

Food and Agriculture Organization of the United Nations WESTERN CENTRAL ATLANTIC FISHERY COMMISSION SLC/FIA/C1117

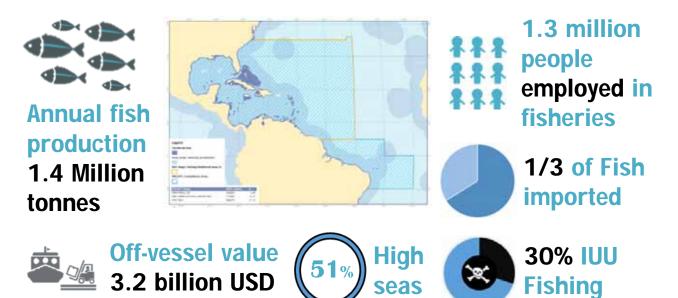
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WESTERN CENTRAL ATLANTIC FISHERY COMMISSION

FINDINGS OF THE INDEPENDENT COST-BENEFIT ASSESSMENT OF THE OPTIONS FOR STRATEGIC RE-ORIENTATION OF WECAFC

THE WESTERN CENTRAL ATLANTIC



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FINDINGS OF THE INDEPENDENT COST-BENEFIT ASSESSMENT OF THE OPTIONS FOR STRATEGIC RE-ORIENTATION OF WECAFC

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS Bridgetown, Barbados, 2016

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Tribute to Kjartan Hoydal

This publication is dedicated to the memory of Kjartan Hoydal, who finalised it shortly before he passed away. He died peacefully surrounded by his family, after a period of serious illness, on 2 May 2016 at the age of 74, in his home country of the Faroe Islands.

Kjartan Hoydal made many important contributions to sustainable fisheries management, both as a scientist and manager, and both for his home nation of the Faroe Islands and at the international level.

Kjartan Hoydal started working as a scientist at the Faroese Marine Research Institute in 1971. He eventually moved into fisheries management and headed the Faroe Islands' fisheries administration 1986–1996, during a period when several great challenges had to be addressed, before dedicating himself more fully to the international arena.

In addition to his important work for the Faroe Islands, Kjartan Hoydal was an active participant in international cooperation for fisheries science and management from the 1970s to the 2010s. This included working for the International Council for the Exploration of the Sea in the early 1980s and for the Nordic Council of Ministers' Nordic Atlantic Cooperation 1996–2001. He was particularly important for the development of the regional fisheries management organisations of the North Atlantic, having served as President of NAFO 1989–1991 and as Secretary of NEAFC 2001–2011. His tenure at NEAFC saw the organisation firmly establish itself as a leading fisheries organisation on the global stage, and he had a very important role in that development. His leadership and teambuilding skills were important for the organisation's development. NEAFC was fortunate to enjoy the services of such a capable person, whose knowledge and professionalism were recognised by all.

He was also active at a global level, *inter alia* serving as the Chair of the FAO-organised Regional Fisheries Bodies Secretariats Network 2009–2011.

Following his retirement from NEAFC, Kjartan Hoydal was highly sought after for various fisheries related projects, including by FAO. Among these were projects aimed at assisting developing States to build their capacity for fisheries management. It was in this capacity that he undertook the task of carrying out the cost-benefit assessment of the options for strategic re-orientation of WECAFC.

Following his passing, messages of condolences and remembrance were received from people working on fisheries issues in all the world's oceans, demonstrating the wide-ranging influence that he had.

Everyone who knew him was impressed with his character and personality. It was certainly a pleasure to have known him, and it is difficult to put into words the feeling that came with the news that he had passed away. His legacy will live on in the multitude of achievements that he leaves behind, which include important contributions to the strengthening of the framework for regional cooperation for fisheries management. The benefits of those contributions will continue to be found both in his home region of the North Atlantic and throughout the world.

This publication will stand as the last project of his work life, but his memory and reputation will live on.

PREPARATION OF THIS DOCUMENT

This document has been prepared by Kjartan Hoydal, independent cost-benefit assessment expert and former Secretary of the North East Atlantic Fisheries Commission (NEAFC). The expert, who was selected by the WECAFC Executive Committee, was asked to carry out a cost-benefit assessment of the options for WECAFC Strategic Reorientation. The cost-benefit assessment was requested by the 15th session of WECAFC, which was held in Trinidad and Tobago in March 2014.

The assessment was made possible with support from the Members of WECAFC. The European Union's DG Mare provided the necessary resources to implement Trust Fund project GCP/SLC/006/EC "An independent cost-benefit assessment of the options for strategic re-orientation of WECAFC". Moreover, the Government of Trinidad and Tobago hosted the Second WECAFC Strategic Reorientation Workshop, which was held Port of Spain, Trinidad and Tobago, 1–2 December 2015, which provided an opportunity for the WECAFC Membership to discuss the draft assessment outcomes.

The preparation of this report accounted with comments and observations obtained at the above mentioned workshop, at an expert meeting to assess the opportunities for a regional fisheries management organization in the Western Central Atlantic, (Barbados, 1–2 September) and by e-mail from FAO and various WECAFC members.

The author would like to acknowledge the great support received from the WECAFC Secretary, Raymon van Anrooy, in the preparation of this document He would also like to acknowledge with thanks the assistance received from FAO and its WECAFC Secretariat at the Subregional Office for the Caribbean (SLC), the WECAFC Executive Committee, the FAO Fisheries and Aquaculture Department and Legal and Ethics Office at FAO Headquarters, the Secretariat of the General Fisheries Commission for the Mediterranean (GFCM) and the Secretariat and President of the North East Atlantic Fisheries Commission (NEAFC). The data and information provided made it possible to carry out this assessment. The author is also grateful for all comments and observations received from WECAFC members and partner organizations during the assessment process.

This final report reflects contains the outcomes of the independent assessment, which are not necessarily in accordance with FAO and WECAFC member views. The author has aimed to provide a balanced assessment of the three options for WECAFC Strategic Reorientation. The cost-benefit assessment shows that establishment of an RFMO would be highly beneficial to the Members of WECAFC. It should however be recognized that setting up a Regional Fisheries Management Organization (RFMO) is not a "cure-all" to the lack of active and efficient sustainable conservation and management of fisheries in the WECAFC mandate area.

FAO. 2016.

Western Central Atlantic Fishery Commission. Findings of the independent cost-benefit assessment of the options for strategic re-orientation of WECAFC, by Kjartan Hoydal. FAO Fisheries and Aquaculture Circular. No. 1117. Bridgetown, Barbados.

ABSTRACT

This circular contains the findings of the independent cost-benefit assessment of the options for strategic re-orientation of WECAFC, which was conducted over the period May–December 2015. The three options assessed are:

- 1. WECAFC should remain a regional level fisheries advisory commission as a FAO Article VI body and continue to coordinate joint work with the (sub-) regional advisory/management bodies.
- 2. WECAFC should become a regional fisheries management organization (RFMO) as an FAO Article XIV body, with a mandate to make legally binding decisions.
- 3. WECAFC should become a regional fisheries management organization (RFMO) independent established outside of FAO's legal framework with a mandate to make legally binding decisions.

This document discusses the status and trends of marine fisheries in the WECAFC area, regional fisheries bodies and RFMOs active in the area, international fisheries instruments and the role of RFMOs and the costs and benefits of the three options above. The assessment concludes that the establishment of an RFMO, either under FAO or outside FAO's framework would create significant economic, social and environmental benefits at limited costs to the members of WECAFC. The conclusions and recommendations from this circular will be presented to WECAFC 16 in June 2016.

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Abbreviations and Acronyms

ABNJ	Areas Beyond National Jurisdiction
AMLC	Association of Marine Laboratories of the Caribbean
ARPEL	Sociación Regional de Empresas del Sector Petróleo, Gas y Biocombustibles en
	Latinoamérica y el Caribe
BAU	Business as Usual
CARICOM	Caribbean Community
CAST	Caribbean Alliance for Sustainable Tourism
CATHALAC	Water Center for the Humid Tropics of Latin America and the Caribbean
CCCCC	Caribbean Community Climate Change Centre
CCCFP	Caribbean Community Common Fisheries Policy
CCRF	Code of Conduct for Responsible Fisheries
CCSBT	Commission for the Conservation of Southern Bluefin Tuna
CEHI	Caribbean Environment Health Institute (now they are incorporated as part of CARPHA)
CCLM	Committee on Constitutional and Legal Matters (CCLM) of FAO
CLME	Caribbean Large Marine Ecosystem (Project)
CONFEPESCA	Confederación de Pescadores Artesanales de Centroamérica
COTED	Council for Trade and Economic Development (of CARICOM)
COPESCAALC	Commission for Inland Fisheries and Aquaculture for Latin America and the
	Caribbean
CRFM	Caribbean Regional Fisheries Mechanism
DWFN	Distant Water Fishing Nation
EAA	Ecosystem approach to aquaculture
EAF	Ecosystem approach to fisheries
FAO	Food and Agriculture Organization of the United Nations
FFA	Forum Fisheries Agency (South Pacific)
IATTC	Inter American Tropical Tuna Commission
ICCAT	International Commission for the Conservation of Atlantic Tuna
IOTC	Indian Ocean Tuna Commission
IUU	Illegal, Unreported and Unregulated
LAC	Latin America and the Caribbean (region)
NAFO	Northwest Atlantic Fisheries Organization
NEAFC	North-East Atlantic Fisheries Commission
NGO	Non-governmental organisation
OSPESCA	Central America Fisheries and Aquaculture Organization
RAA	Aquaculture Network of the Americas
RFB	Regional Fishery Body
RFMO	Regional Fisheries Management Organization
RoP	Rules of Procedure
SIDS	Small Island Developing States
UN	United Nations
UNFSA	United Nations Fish Stocks Agreement
UNCLOS	United Nations Convention on the Law of the Sea
UWI	University of the West Indies
WCPFC	Western and Central Pacific Fisheries Commission
WECAFC	Western Central Atlantic Fishery Commission

Executive Summary

This paper has been produced by Dr Kjartan Hoydal, independent fisheries cost-benefit assessment consultant, on request of the WECAFC membership. The assignment covered the period June – December 2015. The consultant contacted key resource persons and used information from the FAO, WECAFC Secretariat, WECAFC Executive Committee, Member Nations of WECAFC, North East Atlantic Fisheries Commission (NEAFC), General Fisheries Commission for the Mediterranean (GFCM) and others. He also organized a small expert meeting in Barbados on 1–2 September 2015 in which some of the partner organizations (e.g. Caribbean Regional Fisheries Mechanism [CRFM], Organization for Fisheries and Aquaculture of Central America [OSPESCA], and the Caribbean and North Brazil Shelf Large Marine Ecosystem Project [CLME+]) participated, to get better informed and prepare for the 2nd WECAFC Strategic Reorientation Workshop, Port of Spain, Trinidad and Tobago, 1–2 December 2015.

The paper analyses (as requested) the costs and benefits of three options for the Western Central Atlantic Fishery Commission (WECAFC).

The three options assessed are:

- 1. WECAFC should remain a regional level fisheries advisory commission as a FAO Article VI body and continue to coordinate joint work with the (sub-) regional advisory/management bodies (CRFM, OSPESCA, ICCAT and perhaps also OECS, OLDEPESCA).
- 2. WECAFC should become a regional fisheries management organization (RFMO) as an FAO Article XIV body, with a mandate to manage the fisheries in a sustainable manner through the adoption of legally binding decisions.
- 3. WECAFC should become a regional fisheries management organization (RFMO) established outside of FAO's legal framework, i.e. as (an Intergovernmental Organization –IGO-) with a mandate to manage fisheries in a sustainable manner through the adoption of legally binding decisions.

Data and information limitations did not allow a full-fledged cost-benefit assessment (CBA), but the paper looks at the main elements of such an analysis. There were sufficient data available for estimating costs of each of the three options. Estimates of costs for maintaining the status quo are also made available.

