some of the most pressing issues on aFADs, including developing better aFAD designs to minimize losses, rigorously testing the rarely challenged assumption that aFAD fishing leads to a reduction in coastal fishing pressure, and obtaining fishery-independent data on aFADs that could help supplement fishery-dependent data to generate more reliable estimates of stock abundance for management. Relative to previous actions, this action will likely require an increase in resources and workload allocated to the research component by both WECAFC members and the WECAFC secretariat. Failing to approve this three-pronged action will contribute to promote the status quo, which is in practice a largely unregulated aFAD fishery across the region. The status quo could lead to an excessive multiplication of aFADs across the region, resulting in increases in marine debris, dilution of economic benefits of aFADs in the race for fish, increases in conflicts among aFAD users, lack of adequate data to help assess stock status, and unsustainable levels of fishing pressure on several species that are already considered to be overexploited.

Introduction

The use of aFADs to facilitate the capture of large oceanic and coastal pelagics in the WECAFC region has increased over the last three decades. This has been particularly the case in the insular Caribbean, where aFADs are being primarily used to improve the revenue and livelihoods of small-scale fishers and food security. Recent estimates point to 3,600+ aFAD units deployed across the region, mainly privately owned by fishers, which are being used by 6,200+ fishers and 2,700+ fishing vessels for commercial, subsistence and recreational purposes.² However, the use of aFADs remains largely unregulated across the region, raising challenges in governance and prompting concerns about their impacts on fish stocks and the ecosystem.¹ Challenges in governance include lack of adequate aFAD regulatory frameworks and management plans, potentially leading to conflicts among aFAD users and to the dilution of economic benefits through excessive multiplication of aFADs. Concerns about aFAD impacts on stocks include lack of catch and effort and biological data, disproportionate catches of juvenile tuna and target species considered overexploited (e.g. blue marlin), and the fact that catch per unit effort on aFADs is not a reliable index of stock abundance. Concerns about aFAD impacts on ecosystems include potential accumulation of non-biodegradable marine debris due to aFAD losses and potential incidental entanglement of marine animals. In response to such concerns, the WECAFC ad hoc WG on the Development of Sustainable Development of aFAD fishing in the Lesser Antilles was established in Martinique in 8-10 October 2001 with the main goal of increasing the exchange of information, practices and experiences across the region in the management and exploitation of large pelagics using aFADs.

The second WG meeting took place in Guadeloupe on 5–10 July 2004, during which IFREMER shared the results of the DOLPHIN project that described fish aggregations around aFADs in the French Antilles. This meeting led to the later execution of the MAGDELESA project by IFREMER between 2011 and 2014, which generated considerable new knowledge on the aFAD fishery.

Around that same period (2010–2012), JICA and CRFM collaborated to execute a pilot project "Formulation of a Master Plan on sustainable use of fisheries resources for coastal community development in the Caribbean" in St Lucia and Dominica. This project sought to build capacity to manage large pelagics fished on aFADs and increase aFAD productivity by focusing on technical aspects of AFAD design, construction, deployment and maintenance. It also promoted a co-management approach to fisheries in which fishers were expected to increase their participation and responsibility in decision making and provision of fisheries data.

In 2012, during the 14th WECAFC Session Commission in Panama, the decision was made to continue with the WG as a Joint WG with IFREMER. In 2013, the experience of the JICA-CRFM pilot project led to the execution of the JICA-CRFM Caribbean Fisheries Co-Management (CARIFICO) Project, which over a five-year period sought to further support the development of a co-management approach to aFAD fisheries in Dominica, St Lucia, Antigua and Barbuda, St Kitts and Nevis, St Vincent and the Grenadines, and Grenada. This project contributed to the CRFM-JICA CARIFICO/WECAFC-IFREMER MAGDELESA Workshop on FAD Fishery Management in St Vincent in 9–11 December 2013, where it was proposed that the WG expand to a Joint WG with possible participation of JICA, IFREMER, CRFM and WECAFC.

In 2015, recognizing the need for increased coordination, harmonization, and cooperation across the insular Caribbean on aFAD use, the CRFM led the development of a Sub-regional Management Plan for the FAD fishery for the Eastern Caribbean.

Draft Caribbean Regional Management Plan for the moored/anchored fish aggregating device (AFAD) Fishery.

Between April 30th – May 2nd 2019, the Joint JICA, IFREMER, CRFM and WECAFC WG on AFADs met for the third time in Puerto Rico; its TOR, which were formalized during the Seventeenth Session of WECAFC in 15–18 July 2019, included the review of the CRFM Sub-Regional Management Plan to adapt it to the broader WECAFC region. As such, in 2021, with the support of the GCP/SLC/217/ EC project "Support to the Secretariat of WECAFC in implementing targeted actions of the 2019–2020 workplan on improved regional fisheries governance", the WECAFC Secretariat coordinated the drafting of the Regional AFAD Fishery Management Plan.

Of further relevance, in April 2017, the ICCAT-IATTC-IOTC Joint Tuna-RFMO FAD WG met in Madrid and provided significant technological and scientific insights on the use of FADs in tuna fisheries. In June 2020 ICCAT's 19–02 recommendation entered into force, which amended the Recommendation on a Multi-annual Conservation and Management Program for Bigeye and Yellowfin tunas, and which binds a number of WECAFC and CRFM members in terms of FAD fisheries by industrial fleets catching these tunas.

WECAFC Members recognize that the implementation of adequate aFAD regulation is necessary for sustainable management of the fish stocks and that this should lead to increased employment opportunities and income for their fishing industry and local communities and to better social outcomes by reducing conflicts, improving equity in access to pelagic resources, and safety at sea.

REAFFIRMING the need for further action by all interested parties to ensure the long-term sustainable use and management of the offshore pelagic fisheries resources in the region based on an ecosystem approach to fisheries that considers proper dimension of regional aFAD fisheries development under conditions of fully utilized resources availability in the WECAFC region, and

RECALLING that the objective of the Commission is to promote the effective conservation, management and development of the living marine resources within the area of competence of the Commission, 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 address common problems of fisheries management and development faced by WECAFC members, the following guidance is provided to the Commission.

1. Fisheries governance

RECOGNIZING that sustainable development of aFAD fisheries in the WECAFC area provides new opportunities for income generation, livelihoods, and contributes to food security;

NOTING the issues on access to resources via aFADs fisheries, property rights claims and disagreements on aFAD aggregated resources;

FURTHER *NOTING* that the aFAD fishery in the Lesser Antilles has grown substantially in the last ten years, apparently increasing catches of pelagic species but also catches of vulnerable and already overexploited stocks; and adding the need to regulate AFAD numbers and AFAD density to avoid adverse economic consequences;

ACKNOWLEDGING the good efforts of various WECAFC members to license aFADs fishers, prepare legislation for aFAD fishery, aim for improved and refined data collection and analysis in terms of aFAD fishery, encourage best-practice design and training in aFAD construction and use, promote safety-at-sea when fishing with aFADs, reduce conflicts over the use of aFADs, notify maritime authorities of aFADs locations, establish co-management regimes for aFAD fishery and promoting the proper maintenance of aFADs;

REAFFIRMING also its commitment to promote the use of co-management and other participatory approaches involving all affected parties in the development and implementation of relevant policies and programmes;

RECOGNIZING the significant contribution of the CRFM 2015 Sub-regional Management Plan for FAD Fisheries in the Eastern Caribbean and its integration into WECAFC Caribbean Regional Management Plan for the aFAD Fishery, emphasizing on objectives and works necessary to improve aFAD fisheries management in the Caribbean;

FURTHER *RECOGNIZING* the need of implementing WECAFC Regional management plan for FAD fisheries with critical considerations on the status of exploitation of the targeted resources as dictated by ICCAT and CFRM resource assessments;

NOTING the economic and environmental impact of natural phenomena, such as strong hurricanes, on the destruction of aFADs and the lack of reporting of aFAD numbers, locations, lifespan and replacement;

ALSO NOTING the potential of low-cost ICT to improve MCS in the aFAD fishery

ADOPTS in conformity with the provision of Article 6 (h) of the Revised Statutes of the WECAFC the RECOMMENDATION that:

- WECAFC Members prepare national level aFAD fisheries development and aFAD management plans where relevant that consider the status of exploitation of targeted and bycatch species as determined by ICCAT, and other regional stock assessment results.
- WECAFC Members adopt appropriate legislation in support of a sustainable aFAD fishery adhering to the FAO Code of Conduct if insufficient technical and scientific data are available for proper management of aFADs at this time.
- WECAFC Secretariat, CRFM, and OSPESCA, support the regional harmonization of national aFAD technologies and fishing protocols that will secure compatible fishery regulations contained in national fishery management plans and related legislation, in accordance with the best available information (including scientific evidence and local and traditional knowledge) and consistent with international best practices, and present the progress made to the respective regular sessions of these RFBs.

2. Data collection and information-sharing

NOTING that the exchange of information between researchers, fisheries managers and fishers on AFADs fishery has improved in recent years and should be strengthened;

FURTHER RECOGNIZING the need to improve data and information to reduce uncertainties to stock assessment methodologies currently used and to monitor the long-term impacts of these fisheries on the stocks especially recognizing that AFAD CPUE are indicators of biomass aggregation by AFADs, which may not reflect relative abundance of the wild stocks;

NOTING the ongoing effort of the CRFM through its pelagics fisheries WG meetings and in collaboration with the CLME+ project, to improve conservation and management of the offshore pelagic resources;

NOTING the concerns of the WECAFC/OSPESCA/CRFM/CFMC WG on recreational fisheries about the billfish stocks in the Caribbean and the untapped value of this resource in terms of catch-and-release fisheries; and considering the noticeable dominance of blue marlin as the most impacted species in AFAD fisheries in the region;

ACKNOWLEDGING the potential of low-cost ICT to improve fishery data collection and Monitoring, Control and Surveillance (MCS) in the AFAD fishery and the good efforts of various WECAFC members to integrate ICT in their AFAD fisheries

ADOPTS in conformity with the provision of Article 6 (h) of the Revised Statutes of the WECAFC the RECOMMENDATION that:

- WECAFC Members aim to collect and analyze biological, ecological, social and economic data and other scientific literature and information to inform decision making processes on AFAD fisheries.
- WECAFC Members standardize as far as possible aFAD protocols that could generate compatible aFAD fishery statistics using standard terminology (as determined by the WG on aFADs) for the different varieties of aFAD fisheries in the WECAFC area and report in an agreed format on their total catch (i.e. landings and discards) and effort data in FAO Area 31 to the WG on aFADs in support of ongoing research, decision making and management processes at national and regional level.
- WECAFC members explore integrating the use of ICT systems in their fishery statistic systems to facilitate collection and standardization of catch and effort and biological data.
- WECAFC Secretariat, CRFM, and OSPESCA, support a regional aFAD characterization of the impacts and impact mitigation measures of aFAD fishing in the different regions (within the WECAFC area), and build that regional knowledge into management decision-making.
- WECAFC supports its members, in the establishment of stakeholder and public outreach and communication campaigns, in the area including addressing the need to enhance and increase communication of research findings and best practices on aFAD to the fishers and facilitate inputs from stakeholders.

3. Research

CONSIDERING the need to conduct more research related to the potential impact of aFADs on the migration patterns, size/age/sex structures and compositions of stocks, change in yields per recruit and other biological effects due to the conspicuous presence of juvenile species of tunas, dolphinfish, wahoo, as well as blue marlin and silky sharks, in aFADs, as well as on the currently used concept of CPUE for stock assessment and management purposes, co-management options, social and economic aspects, environmental and climate change, fishing techniques and technologies (CRFM, 2015);

CONSIDERING that species diversity associated with aFADs varies according with regions within the WECAFC area as well as seasonality of the catch rates of target and bycatch species;

NOTING research efforts on aFADs in other regions to generate fishery-independent data to help provide a more reliable picture of the abundance and composition of stocks;

CONSIDERING that high rates of losses of current aFAD designs likely constitute a significant source of marine debris;

NOTING the increasing uncertainty surrounding the question of whether aFADs help reduce fishing pressure on coastal resources;

ADOPTS in conformity with the provision of Article 6 (h) of the Revised Statutes of the WECAFC the RECOMMENDATION that:

- WECAFC members be encouraged to participate in regional research programs to help generate fishery-independent data on key species of interest associated with aFADs.
- WECAFC members be encouraged to partake in research seeking to develop fishing techniques and technologies minimizing impacts on vulnerable and overexploited fish groups.
- WECAFC members be encouraged to partake in research seeking to improve aFAD designs to reduce marine debris, while adhering to minimum standards to reduce entanglement of marine animals.
- WECAFC members be encouraged to partake in research seeking to assess potential links between aFAD fishing and fishing pressure on nearshore/coastal resources.

2. (Draft) Recommendation WECAFC/XVIII/2022/XX on "Fisheries Governance, Transshipment and Information-sharing"

Cover note

IUU fishing is considered a major threat to sustainable fisheries management in the Wider Caribbean Region, undermining regional efforts to conserve and manage fish stocks. In 2009, It was estimated that 20–30 percent of total reported catches in the WECAFC area originate from illegal and unreported catches, representing a value of 450 to 750 million USD annually.²

Overall, there has been a general decline in reported fish capture production in the Western Central Atlantic region from the 1980s fisheries production of 2.4 million tonnes to around 1.5 million tonnes in 2016to date, with the 2015 to 2018 showing an average production of 1.47 million tonnes, live weight (FAO, 2018). It has been reported that, in this region, the stocks of many shared and highly migratory species continue to be heavily exploited and increasingly targeted for harvest even though they are already depleted well below biomasses that could achieve maximum sustainable yields.

The CRFM Ministerial Council, at its 14th Meeting held virtually on 25 June 2020, has expressed concern that depletion of tuna stocks in the other parts of the world can cause the affected fishing fleets to shift their operations to the Western Central Atlantic Ocean, whether legally or illegally.

Given this potential for increased fishing effort by distant water fishing fleets, WECAFC Members need to strengthen their cooperation to promote the effective conservation, management and development of the living marine resources of the area of competence of the Commission, which is the final objective of the organization.

WECAFC Members recognize that the sustainable management of the fish stocks should lead to increased employment opportunities and income for their fishing industry and local communities. WECAFC Members are also cognizant of the positive effects that sound administrative, legal and scientific frameworks bring to the fisheries together with enhanced cooperation between and among Regional Fishery Management Organizations/Regional Fishery Bodies. WECAFC Members note that national administrations need to strike the right balance the resources allocated for access to the fisheries with the resources allocated to fulfil Monitoring Control and Surveillance obligations as part of their flag states' responsibilities as they are two sides of the same coin.

WECAFC Members should give the due consideration to the possibility of a situation where their fisheries development policies can become stifled and thus lead to IUU fishing by some distant water fishing nations. In this regard, WECAFC is called to play a key role to promote the necessary coordination to address the conservation of the fishery resources.

Noting that the WECAFC Members are called to promote the effective conservation, management and development of the living marine resources of the area of competence, the CRFM Ministerial Council has opined that WECAFC Member should do what was necessary, including putting in place the requisite legislation and regulation to adequately manage, protect and use the resources available in a sustainable manner.

Following the CRFM Ministerial meeting, the WECAFC Regional WG on Illegal, Unreported and Unregulated Fishing (RWG-IUU) Fishing met virtually on September 8–9, 2020. Members shared information on progress toward implementation of the WECAFC17 recommendations and discussed WECAFC members' States of readiness to implement the RPOA-IUU. In light of these discussions and

² From draft Recommendation WECAF/17/2018/1 on the marking and identification of fishing vessels in the WECAFC area" – as these only available estimates are based on the Agnew *et al.* 2009 estimates, these estimates could be outdated.

the updated workplan of the RWG-IUU, and mindful that IUU fishing and the often-attendant organised crime harms legitimate fishing activities and livelihoods, jeopardizes food and economic security, benefits transnational crime, distorts markets, contributes to human trafficking, and undermines ongoing efforts to implement sustainable fisheries policies, the WECAFC,

1. Fisheries governance

NOTING the current situation with regard to fish stocks status and related management concerns;

NOTING the concern expressed by the CRFM Ministerial Council that depletion of global fish stocks and accompanying fishing effort reductions can cause the affected fishing fleets to shift to the WECAFC region, whether legally or otherwise;

RECALLING the obligations of Member States under:

- a. the CRFM-OSPESCA Joint declaration and action plan (2012, revised in 2019);
- b. the Castries, St Lucia, Declaration on Illegal, Unreported and Unregulated Fishing (2010);
- c. the Caribbean Community Common Fisheries Policy (2010);
- d. 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";
- e. Resolution WECAFC/15/2014/9 "on the implementation of the FAO Agreement on PSMA and the FAO Voluntary Guidelines on Flag State Performance in the region";
- f. WECAFC 17 recommendation WECAFC/17/2019/15 "on the monitoring and control of transshipment at sea";
- g. WECAFC 17 recommendation WECAFC/17/2019/17 "on the marking of fishing gear"; and
- h. the Regional Plan of Action to Prevent, Deter and Eliminate IUU Fishing in WECAFC Member Countries (2019–2029) endorsed at WECAFC 17.

REITERATING the importance of strengthening national legislation for effective conservation, management and sustainable utilization of the fisheries resources and related ecosystems, including combatting IUU fishing, to optimize benefits and to effectively discharge responsibilities and obligations under international fisheries management instruments;

ADOPTS in conformity with Article 6 of the WECAFC Revised Statutes this RECOMMENDATION that:

Member States should make the necessary investments in administrative, legal and scientific frameworks in support of meeting international fisheries conservation and management obligations (including RFMO initiatives as well as implementation of related RFB initiatives;

Member States should develop a strengthened evidence base for fisheries management decision-making, and to develop the capacity to use it skillfully to balance resources allocated for access to new fishing opportunities with their capacity to effectively implement their flag State responsibilities;

The WECAFC Secretariat and the RWG-IUU should develop a report format and process that will allow WECAFC to monitor the progress of implementation of this and all other RWG-IUU recommendations that have been endorsed by WECAFC.

2. Transshipment

RECALLING the Recommendation WECAFC/17/2019/15 supporting developments towards arrangements for an effective system for enhanced surveillance of transshipment operations at sea and enforcement of relevant legislation, including effective information-sharing among WECAFC Members and with other States and international organizations, aimed at strengthening the monitoring, control and surveillance network for fisheries-related activities:

NOTING with concern, that while some countries have transshipment regulations in place, the limited implementation of the regulatory framework addressing transshipment and landing activities in port and at sea can increase the risk of fish and fish products derived from IUU fishing entering the supply chain;

NOTING that the 33rd Session of the COFI33 in 2018 expressed concern about transshipment activities and called for an in-depth study to support the development of guidelines on best practices for regulating, monitoring and controlling transshipment which will be presented at COFI 34 (postponed to February 2021);

CONCERNED about evidence that transshipment activities in the Caribbean also support other criminal activities such as smuggling of narcotics and weapons as well as violations of labor laws and human rights;

ADOPTS in conformity with Article 6 of the WECAFC Revised Statutes thes RECOMMENDATION that:

WECAFC Members should support the process towards development and implementation of international guidelines on the management (regulation, monitoring and control) of transshipment;

WECAFC Members should seek to develop and effectively implement measures in the WECAFC region consistent with the adopted international guidelines for the effective management (regulation, monitoring and control) of transshipment so as to minimize the risk of fish and fish products derived from IUU fishing entering national and international markets and that this is without prejudice to the existing international obligations applicable to individual WECAFC Members as flag, port, coastal and market States to prevent, deter and eliminate IUU fishing.

3. Information-sharing

NOTING the existing obligation by flag States to exercise effective jurisdiction and control over their vessels:

RECALLING the importance of regional information-sharing and cooperation, especially on the identities and operations of fishing and fishing support vessels operating in the WECAFC region, to support countries in effectively meeting their international responsibilities as flag, port, coastal and market States to prevent, deter and eliminate IUU fishing;

NOTING that the Second Meeting of the Parties to the Agreement on Port State Measures (MOP2) requested that: (1) the PSMA Global Information Exchange System (GIES) be operationalized as soon as possible for an effective implementation of the PSMA; (2) that a prototype be prepared for the Third Meeting of the Technical WG on Information Exchange (TWG-IE), and that the meeting participants agreed that active participation by States in this initiative can be an important element to maximize the potential of the Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (Global Record) to support the functioning of the GIES;

NOTING that several WECAFC Members are Parties to the PSMA and the second meeting of the Parties to the PSMA noted that the effective implementation of the PSMA requires further uptake of the Agreement and called on those that have not yet adhered to the PSMA to do so;

NOTING that WECAFC Members who are already Party to the PSMA should submit to FAO information on their designated ports and national contact points, as per Article 7 and Article 16 (3) of PSMA, while those who are not Party may choose to designate a national contact point and communicate it to FAO for the purposes of exchange of information under the PSMA;

FURTHER NOTING that WECAFC Members that are Parties to the PSMA are to start exchanging daily inspection reports in 2021 with other Parties of the PSMA, and that inspection reports include identity of the vessels inspected (under a foreign flag) and that this identity has to be verified, to the greatest extend possible;

NOTING ALSO that a significant portion of the fishing vessels in the region are small-scale fishing vessels with a length overall of less than 12 meters and most catches are taken by a variety of these small-scale vessels:

MINDFUL that IUU fishing and fishing related activities can be carried out by both industrial-scale vessels and the large number of small-scale vessels throughout the region;

NOTING the new developments on the Global Record in order to facilitate multi-tenancy functionality allowing national and regional records to be built from the basis of the Global Record system, adapted to fit the specific requirements of the region at reduced cost and maintenance in comparison to the development of a new system;

FURTHER RECALLING the importance of IMO numbers for the identification of fishing vessels and for identifying IUU fishing activities and for implementing appropriate measures, and that WECAFC Members should ensure that its flagged motorized fishing vessels, refrigerated transport vessels and supply vessels down to a size limit of 12 meters LOA and authorized to operate outside waters under national jurisdiction, obtain an IMO number and use it as a mark for identification. The IMO number should be marked either on the stern or stern quarter, with the name and port of registry, or on the side of the hull or superstructure.

ADOPTS in conformity with Article 6 of the WECAFC Revised Statutes this RECOMMENDATION that:

Member States develop effective mechanisms for information-sharing, consistent with existing approaches, to include fishing vessel related information, such as their beneficial owners, vessel identifiers operations, authorizations, histories, and compliance to improve monitoring, control and surveillance operations, verification of information and risk assessment to prevent, deter and eliminate IUU fishing in the region and beyond; to complement individual WECAFC Members activities such mechanisms should also be built at the regional level.

3. (Draft) Recommendation WECAFC/XVIII/2022/XX on Increased Efforts in the Implementation of the Regional Queen conch Fishery Management and Conservation Plan in the Western Central Atlantic Fishery Commission Region

"Managing Queen conch fisheries presents a broad range of challenges, including the complex biology of the species, uncertainty of catch and effort data, illegal trade, weak surveillance and enforcement mechanisms, unsustainable fishing practices, and even the frequency of severe dive accidents impacting on the quality of life and living conditions of entire towns. Problems in the fishery are dynamic, adding to the complexity of the issues which fishery sector managers have to face and for which they typically do not have enough human, technical and/or financial resources" (Prada, M. C.; Appeldoorn, R. S.; Van Eijs, S. & Pérez, M. M. 2017). "Queen conch fisheries are believed to be fully developed in most areas, and that the alleged increase in levels of illegal fishing often occurs due to a lack of knowledge, awareness and enforcement" (Theile, S. 2005).

The need for coordinated management of the Queen conch has long been recognized by fisheries scientists and managers in the Wider Caribbean region. The Regional Queen conch Fishery Management and Conservation Plan provides a set of management measures that can be applied at the regional or sub-regional level for the sustainability of Queen conch populations, the maintenance of a healthy fishery and the sustenance of fishers and fishers' communities. As the Plan is progressively implemented, improvement in the long-term governance of Queen conch fisheries across the Caribbean is expected, as stated in strategy 4B of the SAP of the "Sustainable Management of the Shared Marine Resources of the CLME and Adjacent Regions".

The 14 management measures recommended in this Regional Queen conch Fishery Management and Conservation Plan were analyzed by experts participating in the Second Meeting of the WECAFC/CFMC/OSPESCA/CRFM WG, held in Panama from 18 to 20 November 2014. Implementation status of the 14 management measures have been discussed at the Third and Fourth meetings of the CFMC/OSPESCA/WECAFC/CRFM/CITES WG on Queen respectively held in 2018 and 2019. In general, Member States have made improvements in the management of their fisheries at the national levels through implementation of the measures. However, given the differences in scales, gears, products, markets and geographic locations of Member States, harmonization of management measures at the regional level has not occurred yet. The degree of implementation of the Regional Queen conch Regional Management and Conservation Plan was preliminarily evaluated using quantitative values collected in 2019–2020, and the WG found that some progress was made.

To help address the issue of IUU fishing, it is important to note the management measure for traceability of Queen conch throughout the value chain identified in the Regional Queen conch Management and Conservation Plan. Traceability can be advantageous by helping to ensure that seafood caught by legal versus illegal fishing practices can be distinguished, allowing legally harvested products to fetch higher prices (Prada, M. C.; Appeldoorn, R. S.; Van Eijs, S. & Pérez, M. M. 2017). This management measure is also aligned with the objectives of the RPOA-IUU Fishing in WECAFC Member Countries (2019–2029) which are to prevent, IUU fishing in the area of competence of the WECAFC through effective information-sharing and regional cooperation; and contribute to promoting the effective conservation, management and development of the living marine resources in the WECAFC area, in accordance with the FAO Code of Conduct for Responsible Fisheries.

The Fifth meeting of the CFMC/OSPESCA/WECAFC/CRFM/CITES WG on Queen conch was held during 13–14 December 2021 in Puerto Rico and online. The purposes of the meeting were to continue monitoring implementation of the Regional Queen conch Fisheries Management and Conservation Plan, and to discuss implementation of the Recommendations developed by the WG and the SSTAG, as well as other items for collaboration called for in the Terms of Reference for the WG. Meeting participants also discussed the progress of activities as called for in the workplan for 2019–2021 and the implementation of Recommendation WECAFC/XVII/2019/12 on Improved Compliance with

Trade Measures for Queen conch and Recommendation WECAFC/XVII/2019/13 on Queen conch Conversion Factor adopted at WECAFC17. An updated workplan for 2021–2024 was also developed. The Fifth Meeting of the WG agreed that any gaps in implementation of the management measures in the Regional Queen conch Fisheries Management and Conservation Plan should be addressed and continued monitoring of the implementation status was required. There was also discussion about the ongoing issue of IUU fishing and the possibility of using genetic techniques to determine the origin of Queen conch products. The Fifth meeting agreed that the QCWG should liaise with the IUU WG to develop a joint recommendation to address IUU fishing in Queen conch fisheries in the region.

It is expected that additional human, technical and financial resources will be required by the Member States and the WECAFC Secretariat in order to continue supporting the implementation of the management measures outlined in the Regional Queen conch Fishery Management and Conservation Plan.

Failing to approve this recommendation will undermine the sustainable management and conservation of the Queen conch resource and hinder the development of genetic tools to help combat IUU fishing in the Queen conch fishery.

1. Continued support for Implementation of the Queen conch Regional Management and Conservation plan

TheWECAFC,

RECALLING that the objective of the Commission is to promote the effective conservation, management and development of the living marine resources within the area of competence of the Commission, 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 problems of fisheries management and development faced by members of the Commission;

RECALLING the establishment of the WECAFC WG on Queen conch by WECAFC 14 in 2012;

REAFFIRMING the commitments made by Queen conch range States at the sixteenth meeting of the Conference of the Parties to CITES (CoP16, Bangkok, 3–14 March 2013) to implement the Decisions on "Regional cooperation on the management of and trade in the Queen conch (*Strombus gigas*)" agreed at CoP16:

FURTHER REAFFIRMING Recommendation WECAFC/16/2016/1 and the Decisions 17.285–17.290 related to Queen conch adopted at 17th Conference of the Parties to CITES (CoP17, Johannesburg, 24 September–4 October 2016) (see FAO Technical Paper No. 610), calling upon WECAFC members to implement the Regional Queen conch Fisheries Management and Conservation Plan;

COGNIZANT of the fact that National CITES Management Authorities are required to make a "Legal Acquisition Finding" before issuing an export permit for Queen conch and noting that a resolution on guidance to CITES Parties for making Legal Acquisition Findings was adopted at CoP18 (Geneva, Switzerland 17–28 August 2019;

RECALLING the outcomes of the Third and Fourth meetings of the CFMC/OSPESCA/WECAFC/CRFM/CITES WG on Queen conch, respectively held in Panama, 30th October – 1st November 2018 with support from the European Union, NOAA Fisheries and FAO; and in San Juan, Puerto Rico, from 16 to 17 December 2019 with support from NOAA Fisheries and FAO;

RECALLING that the Commission adopted Recommendation WECAFC/16/2016/1 "on the regional plan for the management and conservation of Queen conch in the WECAFC area – addendum to recommendation WECAFC/15/2014/3 on the Management and Conservation of Queen conch in the WECAFC area; and Recommendations WECAFC/17/2019/12 on improved compliance with trade measures for Queen Conch and WECAFC/17/2019/13 on Queen conch conversion factor;

NOTING the Regional Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated (IUU) Fishing in WECAFC Member Countries (2019–2029) which was developed by the Joint WECAFC/CRFM/OSPESCA RWG-IUU Fishing and endorsed at the 17th Session of the Commission;

RECALLING that the RPOA-IUU Fishing sets out 28 measures and actions to prevent, deter and eliminate IUU fishing in the Wider Caribbean Region and to fulfill the WECAFC Member States' obligations in the capacities as port, flag, coastal and market State under the aspects of Policy and legal framework, MCS and operations, Regional information-sharing and cooperation Capacity development;

ADOPTS in conformity with the provision of Article 6 (h) of the Revised Statutes of the WECAFC the RECOMMENDATION that:

Given the importance of evaluating the degree of implementation of the Regional Queen conch Management and Conservation Plan, the quantitative values collected in 2019–2020 should be updated with additional data from all countries in the Wider Caribbean participating in the Queen conch fishery using the information presented at the 2021 WG meeting.

Monitoring the plan's implementation should be done to increase communication, coordination, and planning towards the application of ecosystem-based approaches to fisheries of this valuable resource.

Genetic work utilizing the SNPs technique or other similarly advanced genetic techniques should be considered in order to develop appropriate and validated genetic markers. This technique has the potential to identify spatial distribution of the species, and thus would provide useful information for Queen conch connectivity and traceability. This would also support the development of Legal Acquisition Findings. The SNPs technique also has the potential to map the genes and provide information about population genetic structure and thus allow for identification of spatial variability (or distribution) of the species as required under CITES.

Member States will participate in the development of this genetic work and in order to be statistically robust, at least 15 countries would be required to provide genetic samples of Queen conch.

The QC Scientific, Statistical and Technical and Advisory Sub-group (SSTAG) should liaise with the Regional WG on IUU Fishing to further strengthen activities to counteract IUU fishing of Queen conch and advance implementation of the 28 measures and actions identified in the RPOA-IUU fishing.

4. (Draft) Recommendation WECAFC/XVIII/2022/XX CFMC/WECAFC/OSPESCA/ CRFM-Working Group on Spawning Aggregations

Cover Note

The SAWG has held two meetings since the adoption of the Recommendation WECAFC/17/2019/14 "On the sustainable management of spawning aggregations and aggregating species" at the 17th Session of the Commission WECAFC17 held from 15–18 July 2019. This document enshrined 10 recommendations which emerged from commitments made to an associated 2018–2020 workplan at the second meeting of the SAWG in March 2018. These recommendations were subject to review at the third meeting of SAWG in December 2019, during which many of these recommendations were found to have been accomplished through diligent intersessional efforts.

The advancement of the formal adoption process for the Regional FSAMP and completion of the "Big Fish" Regional Communications Strategy now demand high levels of commitment for their most needed implementation. Annual calls for regional harmonization of closed seasons and strengthened enforcement have been issued, along with short films for stakeholder engagement. Many activities have also been implemented at the member State level, including status assessments, passing of legislation and the creation of protected areas.

It is recognized that at the regional level, many of the data-dependent recommendations have not been achieved, impeded by data scarcity and resource limitations for implementation of associated high level tasks. Fundraising efforts are ongoing to support the development of projects to determine the status of all known FSA sites, and to produce a set of standard monitoring protocols and sustain an associated regional monitoring database.

Another gap is the lack of national implementation of a seasonal closure for Nassau grouper and mutton snapper as called for in FSAMP. Recognizing the need for this measure, the Chair of the WECAFC Executive Committee sent a letter to the WECAFC membership in August 2020 strongly encouraging member States to establish synchronized regional closed seasons for Nassau grouper and mutton snapper to safeguard their spawning aggregations, and promote their effective conservation, management and development.

The transition from the 2018–2020 workplan to the 2021–2025 workplan reaffirms the commitment of the SAWG to procure funding to pursue its data dependent objectives, and to establish a framework to facilitate regional monitoring of FSA management trends by WECAFC. The Fifth meeting of the SAWG had to be re-scheduled given Covid-19 travel restrictions, and as such, opportunities to achieve concrete results toward conservation and recovery of the FSAs continue to be postponed. The need for strong education and communication should be highlighted.

In the meantime, existing recommendations have been modified to reflect the status of deliverables. These recommendations call for adoption and implementation of the FSAMP, and actions to advance improved data collection, assessment, communication, and outreach for the conservation of FSAs. They also promote capacity building and the mobilization of resources to assist WECAFC members conduct priority research, monitoring, management, and enforcement activities.

The ramifications of not adopting these recommendations include the perpetuation of gaps in knowledge and critical information necessary to guide decision makers, inadequate protection and management of FSAs, and overexploitation of FSAs that [further] threatens their sustainability.

Preamble

The WECAFC:

- RECALLING that the objective of the Commission is to promote the effective conservation, management and development of the living marine resources within the area of competence of the Commission, 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 problems of fisheries management and development faced by members of the Commission.
- *REAFFIRMING* its commitment to support management and implementation of regional strategies and regulations to protect spawning aggregations and aggregating species through the establishment of the WECAFC SAWG at the 14th session of WECAFC in 2012.

- *NOTING* that stocks of many species of groupers and snappers in the Caribbean have declined significantly in the last three decades, some of their FSAs have declined or disappeared and that immediate action is required to stop further reductions.
- *MINDFUL* that many fishers' livelihoods are dependent on harvest from spawning aggregations and the fisheries that they support, but also that these fishers have experience and expertise that could be invaluable in the conservation, management, and possible tourism at such sites and that the development of economic alternatives for affected fishers should accompany efforts to halt fishing during spawning periods or close areas where spawning occurs.
- *REAFFIRMING* the recommendations of the Declaration of Miami (2013) issued at the 1st CFMC/WECAFC/OSPESCA/CRFM WG on Spawning Aggregations.
- *REAFFIRMING* and supporting the recommendations and the workplan from the 2nd meeting of the CFMC/WECAFC/OSPESCA/CRFM WG on Spawning Aggregations.
- *NOTING* members' commitment to the 2018 SAWG workplan, various planned actions and that activities are well underway.
- *COMMITTED* to individually and collectively taking measures and actions to further improve the management and conservation of fish spawning aggregations and species that aggregate to spawn in the Wider Caribbean Region.

Action Items

The CFMC/WECAFC/OSPESCA-/CRFM-WG on Spawning Aggregations, at its Third and Fourth Meetings on 18–19 December 2019 and 9–10 November 2020, ADOPTS in conformity with the provision of Article 6 (h) of the Revised Statutes of the WECAFC the RECOMMENDATION that:

- 1. WECAFC, CFMC, and as appropriate CRFM, OSPESCA, and CEP-SPAW support the national adoption and strategic implementation of a Regional Fish Spawning Aggregation Fisheries Management Plan by all Member States.
- 2. WECAFC Secretariat and Members invest resources and support the standardization of existing monitoring programs, or introduction where these do not exist, to coalesce them into a unified regional monitoring program utilizing standard protocols to share data designed to track the status and trends of aggregations and the species that form them and thus contribute to local, national and regional management efforts.
- 3. Members of WECAFC identify and determine the status of all known FSA sites (particularly for mutton snapper and Nassau grouper), confirm the timing of spawning seasons, and inform the SAWG and WECAFC SAG.
- 4. Members of WECAFC call for standardized measures to protect FSAs at the national, regional and international scale, including strengthening enforcement of closed seasons, closed areas, sales bans during the closed season, and international collaboration and communication around law enforcement.
- 5. Members of WECAFC agree upon and adopt a regional seasonal closure for all commercial and recreational fishing of Nassau grouper (*Epinephelus striatus*), at least for the period 1 December–31 March and that Members will not permit export or commercial sale of Nassau grouper or its products (e.g. roe, fillets) for the duration of the seasonal closure.

- 6. WECAFC Secretariat supports an assessment of the economic value of FSAs and the socioeconomic impact of proposed management measures to inform future management decision-making.
- 7. Members offer training to fishers (displaced due to FSA closures) in monitoring, research, assessment, and suitable economic alternatives. Fishers and other stakeholders to be involved in cooperative research and FSA management.
- 8. The WECAFC Secretariat and Members support and promote a regional outreach and communication strategy on conservation and management of FSAs.
- 9. Members of WECAFC prioritize FSAs for monitoring, conservation, and management based on status, vulnerability and Members' institutional capacity.
- 10. The WECAFC Secretariat, together with the Members of WECAFC, seek to mobilize resources to assist the Members in the implementation of priority research, monitoring, enforcement, management and conservation of FSAs and the species that form them, with particular focus on mutton snapper and Nassau Grouper.

5. (Draft) Recommendation WECAFC/XVIII/2022/XX on Western Central Atlantic Fishery Commission Fisheries Data, Statistics, and Information

Cover note

Fisheries for States of the Western Central Atlantic Fisheries region, in particular for African, Caribbean and Pacific Group of States (ACP) countries and the SIDS from the Caribbean are important for food security and nutrition, as source of livelihoods, income earnings, and also source of foreign exchange for national governments.

For many years, the Caribbean regional data deficiencies and limited statistical information have been impeding national policy-making and fishery management in a regional context of shared marine resources.

The "Review of fisheries management performance and conservation in the WECAFC area" in 2015 identified a number of challenges in data and statistics in support to fisheries management, including: inadequate legislation; challenges for cooperation with stakeholders with regard to acquisition of data and information on a routine basis; a weak data and information base for supporting fisheries management. The need to strengthen and maintain a quality statistical monitoring system was considered key to the success of immediate fisheries management needs (Singh-Renton, Susan & McIvor, Ian. 2015).

Despite some regional EU and FAO programmes aiming at improving statistics in the Caribbean region, a lack of capacity to collect and exchange data and information, and to analyze the status and trends of fishery resources and regional data policies remains. In the meantime, environmental trends as well as extreme weather events suggest that climate change and variability are already impacting the region's fisheries, in some cases severely.

During WECAFC 14 (6–9 February 2012, Panama) and 15 (26–28 March 2014, Trinidad and Tobago), the EU expressed the need for increased attention to improved fisheries data and information collection as the basis of better fisheries management in the region. The identified data gaps continue to undermine any significant effort to improve fishery management. This need was considered so pressing that one of the four technical Focus Areas in the WECAFC Strategic Plan 2014–2020 was dedicated to this topic and the current Programme of Work includes activity 2.4, "Improved fishery and aquaculture data collection, analysis and dissemination at regional and national level," in support of this subject.

WECAFC 16 (Guadeloupe, France, 20–24 June 2016) agreed to establish a WG for fisheries data and statistics matters (FDS-WG), based on the ongoing work of the WECAFC-FIRMS Partnership and supported by the development of a regional database (RDB) in collaboration with the WECAFC Members and partners in the region.

The most recent Commission session (17th) (Miami, July 2019) adopted 11 regional fisheries management recommendations, including among others for the conservation and management of sharks and rays, the management of Caribbean spiny lobster, the management of shrimp and groundfish resources of the North Brazil-Guianas Shelf, improved compliance with trade measures for Queen conch, the sustainability of fisheries using moored fish aggregating devices, the sustainable management of spawning aggregations and aggregating species. In order to support these conservation and management measures, the Commission also adopted the WECAFC interim iDCRF, and an interim list of main species for data collection in the WECAFC area. The proposed actions if supported will contribute towards continued improvement in the quality of statistics and data available for monitoring and management in the region, building on the initiatives undertaken through the WECAFC-FIRMS and FDS-WG activities.

Following this 17th WECAFC Commission, the second session of the FDS-WG2 met virtually three times between October 2020 and March 2022 to address the requested improvements of the iDCRF,

the operationalization of the regional database, and the steps for increasing Members capacities. In its Concluding meeting (10 March 2022), the FDS-WG2 adopted draft recommendations as laid out in this document.

The Commission is asked to:

NOTE that reliable and timely fisheries data, statistics and information are instrumental to supporting national science-based policy-making and management, and development and monitoring of Regional Fisheries Management Plans;

RECALL that WECAFC 17 urged WECAFC Members to provide national data and statistics to the Regional Database in line with the interim DCRF and to support and promote the WECAFC-FIRMS partnership as a collaborative platform for collating and sharing scientific information throughout the region and leveraging of ongoing regional projects.

1. Data Collection Reference Framework

RECALLING that the objective of the Commission is to promote the effective conservation, management and development of the living marine resources within the area of competence of the Commission, 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 problems of fisheries management and development faced by members of the Commission:

MINDFUL that qualitative and quantitative improvement of regional data and statistics requires harmonization and standardization at national and regional level with the definition of minimum data requirements in support of evidence-based decision-making;

MINDFUL of the global reference harmonization standard being developed by the FAO's coordinating working party on Fishery Statistics under which WECAFC, ICCAT, FAO and other RFBs collaborate for harmonizing and streamlining data collection and reporting frameworks including consideration of multiple reporting burdens;

REAFFIRMING the commitment of CARICOM States to improving evidence-based decision-making through regional cooperation as expressed in multiple regional policy documents including the "Strategic Action Programme for the Caribbean and North Brazil Shelf Large Marine Ecosystem", the CARICOM Strategic Plan, 2015–2019, the Caribbean Community Common Fisheries Policy (CCCFP) and the CRFM Strategic Plan, 2013–2021;

RECOGNIZING the continued efforts by the WECAFC members to increase their capacities to collect, analyze and report fisheries data and statistics;

RECALLING the endorsement of the WECAFC-FIRMS partnership by WECAFC 15 in 2014;

FURTHER RECALLING Recommendation WECAFC/17/2019/22 "On WECAFC interim data collection reference framework;"

FURTHER RECALLING Recommendation WECAFC/XVII/2019/5+6+7 "ON THE CONSERVATION AND MANAGEMENT OF SHARKS AND RAYS IN THE WECAFC AREA" related to reporting data and information on sharks and rays including for non-contracting parties to ICCAT;

FURTHER RECALLING Recommendation WECAFC/XVII/2019/9 "ON THE MANAGEMENT OF CARIBBEAN SPINY LOBSTER IN THE WECAFC AREA" Section 4 related to Catch Documentation Schemes;

ADOPTS in conformity with Article 6 of the WECAFC Revised Statutes the RECOMMENDATIONS that:

- 1(a) Recognize the DCRF serves a minimum of two purposes, including i) a capacity building tool, which can be used by Members as a reference standard to set-up national data collection and information systems for all aquatic marine species, and ii) an instrument to support the scientific mandate and priorities of WECAFC-CRFM-OSPESCA ICM.
- 1(b) Recognize the DCRF, its appendices, and associated documents titled, "Data sharing and access policies" and "Lists of fisheries and stocks within the WECAFC competence area," are living documents based on a modular task-oriented structure articulated around clear supporting bases for reference list of species, with parts more mature than others, and as such conducive to a staged and incremental approach to implementation of the DCRF for some Members.
- 1(c) Endorse version v.8 of the DCRF and its appendices, including in particular Appendix 2, "WECAFC subareas" and Appendix 3, "WECAFC Reference list of main species."
- 1(d) Recommend the following general principles for the delineation of WECAFC sub-areas and divisions:
 - That the WECAFC subareas and divisions are identified, as far as possible, consistently with the major ecosystems in the region as the starting point for defining their delineations, and as the overarching principle.
 - That in defining the subareas and divisions, established maritime boundaries and 200 nautical mile EEZ limits are utilized (where they are established and are not disputed) and other default limits as the prevailing principle, in combination with, where required or preferred, simple longitudinal, latitudinal or oblique straight lines in the cases where:
 - there are no established maritime boundaries, to avoid issues of undefined/disputed maritime spaces; and
 - there are locally recognized and important ecosystem boundaries, together with other considerations, such as WECAFC Member countries' data collection capacities, that would limit adequate reporting.
 - That some of these subareas and divisions remain to be finalized and are subject to further discussion and modification. This document and any proposal for, or final delineation of, any subarea or division is without prejudice to the WECAFC Member States' maritime claims and boundaries.
 - That these delimitations do not imply the expression of any opinion whatsoever on the part of FAO or WECAFC or its Member States concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.
- 1(e) Further recommend regarding statistical delineations:
 - That the above general principles should be followed for further proposals on the final statistical limits, subject to approval by the WECAFC Members directly involved.
 - The adoption of a provisional list of subareas and divisions, that include correspondence to the Large Marine Ecosystems, or marine ecoregions, as identified in DCRF Appendix 2, and promotes the use by all WECAFC Members in their national data collection of the newly established WECAFC geographic subareas and divisions as per DCRF Appendix 2.
 - That, to the extent possible, reporting is done at the finest possible division level to ensure the availability of spatial granular data required for scientific purposes.

- 1(f) Recommend the use by all WECAFC Members in their national data collection on the evolved categorization of WECAFC Reference list of aquatic species developed by the FDS-WG as DCRF Appendix 3, which consists of three groups and several subgroups with defined bases for selection:
 - Group 1, "Main Reference Species," are key species to the region, other than those included in Group 3, and of specific interest to the WECAFC mandate for which States are strongly encouraged to statistical reporting:
 - subgroup Basis 1: Species with fisheries management plans endorsed.
 - Group 2, "Other Reference Species", other than those included in Group 3, are Species of interest for WECAFC that could be elevated to the Group 1, with three Subgroups:
 - subgroup Basis 2: Species of interest to historical WGs of regional bodies (WECAFC, CRFM, OSPESCA, including through their Interim Coordination Mechanisms);
 - subgroup Basis 3: Species in high seas (areas beyond national jurisdiction)/straddling / shared and not under mandate of another RFMO; and
 - subgroup Basis 4: Species for WECAFC region originating from 1978 working party on fishery statistics and/or of interest for other reasons (e.g. of local interest including high commercial value, for biodiversity reasons, or for importance of impacts from/due to climate changes).
 - Group 3, "Other species of interest for WECAFC Members," are:
 - subgroup Basis 5 Species under the mandate of other RFMOs, including for mandatory reporting (e.g. ICCAT), such as tuna and tuna-like species and pelagic sharks.
- 1(g) Strongly encourage WECAFC Members to proceed with the use of DCRF for monitoring and reporting, with prioritization for provision of data for Tasks III (Fleet), II (Catch by species and Effort), and IV (Biological data), with high priority on Group1 species.
- 1(h) Recommend continued participation in the FDS-WG and specifically to support the intersessional workplan as related to interactions with thematic WGs relating to:
 - National vessel mappings to regional fleet segment classifications, promotion of species and associated subareas for priority reporting, species biological parameters.
 - Further tailor the DCRF and associated data sharing policies in consideration of the use of relevant data sets by those WGs.

2. Western Central Atlantic Fishery Commission Regional Database

RECALLING that the objective of the Commission is to promote the effective conservation, management and development of the living marine resources within the area of competence of the Commission, 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 problems of fisheries management and development faced by members of the Commission:

NOTING that the 16th session of WECAFC held in Guadeloupe, France, 20–24 June 2016, agreed to establish the Regional FDS-WG;

FURTHER NOTING that FDS-WG acts as a steering committee for the Regional Database as per its Terms of Reference;

MINDFUL that sharing of information in support to management and monitoring of Regional Fisheries Management Plans requires an instrument for data dissemination and sharing;

NOTING that data access and sharing in the region is to "facilitate regional fisheries data and information exchange to support evidence-based fisheries policymaking at national and regional levels, while ensuring non-disclosure and/or careful handling of sensitive fisheries data and information;"

RECOGNIZING the important role of WECAFC, CRFM, and OSPESCA to validate regional inventories and to support and facilitate consistency and harmonization with national inventories and their publishing through FIRMS as a contribution to the global monitoring framework requested under SDG14.4.1:

RECALLING Recommendation WECAFC/17/2019/22 "ON WECAFC INTERIM DATA COLLECTION REFERENCE FRAMEWORK" section 4 related to the Regional Database;

FURTHER RECALLING Recommendation WECAFC/XVII/2019/11 "ON THE MANAGEMENT OF SHRIMP AND GROUNDFISH RESOURCES OF THE NORTH BRAZIL-GUIANAS SHELF IN THE WECAFC AREA" section 1 related to the Regional Database;

RECALLING Resolution WECAFC/XVII/2019/8 "ON THE WECAFC-FIRMS PARTNERSHIP;"

ACKNOWLEDGING that WECAFC Regional Database is a fully functional information system;

REITERATES the promotion to WECAFC MEMBERS of provisioning of national data and statistics to the WECAFC-CRFM-OSPESCA Regional DataBase (RDB) according to Data Collection Reference Framework (DCRF);

ADOPTS in conformity with Article 6 of the WECAFC Revised Statutes the RECOMMENDATIONS that:

- 2(a) The WECAFIS has the mandate to disseminate data and statistics covered by DCRF with due consideration of DCRF data access and sharing rules, as well as FIRMS information on status and trends of fisheries and stocks under the WECAFC competence area.
- 2(b) The WECAFIS be published in the Data section of the new WECAFC website.
- 2(c) Members publish DCRF data in WECAFIS for Task I, and for Task II.1 and Task II.2, Task III.1 and Task IV.1 with high priority for Groups 1 species to reinforce management of shared stocks, and promote proceeding with related tasks including:
 - carrying out mappings of national vessel types to regional fleet segment classifications.
- 2(d) Members recognize the important role of WECAFC, CRFM, and OSPESCA to validate regional inventories and to support and facilitate consistency and harmonization with national inventories and their publishing through FIRMS as contribution to the global monitoring framework requested under/SDG14.4.1.
- 2(e) WECAFC Members are therefore encouraged to:
 - update or further develop their inventories of fisheries and develop status reports on national fisheries and publish in FIRMS;
 - update or further develop new List of Stocks and stock status reports be updated and published in FIRMS; and

• engage in training opportunities towards completion of WECAFIS-DCRF data templates towards progressing operationalization of the DCRF and WECAFC-FIRMS data templates to enrich FIRMS content.