The report describes in detail the requirements for robust management of fisheries and protection of biodiversity and the obligations accepted by many WECAFC Members under international law and fisheries instruments.

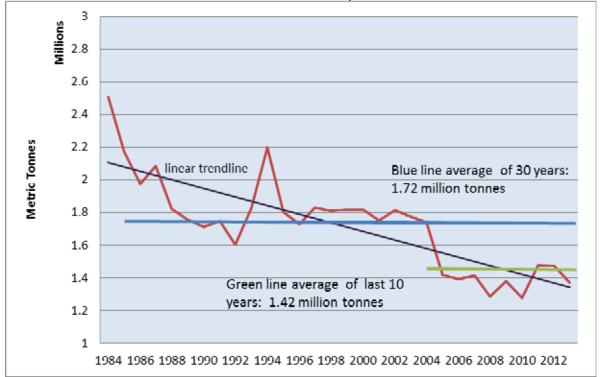
This draft report was finalized after the 2^{nd} WECAFC Strategic Reorientation Workshop, held on 1–2 December 2015 in Port of Spain, Trinidad and Tobago, taking in consideration the outcomes of the discussions there, submitted by the WECAFC Secretariat to all WECAFC Members.

The current situation

In order to understand the costs and benefits of WECAFC in its current form and potentially as RFMO it is important to understand the current situation in terms of stocks and fisheries in the WECAFC mandate area.

The situation can be summarized as follows:

- The region is one of the most overexploited fisheries regions in the world. Many commercially targeted fish stocks are overfishes or fully exploited at present.
- Fish production is currently around 1.4 million tonnes, which is 300 thousand tonnes below the 30 year average.
- Trend in total fisheries catches in Area 31 over the last 30 years (1984–2013).



Source: data derived from FAO FishStatJ (October 2015)

- Main fish producers are: USA, Mexico, Brazil, CRFM, Venezuela, OSPESCA, the European Union (EU) and Cuba.
- The total off-vessel value generated by the sector is some USD3.2 billion.
- The region is a net importer of fish; imports of fish and fisheries products are USD8.5 billion higher than exports.
- The fisheries sector provides direct employment for 1.3 million people in the region and supports the livelihoods of 4.5 million people.
- Fish consumption per capita is on average some 20 kg in Caribbean islands and between 6 and 12 kg in Central America, contributing between 2 and 15 percent to protein intake of the population in the region.
- 51 percent (9.4 million km²) of the WECAFC mandate area, the high seas, is not managed by any country or organization at present.
- IUU fishing is estimated at between 20 and 30 percent of total reported production levels.
- 19 of the 34 WECAFC Members are members of other RFMOs in the Atlantic or elsewhere.

Option 1: WECAFC remains a regional level fisheries advisory commission

If the WECAFC Members continue "business-as-usual" with WECAFC as FAO Article VI commission, this can have the following consequences¹:

Stocks: further reduction in stock status, continued overfishing and continuing IUU fishing, depleted stocks, more species threatened or endangered; reduction in ecosystem services provided by the area.

ABNJ: the fisheries in the Areas Beyond National Jurisdiction (i.e. the High Seas) in the WECAFC area will remain unmanaged, open access to all and (with the exception of tuna) no information will be collected or shared in support of fisheries management and conservation in these areas.

Fisheries volume: possible reduction in catches to 1 million tonnes (thus -30 percent) by 2026-2030. **Fisheries value:** off-vessel value of fisheries products will reduce between 600 million and 1 billion USD compared to present, and further losses in the value chain will be added to this.

Employment: reduction in direct fisheries sector employment with an estimated 20-30 percent; thus a few hundred thousand jobs, by 2030.

Food security: dependence on import of fish and fisheries products will increase significantly.

Trade: the current negative trade balance for fish and fisheries products will further deteriorate.

Other stakeholders: tourism (e.g. scuba diving) may suffer from overexploited reef fish resources and recreational game fishing will move to other regions –resulting losses in income.

Current investments by CRFM and OSPESCA Member states in sub-regional level fisheries management, which are in the range of USD1.3 million annually, may be able to secure some stability in catches and employment in these sub-regions, but it is likely that also these Members will suffer from degradation of transboundary- and straddling stocks originating by inadequate fisheries management at the regional level.

Options 2 and 3: WECAFC transforms into an RFMO

Under the two RFMO options, the Members of WECAFC may expect that the stock status, fisheries production and employment will not further deteriorate, but instead is likely to improve.

The establishment of either type of RFMO (within or outside FAO's framework) would result within a short period 5 to 10 years in substantial positive impacts that include:

Stocks: rehabilitation of some key commercially targeted stocks, through implementation of binding management measures, reduced IUU fishing and an increase in ecosystem services provided by the area.

ABNJ: fisheries management and conservation in the Areas Beyond National Jurisdiction (ABNJ) will be possible, ensuring flag- and port states responsibilities in these areas, and increasing the opportunities for sustainable harvest of high seas fisheries resources as well as Blue Growth.

¹ Note received from FAO's Legal Office: The causal link between the legal status of WECAFC as an Article VI Body and these material consequences is however not apparent. Bearing in mind the intergovernmental nature of WECAFC, and the fact that any capacity of FAO to contribute to regional fisheries management depends on Members' commitments and willingness (including financial commitments), the assumption that WECAFC's present status would result in reduction of natural resources, or fish trading, or employment, or tourism appears unsubstantiated and excessive. In this regard, it is noted that some Article VI Bodies, while not adopting binding decisions, adopt authoritative recommendations that most of their Members implement. The efficiency and impact of the work of the Commission ultimately depends on the interest and willingness of Member Nations.

Fisheries volume: increase in production with 300 thousand tonnes² within 10 years to a fisheries production level of around 1.72 million tonnes in Area 31, and an estimated increase of 20 to 40 thousand tonnes in the northern part of Area 41.

Fisheries value: off-vessel value of fisheries products will be annually more than 20 percent higher than currently the case, adding an estimated USD700 million to the current USD3.2 billion, generating thus additional value also further in the value chain.

Employment: Create additional direct employment in the fisheries sector for some 250 to 300 thousand people.

Food security: Increased supply fish for an additional 20 to 25 million people (at current per capita consumption levels), or allowing a substantial increase in consumption levels of fish of the Caribbean people, while dependence on import of fish and fisheries products will reduce slightly with a growing population.

Trade: the negative trade balance for fish and fisheries products will improve in favour of the region.

Other stakeholders: certain tourism sectors (e.g. scuba diving and recreational fishing) will continue to generate significant incomes for the region.

WECAFC Members and international fisheries governance

Most WECAFC Members are Member also in other RFBs and RFMOs that are active in the Atlantic region. Fifteen Members are also Member of CRFM and seventeen Members are either party or cooperating non-contracting party to ICCAT. Seven Members are also Member of OSPESCA and eight Members are involved in OLDEPESCA. Six Members are party to NAFO and three are involved in NEAFC.

The fisheries governance in the Western Central Atlantic can be presented as a patchwork of organizations, with each having its own limited membership. WECAFC is the only organization incorporating all Caribbean, Gulf and North Brazil–Guianas Shelf countries and overseas territories, and the only organization with a mandate for the ABNJ area in this part of the Atlantic (apart from ICCAT for tuna-fisheries).

The CLME Strategic Action Programme (SAP) recommends the establishment of an interim arrangement for sustainable fisheries, as well as to assess the options for an RFMO. The interim arrangement between CRFM, OSPESCA and WECAFC is currently being tested and a transformation of WECAFC into an RFMO would build on this on-going collaboration that has been established through an MOU between CRFM, OSPESCA and FAO/WECAFC on CLME+ Interim Coordination for Sustainable Fisheries. The establishment of an RFMO with strong ties with CRFM and OSPESCA would be in-line with the CLME SAP.

WECAFC Members have in various meetings of CRFM, OSPESCA and WECAFC emphasized the need to ratify and implement the international fisheries instruments and agreements in the region. The international agreements give states the duties to control their flagged fishing vessels in their EEZs and in the high seas and to encourage flag, port and coastal States to cooperate (duty to cooperate) so as to ensure fisheries sustainability and stocks conservation. The main mechanism for organizing this cooperative management is through RFMOs. Currently, 91 percent of WECAFC Members have

 $^{^{2}}$ The figures used in this section are clarified in section 2.1 and further. Some figures are estimates made by the author of the report based on available information.

ratified UNCLOS, 59 percent have ratified UNFSA, 41 percent have ratified the Compliance Agreement, and 24 percent have signed or ratified the PSMA.

Costs and benefits of the three options

This cost-benefit study recognizes the current situation and the trends in stock status and fisheries demands strengthening of fisheries management in the Wider Caribbean and there are potential economic benefits in the order of USD700 million per year by doing this through an RFMO.

If the potential reduction in IUU fisheries, coordinated through an RFMO, is added to the above, the benefits will increase likely to over USD1 billion per year. The RFMO further contributes to other more generic social and food security benefits a well through securing robust fisheries management. This should make the fisheries sector more resilient and create a better economic environment for sustainable investments in the sector.

Looking globally at other marine regions there is no doubt that RFMOs, where coastal and flag states take the responsibility of getting all elements of managing fisheries systems right, have the best track record in succeeding.

If the countries strive towards socially compatible, economically viable and environmentally sustainable fisheries in the Western Central Atlantic there are, therefore, in effect only two options which WECAFC Members should consider:

1. WECAFC becoming a regional fisheries management organization (RFMO) as an FAO Article XIV body, with a mandate to manage fisheries in a sustainable manner through the adoption of legally binding decisions.

2. WECAFC becoming a regional fisheries management organization (RFMO) established outside FAO's legal framework with a mandate to manage fisheries in a sustainable manner through the adoption of legally binding decisions.

With respect to the FAO-RFMO option the development of GFCM is instructive; with respect to IGO-RFMO option there are important lessons to be learned from RFMOs in the Atlantic, such as NEAFC and ICCAT, especially the ICCAT panel structure.

NEAFC has only five Contracting Parties. This has made it possible to run a small Secretariat, but the demands on the Secretariat are growing. The costs of the Secretariat are fully met by the Contracting Parties as is the funding of participation in the many meetings of NEAFC. NEAFC does not do capacity building. GFCM with a much larger membership has consequently a larger secretariat and higher operational costs.

The expenses for premises of the Secretariat of an RFMO vary according to host country agreements. Generally Member countries contribute to premises of IGOs headquarters. There are not many differences between IGO and FAO RFMOs in terms of costs of staff, as many IGOs follow UN standards. The decisions to carry out scientific research by itself or outsource this to other organizations and to work in various languages have significant impacts on the costs of an RFMO.

The total costs of establishing an RFMO in the Western Central Atlantic, whether an IGO or FAO RFMO, are approximately USD250 to 300 thousand, to be provided for by the Members or a donor over a 1- to 3-year period.

The costs to operate an effective secretariat and organize the main scientific meetings and sessions on an annual basis are between USD1.5 million and USD1.8 million, depending on various choices made by the Members. An additional USD500 thousand would have to be generated annually through resources mobilization to enable the RFMO to carry out the necessary capacity building among its Members and support scientific research in support of its management decision making processes.

Cont items	WECAFC as Article IV RFB	WECAFC as Article XIV RFMO	WECAFC as IGO RFMO
Cost items	Alucie IV Krb	AIV KEWIO	KFMO
Staff	120,000	920,000	830,000
Premises, office, travel	40,000	160,000	290,000
Communication, IT	-	50,000	320,000
Meetings	80,000	280,000	360,000
Science	400,000	500,000	500,000
Translation services	20,000	70,000	-
Consultancies/external expertise	-	-	-
Total expenditure	660,000	1,980,000	2,300,000
Contributions			
FAO	220,000	70,000	-
Member Nations	90,000	1,560,000	2,100,000
Host State agreement	-	150,000	200,000
Trust funds	350,000	200,000	-
Contributions total	660,000	1,980,000	2,300,000

A comparison of cost items and respective contributions needed under each of the three options.