2(f) SAG is encouraged to review and provide recommendations in light of other processes as regards the information/content on list of stocks and stock status

3. Western Central Atlantic Fishery Commission Capacity Building for collection and production of data, statistics, and information

RECALLING that WECAFC's mandate covers all living marine resources, without prejudice to the management responsibilities and authority of other competent fisheries bodies and other living marine resources management organizations or arrangements in the area;

CONCERNED about the challenges that WECAFC members still face to collect data and produce statistics on all living marine resources;

ACKNOWLEDGING continuing technical support from FAO and financial support from donors, including the EU and the United States of America, to develop WECAFC Members' capacities for production and collection of data, statistics, and information;

RECALLING the important steps taken by the WECAFC, OSPESCA, and CRFM members in the recent years in terms of increasing their capacities to collect, analyze and report reliable and timely fisheries data and statistics;

RECALLING Recommendation WECAFC/XVII/2019/11 "ON THE MANAGEMENT OF SHRIMP AND GROUNDFISH RESOURCES OF THE NORTH BRAZIL-GUIANAS SHELF IN THE WECAFC AREA section 2 related to capacity building on stock assessment and bioeconomic analysis of priority fisheries;

FURTHER RECALLING Recommendation WECAFC/17/2019/22 "ON WECAFC INTERIM DATA COLLECTION REFERENCE FRAMEWORK" section 7 related to strengthening of national capacity;

ADOPTS in conformity with Article 6 of the WECAFC Revised Statutes the RECOMMENDATIONS that:

- 3(a) Members reiterate recognition that the WECAFC-FIRMS project provides a collaborative platform for collation and sharing of scientific information, leveraging ongoing regional projects, and prioritizing national data needs.
- 3(b) Members are encouraged to acknowledge the development by the FDS-WG of criteria and related scoring to support the identification and prioritization of capacity-building investments and projects that improve science-based decision-making and support the further development of these criteria as a dashboard for monitoring needs and mobilizing resources for the benefit of WECAFC and its Members.
- 3(c) Members recognize that further investments should be made to build national capacities of WECAFC Members for data collection, analysis, and reporting with priorities on implementing DCRF and feeding the WECAFIS through the SAG process.

References

- **CRFM.** 2015. Draft Sub-Regional Management *Plan for FAD Fisheries in the Eastern Caribbean* (Stakeholder Working Document). Reviewed in CRFM Technical & Advisory Document 2015/05.
- **FAO.** 2018. Report of the first meeting of the regional Working Group on IUU fishing. Bridgetown, Barbados. FAO Fisheries and Aquaculture Report. No. 1190.
- Prada, M. C.; Appeldoorn, R. S.; Van Eijs, S. & Pérez, M. M. 2017. Regional Queen Conch Fisheries Management and Conservation Plan. FAO Fisheries and Aquaculture Technical Paper No. 610. Rome, FAO. 70 pp.
- **Singh-Renton, Susan & McIvor, Ian.** 2015. Review of Current Fisheries Management Performance and Conservation Measures in the WECAFC Area.
- **Theile, S.** 2005. Status of the Queen conch, *Strombus gigas* stocks, management and trade in the Caribbean: *A CITES review. Proc. Annu. Gulf Caribb. Fish. Inst.*, 56: 675–694.
- **WECAFC.** 2019. Recommendation WECAFC/17/2019/21 amendment to Recommendation WECAFC/15/2014/2 "On the sustainability of fisheries using moored fish aggregating devices in the WECAFC area".

APPENDIX E

Tailored terms of reference of the Western Central Atlantic Fishery Commission Working Groups

Terms of Reference draft template for the CFMC/OSPESCA/WECAFC/CRFM/CITES Working Group on Queen conch. Terms of Reference agreed/approved by the Commission 27 July 2022	82
Terms of Reference for the WECAFC/CITES/OSPESCA/CRFM/CFMC – Working Group on Shark Conservation and Management. Terms of Reference agreed/approved by the Commission 27 July 2022	89
Terms of Reference template Regional Working Group on Illegal, Unreported and Unregulated Fishing. Terms of Reference agreed/approved at the Fifteenth session of the Commission, Port of Spain, Trinidad and Tobago, 26 to 28 March 2014	92
Terms of Reference draft for the CFMC/WECAFC/OSPESCA/CRFM-Working Group on Spawning Aggregations. Terms of Reference agreed/approved by the Commission 27 July 2022	99
Terms of Reference draft for the WECAFC/CRFM/OSPESCA Working Group on Fishery, Data and Statistics. Terms of Reference agreed/approved by the Commission 27 July 2022	106
Terms of Reference draft template for the OSPESCA/WECAFC/CRFM/CFMC Working Group on Caribbean spiny lobster. Terms of Reference agreed/approved by the Commission 27 July 2022	112
CRFM/WECAFC/JICA/IFREMER Working Group on moored/anchored) fish aggregating device (aFAD) fisheries. Terms of Reference agreed/approved by the Commission 27 July 2022	119
Terms of Reference template. Working Group on the Management of Deep-sea Fisheries. Terms of Reference agreed/approved by the Commission 27 July 2022	126

Terms of Reference draft template CFMC/OSPESCA/WECAFC/CRFM/CITES Working Group on Queen conch Terms of Reference agreed/approved by the Commission 27 July 2022

1. BACKGROUND AND JUSTIFICATION

Fishery management advice and recommendations, based on the best available scientific information, are provided to WECAFC member countries for their implementation by dedicated WGs, established by the Commission.

The WGs that were established or confirmed in the subsequent sessions since the 14th session of the Commission in 2012 are the following:

- OSPESCA/WECAFC/CRFM/CFMC WG on Caribbean spiny lobster;
- CFMC/OSPESCA/WECAFC/CRFM/CITES WG on Queen conch;
- WECAFC WG on the Management of Deep-sea Fisheries;
- WECAFC/OSPESCA/CRFM/CFMC WG on recreational fisheries;
- CRFM/WECAFC/JICA/IFREMER WG on AFADS;
- CRFM/WECAFC WG on flyingfish in the Eastern Caribbean (established since the 17th Session of WECAFC as the flying fish-dolphinfish WG);
- WECAFC/CRFM/IFREMER WG on shrimp and groundfish in the Northern Brazil-Guianas Shelf;
- CFMC/WECAFC/OSPESCA/CRFM WG on spawning aggregations;
- RWG-IUU;
- WECAFC WG for the Conservation and Management of sharks in the Wider Caribbean Region; and
- WECAFC/CRFM/OSPESCA FDS-WG.

Most WGs are joint WGs with other regional partner institutions, such as the Caribbean Regional Fisheries Mechanism (CRFM), the Organization of Fisheries for the Central American Isthmus (OSPESCA), the Caribbean Fishery Management Council (CFMC), the French Research Institute for Exploration of the Sea (IFREMER), etc. Fishery scientists, experts, managers and decision-makers of member countries, Regional partner organizations including academia and NGOs participate in the WGs, which have specific terms of reference that are time bound. The data used by the WGs to assess the status of fish stocks, to conduct fishery assessments and to generate fishery management advice and recommendations to the Commission are collected by the participating countries and NGOs.

The key drivers behind the establishment of these WGs are the need to collaborate and cooperate in the assessment and management of shared resources; need to standardize data collection and reporting systems to enable assessment of stock status using data and information from a range of countries that target the stock/species/resources throughout their distribution range; need to standardize conservation and management measures for effective management, need for training and capacity building to improve data collection and assessment of the status of fisheries/fish stocks; etc.

In undertaking its work, the WG will pay due attention to the FAO Code of Conduct for Responsible Fisheries and its related guidelines, including the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries especially in regards to livelihoods and food security of communities and value chain stakeholders dependent on sustainable management of these natural resources, as well as their contribution to achieving the targets of the UN Sustainable Development Goals, namely SDGs 1 and 2; 5, 8; 12, 13 and 14, as well as any other agreed international or regional instruments for the conservation and management of fisheries, and the principles of precautionary, participatory and ecosystem approaches to fisheries management. The activities of the WG are also guided by any specific regional or international fisheries management or related obligations and initiatives or instruments of relevance to the respective resources associated with the specific WG – e.g. any FMPs, Declarations, agreed CMMs, regional strategies, regulations, etc.

2. ROLE OF THE WORKING GROUP

2.1 Scope of the Work

The scope of each WG is to provide scientific and management advice for the sustainable management, conservation and development of living marine resources in the area of competence of WECAFC. This includes the development and support to national and regional plans of action in order to regulate target and bycatch fisheries, as well as manage existing populations within the region. Using a multidisciplinary approach, the WG will contribute to the sustainable management by providing management advice to Members of WECAFC based on the best available scientific knowledge/evidence and traditional/local ecological knowledge

In pursuing this goal, the WG will contribute to the fulfilment of national and regional responsibilities for the marine environment and for the management of Queen conch and related or interacting species or fisheries in the WECAFC Region.

2.2 Goal

The goal of each WG is to inform and provide guidance for the management of living marine resources in WECAFC members in such a manner as to promote transformation to responsible fisheries that provide economic opportunities, food security and human nutrition, secure social wellbeing while ensuring the conservation of living marine resources and the protection of marine biodiversity.

2.3 Tasks/functions

The WG will:

- collect, review and share the existing (past and present) data and information on the fishery in the WECAFC area, involving the fishers and private sector, especially women and youth, in addition to identifying the potential for sustainable management and development of such fisheries in the region;
- analyze the data and information collected from capture fisheries and aquaculture production and make recommendations for the sustainability of the fisheries in the WECAFC region;
- monitor changes in distribution and abundance of [Queen conch] in the WECAFC region;
- develop common and feasible methodologies for assessment and monitoring of the fish stock especially in data poor fisheries;
- seek partnerships with other institutions that could provide assistance in the monitoring, evaluation, and recommendations for management for sustainable use, protection and conservation of the resources;

- monitor and provide advice on the management and implementation of regional strategies, regulations and management plans to protect the fish resources;
- establish communication between the members of the WG, other WGs and relevant parties on issues of common interest in order to strengthen regional collaboration in the assessment and management of living marine resources;
- report to the Commission and contribute to communication and visibility of the deliverables of the WG as may be needed;
- identify needs of communities dependent on the fishery resources and investigate alternative livelihoods from fisheries and aquaculture (recreational fishing, hospitality and tourism, etc.);
- continue to assess the implementation status of the 14 managements measures in the Regional Queen conch Fisheries Management and Conservation Plan;
- progressively advance in developing priority research at the regional level identified by the CFMC/OSPESCA/WECAFC/CRFM/CITES WG on Queen conch (i.e. genetic connectivity, reproductive success and update of population dynamics parameters) that serve as a basis for better fisheries management; and
- expand the collection of socioeconomic information to analyze how current a decline in the Queen conch stock may decline impacts income, livelihoods, trade, and determine the need for innovative management strategies.

2.4 Membership

Membership of the WG shall consist of all Member States of CRFM and WECAFC, OSPESCA, including overseas territories and Departments.

3. MODE OF OPERATION

3.1 Role of Countries

The members of the WG will play a leading role in its activities through the following activities and commitments:

- participate in agreed activities of the WG, and ensure the participation of appropriate experts;
- implement, at the National level, the work identified in the WECAFC endorsed work plan (as appropriate);
- report on implementation of agreed conservation and management measures;
- assist with mobilization of resources for the activities of the WG;
- facilitate the organization of WG meetings in the languages of the Commission;
- · host WG meetings on a rotational basis; and
- facilitate the identification of the Convener of the WG.

3.2 Role of Convener

The Convener of the WG will play a leading role during the organization of the meetings and subsequent follow up with the Secretariat of WECAFC by coordinating the inputs of the members of the WG. The Convener should:

- seek experts from among the WECAFC Members, contact potential partner organizations, and solicit their interest to join in the WG;
- call for meetings as appropriate;
- ensure that technical contributions are received in a timely manner and in the appropriate format;
- ensure that outputs are delivered as agreed during each meeting;
- collaborate closely with FAO-WECAFC and other sub-regional and regional organizations as appropriate;
- assist in the preparation and publication process of the proceedings of the WG meeting;
- participate (in person or virtually) at the SAG meetings to present the draft working documents and provide any clarifications as required;
- facilitate the review by the WG membership within a reasonable period of time (max. 15 days) on suggested edits or modifications as considered necessary to address the comments of the SAG and the return of the revised document to the WECAFC Secretariat for distribution and consideration by the Commission;
- participate in the Commission's sessions (physically or virtually) if required, to support the Secretariat in clarifying or substantiating some points of the draft working documents; and
- assist in the relevant processes to gather information in support of seeking funds to implement priority activities of the WG.

3.3 Election and role of Convener of the Working Group

• The WG shall elect a Convener from among its Members to serve over a two-year period. The term of office of the Convener may be extended as determined appropriate. In the case where another qualified Convener is not available, the Convener's term may be renewed for an additional two-year term until another Convener is selected.

3.4 Roles of the FAO/WECAFC Secretariat

The FAO/WECAFC Secretariat will play a supporting role in the activities of the WG by assisting in:

- coordinating activities of the WG, among WECAFC and Non-WECAFC Members, at the wider regional level (including facilitate procurement of funding);
- assisting with logistical arrangements for the convening of meetings of the WG;
- providing technical assistance, such as a technical secretary or research support, if needed and as resources permit;
- liaising with other RFBs active in the Wider Caribbean Region and neighboring areas for their engagement as much as possible in the work of the WG; these RFBs include amongst others OSPESCA, CRFM, CFMC, ICCAT, NAFO, NEAFC, CECAF, COPPESAALC, etc.;
- liaising with other relevant regional organizations as appropriate, such as the Sargasso Sea Commission, SPAW Protocol, etc.;

- coordinating the formulation and adoption of recommendations and/or resolutions and reports/ documents by the WG so as to facilitate the decision-making process by the Commission;
- ensuring the strategic linkage between the work of the WG and programmes and projects hosted to support the fisheries and healthy ecosystems framework of the CLME+ and any future phase of this project; and
- facilitating training and collaboration of WECAFC Member States and sub-regional training institutions as appropriate and based on available resources.

3.5 Roles of other Subregional organizations (e.g. CFMC, CRFM, ICCAT, OSPESCA, UNEP-CEP, IFREMER, NOAA, CARICOM, OECS, etc.)

Sub-regional organizations have an important role to play in assisting their member countries to participate fully in the activities of the WG. Therefore, they may be invited to:

- provide expertise, technical assistance and support;
- facilitate procurement of funding when possible;
- collaborate in implementing the activities of the WG;
- collaborate with the WECAFC Secretariat and sub-regional organizations in coordinating the activities of the WG; and
- facilitate the decision-making process at the Sub-regional level.

4. OUTPUTS

In discharging its duties, the WG will deliver the following outputs:

- biennial Work Plans;
- reports on assessment of the status of fish stocks;
- draft Fisheries Management Plans;
- draft Regional Plans of Actions;
- proposed Recommendations and Resolutions to the Commission; and
- revised TORs as needed.

5. COMMUNICATION

A mechanism for ongoing communication among WG members (video conference, Skype, zoom meeting and email), is essential to ensure that the work of the group is sustained between meetings. It must include all WG members and the communication tools must be accessible to all WG members.

The successful functioning of the WG also requires that each member country and organization/agency identify a national node or focal point who will be contacted through the WECAFC National Focal Point and technically coordinate at national level all matters pertinent to the WG. The outputs of the WG will be communicated through WG reports to WECAFC, OSPESCA, CFMC, CRFM, CITES, UNEP-CEP, ICCAT, IFREMER, and national fishery administrations via the WECAFC Secretariat.

6. WORKING GROUP MEETINGS AND COST

The WG should meet physically or virtually on a regular basis, the timing of which is decided by the members, but at a minimum once every two years. The meetings should be of 2–5 days' duration. The meetings should use cost-effective accommodations and institutional facilities and where possible take advantage of other meetings in the region. Meetings shall be chaired by the Convener of the WG. The reports of the meetings will be formally submitted to OSPESCA, WECAFC, CFMC and CRFM, ICCAT, CITES, UNEP-CEP, IFREMER, Gulf and Caribbean Fisheries Institute Network, etc.

7. AMENDMENTS TO THE TERMS OF REFERENCE

Amendment of these Terms of Reference may be done at each biennial meeting of the Commission for implementation by the WGs in the subsequent intersessional period.

8. TEMPLATES FOR RECOMMENDATIONS AND RESOLUTIONS

[Standardized templates will ensure a common understanding of what should be included in draft recommendations and resolutions, ease the reporting of deliverables as well as facilitate their review by other WECAFC bodies, as appropriate. WGs should include the following elements when preparing draft recommendations and resolutions to be presented to the WECAFC membership or other WECAFC bodies (e.g. the Scientific Advisory Group or other WECAFC WGs).

Recommendations and Resolutions

Draft recommendations and resolutions for review by other WECAFC bodies and the WECAFC membership should include the following elements:

- Cover Note: A brief cover note for draft recommendations and/or resolutions should be provided to assist reviewers. The cover note should include a clear, candid, and transparent explanation of:
 - why the action was developed;
 - at which WG meeting it was discussed;
 - a brief overview of how the WG arrived at its decision to put the action forward;
 - how the action will impact future WECAFC activities, including, where relevant any possible changes in resource or workload requirements for Members or the WECAFC Secretariat;
 - the ramifications of *not* approving the recommended action; and
 - the full picture of the context for the recommended action.
- **Preambular Text**: This should provide essential elements to highlight the context and intent of the proposed action in a concise bulleted format. The preambular text should include only the core historical elements and should include references to related decisions or measures.
- Action Text: This should indicate clearly what action(s) the WG is taking, or is asking the WECAFC Membership to take, at a national, subregional, and/or regional level, including specific timelines to which the action(s) will adhere.

Considering that each WG can have more than one meeting, and more than one issue to address during each intersessional period, the WGs can produce several reports/documents or draft resolutions/ recommendations. In order to facilitate analysis by the Commission, each WG shall prepare a single set of recommendations and/or resolutions organized by fishery or by theme, including all the topics addressed in the intersessional meetings. In this regard, the Commission would consider a single set of draft Recommendations and/or Resolutions for spiny lobster, Queen conch, flying fish and dolphinfish, AFADs, FDS, etc.

The WGs shall refer relevant recommendations and resolutions of a scientific nature to the SAG for scientific review at least one month before the meeting of SAG, in order to provide adequate time to the Secretariat and SAG members to review them before the meeting. This will improve the efficiency of the reviews during the SAG sessions.

Terms of Reference for the WECAFC/CITES/OSPESCA/CRFM/CFMC Working Group on Shark Conservation and Management Terms of Reference agreed/approved by the Commission 27 July 2022

1. ROLE OF THE WORKING GROUP

More than 150 species of sharks and rays are present within the WECAFC region. There is currently limited information regarding their stocks and more needs to be done to protect and manage shark and ray populations. This WG, with the support of FAO, WECAFC Secretariat, CFMC, CRFM and OSPESCA, will provide, among others, a platform for supporting the conservation and sustainable management of shark fisheries in the Wider Caribbean region. Until an RPOA is adopted, the actions of the WG will be guided by the guidelines laid out in the FAO IPOA-Sharks. Sharks are a transboundary resource and as such, the TORs may apply at regional and/or national levels as appropriate.

1.1 Scope

The scope of the WG is to provide advice on the management and conservation of sharks in the Wider Caribbean Region. This includes the development of national and regional plans of action in order to regulate target and bycatch fisheries, as well as manage existing populations within the region.

1.2 The goal of the Working Group

The objective of the WG is to provide a basis for the conservation and sustainable management of shark populations in WECAFC member countries. In pursuing this goal, the WG will be supporting the members in fulfilling the national and regional responsibilities for the conservation and management of sharks as specified by WECAFC.

1.3 Terms of Reference

Specifically, the WG will:

- facilitate the sharing of available data and information on shark and ray stocks within the Wider Caribbean Region;
- provide support to the development National POAs for member states and the Regional POA;
- provide technical inputs to support the implementation of actions as defined in the RPOA;
- develop and implement a biennial work plan that will be monitored and evaluated; and
- establish communication between the members of the WG, and between the WG and interested parties including the private sector.

The TOR may be amended as required by the members at the level of the WECAFC, following each two-year period coinciding with the meetings of the WECAFC.

1.4 Mode of Operation

1.4.1 Role of Countries

The members of the WG will play a leading role in its activities through the following activities and commitments:

- participate in agreed activities of the WG, and ensure the participation of appropriate experts;
- promote the implementation, at the National level, the work identified in the WECAFC endorsed work plan (as appropriate);

- assist with mobilization of resources for the activities of the WG;
- provide assistance and facilitate the organization of WG meetings in the languages of the Commission (to the extent possible); and
- host WG meetings on a rotational basis.

1.4.2 Roles of the FAO/WECAFC Secretariat

To coordinate activities of the WG, among WECAFC and Non-WECAFC Members, at the wider regional level;

- to assist with convening of meetings of the WG;
- to liaise with other RFBs active in the Wider Caribbean Region and neighboring areas will be involved as much as possible in the work of the group; these RFBs include amongst others OSPESCA, CRFM, CFMC, ICCAT, NAFO, NEAFC and CECAF; and
- to coordinate the formulation and adoption of recommendations by the WG so as to facilitate the decision-making process at the level of WECAFC Area 31.

1.4.3 Roles of other Subregional organizations (e.g. CFMC, CRFM, OSPESCA)

Subregional organizations have an important role to play in assisting their member countries to participate fully in the activities of the WG by:

- providing technical assistance and support;
- facilitating procurement of funding when possible;
- · co-coordinating the activities of the WG; and
- facilitating the decision-making process at the Subregional level.

1.4.4 Election and role of Convener of the WG

The WG shall elect a Convener from among its Members to serve over the two-year period.

The first task of the convener will be to seek for experts among the WECAFC Members on sharks and rays, their fisheries and conservation. The convener should also contact potential partner organizations and solicit their interest to join in this WG.

1.5 Communication

A mechanism for ongoing communication among WG members (Video conference, Skype and email), is essential to ensure that the work of the group is sustained between meetings. It must include all WG members.

The successful functioning of the WG also requires that each member country and organization/agency identify a national node or focal point through which communications will be directed. The outputs of the WG will be communicated through WG reports to WECAFC, OSPESCA, CFMC, CRFM, and national fishery administrations via the WECAFC Secretariat.

1.6 Working Group meetings

The WG should meet physically at a minimum once every two years. Meetings should use cost effective accommodations and institutional facilities and where possible take advantage of other meetings in the region. Meetings shall be chaired by the Convener of the WG. The reports of the meetings will be formally submitted to OSPESCA, WECAFC, CFMC and CRFM.

Terms of Reference template Regional Working Group on Illegal, Unreported and Unregulated Fishing

Terms of Reference agreed/approved at the Fifteenth Session of the Commission, Port of Spain, Trinidad and Tobago, 26 to 28 March 2014

1. BACKGROUND AND JUSTIFICATION

Fishery management advice and recommendations, based on the best available scientific information, are provided to WECAFC member countries for their implementation by dedicated WGs, established by the Commission.

The WGs that were established or confirmed in the subsequent sessions since the 14th session of the Commission in 2012 are the following:

- OSPESCA/WECAFC/CRFM/CFMC WG on Caribbean spiny lobster;
- CFMC/OSPESCA/WECAFC/CRFM/CITES WG on Queen conch;
- WECAFC WG on the Management of Deep-sea Fisheries;
- WECAFC/OSPESCA/CRFM/CFMC WG on recreational fisheries;
- CRFM/WECAFC/JICA/IFREMER WG on AFADS;
- CRFM/WECAFC WG on flyingfish in the Eastern Caribbean (established since the 17th Session of WECAFC as the flyingfish-dolphinfish WG);
- WECAFC/CRFM/IFREMER WG on shrimp and groundfish in the Northern Brazil-Guianas Shelf;
- CFMC/WECAFC/OSPESCA/CRFM WG on Spawning Aggregations;
- RWG-IUU;
- WECAFC WG for the Conservation and Management of sharks in the Wider Caribbean Region; and
- WECAFC/CRFM/OSPESCA FDS-WG.

Most WGs are joint WGs with other regional partner institutions, such as the CRFM, the OSPESCA, the CFMC, the IFREMER, etc. Fishery scientists, experts, managers and decision-makers of member countries, Regional partner organizations including academia and NGOs participate in the WGs, which have specific terms of reference that are time bound. The data used by the WGs to assess the status of fish stocks, to conduct fishery assessments and to generate fishery management advice and recommendations to the Commission are collected by the participating countries and NGOs. The key drivers behind the establishment of these WGs are the need to collaborate and cooperate in the assessment and management of shared resources; need to standardize data collection and reporting systems to enable assessment of stock status using data and information from a range of countries that target the stock/species/resources throughout their distribution range; need to standardize conservation and management measures for effective management, need for training and capacity building to improve data collection and assessment of the status of fisheries/fish stocks; etc.

In undertaking its work, the WG will pay due attention to the FAO Code of Conduct for Responsible Fisheries and its related guidelines, including the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries, as well as any other agreed international or regional instruments for the conservation and management of fisheries, and the principles of precautionary, participatory and ecosystem approaches to fisheries management. The activities of the WG are also guided by any specific regional or international fisheries management or related obligations and initiatives or instruments of relevance to the respective resources associated with the specific WG – e.g. any FMPs, Declarations, agreed CMMs, regional strategies, regulations etc.

2. ROLE OF THE WORKING GROUP

2.1 Scope of the Work

The scope of each WG is to provide scientific and management advice for the sustainable management, conservation and development of living marine resources in the area of competence of WECAFC. This includes the development and support to national and regional plans of action in order to regulate target and bycatch fisheries, as well as manage existing populations within the region. Using a multidisciplinary approach, the WG will contribute to the sustainable management by providing management advice to Members of WECAFC based on the best available scientific knowledge/evidence and traditional/local ecological knowledge. In pursuing this goal, the WG will contribute to the fulfilment of national and regional responsibilities for the marine environment and for the management of all living aquatic species and resources WECAFC and related or interacting species or fisheries in the WECAFC Region.

2.2 Goal

The goal of each WG is to inform and provide guidance for the management of living marine resources in WECAFC members in such a manner as to promote responsible fisheries that provide economic opportunities, secure social wellbeing while ensuring the conservation of living marine resources and the protection of marine biodiversity. Specifically, the objective of the RWG-IUU is to improve coordination and cooperation between national organizations/institutions responsible for fisheries-related MCS in support of their common efforts to prevent, deter and eliminate IUU fishing.

2.3 Tasks/functions

The WG will:

- as a matter of priority, identify and recommend cost effective measures that can be easily implemented in the short to medium term to prevent, deter and eliminate IUU fishing;
- review and assess the nature and extent of IUU fishing in the WECAFC area. In particular, the specific areas and species that are targeted by foreign illegal fishing and the main market for these IUU fishing products;
- review current methods and arrangements for timely collection, analysis, reporting and dissemination of data and information relating to Distant Water Fishing Nations (DWFN) IUU fishing activities;
- assess the viability of adopting modern technologies and methodologies to increase data capture, coverage and reliability;
- develop recommendations for the establishment of formal protocols to facilitate the collection, compilation and transmittal of information regarding IUU fishing to the Flag State;
- conduct a comprehensive review and assessment of the methods by which IUU fishing products
 are harvested, handled and traded including potential loopholes in legal systems and make
 recommendations for cost effective strategies and mechanisms to address identified deficiencies;

- review and assess best practices employed to prevent, deter and eliminate IUU fishing and determine the suitability for adoption and implementation in the WECAFC area;
- review and assess systems and mechanisms used by WECAFC Member to address IUU fishing and make such recommendations as may be necessary to improve their effectiveness;
- provide advice and recommendations on viable methodologies to engage with flag States, regional fishery bodies and regional fishery management organizations in relation to data exchanges, in pursuit of reducing IUU fishing opportunities within the WECAFC area;
- recommend mechanisms to ensure effective cooperation and coordination among WECAFC
 Members and entities as well as among national agencies within states as may be necessary
 to combat IUU fishing and seafood fraud including but not limited to sharing of data and
 information, capacity building, legal reforms, and enhancing prosecutorial success;
- promote the concept of collaborative policing approaches, with national fishers, and, where possible, through fisher organizations;
- recommend way of improving public education and awareness in order to strengthen community support and political will to marshal the resources and implement the legal and institutional reforms needed to eradicate IUU fishing;
- identify and recommend policies and measures to ensure transparency in activities such as the allocation of fishing permits and licenses by official authorities; the reporting of catches, payment of fees, taxes and charges by fishers and fishing entities; and disclosure of the identity of the beneficial owners of fishing vessels and companies throughout the supply chain;
- seek complementary funding to support activities relating to data capture, analysis and sharing at the regional, national and local levels;
- promote technical assistance, training, experience exchange, and institutional development, to increase MCS knowledge and capability amongst participating parties; and
- perform other tasks as may be determined by the members.

2.4 Membership

Membership of the WG shall consist of all Member States of CRFM and WECAFC, OSPESCA, including overseas territories and Departments.

Specifically, the national organizations responsible for fisheries MCS and IUU fishing in general nominated by each WECAFC member; and, experts of key partner organizations (OECS, Caribbean Network of Fisherfolk Organizations, CRFM, OSPESCA, FAO). Persons or organizations with expertise in matters pertaining to MCS and IUU fishing may also be invited to participate as [experts] observer to the RWG-IUU. The WECAFC Secretariat will act as secretary to the RWG-IUU.

3. MODE OF OPERATION

3.1 Role of Countries

The members of the WG will play a leading role in its activities through the following activities and commitments, and through a monitoring, control, surveillance and enforcement perspective:

• participate in agreed activities of the WG, and ensure the participation of appropriate experts;

- implement, at the National level, the work identified in the WECAFC endorsed work plan (as appropriate);
- report on implementation of agreed measures;
- assist with mobilization of resources for the activities of the WG;
- facilitate the organization of WG meetings in the languages of the Commission;
- · host WG meetings on a rotational basis; and
- facilitate the identification of the Convener of the WG.

3.2 Role of Convener

The Convener of the WG will play a leading role during the organization of the meetings and subsequent follow up with the Secretariat of WECAFC by coordinating the inputs of the members of the WG. The Convener should:

- seek experts from among the WECAFC Members, contact potential partner organizations, and solicit their interest to join in the WG;
- call for meetings as appropriate;
- ensure that technical contributions are received in a timely manner and in the appropriate format;
- ensure that outputs are delivered as agreed during each meeting
- collaborate closely with FAO-WECAFC and other sub-regional and regional organizations as appropriate;
- assist in the preparation and publication process of the proceedings of the WG meeting;
- participate (in person or virtually) at the SAG meetings to present the draft working documents and provide any clarifications as required;
- facilitate the review by the WG membership within a reasonable period of time (max. 15 days) on suggested edits or modifications as considered necessary to address the comments of the SAG and the return of the revised document to the WECAFC Secretariat for distribution and consideration by the Commission;
- participate in the Commission's sessions (physically or virtually) if required, to support the Secretariat in clarifying or substantiating some points of the draft working documents; and
- assist in the relevant processes to gather information in support of seeking funds to implement priority activities of the WG.

3.3 Election and role of Convener of the Working Group

• The WG shall elect a Convener from among its Members to serve over a two-year period. The term of office of the Convener may be extended as determined appropriate. In the case where another qualified Convener is not available, the Convener's term may be renewed for an additional two-year term until another Convener is selected.

3.4 Roles of the FAO/WECAFC Secretariat

The FAO/WECAFC Secretariat will play a supporting role in the activities of the WG by assisting in:

- coordinating activities of the WG, among WECAFC and Non-WECAFC Members, at the wider regional level (including facilitate procurement of funding);
- assisting with logistical arrangements for the convening of meetings of the WG;
- providing technical assistance, such as a technical secretary or research support, if needed and as resources permit;
- liaising with other RFBs active in the Wider Caribbean Region and neighboring areas for their engagement as much as possible in the work of the WG; these RFBs include amongst others OSPESCA, CRFM, CFMC, ICCAT, NAFO, NEAFC, CECAF, COPPESAALC, etc.;
- liaising with other relevant regional and international organizations as appropriate;
- coordinating the formulation and adoption of recommendations and/or resolutions and reports/ documents by the WG so as to facilitate the decision-making process by the Commission;
- ensuring the strategic linkage between the work of the WG and programmes and projects hosted to support the fisheries and healthy ecosystems framework of the CLME+ and any future phase of this project; and
- facilitating training and collaboration of WECAFC Member States and sub-regional training institutions as appropriate and based on available resources.

3.5 Roles of other Subregional organizations (e.g. CFMC, CRFM, ICCAT, OSPESCA, UNEP-CEP, IFREMER, NOAA, CARICOM, OECS, CARICOM IMPACS, RSS, etc.)

Sub-regional organizations have an important role to play in assisting their member countries to participate fully in the activities of the WG. Therefore, they may be invited to:

- provide expertise, technical assistance and support;
- facilitate procurement of funding when possible;
- collaborate in implementing the activities of the WG;
- collaborate with the WECAFC Secretariat and sub-regional organizations in coordinating the activities of the WG; and
- facilitate the decision-making process at the Sub-regional level.

4. OUTPUTS

In discharging its duties, the WG will deliver the following outputs, monitoring, control, surveillance and enforcement perspective:

- biennial Work Plans including providing performance of projects on a routine schedule;
- reports on the status of monitoring, control, surveillance and enforcement of measures to Prevent, Deter and Eliminate IUU Fishing in WECAFC Member Countries;

- report on the implementation of the Regional Plan of Action to Prevent, Deter and Eliminate IUU Fishing in WECAFC Member Countries;
- make recommendation for the revision and/or updating of the Regional Plan of Action to Prevent, Deter and Eliminate IUU Fishing in WECAFC Member Countries;
- proposed Recommendations and Resolutions to the Commission; and
- revised TORs, as needed.

5. COMMUNICATION

A mechanism for ongoing communication among WG members (video conference, Skype, zoom meeting and email), is essential to ensure that the work of the group is sustained between meetings. It must include all WG members and the communication tools must be accessible to all WG members.

The successful functioning of the WG also requires that each member country and organization/agency identify a national node or focal point who will be contacted through the WECAFC National Focal Point and technically coordinate at national level all matters pertinent to the WG. The outputs of the WG will be communicated through WG reports to WECAFC, OSPESCA, CFMC, CRFM, CITES, UNEP-CEP, ICCAT, IFREMER, and national fishery administrations via the WECAFC Secretariat.

6. WORKING GROUP MEETINGS AND COST

The WG should meet physically or virtually on a regular basis, the timing of which is decided by the members, but at a minimum once every two years. The meetings should be of 2–5 days' duration. The meetings should use cost-effective accommodations and institutional facilities and where possible take advantage of other meetings in the region. Meetings shall be chaired by the Convener of the WG. The reports of the meetings will be formally submitted to OSPESCA, WECAFC, CFMC and CRFM, ICCAT, CITES, UNEP-CEP, IFREMER, Gulf and Caribbean Fisheries Institute Network, etc.

7. AMENDMENTS TO THE TERMS OF REFERENCE

Amendment of these Terms of Reference may be done at each biennial meeting of the Commission for implementation by the WGs in the subsequent intersessional period.

8. TEMPLATES FOR RECOMMENDATIONS AND RESOLUTIONS

[Standardized templates will ensure a common understanding of what should be included in draft recommendations and resolutions, ease the reporting of deliverables as well as facilitate their review by other WECAFC bodies, as appropriate. WGs should include the following elements when preparing draft recommendations and resolutions to be presented to the WECAFC membership or other WECAFC bodies (e.g. the Scientific Advisory Group or other WECAFC WGs).

Recommendations and Resolutions

Draft recommendations and resolutions for review by other WECAFC bodies and the WECAFC membership should include the following elements:

- Cover Note: A brief cover note for draft recommendations and/or resolutions should be provided to assist reviewers. The cover note should include a clear, candid, and transparent explanation of:
 - why the action was developed;
 - at which WG meeting it was discussed;
 - a brief overview of how the WG arrived at its decision to put the action forward;

- how the action will impact future WECAFC activities, including, where relevant any possible changes in resource or workload requirements for Members or the WECAFC Secretariat;
- the ramifications of *not* approving the recommended action; and
- the full picture of the context for the recommended action.
- **Preambular Text**: This should provide essential elements to highlight the context and intent of the proposed action in a concise bulleted format. The preambular text should include only the core historical elements and should include references to related decisions or measures.
- Action Text: This should indicate clearly what action(s) the WG is taking, or is asking the WECAFC Membership to take, at a national, subregional, and/or regional level, including specific timelines to which the action(s) will adhere.

Considering that each WG can have more than one meeting, and more than one issue to address during each intersessional period, the WGs can produce several reports/documents or draft resolutions/ recommendations. In order to facilitate analysis by the Commission, each WG shall prepare a single set of recommendations and/or resolutions organized by fishery or by theme, including all the topics addressed in the intersessional meetings. In this regard, the Commission would consider a single set of draft recommendations and/or resolutions for spiny lobster, Queen conch, flying fish and dolphinfish, AFADs, FDS, etc.

The WGs shall refer relevant recommendations and resolutions of a scientific nature to the SAG for scientific review at least one month before the meeting of SAG, in order to provide adequate time to the Secretariat and SAG members to review them before the meeting. This will improve the efficiency of the reviews during the SAG sessions.

Terms of Reference draft for the CFMC/WECAFC/OSPESCA/CRFM-Working Group on Spawning Aggregations Terms of Reference agreed/approved by the Commission 27 July 2022

1. BACKGROUND AND JUSTIFICATION

Fishery management advice and recommendations, based on the best available scientific information, are provided to WECAFC member countries for their implementation by dedicated WGs, established by the Commission.

The WGs that were established or confirmed in the subsequent sessions since the 14th session of the Commission in 2012 are the following:

- OSPESCA/WECAFC/CRFM/CFMC WG on Caribbean spiny lobster;
- CFMC/OSPESCA/WECAFC/CRFM/CITES WG on Queen conch;
- WECAFC WG on the Management of Deep-Sea Fisheries;
- WECAFC/OSPESCA/CRFM/CFMC WG on recreational fisheries;
- CRFM/WECAFC/JICA/IFREMER WG on Fisheries using FADS;
- CRFM/WECAFC WG on Flyingfish in the Eastern Caribbean (established since the 17th Session of WECAFC as the Flyingfish- Dolphinfish WG);
- WECAFC/CRFM/IFREMER WG on Shrimp and Groundfish in the Northern Brazil-Guianas Shelf;
- CFMC/WECAFC/OSPESCA/CRFM WG on Spawning Aggregations;
- RWG-IUU;
- WECAFC WG for the Conservation And Management of Sharks in the Wider Caribbean Region; and
- WECAFC/CRFM/OSPESCA FDS-WG.

Most WGs are joint groups with other regional partner institutions, such as the CRFM, the OSPESCA, the CFMC, the IFREMER, etc. Fishery scientists, experts, managers, and decision-makers of member countries as well as regional partner organizations, including academia and NGOs, participating in the WGs, which have specific, time-bound terms of reference. The data used by the WGs to assess the status of fish stocks, to conduct fishery assessments and to generate fishery management advice and recommendations to the Commission are collected by the participating countries and NGOs.

The key drivers behind the establishment of these WGs are the need to:

- collaborate and cooperate in the assessment and management of shared resources;
- standardize data collection and reporting systems to enable assessment of stock status using data and information from various countries targeting the stock/species/resources throughout their distribution range;

- standardize the conservation and management measures for effective management;
- provide training and capacity-building to improve data collection and assessment of fisheries/ fish stocks;
- harmonize regulations across the region, and countries, for effective fishery management; and
- cooperate to implement and enforce actions for effective fishery management.

Each WG will pay due attention to the FAO Code of Conduct for Responsible Fisheries and its related guidelines, including the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries, as well as any other agreed international or regional instruments for the conservation and management of fisheries. Also, the principles of precautionary, participatory and ecosystem approaches to fisheries management will be considered. The activities of the WGs are also guided by any specific regional or international fisheries management, or related obligations and initiatives or instruments of relevance, to the respective resources associated with the specific WG – e.g. any FMPs, Declarations, agreed CMMs, regional strategies, regulations etc.

2. ROLE OF THE WORKING GROUP

2.1 Scope of the Work

The scope of each WG is to provide scientific and management advice for the sustainable management, conservation, and development of living marine resources in the area of competence of WECAFC. This scope also includes the development and support to national and regional plans of action, and fishery management plans, to regulate target and bycatch fisheries, as well as manage existing populations in the region. Using a multidisciplinary approach, the WG will contribute to sustainable management by providing advice to the Members of WECAFC based on the best available scientific knowledge/evidence and traditional/local ecological knowledge. In pursuing this goal, the WG will contribute to the fulfillment of national and regional responsibilities for the marine environment and for the management of fish spawning aggregations, and related or interacting species or fisheries in the WECAFC Region, with special emphasis on the mutton snapper and Nassau Grouper.

2.2 Goal

The goal of each WG is to inform and provide guidance for the management of living marine resources to the WECAFC members in such a manner as to promote responsible fisheries, provide economic opportunities, and secure social wellbeing while ensuring the conservation of living marine resources and the protection of marine biodiversity.

2.3 Tasks/functions

The WG will:

- identify issues (gaps, deficiencies), challenges, and best practices in data collection at the national level in the region, and provide recommendations on how to address issues and challenges, and implementation of best practices;
- collect, review and share the past and present data and information on spawning aggregations and their associated fisheries in the WECAFC area, involving the fishers and private sector;
- analyze the data and information collected from capture fisheries and aquaculture production and make recommendations for the sustainability of the fisheries of aggregating species in the WECAFC region;
- monitor changes in distribution and abundance of all living aquatic species and resources of relevance to the mandate of the WG in the WECAFC region;
- develop common methodologies for data collection, assessment, and monitoring of fish aggregations and stocks;

- seek partnerships with other institutions that could provide assistance in the monitoring, evaluation, and effective implementation of management recommendations for the protection and conservation of fish spawning aggregations;
- monitor and provide advice on the management and implementation of regional strategies, regulations, and management plans to protect fish spawning aggregations;
- establish communication between the members of the WG, other WGs and relevant parties on issues of common interest in order to strengthen regional collaboration in the conservation, assessment and management of fish spawning aggregations;
- ensure development of education and outreach programs that articulate the message/s of the WG and facilitate the achievement of the goals and objectives of the SAWG work plan; and
- report to the Commission and contribute to communication and visibility of the deliverables of the WG as may be needed.

2.4 Membership

Membership in the WG shall consist of representatives from all those Member States of CRFM and WECAFC, OSPESCA, including overseas territories and Departments. Specifically, Member representatives will be national Officers responsible for fisheries management with activities related to the following domains: statistical analyses of fisheries data, data collection, designing data collection systems, analyzing statistics for statistical bulletins, report preparation, organizing and managing data collection, storage and dissemination according to a variety of needs (e.g. RFMO reporting, departmental, scientific meetings, etc.).

3. MODE OF OPERATION

3.1 Role of Countries

The members of the WG will play a leading role through the following activities and commitments:

- participate in agreed activities and ensure the participation of appropriate experts;
- implement, at the national level, the work identified in the WECAFC endorsed work plan (as appropriate);
- identify and report on country-specific challenges and opportunities related to implementation of agreed conservation and management measures;
- assist with mobilization of resources and outreach materials;
- facilitate the organization of meetings in the languages of the Commission;
- · host meetings on a rotational basis; and
- facilitate the identification of the Convener.

3.2 Role of Convener

The Convener of the WG will play a leading role during the organization of the meetings and subsequent follow up with the Secretariat of WECAFC by coordinating the inputs of the members of the WG. The Convener should:

- seek experts from the WECAFC Members, contact potential partner organizations, and solicit their interest to join the WG;
- call for meetings as appropriate;

- ensure that technical contributions are received in a timely manner and in the appropriate format;
- ensure that outputs are delivered as agreed during each meeting;
- collaborate closely with FAO-WECAFC and other sub-regional and regional organizations as appropriate;
- assist in the preparation and publication process of the proceedings of the WG meeting;
- participate (in person or virtually) at the meetings to present the draft working documents and provide any clarifications as required;
- facilitate the review by the WG membership within a reasonable period of time (max. 15 days) on suggested edits or modifications as considered necessary to address comments and the return of the revised document to the WECAFC Secretariat for distribution and consideration by the Commission:
- participate in the Commission's sessions (physically or virtually) if required, to support the Secretariat in clarifying or substantiating some points of the draft working documents;
- assist in the relevant processes to gather information in support of seeking funds to implement priority activities of the WG; and
- identify, participate in and share information on inter-sessional activities.

3.3 Election and role of Convener

• The WG shall elect a Convener from among its Members to serve over a two-year period. The term of office of the Convener may be extended as determined appropriate. In the case where another qualified Convener is not available, the Convener's term may be renewed for an additional two-year term until another Convener is selected.

3.4 Roles of the FAO/WECAFC Secretariat

The FAO/WECAFC Secretariat will play a supporting role in the activities of the WG by assisting in:

- coordinating activities of the WG, among WECAFC and Non-WECAFC Members, at the wider regional level (including facilitating procurement of funding);
- assisting with logistical arrangements for the convening of meetings;
- providing technical assistance, such as a technical secretary or research support, if needed and as resources permit;
- liaising with other RFBs active in the Wider Caribbean Region and neighboring areas for their engagement and collaboration as much as possible in the work of the WG; these RFBs include amongst others OSPESCA, CRFM, CFMC, ICCAT, NAFO, NEAFC, CECAF, COPPESAALC, etc.;
- liaising with other relevant regional and international organizations as appropriate, such as the Sargasso Sea Commission, SPAW Protocol, etc.;
- coordinating the formulation and adoption of recommendations and/or resolutions and reports/ documents by the WG so as to facilitate the decision-making process by the Commission;

- ensuring the strategic linkage between the work of the WG and programmes and projects hosted to support the fisheries and healthy ecosystems framework of the CLME+ and any future phase of this project; and
- facilitating training and collaboration of WECAFC Member States and sub-regional training institutions as appropriate and based on available resources.

3.5 Roles of other Subregional organizations (e.g. CFMC, CRFM, ICCAT, OSPESCA, UNEP-CEP, IFREMER, NOAA, CARICOM, OECS, etc.)

Sub-regional organizations have an important role to play in assisting their member countries to participate fully in the activities of the WG. Therefore, they may be invited to:

- provide expertise, technical assistance and support;
- facilitate procurement of funding when possible;
- collaborate in implementing the activities of the WG;
- collaborate with the WECAFC Secretariat and sub-regional organizations in coordinating the activities of the WG; and
- facilitate the decision-making process at the Sub-regional level.

3.6 Regional Activity Centre for the Protocol Concerning Specially Protected Areas and Wildlife for the Wider Caribbean Region (CAR-SPAW-RAC)

Pursuant to mutual aims and objectives with the WG:

- the convener of this WG will contribute as a technical representative to the SPAW STAC Ad Hoc WG on Parrotfish; and
- CAR-SPAW-RAC will provide expertise technical assistance and support with respect to management of species of parrotfish which form spawning aggregations.

4. OUTPUTS

In discharging its duties, the WG will deliver the following outputs:

- biennial Work Plans including providing performance of projects on a routine schedule;
- reports on assessment and monitoring of the status of spawning aggregations;
- draft Fisheries Management Plans;
- draft Regional Plans of Action;
- proposed Recommendations and Resolutions to the Commission; and
- revised TORs as needed.

5. COMMUNICATION

A mechanism for ongoing communication among WG members (video conference, Skype, zoom meeting and email), is essential to ensure that the work of the group is sustained between meetings. It must include all members and the communication tools must be accessible to all members.

The successful functioning of the WG also requires that each member country and organization/ agency identify a national node or focal point who will be contacted through the WECAFC National Focal Point and technically coordinate at national level all matters pertinent to the WG. The outputs of the WG will be communicated through reports to WECAFC, OSPESCA, CFMC, CRFM, CITES, UNEPCEP, ICCAT, IFREMER, and national fishery administrations via the WECAFC Secretariat.

6. WORKING GROUP MEETINGS AND COST

The WG should meet physically or virtually on a regular basis, the timing of which is decided by the members, but at a minimum once every two years. The meetings should be of 2–5 days and use cost effective accommodations and institutional facilities and where possible take advantage of other meetings in the region. Meetings shall be chaired by the Convener of the WG. The reports of the meetings will be formally submitted to OSPESCA, WECAFC, CFMC and CRFM, ICCAT, CITES, UNEP-CEP, IFREMER, Gulf and Caribbean Fisheries Institute Network, etc.

7. AMENDMENTS TO THE TERMS OF REFERENCE

Amendment of these terms of reference may be done at each biennial meeting of the Commission for implementation by the WGs in the subsequent intersessional period.