The annual budget required for enabling the effective operations of the secretariat and cover costs of annual scientific meetings and sessions could be covered through a contribution to regional management of just USD1/tonne produced by the countries. This means for example that the United States of America (USA) would be asked to contribute annually approximately³ USD850 000, Mexico USD220 000, Brazil USD200 000, Venezuela USD150 000, EU USD50 000 and Cuba USD25 000. In contrast, the current annual contributions to regional fisheries management by CRFM and OSPESCA Members is over USD5/tonne, which justifies that these countries should not take up part of the RFMO bill. In annex 13 three indicative scales of contributions for an RFMO with an autonomous budget of approximately USD1.56 million per year are presented (following the above estimated member nations contributions for an Article XIV RFMO).

The differences between an FAO and IGO type RFMO are generally limited in terms of functioning of the organization, the size of its secretariat, operational costs and impact on fish stocks status and fisheries. Some RFMOs function better than others and have a greater impact, because of more active

³ The exact contributions depend on which years would be used to average annual production levels, and whether only the production is considered to determine contributions. Many RFMOs also apply a wealth component, where Members that have a higher GDP/capita contribute relatively more. See example of GFCM in the annex

involvement of their Members and better follow-up on implementation of management measures by the Members. The Members are the key factor that determines the success of an RFMO.

In the negotiations of the RFMO agreement it is important to agree early in the process on a key for calculating Member's contributions. Reference is made to the NEAFC approach limiting the contributions of Members with a population under a certain limit. GFCM contributions are calculated on a basic fee, wealth- and a catch component. The same approach could be used for determining which Members are entitled to assistance with funding their participation in sessions and for capacity building.

Recommendations from the Cost-benefit assessment study

It is recommended that WECAFC Members <u>continue the process of reorientation</u> and in earnest move toward an organisation where the coastal and flag states take responsibility and cooperate through an RFMO that can make binding decisions.

It is clear that in terms of costs-benefits the benefits of establishing and operating an RFMO outweigh by far the limited extra costs to the Members and that the RFMO option is therefore recommended to the Members.

While the cost-benefits study shows that investment by the Members in a transformation of WECAFC into an RFMO is a rational step to take, it is indecisive on which of the two options (IGO or FAO Article XIV Body) RFMO would be the most economical for the Members. For a budget between USD1.5 and 1.8 million/year either of the two options can deliver similar services.

An RFMO can deliver results against its fisheries management objectives, with respect to all requirements in international law and instruments. An RFMO will also be able to get the science right with respect the state of the stocks, and advice better on levels of fishing effort and fishery and impacts of fisheries on the environment and biodiversity than is currently the case. These matters define the management measures that should be presented to the WECAFC parties. With management in place, the next important step is monitoring, surveillance and control, including cooperation between the Inspection services of the WECAFC Members. RFMOs also cooperate with other IGOs with a mandate to regulate fisheries and other activities in the Atlantic Ocean.

It is further recommended that an RFMO would have to be based on the existing institutional structure in the region. This means that WECAFC should transform into an RFMO and continue to cooperate with OSPESCA and CRFM through a Memorandum of Understanding (MoU) formalizing and building on the existing CLME+ interim coordination arrangement for sustainable fisheries. In effect this would mean close collaboration on scientific and management advisory matters between the three institutions, in which each would remain independent and the collaboration would be mutually beneficial.

A schematic overview of the interim mechanism that is under development

Advice and

Recommendations

at Regional level

decision

making

level

Interim fisheries management framework Working groups (joint or stand alone) collect scientific information, and expert members carry out analysis (involvement of key private sector Technical stakeholders and NGOs) working groups are species based, fisheries based level or aim to tackle specific subject (have bian nual work plans) CRFM and OSPESCA Subregional OSPESCA CRFM carry out internal policy/ review of working Advice and decision Recommendations group advice/ making at CARICOM level recommendations level and amend and approve this for their members CRFM and/or OSPESCA decisions are Regional WECAFC passed to WECAFC for discussion and policy/

WECAFC will act as an umbrella organization bringing all elements of science, management and cooperation together at regional level, safeguarding the interests of the Members also with respect to a significant high seas area.

level

final review and approval at regional

The independent cost-benefit assessment study recommends the following steps to be taken by WECAFC Members, partner agencies and FAO:

- 1. Within Strategy 2 of the CLME Strategic Action Programme, the role of WECAFC and the relationship with its partners OSPESCA and CRFM should be further assessed before the 16th session of WECAFC (Guadeloupe, June 2016), defining a clear institutional collaborative structure with operational linkages that are cost-effective, avoid and overlap and duplication, for presenttaion to the session.
- 2. WECAFC Members consider establishing an RFMO, either as FAO Article XIV body or outside of FAO. At this moment an FAO Article XIV body seems from a political point-of-view more within reach than an IGO. After all, the current political situation may constrain the membership of some important countries under the IGO option, while all countries are Member already of FAO and collaborate closely with FAO and WECAFC. The most important element is that the new organization has a mandate to make legally binding decisions and that the Members in that process take the full responsibility managing the fisheries resources in the WECAFC in a way that. This organisation can have panels that deal with different fisheries or groups of Members. For example one CRFM panel, one OSPESCA panel, etc.
- 3. WECAFC Members analyze within their administrations whether there is sufficient interest to collaborate in the potential establishment process of an RFMO (if the 16th WECAFC session would decide in favour of continuing in such direction).
- 4. The Secretariat to inform the 16th session of WECAFC as to the availability of resources (in kind or financial) for FAO to provide legal and institutional support to a transformation process of WECAFC into an FAO RFMO and present a clear roadmap with budget proposal to the session.

1. Introduction

1.1 Objectives and background of the assessment

The WECAFC Members have recognized the need for strategic re-orientation of the Commission to improve management of the fish stocks in the WECAFC mandate area as well as to better meet international obligations set out in the relevant international agreements and instruments.

The immediate reasons for the start of a reorientation process in 2012 were the following:

- the large changes in the institutional environment in which WECAFC operates (e.g. other subregional fishery bodies such as the Caribbean Regional Fishery Mechanism – CRFM – and the Central American Organization for the Fisheries and Aquaculture Sector – OSPESCA – got stronger and more efficient in recent years);
- 2. an overlap in mandates with these other regional fishery bodies (RFBs), which requires greater partnerships;
- 3. the current WECAFC mandate is very broad and receives only limited funding from WECAFC Members and FAO;
- 4. the WECAFC Statutes and Rules of Procedure cause less efficient functioning of the Commission in a time of rapid developments and changes in the region; and
- 5. to better address the Caribbean Large Marine Ecosystem (CLME) Strategic Action Programme (SAP) process outcomes and start supporting its implementation.

Following a request by 12 Members at WECAFC 14 (Panama City, 2012) for a strategic reorientation, WECAFC undertook to carry out a performance review, prepare a strategic plan and investigate the options for re-orientation. A (1st) WECAFC reorientation and strategic planning workshop was held in Gosier, Guadeloupe, 29–30 January 2014. The recommendations from this workshop were presented to WECAFC 15 (Port of Spain, 2014).

WECAFC 15 discussed the outcomes of the 1st workshop and noted the following (from the session report):

28. The Commission addressed working document WECAFC/XV/2014/12 on the "Background, guidance and strategic options for the strategic reorientation of WECAFC: Options Paper". Delegations were not authorized by their governments to take a decision on a possible transformation. After extensive discussion, in which cost aspects and stakeholder involvement were the main issues, it was concluded that WECAFC should remain an Article VI advisory body for the immediate future.

29. The Commission agreed that within Strategy 2 of the CLME Strategic Action Plan, the role of WECAFC and the relationship with its partners OSPESCA and CRFM should be assessed. The Commission expressed appreciation to the WECAFC Secretariat for the in-depth analysis and information package provided regarding the range of options for WECAFC reorientation. However any decision at this session was considered premature.

30. The Commission endorsed as a way forward an independent cost–benefits assessment as proposed by the EU. The EU will explore whether the support to this initiative could be made available as well as to organize a workshop to analyse the results. Because of the decision to defer this matter, Draft Resolution WECAFC/XV/2014/6 was not considered.

As basis for discussions and decisions with respect to the strategic re-orientation of WECAFC the Members have chosen a cost-benefit assessment of the three options considered:

- A. WECAFC should remain a regional level fisheries advisory commission as a FAO Article VI body and continue to coordinate joint work with the sub-regional advisory/management bodies (CRFM, OSPESCA and perhaps OLDEPESCA)
- B. WECAFC should become a regional fisheries management organization (RFMO) as a FAO Article XIV body, with a mandate to manage fisheries in a sustainable manner through the adoption of legally binding decisions.
- C. WECAFC should become a regional fisheries management organization (RFMO) independent of FAO with a mandate to manage fisheries in a sustainable manner through the adoption of legally binding decisions.

1.2 Methodology

The WECAFC Members have chosen a cost-benefit assessment as the basis for moving forward. To undertake a cost-benefit analysis it is first necessary to decide the limits of the analysis, which elements should be included, and to find a common unit of measurement.

Having agreed on that, the next step is to allocate value to the various elements, preferably monetary value. It is necessary to take into account the discounted value or present value. If that is possible, the analysis and assessment is straightforward, but it is rarely simple to allocate monetary value to all elements, because of the variable quality of data and because there are almost always intangibles. One example is the cost of doing nothing. Another is the general problem of expressing environmental services in money terms. Another again is to internalise all costs (pollution, impacts on the marine environment, etc.)

An Asian Development Bank - Commonwealth Secretariat Joint Report attempted to review the role of the South Pacific Forum Fisheries Agency (FFA) and its impact on the South Pacific Forum (Forum) Member states. It shows some of the problems with respect to cost-benefit analysis, which are of interest to the exercise in WECAFC.

The FFA review comprised both a qualitative evaluation of its actions and their probable impacts, and quantitative evaluation to the extent feasible. These evaluations were based on analysis of the findings of existing research studies and other relevant documents by fisheries experts. The review is not a formal cost-benefit analysis (CBA). Such an exercise was impracticable due to: (1) major information limitations; and (2) the difficulty of reliably isolating and quantifying the FFA's contribution to fisheries outcomes, allowing for what otherwise was likely to have occurred in its absence. Quantifying these benefits accurately, however, was a very difficult if not impossible task because of these problems.

In a WECAFC cost-benefit analysis the easy part to quantify relates to the costs of a strengthened Secretariat, the participation of Contracting Parties (Members), inclusive travel costs, etc. Then there are the intangibles, putting a money value on the economic gain of better management, reduction of IUU fishing, better stock management and improved ecosystem services.

There are at least two ways to approach the problem. The first is to look at organisations that have gone through a process of establishing an (independent) RFMO. A second approach would be based on available data to express costs in money terms and then compare the money value of benefits to the money value of the costs.

FAO, in a technical paper, lists the following benefits and costs in the context of implementing the Ecosystem Approach to Fisheries $(EAF)^4$. It is a very long and detailed list, but should be used to

⁴ FAO technical paper 489). pp. 55-57, <u>http://www.fao.org/fishery/eaf-net/eaftool/eaf_tool_9/en</u>

select the most important elements in a cost-benefit assessment. Details are given in Annex 4, but the four main categories are:

- Ecological benefits and costs
- Management benefits and costs
- Economic benefits and costs
- Social benefits and costs

Due to the limitations in terms of availability of data and information on ecological benefits and costs, this assessment focuses largely on economic, social and management benefits and costs of the three options. The main indicators used are those for which information is available, and include, production volume, value, employment, food security, trade, and how each option could address conservation and management objectives. Inter-sectoral collaboration and conflicts, ecosystem health and the production of goods and services by the ecosystem in general, which are included in an EAF cost-benefit assessment, are considered outside the scope of this research.

To assess cost and benefits of fisheries management ideally what is needed are stock assessments of all or at least the most commercially important fish stocks.