8. TEMPLATES FOR RECOMMENDATIONS AND RESOLUTIONS

Standardized templates will ensure a common understanding of what should be included in draft recommendations and resolutions, ease the reporting of deliverables as well as facilitate their review by other WECAFC bodies, as appropriate. WGs should include the following elements when preparing draft recommendations and resolutions to be presented to the WECAFC membership or other WECAFC bodies (e.g. the Scientific Advisory Group or other WECAFC WGs).

Recommendations and Resolutions

Draft recommendations and resolutions for review by other WECAFC bodies and the WECAFC membership should include the following elements:

- Cover Note: A brief cover note for draft recommendations and/or resolutions should be provided to assist reviewers. The cover note should include a clear, candid, and transparent explanation of:
 - why the action was developed;
 - at which WG meeting it was discussed;
 - a brief overview of how the WG arrived at its decision to put the action forward;
 - how the action will impact future WECAFC activities, including, where relevant any possible changes in resource or workload requirements for Members or the WECAFC Secretariat;
 - the ramifications of *not* approving the recommended action; and
 - the full picture of the context for the recommended action.
- **Preambular Text**: This should provide essential elements to highlight the context and intent of the proposed action in a concise bulleted format. The preambular text should include only the core historical elements and should include references to related decisions or measures.

• Action Text: This should indicate clearly what action(s) the WG is taking, or is asking the WECAFC Membership to take, at a national, subregional, and/or regional level, including specific timelines to which the action(s) will adhere.

Considering that each WG can have more than one meeting, and more than one issue to address during each intersessional period, the WGs can produce several reports/documents or draft resolutions/ recommendations. In order to facilitate analysis by the Commission, each WG shall prepare a single set of recommendations and/or resolutions organized by fishery or by theme, including all the topics addressed in the intersessional meetings. In this regard, the Commission would consider a single set of draft Recommendations and/or Resolutions for spiny lobster, Queen conch, flying fish and dolphinfish, FADs, FDS, etc.

The WGs shall refer relevant recommendations and resolutions of a scientific nature to the SAG for scientific review at least one month before the meeting of SAG, to provide adequate time to the Secretariat and SAG members to review them before the meeting. This will improve the efficiency of the reviews during the SAG sessions.

Terms of Reference draft WECAFC/CRFM/OSPESCA Working Group on Fishery, Data and Statistics Terms of Reference agreed/approved by the Commission 27 July 2022

1. BACKGROUND AND JUSTIFICATION

Fishery management advice and recommendations, based on the best available scientific information, are provided to WECAFC member countries for their implementation by dedicated WGs, established by the Commission.

The WGs that were established or confirmed in the subsequent sessions since the 14th Session of the Commission in 2012 are the following:

- OSPESCA/WECAFC/CRFM/CFMC WG on Caribbean spiny lobster;
- CFMC/OSPESCA/WECAFC/CRFM/CITES WG on Queen conch;
- WECAFC WG on the Management of Deep-sea Fisheries;
- WECAFC/OSPESCA/CRFM/CFMC WG on recreational fisheries;
- CRFM/WECAFC/JICA/IFREMER WG on Fisheries using AFADS;
- CRFM/WECAFC WG on flyingfish in the Eastern Caribbean (established since the 17th Session of WECAFC as the flyingfish-dolphinfish WG);
- WECAFC/CRFM/IFREMER WG on shrimp and groundfish in the Northern Brazil-Guianas Shelf;
- CFMC/WECAFC/OSPESCA/CRFM WG on spawning aggregations;
- RWG-IUU;
- WECAFC WG for the Conservation and Management of sharks in the Wider Caribbean Region; and
- WECAFC/CRFM/OSPESCA FDS-WG.

Most WGs are joint WGs with other regional partner institutions, such as the CRFM, the OSPESCA, the CFMC, the IFREMER, etc. Fishery scientists, experts, managers and decision-makers of member countries, Regional partner organizations including academia and NGOs participate in the WGs, which have specific terms of reference that are time bound. The data used by the WGs to assess the status of fish stocks, to conduct fishery assessments and to generate fishery management advice and recommendations to the Commission are collected by the participating countries and NGOs.

The key drivers behind the establishment of these WGs are the need to collaborate and cooperate in the assessment and management of shared resources; need to standardize data collection and reporting systems to enable assessment of stock status using data and information from a range of countries that target the stock/species/resources throughout their distribution range; need to standardize conservation and management measures for effective management, need for training and capacity building to improve data collection and assessment of the status of fisheries/fish stocks; etc.

In undertaking its work, the WG will pay due attention to the FAO Code of Conduct for Responsible Fisheries and its related guidelines, including the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries, as well as any other agreed international or regional instruments for the conservation and management of fisheries, and the principles of precautionary, participatory and ecosystem approaches to fisheries management. The activities of the WG are also guided by any specific regional or international fisheries management or related obligations and initiatives or instruments of relevance to the respective resources associated with the specific WG – e.g. any FMPs, Declarations, agreed CMMs, regional strategies, regulations etc.

2. ROLE OF THE WORKING GROUP

2.1 Scope of the Work

The scope of each WG is to provide scientific and management advice for the sustainable management, conservation and development of living marine resources in the area of competence of WECAFC. This includes the development and support to national and regional plans of action in order to regulate target and bycatch fisheries, as well as manage existing populations within the region. Using a multidisciplinary approach, the WG will contribute to the sustainable management by providing management advice to Members of WECAFC based on the best available scientific knowledge/evidence and traditional/local ecological knowledge. In pursuing this goal, the WG will contribute to the fulfilment of national and regional responsibilities for the marine environment and for the management of all living aquatic species and resources under the mandate of the WECAFC and related or interacting species or fisheries in the WECAFC Region.

2.2 Goal

The goal of each WG is to inform and provide guidance for the management of living marine resources in WECAFC members in such a manner as to promote responsible fisheries that provide economic opportunities, secure social wellbeing while ensuring the conservation of living marine resources and the protection of marine biodiversity.

2.3 Tasks/functions

The WG will:

- identify issues (gaps, deficiencies), challenges and best practices in data collection at national level in the region, and provide recommendations on how to address issues and challenges, and implementing best practices;
- formulate recommendations and guidelines for data collection and statistics;
- develop standardized data collection formats and templates to be collectively considered for coordinated national and regional implementation;
- collect, review and share the existing (past and present) data and information on the fishery in the WECAFC area, involving the fishers and private sector, in addition to identifying the potential for development of such fisheries in the region;
- analyze the data and information collected from capture fisheries and aquaculture production and make recommendations for the sustainability of the fisheries in the WECAFC region;
- monitor changes in distribution and abundance of all living aquatic species and resources of relevance to the mandate of WECAFC in the WECAFC region;
- develop common methodologies for assessment and monitoring of the fish stocks;

- seek partnerships with other institutions that could provide assistance in the monitoring, evaluation, and recommendations for management for protection and conservation of the resources;
- monitor and provide advice on the management and implementation of regional strategies, regulations and management plans to protect the fish resources;
- establish communication between the members of the WG, other WGs and relevant parties on issues of common interest in order to strengthen regional collaboration in the assessment and management of living marine resources; and
- report to the Commission and contribute to communication and visibility of the deliverables of the WG as may be needed.

2.4 Membership

Membership of the WG shall consist of all Member States of CRFM and WECAFC, OSPESCA, including overseas territories and Departments.

Specifically, Member representatives will be national Officers responsible of Fishery Statistics and Data in WECAFC Member Countries (e.g. statisticians, data managers, directors of fisheries statistics, or fisheries offices, etc.) with activities related to the following domains: statistical analyses of fisheries data, data collection, designing data collection systems, analyzing statistics for statistical bulletins, report preparation, organizing and managing data collection, storage and dissemination according to a variety of needs (e.g. RFMO reporting, departmental, scientific meetings, etc.).

3. MODE OF OPERATION

3.1 Role of Countries

The members of the WG will play a leading role in its activities through the following activities and commitments, and through a data and statistics perspective:

- participate in agreed activities of the WG, and ensure the participation of appropriate experts;
- implement, at the National level, the work identified in the WECAFC endorsed work plan (as appropriate);
- report on implementation of agreed conservation and management measures;
- assist with mobilization of resources for the activities of the WG;
- facilitate the organization of WG meetings in the languages of the Commission;
- · host WG meetings on a rotational basis; and
- facilitate the identification of the Convener of the WG.

3.2 Role of Convener

The Convener of the WG will play a leading role during the organization of the meetings and subsequent follow up with the Secretariat of WECAFC by coordinating the inputs of the members of the WG. The Convener should:

- seek experts from among the WECAFC Members, contact potential partner organizations, and solicit their interest to join in the WG;
- call for meetings as appropriate;

- ensure that technical contributions are received in a timely manner and in the appropriate format;
- ensure that outputs are delivered as agreed during each meeting;
- collaborate closely with FAO-WECAFC and other sub-regional and regional organizations as appropriate;
- assist in the preparation and publication process of the proceedings of the WG meeting;
- participate (in person or virtually) at the SAG meetings to present the draft working documents and provide any clarifications as required;
- facilitate the review by the WG membership within a reasonable period of time (max. 15 days)
 on suggested edits or modifications as considered necessary to address the comments of the
 SAG and the return of the revised document to the WECAFC Secretariat for distribution and
 consideration by the Commission;
- participate in the Commission's sessions (physically or virtually) if required, to support the Secretariat in clarifying or substantiating some points of the draft working documents; and
- assist in the relevant processes to gather information in support of seeking funds to implement priority activities of the WG.

3.3 Election and role of Convener of the Working Group

• The WG shall elect a Convener from among its Members to serve over a two-year period. The term of office of the Convener may be extended as determined appropriate. In the case where another qualified Convener is not available, the Convener's term may be renewed for an additional two-year term until another Convener is selected.

3.4 Role of the FAO/WECAFC Secretariat

The FAO/WECAFC Secretariat will play a supporting role in the activities of the WG by assisting in:

- coordinating activities of the WG, among WECAFC and Non-WECAFC Members, at the wider regional level (including facilitate procurement of funding);
- assisting with logistical arrangements for the convening of meetings of the WG;
- providing technical assistance, such as a technical secretary or research support, if needed and as resources permit;
- liaising with other RFBs active in the Wider Caribbean Region and neighboring areas for their engagement as much as possible in the work of the WG; these RFBs include amongst others OSPESCA, CRFM, CFMC, ICCAT, NAFO, NEAFC, CECAF, COPPESAALC, etc.;
- liaising with other relevant regional and international organizations as appropriate, such as the Sargasso Sea Commission, SPAW Protocol, etc.;
- coordinating the formulation and adoption of recommendations and/or resolutions and reports/documents by the WG so as to facilitate the decision-making process by the Commission;
- ensuring the strategic linkage between the work of the WG and programmes and projects hosted
 to support the fisheries and healthy ecosystems framework of the CLME+ and any future phase of
 this project; and

• facilitating training and collaboration of WECAFC Member States and sub-regional training institutions as appropriate and based on available resources.

3.5 Roles of other Subregional organizations (e.g. CFMC, CRFM, ICCAT, OSPESCA, UNEP-CEP, IFREMER, NOAA, CARICOM, OECS, etc.)

Sub-regional organizations have an important role to play in assisting their member countries to participate fully in the activities of the WG. Therefore, they may be invited to:

- provide expertise, technical assistance and support;
- facilitate procurement of funding when possible;
- collaborate in implementing the activities of the WG;
- collaborate with the WECAFC Secretariat and sub-regional organizations in coordinating the activities of the WG; and
- facilitate the decision-making process at the Sub-regional level.

4. OUTPUTS

In discharging its duties, the WG will deliver the following outputs, from a data and statistics perspective:

- biennial Work Plans including providing performance of projects on a routine schedule;
- reports on assessment and monitoring of the status of fish stocks;
- draft Fisheries Management Plans;
- draft Regional Plans of Actions;
- proposed Recommendations and Resolutions to the Commission; and
- · revised TORs as needed

5. COMMUNICATION

A mechanism for ongoing communication among WG members (video conference, Skype, zoom meeting and email), is essential to ensure that the work of the group is sustained between meetings. It must include all WG members and the communication tools must be accessible to all WG members.

The successful functioning of the WG also requires that each member country and organization/ agency identify a national node or focal point who will be contacted through the WECAFC National Focal Point and technically coordinate at national level all matters pertinent to the WG. The outputs of the WG will be communicated through WG reports to WECAFC, OSPESCA, CFMC, CRFM, CITES, UNEP-CEP, ICCAT, IFREMER, and national fishery administrations via the WECAFC Secretariat.

6. WORKING GROUP MEETINGS AND COST

The WG should meet physically or virtually on a regular basis, the timing of which is decided by the members, but at a minimum once every two years. The meetings should be of 2–5 days' duration. The meetings should use cost effective accommodations and institutional facilities and where possible take advantage of other meetings in the region. Meetings shall be chaired by the Convener of the WG.

The reports of the meetings will be formally submitted to OSPESCA, WECAFC, CFMC and CRFM, ICCAT, CITES, UNEP-CEP, IFREMER, Gulf and Caribbean Fisheries Institute Network, etc.

7. AMENDMENTS TO THE TERMS OF REFERENCE

Amendment of these Terms of Reference may be done at each biennial meeting of the Commission for implementation by the WGs in the subsequent intersessional period.

8. TEMPLATES FOR RECOMMENDATIONS AND RESOLUTIONS

Standardized templates will ensure a common understanding of what should be included in draft recommendations and resolutions, ease the reporting of deliverables as well as facilitate their review by other WECAFC bodies, as appropriate. WGs should include the following elements when preparing draft recommendations and resolutions to be presented to the WECAFC membership or other WECAFC bodies (e.g. the Scientific Advisory Group or other WECAFC WGs).

8.1 Recommendations and Resolutions

Draft recommendations and resolutions for review by other WECAFC bodies and the WECAFC membership should include the following elements:

- Cover Note: A brief cover note for draft recommendations and/or resolutions should be provided to assist reviewers. The cover note should include a clear, candid, and transparent explanation of:
 - why the action was developed;
 - at which WG meeting it was discussed;
 - a brief overview of how the WG arrived at its decision to put the action forward;
 - how the action will impact future WECAFC activities, including, where relevant any possible changes in resource or workload requirements for Members or the WECAFC Secretariat;
 - the ramifications of *not* approving the recommended action; and
 - the full picture of the context for the recommended action.
- **Preambular Text**: This should provide essential elements to highlight the context and intent of the proposed action in a concise bulleted format. The preambular text should include only the core historical elements and should include references to related decisions or measures.
- Action Text: This should indicate clearly what action(s) the WG is taking, or is asking the WECAFC Membership to take, at a national, subregional, and/or regional level, including specific timelines to which the action(s) will adhere.

Considering that each WG can have more than one meeting, and more than one issue to address during each intersessional period, the WGs can produce several reports/documents or draft resolutions/ recommendations. In order to facilitate analysis by the Commission, each WG shall prepare a single set of recommendations and/or resolutions organized by fishery or by theme, including all the topics addressed in the intersessional meetings. In this regard, the Commission would consider a single set of draft Recommendations and/or Resolutions for spiny lobster, Queen conch, flying fish and dolphinfish, AFADs, FDS, etc.

The WGs shall refer relevant recommendations and resolutions of a scientific nature to the SAG for scientific review at least one month before the meeting of SAG, in order to provide adequate time to the Secretariat and SAG members to review them before the meeting. This will improve the efficiency of the reviews during the SAG sessions.

Terms of Reference draft template for the OSPESCA/WECAFC/CRFM/CFMC Working Group on Caribbean spiny lobster Terms of Reference agreed/approved by the Commission 27 July 2022

1. BACKGROUND AND JUSTIFICATION

Fishery management advice and recommendations, based on the best available scientific information, are provided to WECAFC member countries for their implementation by dedicated WGs, established by the Commission.

The WGs that were established or confirmed in the subsequent sessions since the 14th session of the Commission in 2012 are the following:

- OSPESCA/WECAFC/CRFM/CFMC WG on Caribbean spiny lobster;
- CFMC/OSPESCA/WECAFC/CRFM/CITES WG on Queen conch;
- WECAFC WG on the Management of Deep-sea Fisheries;
- WECAFC/OSPESCA/CRFM/CFMC WG on recreational fisheries;
- CRFM/WECAFC/JICA/IFREMER WG on Fisheries using AFADS;
- CRFM/WECAFC WG on flyingfish in the Eastern Caribbean (established since the 17th Session of WECAFC as the flyingfish-dolphinfish WG);
- WECAFC/CRFM/IFREMER WG on shrimp and groundfish in the Northern Brazil-Guianas Shelf;
- CFMC/WECAFC/OSPESCA/CRFM WG on spawning aggregations;
- RWG-IUU;
- WECAFC WG for the Conservation and Management of sharks in the Wider Caribbean Region; and
- WECAFC/CRFM/OSPESCA FDS-WG.

Most WGs are joint WGs with other regional partner institutions, such as the CRFM, the OSPESCA, the CFMC, the IFREMER, etc. Fishery scientists, experts, managers and decision-makers of member countries, Regional partner organizations including academia and NGOs participate in the WGs, which have specific terms of reference that are time bound. The data used by the WGs to assess the status of stocks of harvested species, to conduct fishery assessments and to generate fishery management advice and recommendations to the Commission are collected by the participating countries and NGOs.

The key drivers behind the establishment of these WGs are the need to collaborate and cooperate in the assessment and management of shared resources; need to standardize data collection and reporting systems to enable assessment of stock status using data and information from a range of countries that target the stock/species/resources throughout their distribution range; need to standardize conservation and management measures for effective management, need for training and capacity building to improve data collection and assessment of the status of fisheries/fish stocks; etc.

In undertaking its work, the WG will pay due attention to the FAO Code of Conduct for Responsible Fisheries and its related guidelines, including the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries especially in regards to livelihoods and food security of communities and value chain stakeholders dependent on sustainable management of these natural resources, as well as their contribution to achieving the targets of the UN Sustainable Development Goals, namely SDG 1 and 2; 5, 8; 12, 13 and 14, as well as any other agreed international or regional instruments for the conservation and management of fisheries, and the principles of precautionary, participatory and ecosystem approaches to fisheries management. The activities of the WG are also guided by any specific regional or international fisheries management or related obligations and initiatives or instruments of relevance to the respective resources associated with the specific WG – e.g. any FMPs, Declarations, agreed CMMs, regional strategies, regulations, etc.

2. ROLE OF THE WORKING GROUP

2.1 Scope of the Work

The scope of each WG is to provide scientific and management advice for the sustainable management, conservation and development of living marine resources in the area of competence of WECAFC. This includes the development and support to national and regional plans of action in order to regulate target and bycatch fisheries, as well as manage existing populations within the region. Using a multidisciplinary approach, the WG will contribute to the sustainable management by providing management advice to Members of WECAFC based on the best available scientific knowledge/evidence and traditional/local ecological knowledge

In pursuing this goal, the WG will contribute to the fulfilment of national and regional responsibilities for the marine environment and for the management of the Caribbean spiny lobster and related or interacting species or fisheries in the WECAFC Region.

2.2 Goal

The goal of each WG is to inform and provide guidance for the management of living marine resources to WECAFC members in such a manner as to promote transformation to responsible fisheries that provide economic opportunities, food security and human nutrition, secure social wellbeing while ensuring the conservation of living marine resources and the protection of marine biodiversity.

2.3 Tasks/functions

The WG will:

- collect, review and share the existing (past and present) data and information on the fishery in the WECAFC area, involving the fishers and private sector, especially women and youth, in addition to identifying the potential for sustainable management and development of such fisheries in the region;
- analyze the data and information collected from Caribbean spiny lobster fisheries and aquaculture production and make recommendations for the sustainability of the fisheries in the WECAFC region;
- monitor changes in distribution and abundance of the Caribbean spiny lobster in the WECAFC region;
- develop common and feasible methodologies for the assessment and monitoring of the status of Caribbean spiny lobster stocks, taking into account the different levels of exploitation (industrial and artisanal) in the member countries;

- seek partnerships with other institutions that could provide assistance in the monitoring, evaluation, and recommendations for management for sustainable use, protection and conservation of the resources;
- monitor and provide advice on the management and implementation of regional strategies, regulations and management plans to protect the fish resources;
- establish communication between the members of the WG, other WGs and relevant parties on issues of common interest in order to strengthen regional collaboration in the assessment and management of living marine resources;
- report to the Commission and contribute to communication and visibility of the deliverables of the WG as may be needed;
- identify needs of communities dependent on the fishery resources and investigate alternative livelihoods from fisheries and aquaculture (recreational fishing, hospitality and tourism, etc.);
- develop and propose improved and coordinated management measures in the fight against illegal, unreported and unregulated fishing;
- assess and define the most sustainable and resource and ecosystem-friendly fishing gear to catch Caribbean spiny lobster; and
- Inform OSPESCA, WECAFC, CFMC and CRFM about the outcome of each session.

2.4 Membership

Membership of the WG shall consist of all Member States of CRFM and WECAFC, OSPESCA, including overseas territories and Departments.

These members shall be national officials of fisheries authorities, offices or institutes, in charge of the collection and management of fisheries data and statistics. They shall have experience with the Caribbean spiny lobster. They shall be involved in/related to data collection and processing and/or assessment of this fishery. They shall have knowledge of fisheries biology and stock assessments.

3. MODE OF OPERATION

3.1 Role of Countries

The members of the WG will play a leading role in its activities through the following activities and commitments:

- participate in agreed activities of the WG, and ensure the participation of appropriate experts;
- implement, at the national level, the work identified in the WECAFC endorsed work plan (as appropriate);
- report on implementation of agreed conservation and management measures;
- assist with mobilization of resources for the activities of the WG;
- facilitate the organization of WG meetings in the languages of the Commission;
- · host WG meetings on a rotational basis; and
- facilitate the identification of the Convener of the WG.

3.2 Role of Convener

The Convener of the WG will play a leading role during the organization of the meetings and subsequent follow up with the Secretariat of WECAFC by coordinating the inputs of the members of the WG. The Convener should:

- seek experts from among the WECAFC Members, contact potential partner organizations, and solicit their interest to join in the WG;
- call for meetings as appropriate;
- ensure that technical contributions are received in a timely manner and in the appropriate format;
- ensure that outputs are delivered as agreed during each meeting;
- collaborate closely with FAO-WECAFC and other sub-regional and regional organizations as appropriate;
- assist in the preparation and publication process of the proceedings of the WG meeting;
- participate (in person or virtually) at the SAG meetings to present the draft working documents and provide any clarifications as required;
- facilitate the review by the WG membership within a reasonable period of time (max. 15 days)
 on suggested edits or modifications as considered necessary to address the comments of the
 SAG and the return of the revised document to the WECAFC Secretariat for distribution and
 consideration by the Commission;
- participate in the Commission's sessions (physically or virtually) if required, to support the Secretariat in clarifying or substantiating some points of the draft working documents; and
- assist in the relevant processes to gather information in support of seeking funds to implement priority activities of the WG.

3.3 Election and role of Convener of the Working Group

• The WG shall elect a Convener from among its Members to serve over a two-year period. The term of office of the Convener may be extended as determined appropriate. In the case where another qualified Convener is not available, the Convener's term may be renewed for an additional two-year term until another Convener is selected.

3.4 Roles of the FAO/WECAFC Secretariat

The FAO/WECAFC Secretariat will play a supporting role in the activities of the WG by assisting in:

- coordinating activities of the WG, among WECAFC and Non-WECAFC Members, at the wider regional level (including facilitate procurement of funding);
- assisting with logistical arrangements for the convening of meetings of the WG;
- providing technical assistance, such as a technical secretary or research support, if needed and as resources permit;
- liaising with other RFBs active in the Wider Caribbean Region and neighboring areas for their engagement as much as possible in the work of the WG; these RFBs include amongst others OSPESCA, CRFM, CFMC, ICCAT, NAFO, NEAFC, CECAF, COPPESAALC, etc.;

- liaising with other relevant regional organizations as appropriate, such as the Sargasso Sea Commission, SPAW Protocol, etc.;
- coordinating the formulation and adoption of recommendations and/or resolutions and reports/ documents by the WG so as to facilitate the decision-making process by the Commission;
- ensuring the strategic linkage between the work of the WG and programmes and projects hosted to support the fisheries and healthy ecosystems framework of the CLME+ and any future phase of this project; and
- facilitating training and collaboration of WECAFC Member States and sub-regional training institutions as appropriate and based on available resources.

3.5 Roles of other Subregional organizations (e.g. CFMC, CRFM, ICCAT, OSPESCA, UNEP-CEP, IFREMER, NOAA, CARICOM, OECS, etc.)

Sub-regional organizations have an important role to play in assisting their member countries to participate fully in the activities of the WG. Therefore, they may be invited to:

- provide expertise, technical assistance and support;
- facilitate procurement of funding when possible;
- collaborate in the implementation of the activities of the WG;
- collaborate with the WECAFC Secretariat and sub-regional organizations in coordinating the activities of the WG; and
- facilitate the decision-making process at the Sub-regional level.

4. OUTPUTS

In discharging its duties, the WG will deliver the following outputs:

- biennial Work Plans;
- reports on assessment of the status of fish stocks;
- draft Fisheries Management Plans;
- draft Regional Plans of Actions;
- proposed Recommendations and Resolutions to the Commission; and
- · revised TORs as needed.

5. COMMUNICATION

A mechanism for ongoing communication among WG members (video conference, Skype, zoom meeting and email), is essential to ensure that the work of the group is sustained between meetings. It must include all WG members and the communication tools must be accessible to all WG members.

The successful functioning of the WG also requires that each member country and organization/ agency identify a national node or focal point who will be contacted through the WECAFC National Focal Point and technically coordinate at national level all matters pertinent to the WG. The outputs of the WG will be communicated through WG reports to WECAFC, OSPESCA, CFMC, CRFM, CITES, UNEP-CEP, ICCAT, IFREMER, and national fishery administrations via the WECAFC Secretariat.

6. WORKING GROUP MEETINGS AND COST

The WG should meet physically or virtually on a regular basis, the timing of which is decided by the members, but at a minimum once every two years. The meetings should be of 2–5 days' duration. The meetings should use cost effective accommodations and institutional facilities and where possible take advantage of other meetings in the region. Meetings shall be chaired by the Convener of the WG. The reports of the meetings will be formally submitted to OSPESCA, WECAFC, CFMC and CRFM, ICCAT, CITES, UNEP-CEP, IFREMER, Gulf and Caribbean Fisheries Institute Network, etc.

7. AMENDMENTS TO THE TERMS OF REFERENCE

Amendment of these Terms of Reference may be done at each biennial meeting of the Commission for implementation by the WGs in the subsequent intersessional period.

8. TEMPLATES FOR RECOMMENDATIONS AND RESOLUTIONS

[Standardized templates will ensure a common understanding of what should be included in draft recommendations and resolutions, ease the reporting of deliverables as well as facilitate their review by other WECAFC bodies, as appropriate. WGs should include the following elements when preparing draft recommendations and resolutions to be presented to the WECAFC membership or other WECAFC bodies (e.g. the Scientific Advisory Group or other WECAFC WGs).

Recommendations and Resolutions

Draft recommendations and resolutions for review by other WECAFC bodies and the WECAFC membership should include the following elements:

- Cover Note: A brief cover note for draft recommendations and/or resolutions should be provided to assist reviewers. The cover note should include a clear, candid, and transparent explanation of:
 - why the action was developed;
 - at which WG meeting it was discussed;
 - a brief overview of how the WG arrived at its decision to put the action forward;
 - how the action will impact future WECAFC activities, including, where relevant any possible changes in resource or workload requirements for Members or the WECAFC Secretariat;
 - the ramifications of *not* approving the recommended action; and
 - the full picture of the context for the recommended action.
- **Preambular Text**: This should provide essential elements to highlight the context and intent of the proposed action in a concise bulleted format. The preambular text should include only the core historical elements and should include references to related decisions or measures.
- Action Text: This should indicate clearly what action(s) the WG is taking, or is asking the WECAFC Membership to take, at a national, subregional, and/or regional level, including specific timelines to which the action(s) will adhere.

Considering that each WG can have more than one meeting, and more than one issue to address during each intersessional period, the WGs can produce several reports/documents or draft resolutions/recommendations. In order to facilitate analysis by the Commission, each WG shall prepare a single

set of recommendations and/or resolutions organized by fishery or by theme, including all the topics addressed in the intersessional meetings. In this regard, the Commission would consider a single set of draft Recommendations and/or Resolutions for spiny lobster, Queen conch, flying fish and dolphinfish, FADs, FDS, etc.

The WGs shall refer relevant recommendations and resolutions of a scientific nature to the SAG for scientific review at least one month before the meeting of SAG, in order to provide adequate time to the Secretariat and SAG members to review them before the meeting. This will improve the efficiency of the reviews during the SAG sessions.

Terms of Reference for the CRFM/WECAFC/JICA/IFREMER Working Group on moored/anchored fish aggregating device fisheries

Terms of Reference agreed/approved by the Commission 27 July 2022

1. BACKGROUND AND JUSTIFICATION

Fishery management advice and recommendations, based on the best available scientific information, are provided to WECAFC member countries for their implementation by dedicated WGs, established by the Commission.

The WGs that were established or confirmed in the subsequent sessions since the 14th session of the Commission in 2012 are the following:

- OSPESCA/WECAFC/CRFM/CFMC WG on Caribbean spiny lobster;
- CFMC/OSPESCA/WECAFC/CRFM/CITES WG on Queen conch;
- WECAFC WG on the Management of Deep-sea Fisheries;
- WECAFC/OSPESCA/CRFM/CFMC WG on recreational fisheries;
- CRFM/WECAFC/JICA/IFREMER WG on Fisheries using AFADS;
- CRFM/WECAFC WG on flyingfish in the Eastern Caribbean (established since the 17th Session of WECAFC as the flyingfish-dolphinfish WG);
- WECAFC/CRFM/IFREMER WG on shrimp and groundfish in the Northern Brazil-Guianas Shelf;
- CFMC/WECAFC/OSPESCA/CRFM WG on spawning aggregations;
- RWG-IUU;
- WECAFC WG for the Conservation and Management of sharks in the Wider Caribbean Region;
- WECAFC/CRFM/OSPESCA FDS-WG.

Most WGs are joint WGs with other regional partner institutions, such as the CRFM, the OSPESCA, the CFMC, the IFREMER, etc. Fishery scientists, experts, managers and decision-makers of member countries, Regional partner organizations including academia and NGOs participate in the WGs, which have specific terms of reference that are time bound. The data used by the WGs to assess the status of fish stocks, to conduct fishery assessments and to generate fishery management advice and recommendations to the Commission are collected by the participating countries and NGOs.

The key drivers behind the establishment of these WGs are the need to collaborate and cooperate in the assessment and management of shared resources; need to standardize data collection and reporting systems to enable assessment of stock status using data and information from a range of countries that target the stock/species/resources throughout their distribution range; need to standardize conservation and management measures for effective management, need for training and capacity building to improve data collection and assessment of the status of fisheries/fish stocks; etc.

In undertaking its work, the WG will pay due attention to the FAO Code of Conduct for Responsible Fisheries and its related guidelines, including the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries especially in regards to livelihoods and food security of communities and value chain stakeholders dependent on sustainable management of these natural resources, as well as their contribution to achieving the targets of the UN Sustainable Development Goals, namely SDG 1 and 2; 5, 8; 12, 13 and 14, as well as any other agreed international or regional instruments for the conservation and management of fisheries, and the principles of precautionary, participatory and ecosystem approaches to fisheries management. The activities of the WG are also guided by any specific regional or international fisheries management or related obligations and initiatives or instruments of relevance to the respective resources associated with the specific WG – e.g. any FMPs, Declarations, agreed CMMs, regional strategies, regulations, etc.

2. ROLE OF THE WORKING GROUP

2.1 Scope of the Work

The scope of each WG is to provide scientific and management advice for the sustainable management, conservation and development of living marine resources in the area of competence of WECAFC. This includes the development and support to national and regional plans of action in order to regulate target and bycatch fisheries, as well as manage existing populations within the region. Using a multidisciplinary approach, the WG will contribute to the sustainable management by providing management advice to Members of WECAFC based on the best available scientific knowledge/evidence and traditional/local ecological knowledge

In pursuing this goal, the WG will contribute to the fulfilment of national and regional responsibilities for the marine environment and for the management of pelagic oceanic and coastal fish resources harvested using anchored aFADs – including large and small tuna, swordfish, billfishes, dolphinfish, and mackerels – and related or interacting species or fisheries in the WECAFC Region.

2.2 Goal

The goal of each WG is to inform and provide guidance for the management of living marine resources in WECAFC members in such a manner as to promote transformation to responsible fisheries that provide economic opportunities, food security and human nutrition, secure social wellbeing while ensuring the conservation of living marine resources and the protection of marine biodiversity.

2.3 Tasks/functions

The WG will:

- collect, review and share the existing (past and present) data and information on the aFAD fishery in the WECAFC area, involving the fishers and private sector, in addition to identifying the potential for sustainable management and development of such fisheries in the region;
- analyze the data and information collected from AFAD fisheries and make recommendations for the sustainability of the fisheries in the WECAFC region;
- promote the reporting of AFADs fisheries statistics to ICCAT;
- facilitate the sharing of data, information, and experiences related to AFAD fisheries in the region in collaboration with the Fisheries Data and Statistics WG and the recreational fisheries WG;
- monitor changes in distribution and abundance of species pelagic oceanic and coastal fish species harvested using AFADs, including large and small tuna, swordfish, billfishes, dolphinfish, and mackerels in the WECAFC region;

- develop common and feasible methodologies for assessment and monitoring of the fish stock especially in data poor fisheries;
- collaborate with academia and other research institutions to gain knowledge on the biology of key pelagic oceanic and coastal fish species harvested using AFADs and on relevant socioeconomic and governance aspects of such fisheries to improve management;
- seek partnerships with other institutions that could provide assistance in the monitoring, evaluation, and recommendations for management for sustainable use, protection and conservation of the resources;
- seek partnerships with other institutions that could aid with the implementation of local/national level AFAD fishery management plans and co-management arrangements;
- monitor and provide advice on the management and implementation of regional strategies, regulations and management plans to protect the fish resources;
- establish communication between the members of the WG, other WGs and relevant parties on issues of common interest in order to strengthen regional collaboration in the assessment and management of living marine resources;
- report to the Commission and contribute to communication and visibility of the deliverables of the WG as may be needed; and
- identify needs of communities dependent on the AFAD fishery resources and investigate alternative livelihoods from fisheries and aquaculture (recreational fishing, hospitality and tourism, etc.).

2.4 Membership

Membership of the WG shall consist of all Member States of CRFM and WECAFC, OSPESCA, including overseas territories and Departments.

3. MODE OF OPERATION

3.1 Role of Countries

The members of the WG will play a leading role in its activities through the following activities and commitments:

- participate in agreed activities of the WG, and ensure the participation of appropriate experts;
- implement, at the National level, the work identified in the WECAFC endorsed work plan (as appropriate);
- report on implementation of agreed conservation and management measures;
- assist with mobilization of resources for the activities of the WG;
- facilitate the organization of WG meetings in the languages of the Commission;
- · host WG meetings on a rotational basis; and
- facilitate the identification of the Convener of the WG.

3.2 Role of Convener

The Convener of the WG will play a leading role during the organization of the meetings and subsequent follow up with the Secretariat of WECAFC by coordinating the inputs of the members of the WG. The Convener should:

- seek experts from among the WECAFC Members, contact potential partner organizations, and solicit their interest to join in the WG;
- call for meetings as appropriate;
- ensure that technical contributions are received in a timely manner and in the appropriate format;
- ensure that outputs are delivered as agreed during each meeting;
- collaborate closely with FAO-WECAFC and other sub-regional and regional organizations as appropriate;
- assist in the preparation and publication process of the proceedings of the WG meeting;
- participate (in person or virtually) at the SAG meetings to present the draft working documents and provide any clarifications as required;
- facilitate the review by the WG membership within a reasonable period of time (max. 15 days)
 on suggested edits or modifications as considered necessary to address the comments of the
 SAG and the return of the revised document to the WECAFC Secretariat for distribution and
 consideration by the Commission;
- participate in the Commission's sessions (physically or virtually) if required, to support the Secretariat in clarifying or substantiating some points of the draft working documents; and
- assist in the relevant processes to gather information in support of seeking funds to implement priority activities of the WG.

3.3 Election and role of Convener of the Working Group

• The WG shall elect a Convener from among its Members to serve over a two-year period. The term of office of the Convener may be extended as determined appropriate. In the case where another qualified Convener is not available, the Convener's term may be renewed for an additional two-year term until another Convener is selected.

3.4 Roles of the FAO/WECAFC Secretariat

The FAO/WECAFC Secretariat will play a supporting role in the activities of the WG by assisting in:

- coordinating activities of the WG, among WECAFC and Non-WECAFC Members, at the wider regional level (including facilitate procurement of funding);
- assisting with logistical arrangements for the convening of meetings of the WG;
- providing technical assistance, such as a technical secretary or research support, if needed and as resources permit;
- liaising with other RFBs active in the Wider Caribbean Region and neighboring areas for their engagement as much as possible in the work of the WG; these RFBs include amongst others OSPESCA, CRFM, CFMC, ICCAT, NAFO, NEAFC, CECAF, COPPESAALC, etc.;

- liaising with other relevant regional and international organizations as appropriate, such as the Sargasso Sea Commission, SPAW Protocol, etc.;
- coordinating the formulation and adoption of recommendations and/or resolutions and reports/documents by the WG so as to facilitate the decision-making process by the Commission;
- ensuring the strategic linkage between the work of the WG and programmes and projects hosted to support the fisheries and healthy ecosystems framework of the CLME+ and any future phase of this project; and
- facilitating training and collaboration of WECAFC Member States and sub-regional training institutions as appropriate and based on available resources.

3.5 Roles of other Subregional organizations (e.g. CFMC, CRFM, ICCAT, OSPESCA, UNEP-CEP, IFREMER, NOAA, CARICOM, OECS, etc.)

Sub-regional organizations have an important role to play in assisting their member countries to participate fully in the activities of the WG. Therefore, they may be invited to:

- provide expertise, technical assistance and support;
- facilitate procurement of funding when possible;
- collaborate in implementing the activities of the WG;
- collaborate with the WECAFC Secretariat and sub-regional organizations in coordinating the activities of the WG; and
- facilitate the decision-making process at the Sub-regional level.

4. OUTPUTS

In discharging its duties, the WG will deliver the following outputs:

- biennial Work Plans;
- reports on assessment and monitoring of the status of fish stocks;
- draft Fisheries Management Plans;
- draft Regional Plans of Actions;
- proposed Recommendations and Resolutions to the Commission; and
- · revised TORs as needed.

5. COMMUNICATION

A mechanism for ongoing communication among WG members (video conference, Skype, zoom meeting and email), is essential to ensure that the work of the group is sustained between meetings. It must include all WG members and the communication tools must be accessible to all WG members.

The successful functioning of the WG also requires that each member country and organization/agency identify a national node or focal point who will be contacted through the WECAFC National Focal Point and technically coordinate at national level all matters pertinent to the WG. The outputs of the WG will be communicated through WG reports to WECAFC, OSPESCA, CFMC, CRFM, CITES, UNEP-CEP, ICCAT, IFREMER, and national fishery administrations via the WECAFC Secretariat.

6. WORKING GROUP MEETINGS AND COST

The WG should meet physically or virtually on a regular basis, the timing of which is decided by the members, but at a minimum once every two years. The meetings should be of 2–5 days' duration. The meetings should use cost effective accommodations and institutional facilities and where possible take advantage of other meetings in the region. Meetings shall be chaired by the Convener of the WG. The reports of the meetings will be formally submitted to OSPESCA, WECAFC, CFMC and CRFM, ICCAT, CITES, UNEP-CEP, IFREMER, Gulf and Caribbean Fisheries Institute Network, etc.

7. AMENDMENTS TO THE TERMS OF REFERENCE

Amendment of these Terms of Reference may be done at each biennial meeting of the Commission for implementation by the WGs in the subsequent intersessional period.

8. TEMPLATES FOR RECOMMENDATIONS AND RESOLUTIONS

Standardized templates will ensure a common understanding of what should be included in draft recommendations and resolutions, ease the reporting of deliverables as well as facilitate their review by other WECAFC bodies, as appropriate. WGs should include the following elements when preparing draft recommendations and resolutions to be presented to the WECAFC membership or other WECAFC bodies (e.g. the Scientific Advisory Group or other WECAFC WGs).

Recommendations and Resolutions

Draft recommendations and resolutions for review by other WECAFC bodies and the WECAFC membership should include the following elements:

- Cover Note: A brief cover note for draft recommendations and/or resolutions should be provided to assist reviewers. The cover note should include a clear, candid, and transparent explanation of:
 - why the action was developed;
 - at which WG meeting it was discussed;
 - a brief overview of how the WG arrived at its decision to put the action forward;
 - how the action will impact future WECAFC activities, including, where relevant any possible changes in resource or workload requirements for Members or the WECAFC Secretariat;
 - the ramifications of *not* approving the recommended action; and
 - the full picture of the context for the recommended action.
- **Preambular Text**: This should provide essential elements to highlight the context and intent of the proposed action in a concise bulleted format. The preambular text should include only the core historical elements and should include references to related decisions or measures.
- Action Text: This should indicate clearly what action(s) the WG is taking, or is asking the WECAFC Membership to take, at a national, subregional, and/or regional level, including specific timelines to which the action(s) will adhere.

Considering that each WG can have more than one meeting, and more than one issue to address during each intersessional period, the WGs can produce several reports/documents or draft resolutions/recommendations. In order to facilitate analysis by the Commission, each WG shall prepare a single

set of recommendations and/or resolutions organized by fishery or by theme, including all the topics addressed in the intersessional meetings. In this regard, the Commission would consider a single set of draft recommendations and/or resolutions for spiny lobster, Queen conch, flying fish and dolphinfish, AFADs, FDS, etc.

The WGs shall refer relevant recommendations and resolutions of a scientific nature to the SAG for scientific review at least one month before the meeting of SAG, in order to provide adequate time to the Secretariat and SAG members to review them before the meeting. This will improve the efficiency of the reviews during the SAG sessions.

Terms of Reference template

Working Group on the Management of Deep-Sea Fisheries Terms of Reference agreed/approved by the Commission 27 July 2022

1. BACKGROUND AND JUSTIFICATION

Fishery management advice and recommendations, based on the best available scientific information, are provided to WECAFC member countries for their implementation by dedicated WGs, established by the Commission.

The WGs that were established or confirmed in the subsequent sessions since the 14th session of the Commission in 2012 are the following:

- OSPESCA/WECAFC/CRFM/CFMC WG on Caribbean spiny lobster;
- CFMC/OSPESCA/WECAFC/CRFM/CITES WG on Queen conch;
- WECAFC WG on the Management of Deep-sea Fisheries;
- WECAFC/OSPESCA/CRFM/CFMC WG on recreational fisheries;
- CRFM/WECAFC/JICA/IFREMER WG on Fisheries using fish aggregating devices (AFADS);
- CRFM/WECAFC WG on flyingfish in the Eastern Caribbean (established since the 17th Session of WECAFC as the flyingfish-dolphinfish WG);
- WECAFC/CRFM/IFREMER WG on shrimp and groundfish in the Northern Brazil-Guianas Shelf:
- CFMC/WECAFC/OSPESCA/CRFM WG on spawning aggregations;
- RWG-IUU;
- WECAFC WG for the Conservation and Management of sharks in the Wider Caribbean Region; and
- WECAFC/CRFM/OSPESCA FDS-WG.

Most WGs are joint WGs with other regional partner institutions, such as the CRFM, the OSPESCA, the CFMC, the French Research Institute for Exploration of the Sea (IFREMER), etc. Fishery scientists, experts, managers and decision-makers of member countries, regional partner organizations including academia and NGOs participate in the WGs, which have specific terms of reference that are time bound. The data used by the WGs to assess the status of fish stocks, to conduct fishery assessments and to generate fishery management advice and recommendations to the Commission are collected by the participating countries and NGOs.

The key drivers behind the establishment of these WGs are the need to collaborate and cooperate in the assessment and management of shared resources; need to standardize data collection and reporting systems to enable assessment of stock status using data and information from a range of countries that target the stock/species/resources throughout their distribution range; need to standardize conservation and management measures for effective management, need for training and capacity building to improve data collection and assessment of the status of fisheries/fish stocks; etc.

In undertaking its work, the WG will pay due attention to the FAO Code of Conduct for Responsible Fisheries and its related guidelines, including the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries especially in regards to livelihoods and food security of communities and value chain stakeholders dependent on sustainable management of these natural resources, as well as their contribution to achieving the targets of the UN Sustainable Development Goals, namely SDG 1 and 2; 5, 8; 12, 13 and 14, as well as any other agreed international or regional instruments for the conservation and management of fisheries, and the principles of precautionary, participatory and ecosystem approaches to fisheries management. The activities of the WG are also guided by any specific regional or international fisheries management or related obligations and initiatives or instruments of relevance to the respective resources associated with the specific WG, e.g. any FMPs, Declarations, agreed CMMs, regional strategies, regulations, etc.

2. ROLE OF THE WORKING GROUP

2.1 Scope of the Work

The scope of each WG is to provide scientific and management advice for the sustainable management, conservation and development of living marine resources in the area of competence of WECAFC. This includes the development and support to national and regional plans of action in order to regulate target and bycatch fisheries, as well as manage existing populations within the region. Using a multidisciplinary approach, the WG will contribute to the sustainable management by providing management advice to Members of WECAFC based on the best available scientific knowledge/evidence and traditional/local ecological knowledge

In pursuing this goal, the WG will contribute to the fulfilment of national and regional responsibilities for the marine environment and for the management of Deep-sea fisheries and related or interacting species or fisheries in the WECAFC Region.

2.2 Goal

The goal of each WG is to inform and provide guidance for the management of living marine resources in WECAFC members in such a manner as to promote transformation to responsible fisheries that provide economic opportunities, food security and human nutrition, secure social wellbeing while ensuring the conservation of living marine resources and the protection of marine biodiversity.

2.3 Tasks/functions

The WG will:

- collect, review and share the existing (past and present) data and information on the fishery in the WECAFC area, involving the fishers and private sector, especially women and youth, in addition to identifying the potential for sustainable management and development of such fisheries in the region;
- analyze the data and information collected from capture fisheries and aquaculture production and make recommendations for the sustainability of the fisheries in the WECAFC region;
- monitor changes in distribution and abundance of species of Deep-sea Fisheries in the WECAFC region;
- develop common and feasible methodologies for assessment and monitoring of the fish stock especially in data poor fisheries;

- seek partnerships with other institutions that could provide assistance in the monitoring, evaluation, and recommendations for management for sustainable use, protection and conservation of the resources;
- monitor and provide advice on the management and implementation of regional strategies, regulations and management plans to protect the fish resources;
- establish communication between the members of the WG, other WGs and relevant parties on issues of common interest in order to strengthen regional collaboration in the assessment and management of living marine resources;
- report to the Commission and contribute to communication and visibility of the deliverables of the WG as may be needed;
- identify needs of communities dependent on the fishery resources and investigate alternative livelihoods from fisheries and aquaculture (recreational fishing, hospitality and tourism, etc.);
- carry out research on conservation of fishing resources both commercial and non-commercial fish and crustaceans which are found between 200 and 1000 m of depth which comprise highly complex and dynamic assemblages and diversity of the WECAFC countries;
- contribute towards the conservation of deep-sea communities and their habitats which supply resources for fishing by considering these the focal point of exportation of materials and energy towards neighboring ecosystems;
- favor the conservation of the deep-sea resources considering their individual conditions of low resistance and high vulnerability (for example: deep-sea Chondrichthyes due to the extremely low resilience to fishing exploitation);
- do not allow fishing of any kind beyond 600 m depth to protect the reproductive adult population and biodiversity;
- carry out research on the reproductive biology of commercially important deep-sea crustacean species in the WECAFC countries for management and sustainable use;
- promote the use and training of marine robotic technologies for ecological monitoring: Cameras, underwater Remotely Operated Vehicles (ROV), integrated Optic-Acoustics studies of deep-sea ecosystems;
- carry out research on biodiversity conservation and assessment of the fishing potential of fisheries resources in the deep waters of the WECAFC countries based on an ecosystem approach (for example to identify Marine Protected Areas);
- promote the use of gear and fishing methods that do not alter the habitat, with the active participation of fishermen from the design and construction of the fishing gear: traps (traps) for the selective capture of crustaceans and fish, and artisanal longlines with curved hooks to avoid bycatch of non-target species, fishing methods with a low impact on underwater life and ecosystems;
- to get funding for a Project about "Biodiversity conservation and assessment of the fishing potential of fisheries resources in the deep waters of the countries of The Western Central Atlantic Fishery Commission (WECAFC) based on an ecosystem approach";

2.4 Membership

Membership of the WG shall consist of all Member States of CRFM and WECAFC, OSPESCA, including overseas territories and Departments.

3. MODE OF OPERATION

3.1 Role of Countries

The members of the WG will play a leading role in its activities through the following activities and commitments:

- participate in agreed activities of the WG, and ensure the participation of appropriate experts;
- implement, at the National level, the work identified in the WECAFC endorsed work plan (as appropriate);
- report on implementation of agreed conservation and management measures;
- assist with mobilization of resources for the activities of the WG;
- facilitate the organization of WG meetings in the languages of the Commission;
- · host WG meetings on a rotational basis; and
- facilitate the identification of the Convener of the WG.