ATLANTIC YELLOWFIN TUNA SUMMARY			
Maximum Sustainable Yield (MSY)	144,600 ¹ (114,200 - 155,100)		
2013 Yield	92,615 t		
Relative Biomass B2010/ BMSY	0.85 (0.61-1.12) ²		
Relative Fishing Mortality: $F_{current (2010)}/F_{MSY}$	0.87 (0.68-1.40) ²		
Management measures in effect:			
[Rec. 93-04]: - Effective fishing effort not to exceed 1992 level			
	rface fishing; TAC of 110,000 t beginning in 2013 Vor purse seine boats for a number of fleets		
Other measures also impacting yellowfin tuna			
 [Rec. 09-01], para. 1 of [Rec. 06-01], [Rec. 04-01]: Limits on numbers of fishing vessels less than the average of 1991 and 1992. Specific limits of number of longline boats; China (45), Chinese Taipei (75), Philippines (10), Korea (16). Specific limits of number of purse seine boats; Panama (3). 			

A stock assessment from ICCAT is shown below:

There are estimates of fishing mortality that allow comparison between reference points (MSY) and the current fishing mortality and if the catches are inside safe biological limits.

All RFMOs, like NAFO, NEAFC and the tuna RFMOs, have scientific biological advice as a basis for their management measures and can determine if catches are a result of overfishing or not. For most species harvested in the wider Caribbean assessments of this detail are not available, unfortunately.

Although it is hard to put a monetary value on the benefits of management there are strong arguments for securing proper fisheries management, consistent with EAF, international law and international and regional fisheries instruments and agreements. It should be noted that it is possible to put a monetary value on the costs of the three options on the table, which is presented further in this paper.

2. Summary Status and Trends of marine fisheries in the WECAFC Area

The WECAFC mandate area includes Area 31 (Western Central Atlantic) and the northern part of Area 41 (Southwest Atlantic). Fifty-three countries and overseas territories reported catches in this area over the period 2000–2013.

2.1 Production Volume

In the period 1984–2013⁵ the reported capture fisheries production in Area 31 fluctuated between 1.28 million tonnes (2008 and 2010) and 2.50 million tonnes (in 1984). The latest available figure for 2013 estimates the total production at nearly 1.4 million tonnes.

The thirty year (1984–2013) average annual capture fisheries production in the area was 1.72 million tonnes, while the median production was at 1.75 million tonnes (figure 1). The average annual production over the most recent 10 years (2004–2013) was 1.42 million tonnes. The linear trend line inserted in the figure (1) below shows that the trend in capture fisheries production was negative over the last 30 years.

If we forecast the future production using the current capture fisheries production trend (linear line) presented in the chart, then the capture fisheries production may be reduced to 1 million tonnes by 2026^{6} .

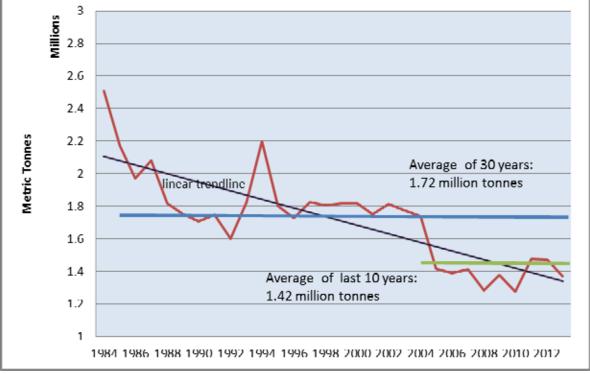


Figure 1: Reported total catches in Area 31 over the last 30 years (1984-2013)

Source: FAO FishStatJ (October 2015)⁷

⁵ The period of 30 years has been selected as the expert panel meeting in Barbados (1–2 September 2015) considered 10 years insufficient. FAO's fishstatJ database includes data from 1950 onwards, but in the early decades reporting was relatively poor.

⁶ A trend line is useful to show the trend (negative/stable/positive) of production, but we should be very cautious to draw conclusions from it, as many factors (internal/external to the sector) affect production and will influence the stocks available and their fisheries. FAO recommends using the trend line only for illustration purposes.

The main fisheries countries in Area 31 are the USA, Mexico and Venezuela (figure 2). These three countries together account for 79 percent of the total reported catch in the region. All other countries produce less than 100 thousand tonnes each. Some 25 countries and overseas territories reported catches lower than 2 000 tonnes in 2013 while 72 percent of the 50 countries that reported their catches in 2013 had a production of fewer than 10 000 tonnes.

The countries and territories organized within CRFM⁸ and OSPESCA account together for respectively 13 and 4 percent of the total catches in 2013.

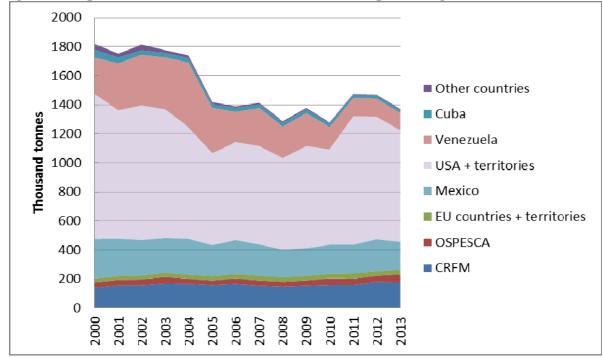


Figure 2: Capture Fisheries Production Area 31 (main producing countries) 2000–2013

When comparing fisheries production by the main producers between 2000 and 2013 it is clear that the share in total production of Venezuela decreased significantly from 14 to 9 percent, while the share of the CRFM and OSPESCA countries increased from 10 to 17 percent over the same period (figures 3 and 4, and annex 3).

⁷ Unless stated otherwise all data used in the figures presented in this document originate from the FAO FishStatJ database (accessed October 2015).

⁸ In order to avoid duplication in data and information, the approximately 10 000 tonnes production by Belize (in 2013) was included in the OSPESCA total production. It is however recognized that Belize is also Member of CRFM and that its production could as well have been added to CRFMs total.

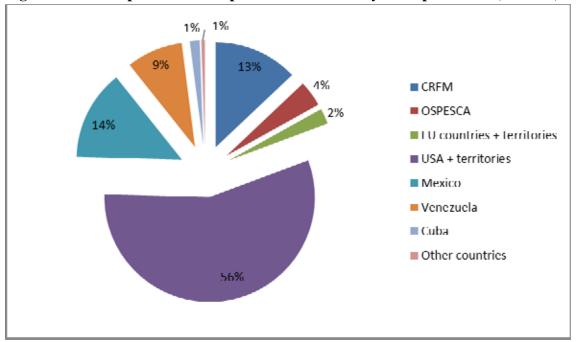
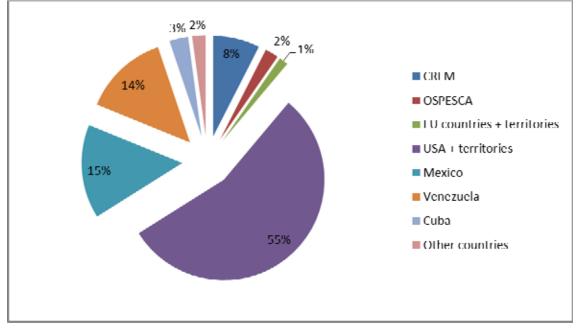


Figure 3: Total capture fisheries production in 2013 by main producers (Area 31)





In terms of capture fisheries production by main species groups, the largest production in volume in the WECAFC area came in 2013 from marine pelagic species (47%), followed by crustaceans (16%), Molluscs (15%) and demersal species (11%) (figure 5). When using the International Standard Statistical Classification of Aquatic Animals and Plants (ISSCAAP) groups, it appears that while there are decreases between 2000 and 2013 in reported catches of herrings, tunas, shrimps, spiny lobsters, crabs and many others, there was a slight increase in catches of sharks and conchs.

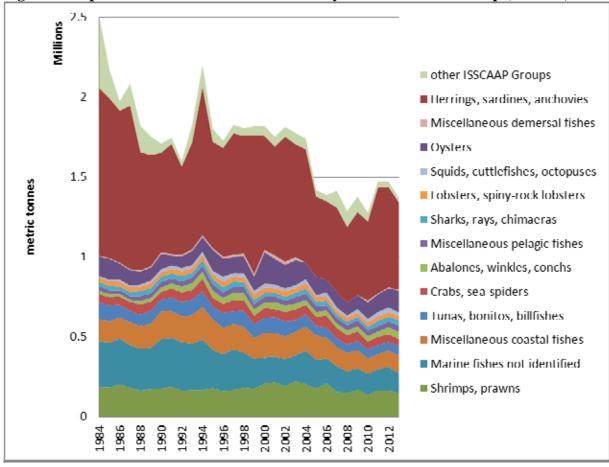


Figure 5: Capture Fisheries Production trends by main ISSCAAP Group (Area 31)

In the ISSCAAP group 35 (herrings, sardines and anchovies) the annual variation in catch is largely caused by the Gulf menhaden (*Brevoortia patronus*) fisheries by the United States of America (USA). For instance in 2011, the reported catch of this species by the USA was 623 thousand tonnes and in 2013 it was some 498 thousand tonnes. The production of round sardinella in the same group (35) by Venezuela decreased from 200 thousand tonnes in 2004 to around 40 thousand tonnes in 2010 and had been relatively steady at that level in recent years⁹. Both fisheries have a high impact on total production levels in the WECAFC area.

Trends in capture fisheries production by fish species in the WECAFC area can be presented in various ways. To get a clearer impression of this, we can look at some of the major fisheries, individually. One example is the Gulf menhaden production in tonnes over the period 1950–2012 and 1985–2012. The general trends in production can be contrary if different time periods are chosen (figures 6, 7 and table 1).

⁹ Some of the main factors that caused the reduction of round sardinella landings by Venezuela were the ban on trawling of shrimp in 2008 and the control of fishing effort. Most round sardinella catches are now made by artisanal fishers.

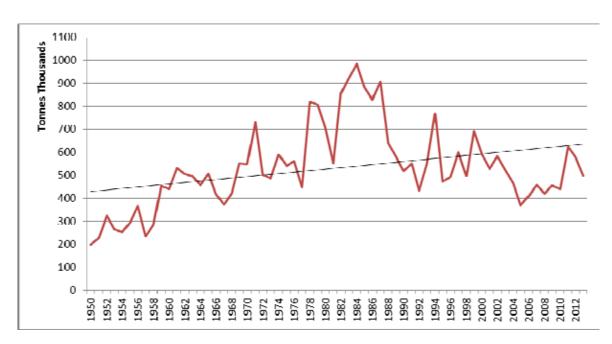
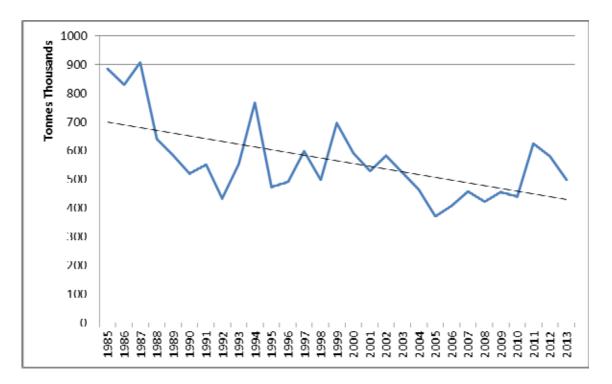


Figure 6: Capture fisheries production of Gulf Menhaden (1950-2013)

Figure 7: Capture fisheries production of Gulf Menhaden (1985-2012)



A summary of trends in major fisheries is presented below.

	Period		Period	
	1950–2012		1985–2012	
	Maximum			
	catch in		Linear	Linear
Species/fishery	tonnes	year	trend	trend
Gulf menhaden	983.000	1984	increasing	decreasing
Atlantic Menhaden	140.000	1981	decreasing	decreasing
American cupped oyster	195.000	2000	increasing	increasing
Blue crab	74.000	1994	increasing	increasing
Caribbean spiny lobster	31.000	2004	increasing	decreasing slightly
Northern white shrimp	523.000	2000	increasing	increasing
Northern brown shrimp	68.000	1990	stable	decreasing
Round sardinella	201.000	2004	increasing	decreasing
Groupers nei	29.000	1981	stable	stable
Groupers, seabasses nei	15.700	1995	increasing	stable
Yellowfin tuna	32.700	1983	increasing	decreasing
Flyingfishes nei	4.500	1984	stable	stable

Table 1: Catch by species in FAO Area 31: Trends and maxima

The WECAFC area is a very large area with various and variable habitats and a complex array of species with very different life cycles. It is also an area with very variable social pressures. Total catches, therefore, reflect a vast number of impacts that can affect stock status. On the other hand by combining the available data for a reasonable number of years a lot of the impacts are averaged out. It would be rather unexpected if the results from fishing pressure and fishing effort, would stand clearly out in this complexity. It is, therefore, difficult to conclude from table 1 that there will be a major benefit from getting management right, resulting in stable catches at a level between the 2.5 and 1.4 million tonnes.

Taking a look at the capture fisheries production from the northern part of the Southwest Atlantic (fishing area 41), which is also within WECAFC's mandate area, it has to be noted that not any reliable data from Brazil for the period between 2005 and 2010 are available. The Brazilian authorities regard the production from the regions North and Nord-East regions as production realized within the WECAFC mandate area.

The total capture fisheries production by Brazil in the northern part of Area 41 fluctuated over the period since 2000 between 163 000 tonnes in 2013 and 194 000 tonnes in 2002. Figure 8 shows that production in the Northern region is showing a downward trend and that production in the Northeast region is higher than in the Northern region since 2011.

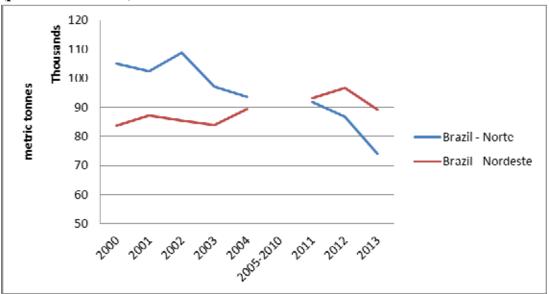
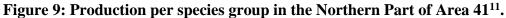
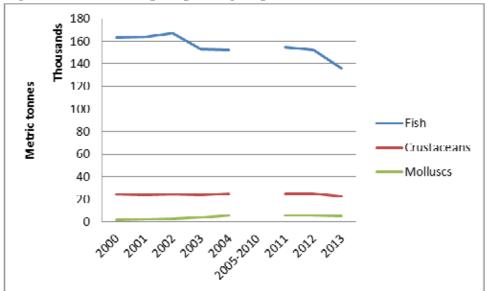


Figure 8: capture fisheries production in the Northern and Northeast region of Brazil (period 2000 - 2013)¹⁰

The average production by species group in the Northern part of Area 41, over the period 2000 to 2013 was an estimated 155 000 tonnes of fish, 24 000 tonnes of crustaceans and 4 000 tonnes of molluscs (figure 19).





¹⁰ Reliable fisheries production statistics for the period 2005–2010 are not available.

¹¹ The production included is only the production reported by Brazil, as the authorities noted that not any other countries were fishing in this northern part of Area 41.

2.2 Production Value

The total off-vessel value¹² of fisheries products harvested in Area 31 in 2012 was nearly USD2.9 billion and this increased in 2013 to USD3.2 billion.

The main fisheries species in terms of total off-vessel value per kg included northern brown shrimp (USD786 million), Caribbean Spiny Lobster (USD513 million), Northern white shrimp (USD226 million), American cupped oyster (USD143 million) and Yellowfin tuna (with USD139 million).

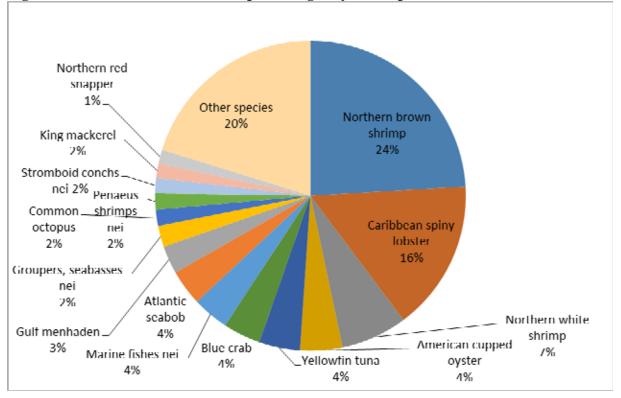


Figure 10: Total off-vessel value in percentages by main species (2013)

Atlantic seabob shrimp, an important species for the Brazil-Guianas shelf generated 120 million in off-vessel value in 2013 while Queen conch added USD51 million¹³.

The average off-vessel production value per ton of fishery product in 2013 was USD2 363¹⁴. Over the period 2000–2013 in an average year 22% of the total off-vessel value was generated by Northern brown shrimp, 16% by Caribbean spiny lobster, 7% by Northern white shrimp, 5% by blue crab and 4% each for marine fishes nei, penaeus shrimp and yellow fin tuna.

From section 2.1 (figure 1), it is clear that the average production over the last 10 years was 1.42 million tonnes, while this was 1.72 million tonnes over the last 30 years. The difference of 300 thousand tonnes represents a value (at 2013 prices) of approximately USD700 million.

¹² Off-vessel value is composed of the price paid at first point of sale, often the landing side/fishing port.

¹³ The latter Queen Conch figure is probably an under representation, as conversion factors may have been applied in some data reported and in other cases not

¹⁴ This average value per tonne, obtained from FAO FishStatJ, is used throughout the document for further value estimations.

This means that if the WECAFC countries would develop their fisheries and manage to bring back their catches to the 30 years average, the annual value generated by their fisheries would be USD700 million larger than currently is the case.

2.3 Exports and imports

The fish and fisheries products **export** figures are in the FAO databases not specified by geographical area, which makes it difficult to distinguish whether an exported fisheries product from for instance Mexico originates from the Caribbean or the Pacific coast.

The WECAFC countries in the region exported 2.4 million tonnes of fish in 2011¹⁵ while the average of the last decade was 2.1 million tonnes per year. Some 72 percent of this volume was exported by the US, while Mexico and Colombia accounted for respectively 15 percent and 3 respectively. The total value of all fish and fisheries products exported in 2011 was estimated at USD8.5 billion representing a significant increase from the USD7 billion in 2010. The USA exported for USD5.9 billion in 2011 while Mexico and Brazil followed with USD1.1 billion and USD242 million in the same year.

If we take a look at the CARICOM Members within WECAFC, then we see that the combined fish and fishery products export value fluctuated in the period 2000–2013 between USD220 million and USD291 million annually. The fish and fishery products export volume ranged in the same period between 44 000 tonnes (in 2002) and 66 thousand tonnes (in 2008 and 2013). One third of the exported products concerned shrimps, while fresh and frozen fish remains the chief category of exported products with over 60 percent of export volume. Lobster exports account only for some 3 thousand tonnes (<5 percent of the total volume), but represent in value terms around one-third of the total export value of CARICOM fishery products.

The major fish and fisheries products exporting countries (in value terms) among the CARICOM Members are: Bahamas (28 percent), Suriname (26 percent) and Guyana (20 percent). Major export money earning species are spiny lobster in the Bahamas, seabob, shrimp and ground fish in Guyana and Suriname. Re-exports of fish and fishery products by CARICOM countries are small and value less than USD4 million annually.

In terms of fish and fisheries products **imports** the WECAFC countries in the region imported since 2004 annually more than 3 million tonnes. In 2011, the volume was 3.4 million tonnes. The USA alone imported 2.4 million tonnes of fish and fisheries products. Of the total volume of fish and fisheries products imported by the WECAFC region 72 percent was imported by the USA, 10 percent by Brazil, 6 percent by Mexico and 4 percent by Colombia. In value terms, the imports of fish and fisheries products were adding up to over USD20 billion in 2011, of which the USA imported USD17 billion. Brazil imported nearly USD1.3 billion in fisheries products and Mexico imported for some USD641 million.

The value of fish and fisheries products imports by the CARICOM Members within WECAFC was some USD189 million in 2013, an increase of 37 percent compared to 2010. Three countries account for three-quarters of the fish import bill. In 2013 this translated to: Jamaica, 30 percent (USD56 million), Trinidad and Tobago, 23 percent (USD4 million), and Haiti, 21 percent (USD39 million). The major sources of imported fish and fishery products by the CARICOM were Canada (USD32 million), Thailand (USD31 million) and USA (USD30 million).

Norway, Netherlands and China were other major exporters to the CARICOM, each with exports of 15 million or more to the CARICOM annually. In terms of volume FAO estimated the imports of fish and fishery products by CARICOM countries in 2013 at some 141 thousand tonnes. It should be noted that most imported fish originates from outside the Caribbean region. The range of imported products is

¹⁵ Only direct export is calculated here, not the re-exported products.

large and includes, amongst others, salmon, catfish, sardines, tuna, shrimp, and filets of many kinds of marine and freshwater fish. In 2000 fish imports by the CARICOM countries added up to some 56 000 tonnes, while in 2013 these imports reached 141 000 tonnes, an increase of 150 percent.

Overall, it is clear that the trade balance of the WECAFC membership is negative as both in volume and in value terms the WECAFC region imports more than it exports. In value terms, USD8.5 billion in fish and fisheries products more is imported than is being exported. In volume terms, the annual fish imports are 30 percent higher than the exports.

2.4 Employment and livelihoods in fisheries

Employment in fisheries in the WECAFC mandate area (31 and part of 41) has been substantial over the last decade. It increased from around 900 000 in the early years of this millennium till over 1.31 million in 2013. In the whole Latin American and the Caribbean region the growth rate in number of fishers was around 3 percent annually over the last decade.

Brazil (561 000), USA (185 000), Mexico (216 000) and Venezuela (77 000) are the countries in which the fisheries sector generates most employment in absolute terms in the region. However, in many of the smaller WECAFC Member countries and overseas territories, particularly some SIDS, the contribution of fisheries to total employment is higher and is generally between 2 and 5 percent, including in addition to primary producers also those involved in input supplies, wholesale, processing and export. The small-scale fishing sector is in many countries around the Caribbean basin a major provider of coastal livelihoods, employment, food and income.

Considering that on average each fisher supports a household of 3.5 persons, the primary sector (fishers only) contributes to the livelihoods of more than 4.55 million people. If one adds to this number the part of the population that derives an income from processing, marketing and trade in fish, and those involved in ancillary jobs (e.g. boat repair, input supplies), then it can be concluded that the sector contributes to the income and livelihoods of over 11 million people in the WECAFC mandate area, including about 1 million in the CARICOM region.

If WECAFC Members decide to increase fisheries production in Area 31 to the 30 year average, which would imply an increase of 300 000 tonnes, this would provide employment for an additional 250 000 to 280 000 persons¹⁶.

However if we forecast the production, using the current capture fisheries production trend (linear line) presented in section 2.1, then the capture fisheries production could be reduced to 1 million tonnes by 2026. This would imply a reduction of around 27 percent in direct employment in fisheries, resulting in an estimated loss of employment between 320 000 and 370 000 fishers in the region.

¹⁶ Currently the fisheries productivity in the region is just over 1.1 tonne per fisher per year. World-wide the average production per fisher is 2.3 tonnes/year, while in the whole LAC region this is 6.2 tonnes per year (2012, data from SOFIA 2014). The WECAFC figure shows that most fisheries in the region can be characterized as small-scale.