3.2 Role of Convener

The Convener of the WG will play a leading role during the organization of the meetings and subsequent follow up with the Secretariat of WECAFC by coordinating the inputs of the members of the WG. The Convener should:

- seek experts from among the WECAFC Members, contact potential partner organizations, and solicit their interest to join in the WG;
- call for meetings as appropriate;
- ensure that technical contributions are received in a timely manner and in the appropriate format;
- ensure that outputs are delivered as agreed during each meeting;
- collaborate closely with FAO-WECAFC and other sub-regional and regional organizations as appropriate;
- assist in the preparation and publication process of the proceedings of the WG meeting;
- participate (in person or virtually) at the SAG meetings to present the draft working documents and provide any clarifications as required;
- facilitate the review by the WG membership within a reasonable period of time (max. 15 days)
 on suggested edits or modifications as considered necessary to address the comments of the
 SAG and the return of the revised document to the WECAFC Secretariat for distribution and
 consideration by the Commission;

- participate in the Commission's sessions (physically or virtually) if required, to support the Secretariat in clarifying or substantiating some points of the draft working documents; and
- assist in the relevant processes to gather information in support of seeking funds to implement priority activities of the WG.

3.3 Election and role of Convener of the Working Group

• The WG shall elect a Convener from among its Members to serve over a two-year period. The term of office of the Convener may be extended as determined appropriate. In the case where another qualified Convener is not available, the Convener's term may be renewed for an additional two-year term until another Convener is selected.

3.4 Roles of the FAO/WECAFC Secretariat

The FAO/WECAFC Secretariat will play a supporting role in the activities of the WG by assisting in:

- coordinating activities of the WG, among WECAFC and Non-WECAFC Members, at the wider regional level (including facilitate procurement of funding);
- assisting with logistical arrangements for the convening of meetings of the WG;
- providing technical assistance, such as a technical secretary or research support, if needed and as resources permit;
- liaising with other RFBs active in the Wider Caribbean Region and neighboring areas for their engagement as much as possible in the work of the WG; these RFBs include amongst others OSPESCA, CRFM, CFMC, ICCAT, NAFO, NEAFC, CECAF, COPPESAALC, etc.;
- liaising with other relevant regional organizations as appropriate, such as the Sargasso Sea Commission, SPAW Protocol, etc.;
- coordinating the formulation and adoption of recommendations and/or resolutions and reports/ documents by the WG so as to facilitate the decision-making process by the Commission;
- ensuring the strategic linkage between the work of the WG and programmes and projects hosted to support the fisheries and healthy ecosystems framework of the CLME+ and any future phase of this project; and
- facilitating training and collaboration of WECAFC Member States and sub-regional training institutions as appropriate and based on available resources.

3.5 Roles of other Subregional organizations (e.g. CFMC, CRFM, ICCAT, OSPESCA, UNEP-CEP, IFREMER, NOAA, CARICOM, OECS, etc.)

Sub-regional organizations have an important role to play in assisting their member countries to participate fully in the activities of the WG. Therefore, they may be invited to:

- provide expertise, technical assistance and support;
- facilitate procurement of funding when possible;
- collaborate in implementing the activities of the WG;
- collaborate with the WECAFC Secretariat and sub-regional organizations in coordinating the activities of the WG; and

• facilitate the decision-making process at the Sub-regional level.

4. OUTPUTS

In discharging its duties, the WG will deliver the following outputs:

- biennial Work Plans;
- reports on assessment of the status of fish stocks;
- draft Fisheries Management Plans;
- draft Regional Plans of Actions;
- proposed Recommendations and Resolutions to the Commission; and
- · revised TORs as needed.

5. COMMUNICATION

A mechanism for ongoing communication among WG members (video conference, Skype, zoom meeting and email), is essential to ensure that the work of the group is sustained between meetings. It must include all WG members and the communication tools must be accessible to all WG members.

The successful functioning of the WG also requires that each member country and organization/ agency identify a national node or focal point who will be contacted through the WECAFC National Focal Point and technically coordinate at national level all matters pertinent to the WG. The outputs of the WG will be communicated through WG reports to WECAFC, OSPESCA, CFMC, CRFM, CITES, UNEP-CEP, ICCAT, IFREMER, and national fishery administrations via the WECAFC Secretariat.

6. WORKING GROUP MEETINGS AND COST

The WG should meet physically or virtually on a regular basis, the timing of which is decided by the members, but at a minimum once every two years. The meetings should be of 2–5 days' duration. The meetings should use cost-effective accommodations and institutional facilities and where possible take advantage of other meetings in the region. Meetings shall be chaired by the Convener of the WG. The reports of the meetings will be formally submitted to OSPESCA, WECAFC, CFMC and CRFM, ICCAT, CITES, UNEP-CEP, IFREMER, Gulf and Caribbean Fisheries Institute Network, etc.

7. AMENDMENTS TO THE TERMS OF REFERENCE

Amendment of these Terms of Reference may be done at each biennial meeting of the Commission for implementation by the WGs in the subsequent intersessional period.

8. TEMPLATES FOR RECOMMENDATIONS AND RESOLUTIONS

Standardized templates will ensure a common understanding of what should be included in draft recommendations and resolutions, ease the reporting of deliverables as well as facilitate their review by other WECAFC bodies, as appropriate. WGs should include the following elements when preparing draft recommendations and resolutions to be presented to the WECAFC membership or other WECAFC bodies (e.g. the Scientific Advisory Group or other WECAFC WGs).

Recommendations and Resolutions

Draft recommendations and resolutions for review by other WECAFC bodies and the WECAFC membership should include the following elements:

- Cover Note: A brief cover note for draft recommendations and/or resolutions should be provided to assist reviewers. The cover note should include a clear, candid, and transparent explanation of:
 - why the action was developed;
 - at which WG meeting it was discussed;
 - a brief overview of how the WG arrived at its decision to put the action forward;
 - how the action will impact future WECAFC activities, including, where relevant any possible changes in resource or workload requirements for Members or the WECAFC Secretariat;
 - the ramifications of *not* approving the recommended action; and
 - the full picture of the context for the recommended action.
- **Preambular Text**: This should provide essential elements to highlight the context and intent of the proposed action in a concise bulleted format. The preambular text should include only the core historical elements and should include references to related decisions or measures.
- Action Text: This should indicate clearly what action(s) the WG is taking, or is asking the WECAFC Membership to take, at a national, subregional, and/or regional level, including specific timelines to which the action(s) will adhere.

Considering that each WG can have more than one meeting, and more than one issue to address during each intersessional period, the WGs can produce several reports/documents or draft resolutions/ recommendations. In order to facilitate analysis by the Commission, each WG shall prepare a single set of recommendations and/or resolutions organized by fishery or by theme, including all the topics addressed in the intersessional meetings. In this regard, the Commission would consider a single set of draft Recommendations and/or Resolutions for spiny lobster, Queen conch, flying fish and dolphinfish, FADs, FDS, etc.

The WGs shall refer relevant recommendations and resolutions of a scientific nature to the SAG for scientific review at least one month before the meeting of SAG, in order to provide adequate time to the Secretariat and SAG members to review them before the meeting. This will improve the efficiency of the reviews during the SAG sessions.

APPENDIX F

Workplans of the WECAFC Working Groups

Draft Work Plan 2022–2024 for the Queen conch Working Group

The QCWG will carry out the following activities in the 2022–2024 period:

Activity	Timetable	Responsible entity	Group/theme
1. Address any gaps in implementation of the management measures in the <i>Regional Queen conch Fisheries Management and Conservation Plan</i> (endorsed by WECAFC 17, CRFM, OSPESCA and CFMC), and continue to monitor implementation of the plan.	January 2022 onwards	CFMC, WECAFC, and CRFM, OSPESCA and the WG members	Technical/ Scientific Advisory/ Collaboration
2. Finalize, publish and disseminate the report of the hybrid WG meeting hosted in Puerto Rico (in hard copies and on-line on http://www.strombusgigas.com/index.htm and at www. WECAFC.org; including the national summary reports).	March 2022	CFMC and FAO with inputs from meeting participants	Communication/ Dissemination
3. Provide technical and scientific advice to national governments, and support national consultations as needed in the region, to advance implementation of the <i>Regional Queen conch Fisheries Management and Conservation Plan</i> and relevant decisions and recommendations adopted by CITES and WECAFC.	January 2022 onwards	WG members (national fisheries and CITES authorities), CRFM, OSPESCA, CITES, CFMC, FAO/ WECAFC, SSTAG	Technical/ Scientific Advisory/ Collaboration
 4. Report on progress with the implementation of relevant CITES and WECAFC decisions, and the outcomes of the WG – at the following: 18th session of WECAFC, July 2022; 19th meeting of the Conference of the Parties to CITES, November 2022; and consider the possibility of organizing a side-event 32nd meeting of the Animals Committee, 2023 	In advance of deadlines for reporting required	CITES/Fisheries authorities of QC range States attending these meetings (as appropriate); CITES and WECAFC Secretariats	Communication/ Dissemination/ Collaboration
5. Support fishers and fisheries administrations in addressing the decent work, employment, and safety-at-sea problems in the Queen conch fisheries, in particular; fisher organizations should be engaged as much as possible for these activities.	January 2022 onwards	NOAA Fisheries/ CFMC and FAO with the fisheries authorities in the region	Capacity Building
6. Prepare a recommendation on the promotion of decent work, health, and safety in the fisheries sector for potential endorsement by the Commission at WECAFC18.	January 2022– February 2022	WECAFC/FAO with CRFM and OSPESCA	Technical/ Scientific Advisory/ Collaboration
7. Support publication of the health and safety study and proposed project.	January– September 2022		Communication/ Dissemination
8. Continue the review and consideration of options for the development of a transparent "chain of custody" procedure to track catches from their harvest location to their eventual destination.	January 2022 onwards	OSPESCA, CRFM, NOAA Fisheries/ CFMC with CITES, WECAFC/FAO and the fisheries authorities in the region	Technical/ Scientific Advisory/ Collaboration
9. Advance research to determine genetic connectivity of Queen conch across the Caribbean, identify stocks, and design/implement a protocol to trace illegally harvested Queen conch in trade. Engage countries to identify points of contact to assist with sample collection and participation in this research.	January 2022 onwards	SSTAG with support of WECAFC/FAO and CITES	Technical/ Scientific Advisory/ Collaboration
10. Create a Task Force – comprised of members from the QCWG and Regional WG on IUU fishing – to intersessionally draft a recommendation prioritizing genetic identification of Queen conch to improve traceability and combat IUU fishing in the region for the QCWG to consider for potential endorsement by the Commission at WECAFC 18.	January 2022 – February 2022	SSTAG, WECAFC, CFMC, CRFM, OSPESCA	Technical/ Scientific Advisory/ Collaboration

Activity	Timetable	Responsible entity	Group/theme
11. Expand the collection of socioeconomic information to analyze contribution of Queen conch fisheries to income, livelihoods, and trade.	January 2022 onwards	CFMC, WECAFC, and CRFM, OSPESCA and the WG members	Technical/ Scientific Advisory/ Collaboration
12. Provide training on the use of modules for the assessment of Queen conch stocks through a regional conference.	January 2022 onwards	SSTAG with support from CFMC, WECAFC/FAO	Technical/ Scientific Advisory/ Collaboration/ Capacity Building
13. Conduct two pilot studies for determination of fishery production as the basis for further analysis of the long-term sustainability of the species and its associated fisheries.	January 2022	SSTAG with support from CFMC, WECAFC/FAO	Technical/ Scientific Advisory/ Collaboration
14. Investigate and consider the impacts of climate change on the Queen conch resources and the fishery.	January 2022 onwards	WG members with support from CFMC, WECAFC/FAO	Technical/ Scientific Advisory/ Collaboration
15. Investigate the ecological and biological impacts of pollution on Queen conch resources.	January 2022 onwards	WG members with support from CFMC, WECAFC/FAO	Technical/ Scientific Advisory/ Collaboration
16. Continue/expand the scientific support to apply updated conversion factors by all countries with a Queen conch fishery. For this purpose, the Scientific and Statistical Sub-Group (SST Sub-group) has: Elaborated a series of technical documents that on conversion factors that need to be apply and updated when reporting conch production / trade data across the region.	Work in progress initiated in 2019 and will continue over the next two years.	CFMC/WECAFC, SST Sub-group membership, CITES	Technical/ Scientific Advisory/ Collaboration
17. Continue review of existing Queen conch NDFs and guidance in order to develop a simplified template for making non-detriment findings for Queen conch, in consultation with the CITES Animals Committee, dissemination of the template to the WG membership for their consideration, and supporting selected countries in applying the templates and sharing the results at the regional level.	Work in progress initiated in 2019 and will continue over the next two years.	CFMC/WECAFC, SST Sub-group membership, CITES	Technical/ Scientific Advisory/ Collaboration/ Capacity Building
18. Determine priority next steps to implement education and outreach as stated in the Regional Queen conch Fisheries Management and Conservation Plan.	January 2022 onwards	CFMC/WECAFC Secretariat and the WG	Communication/ Collaboration/ Education and Outreach
19. Consult with the PROCARIBE+ project to identify potential areas for improving the sustainability of the Queen conch fishery including contributions to the State of the Marine Environment and Associated Economies (SOMEE) reporting mechanism, habitat impacts/restoration and an updated Strategic Action Program Monitoring and Evaluation framework.	January 2022 onwards	CFMC, the WECAFC Secretariat too and/ or the relevant sub- regional partners (CRFM, OSPESCA, Coordination Mechanism for Integrated Ocean Governance in the Wider Caribbean)	Monitoring/ Evaluation/ Collaboration
20. Collaborate with the Blue BioTrade Project regarding improved trade and value-chain activities.	January 2022 onwards	CFMC/WECAFC Secretariat and the WG	Collaboration
21. Continue support to the development of the WECAFC Strategic Plan 2021–2027	January 2022– February 2022	CFMC/WECAFC Secretariat and the WG	Collaboration
22. Review and finalize the new TORs for the QCWG	January 2022– February 2022	CFMC/WECAFC Secretariat and the WG	Collaboration

The Working Group will carry out the following activities in 2022–2023 period

Activity	Timetable	Responsible Entity
Provide technical and scientific advice to national governments and WECAFC Commission	2022–2023	WG members
Report to the: 19th session of WCAFC 12 meeting of the WECAFC SAG	As deadlines for reporting require	WECAFC Secretariat
Continue work on data preparation, training in stock assessment for WG countries and carry out periodic stock assessment	2023	IFREMER/CRFM/WECAFC in collaboration with NOAA, FIRMS and potential funders
Search resources for collaborative research to complement and refine results on stock identification and extend research to additional shrimp and groundfish species	2022–2023	WG members
Revise the terms of reference of the WG to reflect expected tasks on provision of advice to a formal shrimp and groundfish resources management mechanism in the North Brazil- Guianas shelf.	5th meeting of the WG in 2022	IFREMER/CRFM/WECAFC, WG members with support from CLME+
Collaborate with:		
-Regional WG on Illegal, Unreported and Unregulated Fishing		
-WECAFC/CRFM/OSPESCA Fisheries Data and Statistics WG		
Further studies on mainstreaming human well- being (including gender and working conditions) in fisheries policies		Member countries
Next session of WG-intersessional meeting	November 2022	WECAFC, IFREMER, CLME+

WECAFC/CITES/OSPESCA/CRFM/CFMC Working Group on Shark Conservation and Management workplan 2022–2024

2022–2024			-	
Objectives	Needs	Actions	Timeframe for implementation S: "Short-term (1–3 years) " M: "Medium-Term (3–5 years)" L: "Long-Term (5–10 years)" O: "Ongoing"	Actors (other than WECAFC Members)
1. Improving understanding of the status of shark ¹ populations in the WECAFC geographic area of competence through research, monitoring and data collection.	1.1. Essential data for assessing population status and/or risks of relevant species.	1.1.1. Collection of scientific and empirical information on relevant species' biology and ecology, including life history characteristics, behaviour, feeding, identification.	S/M	Public and private research institutions, NGOs, Universities
		1.1.2. Collection of scientific and empirical information on population dynamics, distribution, spatial-temporal and/ or migratory patterns of relevant species. Delineation of pupping and nursery areas and critical habitats, etc.	М	Public and private research institutions, NGOs, Universities
	1.2. Accurate and reliable species-specific time-series data and statistics on sharks from commercial and recreational fisheries, including total shark catches (landings and live and dead discards at sea) and effort for all fisheries (directed or by-catch) on a species-specific basis across the region.	1.2.1. Implementation of long-term fisheries data collection, verification and monitoring programs to collect commercial and recreational fisheries data, including total catches and effort, age/length compositions etc. at species level.	O/S	Governmental fisheries agency. Public and private research institutions, Universities.
		1.2.2. Ensure a scientifically appropriate level of observer coverage onboard fishing vessels to collect species-specific biological information and fisheries information for relevant targeted and/ or incidentally caught sharks.	O/M	
	1.3. Availability of appropriate methodologies for assessing the conservation status of relevant shark-stocks.	1.4.1. Development and/ or implementation of existing standardised methodologies, such as abundance indices, quantitative or semi- quantitative stock assessments, or other appropriate approaches (e.g. data-poor methods, genetic methods etc.).	М	

For the purpose of this RPOA, « sharks » encompasses all fishes of the class Chondrichthyes (sharks, skates, rays and chimaeras).

Objectives	Needs	Actions	Timeframe for implementation S: "Short-term (1–3 years)" M: "Medium-Term (3–5 years)" L: "Long-Term (5–10 years)" O: "Ongoing"	Actors (other than WECAFC Members)
	1.4. Social, economic, trade and cultural information and data.	1.4.1. Collection of available trade data and market chain information for shark products at lowest possible taxonomic level, ideally species level.	М	
		1.4.2. Implementation of appropriate labelling and custom coding for priority/relevant sharks species and products thereof.	M/L	
		1.4.3 Collection of information about social and cultural practices related to sharks.	S/M	
2. Ensuring that shark catches are sustainable and that sharks' species/stocks with poor or protected conservation status have appropriate conservation measures in place	2.1. Fishing mortality is maintained at sustainable levels that prevent overexploitation and allow recovery of sharks with poor conservation status.	2.1.1. Reduction of shark by-catch in non-target fisheries and limiting directed catch and effort in target fisheries to sustainable levels.	S/M	
		2.1.2. For relevant shark stocks, development of conservation and management reference points that could serve as a basis for deriving stock status and evaluating the achievement of management objectives.	M/L	
		2.1.3. Design, implementation and monitoring for compliance with appropriate, science-based conservation and management measures	0	
		2.1.4. Implementation of the precautionary approach in the absence of adequate scientific information, where appropriate.	S	
		2.1.5. Design and promotion of safe handling and release guidelines for shark species, appropriate.	М	

Objectives	Needs	Actions	Timeframe for implementation S: "Short-term (1-3 years)" M: "Medium-Term (3-5 years)" L: "Long-Term (5-10 years)" O: "Ongoing"	Actors (other than WECAFC Members)
	2.2. Exploration and, as applicable, implementation of methods to improve traceability in the trade flows of sharks and products thereof.	2.2.1 Exploration of regional fisheries sustainability initiatives (e.g. certification, FIPs, etc.)	L	
	2.3. Implementation and compliance with applicable measures adopted under national and international legislation, as appropriate, such as, UNCLOS, UNFSA, ICCAT, CITES, etc.	2.3.1 Development of national laws and policies in line with FAO Code of Conduct for Responsible Fisheries	S/M	
		2.3.2. Binding international obligations (primarily under Multilateral Environmental Agreements and Regional Fisheries Management Organisations) are codified into national law and regulations.	S/M	
		2.3.3. Full utilization is promoted and by-catch of sharks is reduced in other fisheries.	S/M/L	
		2.4.6. Development of Non-Detriment Findings for the exports of CITES-listed shark products.	S/M	
	2.4. Adequate monitoring and enforcement of shark conservation and management measures.	2.4.1. Implementation of effective monitoring, control and surveillance (MCS) systems (properly staffed, trained, equipped, financed and supervised), including observers, VMS, electronic monitoring, etc. that specifically include monitoring of shark catch and bycatch. 2.4.2 Establishment/ improvement of institutional and legal frameworks for the implementation of shark conservation and management measures, implementation of the RPOA, regulation of surveillance and enforcement activities, empowerment of staff to carry them out, and	S/M/L S	

Objectives	Needs	Actions	Timeframe for implementation S: "Short-term (1–3 years)" M: "Medium-Term (3–5 years)" L: "Long-Term (5–10 years)" O: "Ongoing"	Actors (other than WECAFC Members)
		2.4.3. Combat IUU fishing activities	0	
3. Foster regional cooperation and improved governance for the conservation and management of sharks in the WECAFC region	3.1. Strengthened capacity of subregional and regional organisations dealing with the conservation and management of sharks to coordinate their activities, avoid duplication of efforts and optimise the use of available resources, to ensure that target and non-target shark fisheries in the region are sustainably managed, based on species' full range and all sources of mortality, by using all of the available biological, ecological, social, or economic information from each stock and fishery.	3.1.1. Regional systematic sharing of information and data, including through the WECAFC Data Collection Reference Framework, with sub/regional organisations with a mandate for the conservation and/or management of sharks, in line with confidentiality rules.	S	
		3.1.2 Harmonisation of data collection protocols and information exchange systems related to sharks	M	
		3.1.3. Cooperate and coordinate on MCS activities and fighting IUU activities, including related to sharks, at bilateral, subregional and regional levels	S	
		3.1.4. Coordination of research priorities and activities related to the conservation and management of sharks	0	
		3.1.5. Development and coordination of capacity building activities related to sharks (e.g. training workshops, practical trainings etc.) by consolidating available resources and fostering expertise at subregional and regional levels.	О/М	
	3.2. Strengthened/ improved governance of subregional and regional organisations dealing with the conservation and management of sharks	3.2.1. Identification of policy, conservation and management issues related to sharks that require subregional/ regional cooperation to be effectively addressed.	O	

Objectives	Needs	Actions	Timeframe for implementation S: "Short-term (1–3 years)" M: "Medium-Term (3–5 years)" L: "Long-Term (5–10 years)" O: "Ongoing"	Actors (other than WECAFC Members)
		transparency and inclusiveness through the participation of relevant stakeholders (e.g. fishermen, fishers' organisations, fisheries managers, scientists, civil society/NGOs etc.) in the proceedings of subregional, regional fora addressing sharks-related issues.	O	
		3.2.3. Development/ strengthening of collaborative arrangements between subregional/ regional/ international organisations involved in the conservation and management of sharks	0	
	3.3. Regular review and update of the RPOA-sharks to evaluate its adequacy and effectiveness, as well as, reflect new developments and knowledge	3.3.1 Development/ update of appropriate ToRs, methodologies (including indicators and metrics), to enable the assessment of progress towards RPOA objectives, identifying successes, shortcomings, gaps etc.	0	
		3.3.2. Assess progress towards the RPOA-sharks implementation, including through annual reports	S	
	3.4. Cooperation with relevant Multilateral Environmental Agreements (e.g. SPAW Protocol, CITES, CMS)	3.4.1. Participation in deliberations relevant to sharks (e.g. SPAW Protocol, CITES, CMS).	0	
4. Promote communication and increased public and stakeholder awareness about shark management and conservation	4.1. Ensure opportunities for engagement and participation by all stakeholders in shark conservation and fisheries management decisions to increase levels of public support, in line with actions under 3.2.2.	4.1.1. Stakeholder meetings organized, as appropriate, on specific issues related to shark conservation and management.	S	
		4.1.2 Processes for regular stakeholder feedback on the decision-making process on conservation and management measures	S	

Objectives	Needs	Actions	Timeframe for implementation S: "Short-term (1–3 years)" M: "Medium-Term (3–5 years)" L: "Long-Term (5–10 years)" O: "Ongoing"	Actors (other than WECAFC Members)
	4.2 Effective communication with stakeholders	4.2.1 Use existing and, if needed, develop appropriate communication tools for raising awareness about sharks adapted to the targeted audience.	S	
		4.2.2. Environmental education activities including surveys, information and awareness raising campaigns etc. to raise public awareness about shark conservation and management	S	
5. Capacity building and financing mobilization for the effective implementation of the RPOA.	5.1. Adequate resources are allocated for the implementation of the RPOA sharks	5.1.1. Elaboration of a strategy for ensuring that adequate financial resources are made available for RPOA implementation at national level	S	
		5.1.2 Identify and seek commitment of potential donor agencies and organizations for supporting the implementation of the RPOA	S	
	5.2. Availability of regional expertise in the conservation and management of sharks	5.2.1. Organise regular training workshops and courses in shark biology, ecology, data collection, identification, stock assessments methods, management, etc. for targeted audience including fisheries observers, researchers, fisheries managers, civil society and other relevant NGOs	S	

Status since Third Regional Working Group illegal, unreported and unregulated fishing meeting and proposed 2020–22 workplan

Activities completed since 3rd RWG-IUU:

•	# Activity	Timeframe	Responsible	Status	Proposed activity end date	Notes
	Develop a draft regional plan of action to combat IUU fishing (RPOA-IUU)	Rescheduled to 2018	RWG IUU coordinated by the WECAFC Secretariat			Completed
2	2 Develop and finalise RPOA IUU	January 2019	WG Members with WECAFC, CRFM, OSPESCA, Consultant(s)	Activity pursuant to outcome of RWG IUU 3, http://www. fao.org/3/ca9457t/ ca9457t.pdf	Submission to WECAFC 17 in July 2019	Completed
,	3 Organization of the 3rd meeting of the RWG-IUU – focus on the RPOA- IUU finalization	26–28 September 2018	WECAFC + CRFM (as convener): meeting supported by EU-DG Mare funded project, the CLME+ project sub- project for shrimp and groundfish and REBYC II LAC	Meeting held http://www.fao.org/3/ ca7572en/CA7572EN. pdf		Completed
4	Submission of advice and recommendations generated by the 3 RWG-IUU meetings for review/discussion and approval within CRFM and OSPESCA	October 2017– January 2019	Interim Coordination Mechanism for Sustainable Fisheries (CLME+ supported)	Recommendations from 1st and 2nd meetings and the outcomes of 3rd meeting to be submitted to ICM once clarified	In time for WECAFC 17	Completed
;	Reporting to the 9th meeting of the WECAFC Scientific Advisory Group (SAG) for review of advice and recommendations	November 2018	Convener + WECAFC Secretariat	Recommendations from RWG IUU 3rd meeting submitted to SAG for endorsement	November 2018	Completed

Items ongoing or postponed since the 3rd RWG-IUU:

#	Activity	Initial Timeframe	Responsible	Status	Proposed activity end date	Notes
1	Design and carry out a review study to assess the nature and extent of IUU fishing in the WECAFC region	2019	Convener + WG members	(Had previously been) postponed pending development/ finalization of FAO methodological guidelines	2021	In coordination with NFIO's work towards methodology to estimate the extent of IUU fishing. Pending the field guide toward mid 2021
2	Develop NPOAs -IUU based on the RPOA-IUU and inform FAO/WECAFC after adoption	2018 to 2020	WG members	ongoing	2021	To be informed by the ongoing work on NPOA-IUU development guidance and the findings of the members Readiness study.
3	Finalization of the study proposal Determining cost effective measures to combat IUU fishing, and approaching of potential resource partners	2019	Convener + CRFM	Concept note developed; develop and finalise proposal	Dependent on progress of assessment of the extent of IUU	Postponed. Achievement based on relevant info from the study to assess the nature and extent of IUU fishing

#	Activity	Initial Timeframe	Responsible	Status	Proposed activity end date	Notes
4	Encourage/support increased national regulations, to ensure effective monitoring and control of transshipment activities	2018 to 2020	Interim Coordination Mechanism for Sustainable Fisheries; WG Members	New activity pursuant to outcome of RWG IUU 3	2022	In progress in national support activities
5	Identify information that should be shared at regional level to facilitate enforcement of national transshipment regulations	2018–2019	Interim Coordination Mechanism for Sustainable Fisheries; WG Members	New activity pursuant to outcome of RWG IUU 3	2021	Important for the work to be done to raise awareness on transshipment contributing to laundering IUU catch into the supply chain and improve the monitoring, control and regulation of transshipment activities
6	Encourage/support alignment of national regulations, with voluntary guidelines for marking of fishing gear.	2018–2019	Interim Coordination Mechanism for Sustainable Fisheries; WG Members	New activity pursuant to outcome of RWG IUU 3	2020–2021	In progress in national support activities
7	Develop an IUU Vessel List for the region, using internationally applied criteria and procedures, and arrange with TM Tracking for maintaining the list	September 2018	WG Members with WECAFC, CRFM, OSPESCA and TM Tracking	t.b.d.	Guidance to be sought from WECAFC18	Probable review of the FAO Standard Specifications for the Marking and Identification of Fishing Vessels
8	Develop protocols for "cooperation in monitoring, control and surveillance to combat illegal, unregulated and unreported fishing" under the Caribbean Community Common Fishery Policy and OSPESCA, respectively	2018 to 2020	CRFM, OSPESCA plus relevant WG members; supported by WECAFC Secretariat	ongoing	Late 2021	
9	Organize exchange of information and study tours for WG members to learn about successful and best-practice approaches in MCS and fisheries inspection in general	2018–2020	WG members, facilitated by the CRFM, OSPESCA and WECAFC Secretariats	Ongoing	2022	Needs to be strengthened, with more collaboration, information generation by WG members or WECAFC focal points then coordination by WECAFC Secretariat

New items proposed for 2020-2022:

#	Activity	Activity Timeframe Responsible Status		Proposed activity end date	Notes	
1	Assessment of WECAFC members' readiness to implement the RPOA-IUU	2020	WECAFC Secretariat in consultation with WG Convener and NFIO colleagues	Study completed	September 2020	Report to be presented to the 4th WG Meeting then publication
2	Develop new draft recommendation for regional vessel record for WECAFC region	2020	WECAFC Secretariat together with FAO HQ, in consultation with WG Members	-	In time for WECAFC 18	
3	Organise the 4th RWG- IUU and publication of the proceedings	2020	RWG-IUU	-	November 2020	

#	Activity	Timeframe	Responsible	Status	Proposed activity end date	Notes
4	Guidance document for the development of NPOA-IUU	2020	CLME+ project together with FAO HQ and WECAFC Secretariat		December 2020	
5	Engage in the ongoing process coming up to COFI 34 for the possible development of guidelines for regulating, monitoring and controlling transshipment operations	2020–2021	WG Members	-	COFI 34	
6	Development of a GEF proposal to combat IUU fishing in selected countries in the WECAFC area	2020–2021	CLME+ project together with FAO HQ and WECAFC Secretariat		2021	Concept Note to be presented at the 4th WG Meeting for expression of interest by WECAFC members
7	Development of an implementation plan of the RPOA-IUU	2021	WECAFC Secretariat and FAO HQ colleagues		In time for WECAFC18	Based on the findings of the readiness study, the report of which includes the elements of an implementation plan. WG to guide on the what makes sense to be done next
8	Presentation of deliverables (recommendations and resolutions) of scientific nature to the 11th Session of the Scientific Advisory Group (SAG) of WECAFC	2021	WECAFC Secretariat and Convener of the RWG-IUU	-	April 2021	As per WECAFC17 instructions, WG convener to present recommendations to SAG and be on hold for the Commission's deliberations
9	Report on the work of the RWG-IUU and eventual support to SAG for the submission of recommendations to WECAFC18	2021	SAG and WECAFC Secretariat in consultation with WG Convenor		July 2021	As per WECAFC17 instructions, WG convener to present recommendations to SAG and be on hold for the Commission's deliberations
10	Organise the 5th RWG- IUU and publication of the proceedings	2020–2021	RWG-IUU	-	2022	

Draft 2022–2023 Work Plan of the Spawning Aggregations Working Group

The Working Group will carry out the following activities in 2022–2023 period:

Activity	Timetable	Responsible entity	Group/theme
Present Fishery Management Plan (FSAMP) to WECAFC Scientific Advisory Group (SAG) to review the recommendations	Spring 2022	WECAFC Secretariat	Technical/Scientific Advisory
Convene the 5th meeting of the SAWG (Panama)	March 2–3, 2022	WECAFC + CFMC as coordinator; meeting supported by NOAA Fisheries Deferred	Coordination/ Collaboration
Submit Fishery Management Plan to WECAFC 18 (Nicaragua)	Summer 2022	Spawning Aggregations WG	Technical/Scientific Advisory
Publish and distribute Report of 5th SAWG meeting (2022)	Fall 2022	WECAFC + CFMC supported by NOAA Fisheries	Coordination/ Collaboration

Activity	Timetable	Responsible entity	Group/theme
Maintain the SAWG network intersessional communications by regularly posting FSA news and events to the GCFI, CAMPAM, and other lists	2021–2025	FWRI (Acosta) Ongoing – ListServe established; postings ongoing	Education and Outreach
Final cooperative monitoring program and database	Not started	WECAFC, CFMC, NOAA Fisheries, SAWG members and researchers, and others Requires funding	Technical/Scientific Advisory
Develop a FSA Protocol to: 1) report on the status of spawning aggregations and associated environmental factors, and 2) evaluate local management initiatives. Identify lessons learned and apply positive outcomes.	Present draft at 6th SAWG meeting; adopt at 7th SAWG meeting	FSAMP Team Funding application submitted (applicable to all relevant countries)	Technical/Scientific Advisory
Conduct a regional and national status and needs assessment of FSA sites in the WECAFC region	Not started	WECAFC, CFMC, NOAA Fisheries, SAWG members and researchers, and others Requires funding	Technical/ Scientific Advisory
Establish clear and simple guidance to: 1) update and/or verify the status (timing and location, fish numbers, catches) of known spawning aggregations at the national level, and 2) facilitate prioritization of those spawning aggregations most urgently needing protective action.	2022–2023	FSAMP Team Funding application submitted (applicable to pilot countries)	Technical/ Scientific Advisory
Mobilize resources from bilateral and international agencies to assist with Activities called for in SAWG Work Plan	2021–2025	WECAFC, CFMC, NOAA Fisheries, SAWG members, and others Initiated summer 2021	Coordination/ Collaboration
Secure financial support to develop Digital Hub in support of Communication Plan with downloadable resources and resource library	2022–2023	CFMC (support to A. Salceda, BelugaSmile) Requires additional funding USD 100 000	Education and Outreach
Production of one-hour film for International Broadcast	Jan-Sept 2022	Ana Salceda, BelugaSmile Productions, supported by The Howard Hughes Medical Institute (HHMI), Terra Mater and PBS	Education and Outreach
Develop materials for Citizen Science Program aimed at fishers and enforcement officials: 1) Produce & distribute radio kits in Spanish and French; 2) Produce & distribute two short films: a) a 30 minute "call to action" film aimed at fishing communities to stop decline of mutton snapper; and b) a film that calls on the general public to protect FSAs by not consuming grouper and snapper during spawning periods	2022–2023	CFMC (support to A. Salceda, BelugaSmile) Radio kits require USD 32 000 Short films require USD 38 000	Education and Outreach
Share technical capacity to identify FSAs in regions where FSAs have not been documented or characterized (e.g. Eastern Caribbean)	2021–2025	WECAFC Requires funding	Technical/ Scientific Advisory
Implementation of 1) Public Broadcasting Service's Outreach plan and 2) The Howard Hughes Medical Institute's (HHMI) Science Outreach Plan.	2022–2023	Ana Salceda will coordinate with HHMI & PBS.	Education and Outreach
Secure support to assist WECAFC members with FSAMP Implementation for most urgent actions needed	2022–2023	FSAMP Team, CFMC, NOAA Fisheries, WECAFC Funding application submitted	Coordination/ Collaboration

Draft 2022-2023 Work Plan of the Fisheries Data and Statistics Working Group

The Working Group will carry out the following activities in 2022–2023 period. [Highlighted text indicates minor editorial change since March 2022 FDS-WG2 Conclusion meeting.]

Activity	Timeframe	Responsible entity	Group/theme		
Extended Meeting Components					
1. Vessel mapping Content	2022–2023	WECAFC-FIRMS and member countries	Technical		
a. Liaise with FDS WG focal points for additional submissions					
b. Review submission from WECAFC Members and highlight where revisions are needed					
c. Implementations in the Regional Database with corresponding metadata					
 d. Discussion of adding vessel type information into FIRMS tables, including vessels images when available 					
2. WECAFC Subarea Boundaries	2022–2023	FDS-WG and member countries	Technical/ Coordination		
Finalize the proposal in the Honduras, Nicaragua and Guatemala sub-region under the OSPESCA umbrella					
 B. Review feedback from member countries on sub-areas related to area 31 and 41, and if the case appears feasible, prepare for presentation at CWP 					
c. Discuss a recommendation for SAG and the Commission, or any other plan to move forward					
d. Conduct intersession discussions on Venezuela (Bolivarian Republic of) sub area delimitations					
3. FIRMS Inventories	2022–2023	WECAFC-FIRMS and member countries	Technical/ Collaborative		
Summarize inputs by member countries, highlight latest submissions, discuss/elaborate specific FIRMS services for the region (delivered through WECAFC map viewer)					
 b. Discuss/identify/implement a path for updating inventories in OSPESCA region e.g. consultant to further inventory development on a country by country basis possibly, considerations of focus groups working with fleet segments (across multiple member countries) to enrich inventories 					
c. Also noting that FIRMS Secretariat may develop a pilot demonstrating how a possible future addition of FIRMS fishery lds (optional) in certain Tasks of the DCRF can be exploited, for presentation at next FDS-WG					
4. Small Scale Fisheries Matrix	2022–2023	FAO and FDS-WG	Technical/ Collaboration		
Summarize list of member countries which submitted highlighting latest submissions and new pilot testing					
b. Present a synthesis of the level of adaption of the SSF matrix to the WECAFC region and what would need to be changed in the SSF matrix for it to be of practical application for the region					
c. Discuss a recommendation for submitting to FAO for consideration WECAFC iDCRF					

Activity	Timeframe	Responsible entity	Group/theme
5. WECAFC Reference list of aquatic species, annotation of important Subareas by species and DCRF tasks	2022–2023	FDS-WG and member countries	
a. Review submissions by member countries and WGs for additional species, and subareas for species, and proceed with member countries endorsements for the proposals. The use of the FIRMS map viewer will help to obtain additional input on annotation of area by species.			
b. Review inputs from relevant WGs, for the list of species and their sub-areas and identification of specific DCRF tasks			
c. Annotation of relevant standard conversion metrics by species/subarea for inclusion in DCRF catalogue (Tables) of conversions			
d. Annotation of relevant biological parameters for select set of species in main list of species by important subareas (e.g. reproductive ogives, growth parameter estimates) for inclusion in DCRF catalogue (Tables) of biological parameters			
6. iDCRF	2022–2023	FDS-WG and member countries	Technical
a. A revised DCRF document will be made available early December for review by Members, WGs and ICCAT by end January 2021, for consolidation in February and final review in March for adoption at the extended session of FDS-WG2 (end March/early April) of a recommendation for SAG and the Commission, or any other plan to move forward			
b. Further proofing DCRF (post extended session of FDS-WG2) with:			
i. pilot testing starting with Data preparatory workshop and initial country submissions that will follow			
ii. two proposed e-TWGs:			
 for elaboration on measures of fishing effort per Fleet segment or Gear type 			
 for refinement of Biological tasks – member countries with experience invited to be part of this WG 			
I. Operationalization of the DCRF and Contributions to RDB-1 post Q2 2021, initiate June 2021	2022–2023	FDS-WG and member countries	Technical/ Collaboration
Finalize the Maps viewer (through e-TWG?) for public release as soon as possible			
2. Identifying member countries willing to commit in the intersession, to populate the RDB using local statistics in 2020 and 2021. Local statistics uploaded to RDB. Identification of local country data manager.			
3. Liaising with and identifying Regional species WGs to combine their expectations for data with the member countries contribution (Shrimp and Groundfish, Lobster,), and organize joint activities			
Identifying issues/challenges with member countries committing data to RDB during pilot tests			

Activity	Timeframe	Responsible entity	Group/theme
Developing road map including pilot data sets for implementing data uploads to RDB by end of 2021			
(*) [Consider communication of OSPESCA Director of 12 June 2020 on topic of collaborating on pilot data sets to test for RDB that currently are already capturing statistics]			
II. Discussion of how the RDB information can contribute to informing SDG 14.4.1 (initiate Q1 2021 through the work of the FDS-WG via the DCRF? Has any progress been made yet, what is needed to begin to make progress (individual member countries operationalizing the DCRF through committing to contribute to the RDB). Develop some time tables and a path (roadmap)-	2022–2023	FAO and FDS-WG	Technical/scientific advisory
Consider if a sub-committee needed- perhaps focus on one of the pilots (e.g. OSPESCA lobster)			
III. Fostering Growth of FDS-WG throughout region -this work is ongoing	2022–2023	FDS-WG	Communication/ Outreach
Co-convener shadow training to develop leadership in WG			
IV. How can this WG interact or begin to interact with other regional/international WGs (species, topical, RFMOs) to further improve the regional statistics and information on fisheries	2022–2023	FDS-WG//	Collaboration/ Coordination/ Outreach
Under MoU with ICCAT- contribute to the planned joint ICCAT-WECAFC WG where respective species list might be examined			
2. Should this WG contact ICCAT re' participating in ICCAT statistics WG as observer to learn how ICCAT develops/ prioritizes and carries out its tasks/ intersessional work on the topic of statistics (a question to ask to the participants? would anyone volunteer)			
V. Review Logbooks guidelines and revisit FDS-WG 2 (LOG-1) Begin Q3 2021	2022–2023	FDS-WG	Technical
Review work done during FDS-WG 1 intersession- discuss LOG-1 (two pilot surveys) and LOG-2 (historical experiences) survey instruments in context of best practices in logbook implementation in region and identify needed revisions for survey instruments LOG-1, LOG-2.			
VI. Capacity building – other needs – this work is ongoing	2022–2023	FDS-WG, WECAFC-FIRMS, FAO-FIRMS	Communication/ Coordination/ Collaboration
Finalize the list of selection criteria and propose a short list of WECAFC Members meeting these criteria for final selection			
For the selected WECAFC member(s), define the work plan and related budget for support			
Seek for co-funding from other regional projects and agree on the shared investments			

Draft 2022–2023 Work Plan of the Caribbean spiny lobster Working Group

The Caribbean spiny lobster Working Group will carry out the following activities in the 2022–2023 period:

Activity	Calendar	Responsible entity	Group/topic
Organisation and holding of the 3rd meeting of the Caribbean spiny lobster Regional WG.	Later than December 2022	WECAFC + OSPESCA	Implementation of the regional management plan in the countries. Presentation of the PROCARIBE+ project and the role of the group and WECAFC in it.
Preparation and approval by the group members of the CSL-RWG work plan.	December 2022	CSL-RWG	Generate a complete work plan approved by the group.

Draft 2022-2023 Work Plan of the Shrimp and Groundfish Working Group

The Shrimp and Groundfish Working Group will carry out the following activities in the 2022–2023 period:

Activity	Timetable	Responsible entity
Provide technical and scientific advice to national governments and WECAFC Commission	2022–2023	WG members
Report to the 19th session of WCAFC 12 meeting of the WECAFC SAG	As deadlines for reporting require	WECAFC Secretariat
Continue work on data preparation, training in stock assessment for WG countries and carry out periodic stock assessment	2023	IFREMER/CRFM/WECAFC in collaboration with NOAA, FIRMS and potential funders
Search resources for collaborative research to complement and refine results on stock identification and extend research to additional shrimp and groundfish species	2022–2023	WG members
Revise the terms of reference of the WG to reflect expected tasks on provision of advice to a formal shrimp and groundfish resources management mechanism in the North Brazi - Guianas shelf.	5th meeting of the WG in 2022	IFREMER/CRFM/WECAFC, WG members with support from CLME+
Collaborate with: -Regional WG on Illegal, Unreported and Unregulated Fishing (RWG-IUU) -WECAFC/CRFM/OSPESCA Fisheries Data and Statistics WG (FDS-WG)		
Further studies on mainstreaming human well- being (including gender and working conditions) in fisheries policies		Member countries
Next session of WG-intersessional meeting	November 2022	WECAFC, IFREMER, CLME+

Draft 2022-2024 work plan of the anchored fish aggregating devices Working Group

Draft 2022-2024 Work plan of the anchored fish aggi		
Activity	Timetable	Responsible entity
To review data on aFAD fisheries and conduct analyses of pelagic fish resources, including through collaboration with the Fisheries Data and Statistics Working	Ongoing	Convener with CRFM, OSPESCA, WECAFC Secretariat, and IFREMER
To provide technical advice and guidance based on the outputs of the JICA-CARIFICO Project and the Billfish Project	2022–2023	WECAFC Members, CRFM, and OSPESCA
To collaborate with IFREMER, academia, and other research institutions on the use of technology on aFADs (e.g. satellite-linked echosounders) for improved assessment of abundance of key fish stocks associated with aFAD fisheries	2022–2023	Convener with CRFM, OSPESCA, WECAFC Secretariat, and IFREMER
To develop and finalize manuals on best practices on (1) fishing and business strategies for sustainable aFAD fisheries, (2) safety and working conditions of aFAD fishers, and (3) governance of aFAD fisheries. These manuals should be presented during training sessions with fishers	2022–2024	Convener with CRFM, OSPESCA, WECAFC Secretariat, and IFREMER
To promote the reporting of aFADs fisheries statistics to ICCAT	2022–2024	CRFM, WECAFC Secretariat, and IFREMER
To develop and finalize manuals on best practices on (1) fishing and business strategies for sustainable aFAD fisheries, (2) safety and working conditions of aFAD fishers, and (3) governance of aFAD fisheries. These manuals should be presented during training sessions with fishers	2022–2024	WECAFC Members
To promote the reporting of aFADs fisheries statistics to ICCAT	2022–2024	OSPESCA, CRFM, and WECAFC Secretariat
To collaborate on co-management within aFADs fisheries, noting the successful examples in Grenada, Dominica, and Bonaire, and strengthen ties with the recreational fisheries WG	2022–2024	CRFM with assistance of CFMC, OSPESCA, and relevant fisherfolk organizations and National Fishery Authorities
To collaborate on use of low-cost Information and Communication Technology (ICT) for improved monitoring of aFAD fisheries, noting the promising examples of Dominica and Monserrat and strengthen ties with Fisheries Data and Statistics WG	2022–2023	WECAFC Secretariat and Fisheries Data and Statistics WG
To facilitate the sharing of data, information, and experiences related to aFAD fisheries in the region in collaboration with the Fisheries Data and Statistics WG	2022–2023	CRFM with assistance of CFMC, OSPESCA, and relevant fisherfolk organizations and National Fishery Authorities
To facilitate the sharing of information and experiences related to aFAD designs in the region and outside the region	2022–2023	WECAFC Secretariat and Fisheries Data and Statistics WG
To review and finalize the Regional Management Plan for aFAD Fisheries in the Caribbean, the guide for improved monitoring of aFADs, and the guide for implementation of local MFAD fishery management plans	Q2 2022	WECAFC Secretariat
To support Members' efforts to develop (sub-) national FAD (co-) management plans and improved monitoring systems for aFADs	2022–2023	OSPESCA, CRFM, and WECAFC Secretariat, WECAFC members

Draft 2022-2023 work plan of the Deep-sea fisheries Working Group

Activities	Outputs	Key performance indicator	Timeframe	Commission endorsement required	Total budget required	Budget sources and status	Responsible	Strategic Plan Focus Area
Workshop1: prepare a regional project		Regional project start up	July 2022	No, for information	USD 28 000	anu status	Convener with OSPESCA, WECAFC Secretariat	Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner. (1,2,3)
Project preparation			July-October 2022	No, for information			Convener with OSPESCA, WECAFC Secretariat	
Report Workshop1		report	November– December 2022	No, for information			Convener with OSPESCA, WECAFC Secretariat	
Workshop2: monitoring, management and conservation strategies		report	April 2023	No, for information			Convener with OSPESCA, WECAFC Secretariat	Same as above
Report Workshop2			May-June 2023	No, for information	USD 28 000		Convener with OSPESCA, WECAFC Secretariat	
Training 1: Marine robotic technologies for ecological monitoring		report	February 2022	No, for information	USD 21 000		Convener with OSPESCA, WECAFC Secretariat	Same as above
Report Training 1			March 2022	No, for information			Convener with OSPESCA, WECAFC Secretariat	
Training 2: Fisheries Stocks assessment data-poor fisheries		Report	July 2023	No, for information	USD 21 000		Convener with OSPESCA, WECAFC Secretariat	Same as above
Report Training 2			August 2023	No, for information			Convener with OSPESCA, WECAFC Secretariat	
Technical report/ Publications		Online Publication	December 2022 October– December 2023	No, for information	USD 2 000+ USD 1 000 (Stationery (paper, pens, pencils, envelops, banner, etc.))		Convener with OSPESCA, WECAFC Secretariat	Same as above

Activities	Outputs	Key performance indicator	Timeframe	Commission endorsement required	Total budget required	Budget sources and status	Responsible	Strategic Plan Focus Area
Documentary video		Video broadcasting	November– December 2022	No, for information	USD 4 000		Convener with OSPESCA, WECAFC Secretariat	Same as above
			September– December 2023					

The Eleventh Session of the SAG of the WECAFC was held virtually from 25–27 April 2022. The session was attended by six members of the SAG, eight WG members and about 31 observers. The SAG endorsed five (5) recommendations from the WGs.

The SAG reviewed outputs from activities of the WG carried out during the intersession, which also included draft recommendations to the 18th session of WECAFC, tailored terms of reference and 2022–2024 workplans. The SAG also recommended further revisions of the interim, DCRF.

In addition, the SAG requested that consideration of a standard template for WG workplans be considered for the next session and that consideration of a hybrid format be made for future sessions as a mechanism to engage additional participation.

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