2.5 Fisheries fleets

Fishing fleet information is incomplete. Data from many WECAFC Members are lacking. The currently available information suggests that in 2013 some 160 000 fishing vessels are operating in area 31, of which 87 percent is powered and 13 percent is using sails or oars¹⁷. In the northern part of Area 41 some 32 000 fishing vessels are operating, according to Brazilian government statistics, of which approximately 13 000 are motorized.

As definitions of small-scale and industrial fishing fleets differ among the membership it is impossible to distinguish between these fleets at WECAFC level. One can however conclude that a large majority of the fishing vessels used are operating only within the EEZs of their respective countries. Most vessels (probably close to 90 percent) can be characterized as small-scale fishing vessels due to their size, fish hold/on-board storage capacity and as they can operate for a short period at sea.

However, a large majority of WECAFC Members has industrial (large-scale) fishing or fish transport vessels flagged that are active in mandate areas of tuna and non-tuna RFMOs at global level. Annex 5 shows that two-thirds of WECAFC Members are having fishing vessels listed in one or more RFMO approved fishing vessels lists. The most common RFMO vessels lists the WECAFC Members are listed on include those of: ICCAT, IATTC, NAFO, WCPFC and IOTC. Nine WECAFC Members have fish transport vessels that are listed on RFMO approved vessel lists. Moreover, nine out of 34 WECAFC Members do not have any fishing vessels that are involved in fishing under RFMOs.

At least 19 WECAFC Members are involved also in fishing or fish transport activities on high seas areas that are not covered by any RFMO.

2.6 Fisheries contribution to food security

The contribution of fish and fisheries products to food security shows large differences among the WECAFC Members. Specifically the difference between the Spanish- and English-speaking Member countries of WECAFC is striking. While most of the English speaking countries show per capita fish supplies of over 20 kg per year, the similar fish supplies in most Central American countries only reach 5 to 8 kg/capita per year. For comparison, the average per capita supply at world level is an estimated 19 kg per year.

The food balance sheets for the CARICOM Member countries of WECAFC show that average per capita fish supply in the region (excluding Haiti) has increased from 21 to 25 kg/capita/year over the period 1990 till 2011. However, if we include Haiti, then we see an increase of the average from 11 to 13 kg. The variation in per capita supply of fish to the CARICOM population is large and ranged in 2011 (latest available data) between 55 kg in Antigua and Barbuda and 5 kg for Haiti (figure 11). Most countries, except Guyana, saw an increase in per capita availability of fish compared to 1990. The decrease in Guyana can be largely attributed to the steep increase in exports of fisheries products. In 2011, some 49 percent of the fisheries production was exported.

¹⁷ The statistics from the USA (mainland) are not yet included in this figure (data are awaited).

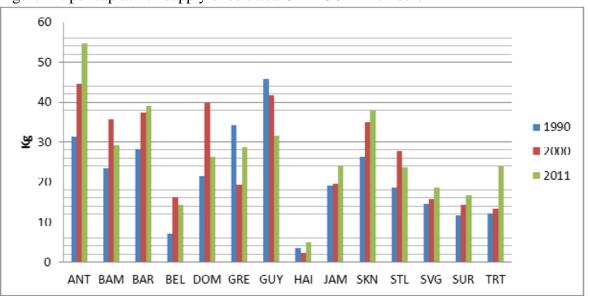


Figure 11: per capita fish supply of selected CARICOM Members

Source: FAO Food balance sheets, 2015

The Food Balance Sheets of some selected Central and South American countries and Cuba show large differences as well (figure 12). Per capita fish supply in Cuba reduced tremendously from 18 kg/caput/year1990, to 6 kg/caput/year in 2011. In Venezuela the supply nearly halved over the last decade. On the other hand, the per capita supply in Colombia, Nicaragua and Honduras at least doubled in the last two decades. The picture for Mexico is rather stable with a supply of around 11 kg/capita/year.

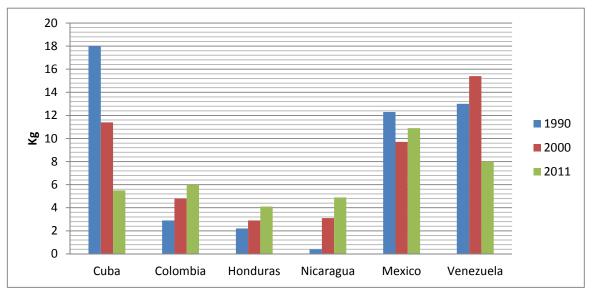


Figure 12: per capita fish supply of selected WECAFC Members

Source: FAO Food balance sheets, 2015

The Food Balance Sheet for the USA shows over the period 1990–2011 a very stable supply of fish of around 21 to 22 kg/capita/year.

Nutrition

Fish and fisheries products are important in the diet of the people in the WECAFC area, but the percentage of fish proteins in animal and total protein intake is below global average. In recent years fish accounted for 16.7 percent of animal protein intake and 6.5 percent of total protein intake at global level.

Currently in the CARICOM countries the fish protein intake, as percentage of total animal protein intake, ranges between 10 percent in Saint Vincent and the Grenadines and 25 percent in Guyana. In the CARICOM countries on average 16 percent of the animal protein intake by the population originates from fish and fisheries products. In terms of total protein intake by the CARICOM population, some 8 percent comes from fish, which is in fact a bit above global average.

For the selected Spanish speaking WECAFC Member countries above on average some 6 percent of the animal protein intake originates from fish and fisheries products. In terms of total protein intake the contribution of fish ranges between 2 and 4 percent. For the USA the contribution of fish to animal protein intake is some 7 percent, while its contribution to total protein intake by the population is around 5 percent in recent years.

3. Coverage of RFBs and RFMOs in the Atlantic Ocean and the Caribbean Sea

An extensive list of membership of the most important Regional Fishery Bodies (RFBs) in the Atlantic Ocean and Caribbean Sea can be found in annex 3.

FAO defines RFBs as a group of States or organizations that are parties to an international fishery arrangement and work together towards the conservation and management of fish stocks¹⁸.

The acronym RFB is used generically and includes also inland and marine capture fisheries bodies, fisheries research and advisory bodies, fisheries management organizations and management bodies for other ecologically related species such as albatross, petrels and whales. They can have conservation and/or management functions and advisory and/or regulatory roles, cover also aquaculture, and be established within or outside FAO's framework. Currently, there are at least 48 RFBs.

Not every RFB can be considered a Regional Fisheries Management Organization (RFMO). FAO defines an RFMO as: intergovernmental fisheries organization or arrangement, as appropriate, that has the competence to establish fisheries conservation and management measures. RFMOs are therefore generally distinguished from other RFBs, because of their management and regulatory powers, including the power to establish binding fisheries conservation and management measures.

¹⁸ <u>http://www.fao.org/fishery/rfb/en</u>

RFB	RFMO	
Advisory purpose	Advisory + Management purpose	
Voluntary (non-binding) measures and recommendations	Voluntary + binding measures and recommendations	
Mechanism for scientific advice and collaboration	Scientific advice and collaboration +, in some instances, a mechanism for fisheries quota negotiation and allocation	
Information and knowledge exchange	Information and knowledge exchange + regional databases and vessel registers	
Advise on high seas fisheries	Advise on, + regulate, monitor and manage high seas fisheries	
Promote harmonization of Monitoring, Control and Surveillance (MCS)	Promote + regulate MCS and support MCS enforcement by Member States	
Identify Vulnerable Marine Ecosystems (VMEs)	Identify + manage and conserve VMEs	

In general, the differences between an RFB and RFMO include the following:

3.1 RFBs in the Atlantic

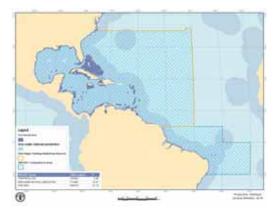
Western Central Atlantic Fishery Commission (WECAFC)

The WECAFC was established in 1973 by resolution 4/61 of the FAO Council on the basis of Article VI of the FAO Constitution. Its area of competence includes all marine waters of the Western Central Atlantic. The Statutes¹⁹ provide for the exact coordinates. The main area of competence is Area 31, but the commission is also mandated to work in the northern part of Area 41. The size of the WECAFC mandate area covered ads up to 18.2 million km² of water, of which 86 percent (15.7 million km²) is deeper than 1 000 meters. Some 51 percent of the mandate area (9.4 million km²) is high seas (area beyond national jurisdiction). For comparison, the size of the area of competence of WECAFC is larger than the land areas of the USA and Brazil combined. Its headquarters are located in Barbados, at the FAO Subregional Office for the Caribbean.

Objective: to promote the effective conservation, management and development of the living marine resources of the area of competence of the Commission, in accordance with the FAO Code of Conduct for Responsible Fisheries, and address common problems of fisheries management and development faced by Members of the Commission.

Membership: WECAFC has 34 Members, including all Caribbean SIDS, Central and South American countries bordering the Caribbean basin, the European Union (EU), the USA and various Distant Water Fishing Nations (DWFNs).

¹⁹ Statutes of WECAFC are available at: <u>ftp://ftp.fao.org/FI/DOCUMENT/wecafc/statutes.pdf</u>



OLDEPESCA

OLDEPESCA was established in 1981 by the Latin American and Caribbean Economic System (SELA) through a resolution by the 2nd Ministerial meeting in Guayaquil, Ecuador, as Latin American Organization for Fisheries Development. The area of competence includes the national waters, inland waters and EEZs of its Member States. Its headquarters is in Lima, Peru.

Objective: to meet Latin American food requirements adequately, making use of Latin American fishery resource potential for the benefit of Latin American peoples, by concerted action in promoting the constant development of the countries and the permanent strengthening of regional cooperation in this sector.²⁰

Membership: 12 Central and South American countries.



Source: map from FAO's RFB map viewer (accessed October 2015)²¹

Central America Fisheries and Aquaculture Organization (OSPESCA)

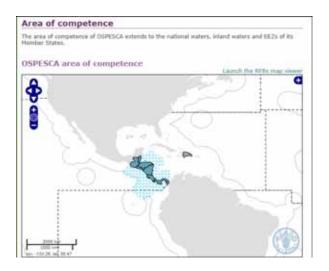
The Central American Fisheries and Aquaculture Organization (Organización del Sector Pesquero y Acuícola del Istmo Centroamericano, OSPESCA) was etablished in 1995 as specialized agency for fisheries of the Central American Integration System (SICA). The area of competence of OSPESCA extends to the national waters, inland waters and EEZs of its Member States. The headquarters of OSPESCA are located in El Salvador.

²⁰ <u>http://www.oldepesca.com/node/6</u>

²¹ All maps used originate from the RFB map viewer, available at: http://www.fao.org/fishery/rfb/search/en

Objective: OSPESCA aims to encourage the development and the coordinated management of regional fisheries and aquaculture activities, helping to strengthen the Central American integration process.

Membership: 7 Central American countries and the Dominican Republic.

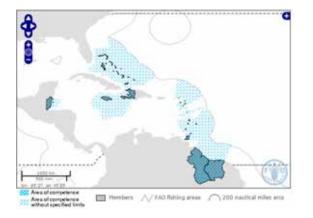


Caribbean Regional Fisheries Mechanism (CRFM)

The Caribbean Regional Fisheries Mechanism was established by means of a regional intergovernmental agreement signed on 4 February 2002. It is the fisheries organization of the CARICOM Members and associated Members. Its coverage includes the internal waters, territorial seas, continental shelves and exclusive economic zones (EEZs) of Member states. CRFM also has competence over transboundary resources beyond the jurisdiction of its individual Member States. The headquarters of CRFM are located in Belize.

Objective: to promote and facilitate the responsible utilization of the region's fisheries and other aquatic resources for the economic and social benefits of the current and future population of the region.

Membership: 16 Caribbean SIDS



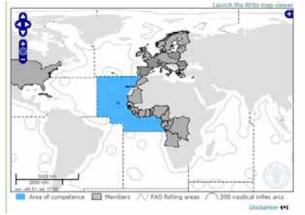
Fishery Committee for the Eastern Central Atlantic (CECAF)

The Fishery Committee for the Eastern Central Atlantic (CECAF) was established in 1967, by Resolution 1/48 adopted by the FAO Council at its Forty-eighth Session held in Rome under Article

VI (2) of the FAO Constitution. The Committee covers all living marine resources within its area of competence.

Objective: to promote the sustainable utilization of the living marine resources within its area of competence by the proper management and development of the fisheries and fishing operations.

Membership: 34 members, including 22 African countries, as well as the EU, USA, Japan, Spain, Netherlands, France and Cuba.

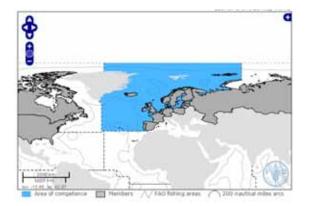


International Council for the Exploration of the Sea (ICES)

The International Council for the Exploration of the Sea (ICES) was established in 1902 by exchange of letters between participating countries. In 1964, through an agreed Convention, ICES received a legal foundation and full international status. ICES work is centred on the North Atlantic Ocean as well as the adjacent North Sea and Baltic Sea and is carried out in a collaborative and coordinated manner by the laboratories and institutes of the 20 ICES Member Countries. The headquarters of ICES are located in Copenhagen, Denmark.

Objectives: to provide the best available science for decision-makers to make informed choices on the sustainable use of the marine environment and ecosystems.

Members: 20 countries from Europe and North America.



3.2 RFMOs in the Atlantic

North-East Atlantic Fisheries Commission (NEAFC)

The North-East Atlantic Fisheries Commission (NEAFC) was established in 1959 and exists in its current form since 1980. Its area of competence includes those parts of the Atlantic and Arctic Oceans and their dependent seas which lie north of 36° north latitude and between 42° west longitude and 51° east longitude, but excluding:

(i) the Baltic Sea and the Belts lying to the south and east of lines drawn from Hasenøre Head to Gniben Point, from Korshage to Spodsbjerg and from Gilbjerg Head to the Kullen.

(ii) the Mediterranean Sea and its dependent seas as far as the point of intersection of the parallel of 36° latitude and the meridian of $5^{\circ}36'$ west longitude.

NEAFC's area of competence also includes the part of the Atlantic Ocean north of 59° north latitude and between 44° west longitude and 42° west longitude.

NEAFC area of competence - High seas, National waters Launch the R/Bs map viewer

Its headquarters are based in London, United Kingdom.

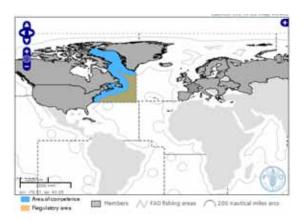
Objective: to ensure the long-term conservation and optimum utilization of the fishery resources within its area of competence, providing sustainable economic, environmental and social benefits.

Membership: 5 European countries and the EU.

Northwest Atlantic Fisheries Organization (NAFO)

NAFO was founded in 1979 as a successor to ICNAF (International Commission of the Northwest Atlantic Fisheries) (1949–1978). The area of competence of NAFO includes the waters of the Northwest Atlantic Ocean, north of 35°00' north latitude and west of a line extending due north from 35°00' north latitude and 42°00' west longitude to 59°00' north latitude, thence due west to 44°00' west longitude, and thence due north to the coast of Greenland, and the waters of the Gulf of St. Lawrence, Davis Strait and Baffin Bay south of 78°10' north latitude. Within this area, NAFO may only regulate fishing activity beyond Coastal States' EEZs. The headquarters of NAFO are located in Dartmouth, Nova Scotia, Canada.

Objective: to contribute through consultation and cooperation to the optimum utilization, rational management and conservation of the fishery resources of its area of competence, and to ensure the long term conservation and sustainable use of the fishery resources and, in so doing, to safeguard the marine ecosystems in which these resources are found.



Membership: 14 countries, mainly from North America and Europe, including also the EU.

International Commission for the Conservation of Atlantic Tunas (ICCAT)

ICCAT was established in 1966 as Intergovernmental Organization (IGO) and its coverage area includes all waters of the Atlantic Ocean, including adjacent seas. Its headquarters are in Madrid, Spain.

Objective: the conservation of tunas and tuna-like species in the Atlantic Ocean and adjacent seas.

Membership: 50 Contracting Parties, including the EU.

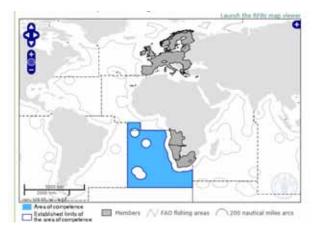
South East Atlantic Fisheries Organisation (SEAFO)

The SEAFO Convention was signed in April 2001 in Windhoek, Namibia. It entered into force on April 2003. SEAFO covers all living marine resources of fish, molluscs, crustaceans and other sedentary species within the SEAFO Convention Area, but excluding:

- sedentary species subject to the fishery jurisdiction of coastal States pursuant to article 77 paragraph 4 of the 1982 United Nations Convention on the Law of the Sea; and
- highly migratory species listed in Annex I of the 1982 United Nations Convention on the Law of the Sea.

Objective: to ensure the long-term conservation and sustainable use of all living marine resources in the South East Atlantic Ocean, and to safeguard the environment and marine ecosystems in which the resources occur

Membership: Angola, EU, Japan, Namibia, Norway, Republic of Korea, South Africa.



In summary, many WECAFC Members are Member in other RFBs and RFMOs that are active in the Atlantic region. Fifteen Members are also Member of CRFM and seventeen Members are either party or cooperating non-contracting party to ICCAT. Seven Members are also Member of OSPESCA and eight Members are involved in OLDEPESCA. Six Members are party to NAFO and three are involved in NEAFC.

As noted in section 2.5, WECAFC Members are also active in other oceans and involve there with other RFBs and RFMOs. The membership of various WECAFC Members in IATTC and WCPFC (in the Pacific) and IOTC (in the Indian Ocean) demonstrates that the Members are not just involved in fisheries governance in the Atlantic but also in other regions.

3.3 Governance

An analysis undertaken by the *Centre for Resource Management and Environmental Studies of the University of West Indies (UWI - CERMES)* as part of the Caribbean Large Marine Ecosystem (CLME) Project (GEF ID 1032) identified at least 25 institutions/organisations working within the Caribbean and North Brazil Shelf Large Marine Ecosystems that have some type of mandate related to the governance of the region's living marine resources (Figure 13). Notwithstanding the fact that many of these organisations have contributed to advancements in transboundary coordination and resource management, the geopolitical focus of many of these organisations has resulted in a certain "patchiness" of the governance arrangements. In this respect, the Caribbean is unique in its patchwork of organizations, but not in terms of fisheries mix, multi-species nature and the need for collaboration between SIDS, Distant Water Fishing Nations (DWFNs) and large countries.

It should further be noted that Transboundary Diagnostic Analyses (TDAs) undertaken as part of the CLME Project indicated that "weaknesses in governance arrangements" was an over-arching root cause hampering the full adoption of an ecosystem approach in the region.

This rich organisational diversity is a strength of the WCR, but overarching policy coordination is tacking		Regions/sub-	Wider	Central and Sour	th Insular
Agreements	UN and Intergovernmental	regions	Caribbean	America	Caribbean
AarPol Special Area: OAS CSI Resolution LBS Protocol 2010		-	Inter-governmen	tal Organisations (IGOs)	
CNFO			ACS	CCAD	CARICOM
	050		CEP	COCATRAM	CCCCC
2005	00000		СТО	OSPESCA	CEHI
	CREW		ECLAC	OLDEPESCA	CRFM
SPAW Protocol; St. 2000 Seorges' Declaration	0		IOCARIBE		OECS
NGA CSI Resolution			WECAFC		
CONFE-PESCA	OSPESCA	Organisations	Non-governmen	tal Organisations (NGOs)
	ACS	e	TNC	CONFEPESCA	UWI
	GATHALAG SIGA; CDEMA		GCFI		CANARI
CANAF8	CCAD; CTO		AMLC		CAST
rtagena Convention;	CEHE UNEP - CEP; DECS		CATHALAC		
Oil Spills Protocol 1985	ESDU; OECS Fisheries Unit		IUCN		
			Private Sector O	rganisations (PSOs)	
1980	OECS COCATRAM		ARPEL		
	OLDEPESCA	Number	12	5	8
ARPEL TNC 1975	IOCARIBE	Percentage	48%	20%	32%
	WEGAFC; GARICOM; CME	<u> </u>			
CAST	-				

Figure 13: Timeline of establishment of regional organizations, plus typology and geographic scope²²

In an attempt to improve the governance and management of the region's living marine resources and to assist the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+) Region fully adopt the ecosystem approach, a 10-year Strategic Action Programme (SAP) was developed which seeks to improve human well-being through improved ecosystem and fish-stock conditions. This SAP, which has been endorsed at the political level by over twenty countries within the region, provides a roadmap towards sustainable living marine resources management through strengthened and consolidated regional cooperation.

Through the endorsement of the CLME+ SAP, countries committed to the implementation of a comprehensive package of coordinated strategies and actions. Six strategies and four sub-strategies, and a total seventy-seven (77) short-term (0-5 years) and medium-term actions (6-10 years) for enhanced marine resources governance have been defined under the SAP.

Successful implementation of the CLME+ SAP can only take place through, amongst other things, the strengthening and improved functioning of the existing governance (regional, national and local) arrangements.

Of particular importance to the RFBs is CLME+ SAP Strategy 2: *Enhance the regional governance arrangements for sustainable fisheries*. Under this strategy the countries of the region²³ have agreed in 2013 to a number of priority short term actions for improved sustainable fisheries governance, which include:

• the establishment of an interim arrangement for sustainable fisheries;

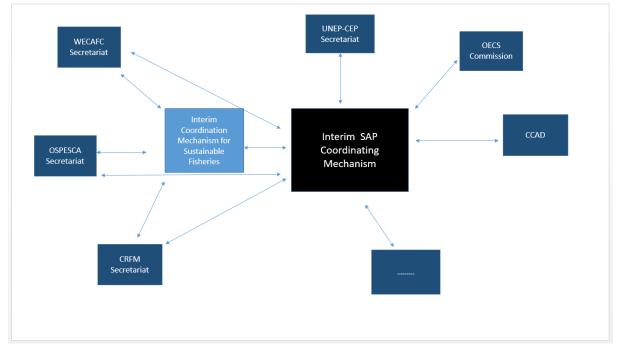
²² In 2013, CEHI became a part of the Caribbean Public Health Agency (CARPHA)

²³ As of February 2016 the CLME SAP was endorsed by 22 countries in the Wider Caribbean Region.

- the review and reform of WECAFC (as needed); and
- the need to evaluate the needs and options for a Regional Fisheries Management Organisation (RFMO) or alternative arrangement for the management of shared living marine resources.

The CLME+ SAP further recognises that the ecosystem approach cannot be fully adopted without enhanced integration and coordination between and amongst the agencies/organisations with an ocean's mandate and as such Strategy 3 seeks to establish and operationalize a regional policy coordination mechanism for ocean governance, with initial focus on shared living marine resources (figure 14).

Figure 14: Schematic provisional representation of the interim Coordination Mechanism for Sustainable Fisheries and the Interim SAP Implementation Coordination Mechanisms.



WECAFC Members, by endorsing the SAP and expressing support to the SAP implementation at WECAFC 15 have authorized the secretariats of CRFM, OSPESCA and WECAFC to work on the establishment of the interim coordination mechanism for sustainable fisheries development and management in the region. The currently proposed structure would build on the existing governance framework for fisheries at subregional and regional level. It will strengthen the position of OSPESCA and CRFM at subregional level and recognizes the value of the scientific and capacity building work undertaken at sub-regional level for the regional level.

Taking in consideration the possibilities within the CRFM and OSPESCA Memberships to issue (through respectively CARICOM and SICA) binding recommendations and regulations that are valid for the whole Membership, there are clear benefits to extend some of these recommendations to the regional level. The wider WECAFC Membership can benefit from improved fisheries management at the subregional level, through discussion, review and adoption of these recommendations and measures (binding and voluntary) to increase harmonization of approaches at regional level resulting in greater impact of fisheries policy decision making processes.

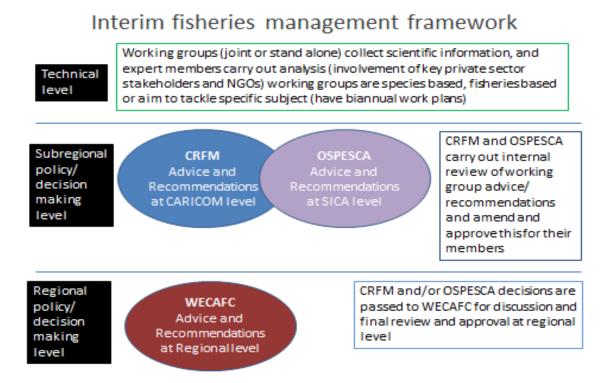
Collaboration between the RFBs through an interim arrangement, as was agreed on 27 January 2016 through a Memorandum of Understanding²⁴ between CRFM, OSPESCA and FAO/WECAFC

²⁴ Memorandum of Understanding for Interim Coordination on Sustainable Fisheries (signed on 27 January 2016), accessible at: <u>http://www.fao.org/3/a-bc123e.pdf</u>

Secretariats, may partially solve the needs for a few years, but eventually will remain less effective in governance terms as long as WECAFC is unable to issue binding recommendations. The interim arrangement addresses however a misbalance in the sense that the smaller countries – in terms of fisheries production – (SIDS under CRFM and Central American countries under OSPESCA) appear to have better collaboration on fisheries management with neighbouring countries than those WECAFC Members that produce most fish in the region. The interim arrangement enables the larger fish producing countries among WECAFC's members to collaborate more effectively with the smaller SIDS and Central American countries, organized under CRFM and OSPESCA. Joint species- or fisheries based working groups and projects are the main tools for collaboration under this arrangement. The interim mechanism is a step forward in the right direction and WECAFC seems to be well-placed to carry out an umbrella function for the region in terms of fisheries management advisory services (figure 15).

Collaboration with the UNEP Regional Seas Commissions is an area that has not been investigated well, but discussions are ongoing. This inter-sectoral collaboration will be addressed partially under the CLME+ SAP interim coordination mechanism and may look into the development of a Regional Ocean Management Organization (ROMO), however to discuss this in detail is beyond the scope of this paper.





4. International fisheries instruments and RFMO roles

The international community has invested considerable time and effort in developing international fisheries instruments, both binding and voluntary²⁵, to achieve the objective of deterring illegal, unreported and unregulated (IUU) fishing and ensuring the long-term conservation and sustainable use of living marine resources and marine ecosystems. The instruments are based on the 1982 United Nations Convention on the Law of the Sea (UNCLOS) and share many synergies among themselves.

There are currently four international fisheries instruments that are binding for the countries that have ratified or accessed these international agreements. Moreover, there are a number of non-binding, voluntary, international fisheries instruments that are recognized as important for fisheries management. Most of these instruments assign important roles to RFMOs in terms of promotion of regional fisheries management collaboration and conservation of fisheries resources.

4.1 The 1982 Convention and UNFSA

1982 United Nations Convention on the Law of the Sea

The <u>1982 United Nations Convention on the Law of the Sea</u> (UNCLOS²⁶) sets out the legal framework within which all activities in the oceans and seas must be carried out, including fisheries activities. It provides for the principles and rules for the establishment of various maritime zones, as well as the rights and obligations of States within these zones. In particular, UNCLOS sets out the sovereign rights of coastal States for the purposes of exploring and exploiting, conserving and managing living resources within the Exclusive Economic Zone, as well as their duties with regard to the conservation and utilization of such resources. It also sets out the rights and duties of the flag State with respect to vessels flying its flag in the various maritime zones. There are several important provisions in the 1982 Convention which have been elaborated in the 1995 Fish Stocks Agreement and in RFMO instruments. The recent Sub regional Fisheries Commission (SCRFC) advisory opinion by the International Tribunal of the Law of the Sea (ITLOS) and the FAO Voluntary Guidelines for Flag State Performance also contain important guidance on flag state responsibilities. The UNCLOS recognizes the sovereignty of states in their internal waters, archipelagic waters (in the case of an archipelagic State), territorial seas, sovereign rights in their EEZs and continental shelves and freedom of the seas in the high seas.

UNCLOS has various dedicated articles on the obligations of states to cooperate in taking the necessary fisheries conservation measures for shared stocks and in the high seas, e.g.:

Article 63(1): "Where the same stock or stocks associated species occur within the exclusive economic zones of two or more coastal States, these States shall seek, either directly or through appropriate subregional or regional organizations, to agree upon the measures necessary to co-ordinate and ensure the conservation and development of such stocks without prejudice to the other provisions of this Part"

²⁵ Binding instruments are often established in the form of conventions or agreements. Examples include UNCLOS, the 1993 FAO Compliance Agreement, the 1995 UN Fish Stocks Agreement, and the 2009 FAO Port State Measures Agreement. Voluntary instruments are generally negotiated and agreed at FAOs' Committee on Fisheries (COFI). Examples include, amongst others, the 1995 FAO Code of Conduct for Responsible Fisheries, the 2003 FAO Technical Guidelines on the ecosystem approach to fisheries (EAF), the 2008 FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas and the 2010 FAO International Guidelines on Bycatch Management and Reduction of Discards.

²⁶ Formally "UNCLOS" refers to the Conferences during which the Law of the Sea Convention was negotiated and as such there were UNCLOS I, II and III. It is therefore more appropriate to refer, in an abbreviated manner to the "1982 Convention" or "LOSC". The term "UNCLOS" is used in this report solely because it is widely used as such throughout the fisheries community in the region.

- Article 63(2): "Where the same stock or stocks associated species occur both within the exclusive economic zone and in an area beyond and adjacent to the zone, the coastal State and the States fishing for such stocks in the adjacent area shall seek, either directly or through appropriate subregional or regional organizations, to agree upon the measures necessary for the conservation of these stocks in the adjacent area"
- Article 64(1): "The coastal State and other States whose nationals fish in the region for highly migratory species listed in Annex I shall cooperate directly or through appropriate inter-national organizations with the view to ensuring conservation and promoting the objective of optimum utilization of such species throughout the region, both within and beyond the exclusive economic zone."
- Article 118: "States shall cooperate with each other in the conservation and management of living resources in the areas of the high seas. States whose nationals exploit identical living resources, or different living resources in the same area, shall enter into negotiations with a view to taking the measures necessary for the conservation of the living resources concerned. They shall, as appropriate, cooperate to establish subregional or regional fisheries organizations to this end."

Additional provisions of relevance here include the right to fish on the high seas (art 116) and the duty to take measures against nationals fishing on the high seas (art 117).

Ninety one per cent (31 out of 34) of WECAFC Members have ratified UNCLOS.

1995 United Nations Fish Stocks Agreement (UNFSA)

<u>The Agreement</u> promotes good order in the oceans through the effective management and conservation of high seas resources by establishing, among other things, international standards for the conservation and management of straddling fish stocks and highly migratory fish stocks. The UNFSA aims to ensure that measures taken for the conservation and management of those stocks in areas under national jurisdiction²⁷ and in the adjacent high seas are compatible and that there are effective mechanisms for compliance and enforcement of those measures on the high seas. The UNFSA recognizes the special requirements of developing States in relation to conservation and management as well as the development and participation in fisheries of straddling and highly migratory fish stocks.

It sets out principles for the conservation and management of those fish stocks and establishes that such management must be based on the precautionary approach and the best available scientific information. The UNFSA provides an enabling framework for the role of RFMOs.

Under part III "mechanisms for international cooperation", the UNFSA obligates States to cooperate through RFMO/As. The UNFSA aims at effective measures and actions of RFMO/As through rules on establishment, Membership, access, functions, transparency, data collection, research cooperation, collection and provision of information, new entrants to the fisheries and non-Member States whose vessels undermine the effectiveness of high seas measures. Article 13 of the UNFSA also calls for existing mechanisms to be strengthened to improve their effectiveness.

In its part IV "non-Members and non-participants", the UNFSA states that non-Members or organizations and non-participants are not discharged from the obligation to cooperate in the conservation and management of fish stocks, and cooperative actions are elaborated.

The substance and methods of implementation of the provisions of the UNFSA have been strengthened in recent years, inter alia, through the Review Conferences, informal consultations of

²⁷ It is important to note that the Agreement applies primarily to the high seas, but contains obligations that relate to "areas under national jurisdiction". This is the first treaty that uses this phrase and results in differences in interpretation. For some States, the phrase refers to all waters under national jurisdiction (i.e., using jurisdiction in its broadest sense). For others, the term applies only to the Exclusive Economic Zone (EEZ).

States Parties to the UNFSA, through the work of the General Assembly and through the practices of States and the regional fisheries management organizations (RFMOs).

29

Fifty-nine per cent (20 out of 34) of WECAFC Members have ratified or acceded to the UNFSA.

4.2 FAO Compliance agreement

The 1993 FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the high seas specifies flag States' responsibility in respect of fishing vessels entitled to fly their flags and operating on the high seas, including the authorization by the flag State of such operations, as well as through the strengthened international cooperation and increased transparency through the exchange of information on high seas fishing. In this context it defines some key terms. The Agreement was adopted pursuant to Article XIV of the FAO Constitution to stop vessels that are flagged by States that are not a Member of a RFMO from fishing in contravention with the conservation measures taken by the RFMO. The Compliance Agreement discourages "flag hopping" by requiring States not to authorize vessels where previous authorization suspended or withdrawn. It further promotes international cooperation through exchange of information (e.g. HSVAR – High Seas Vessels Authorization Record), which led to RFMOs having strengthened their requirements.

Forty-one per cent (14 out of 34) of WECAFC Members have accepted the Compliance Agreement.

4.3 FAO Port State Measures Agreement

The 2009 FAO Port State Measures Agreement to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (PSMA) aims to prevent IUU-caught fish from entering international markets through implementation of harmonized measures by countries and through RFMOs. It removes incentives to engage in IUU fishing. Stronger port controls applied under the PSMA will leave IUU fishers with fewer places to sell their fish. The PSMA, which was adopted pursuant to Article XIV of the FAO Constitution, encourages Parties to deny a vessel the use of port if *inter alia* the vessel has no valid authorization to fish, or if a Party receives clear evidence that the fish on board was taken in contravention of applicable requirements and measures in place. The PSMA establishes harmonized minimum standards for compliance, is cost-effective and generates economic hardship and criminal proceedings for (illegal, unreported and unregulated) IUU fishers. It also enhances cooperation among coastal States, flag States and RFMOs.

To date²⁸ twenty nine per cent (10 out of 34) of WECAFC Members have signed or ratified or acceded to the PSMA. The Agreement has entered into force in 2016.

4.4 Role of RFMOs and RFBs in the implementation of these agreements

The role of RFMOs and RFBs in the implementation of binding international fisheries instruments is noteworthy. In the Wider Caribbean Region, the various RFBs have been actively promoting the ratification of these agreements, as well as generating awareness and building capacity in the Member states for implementation of the agreements. As a consequence the Secretariats of CRFM, OSPESCA and WECAFC have worked with their respective Members in support of implementation of these agreements. The Status of ratification of the agreements by WECAFC Members is provided in annex 1.

The <u>Fourteenth Session</u> of the WECAFC was held in Panama City, Panama in 2012. At that session a resolution was adopted on the support by WECAFC Members to implement international instruments in national legislation²⁹.

²⁸ February 2016

The Fifteenth Session of the WECAFC was held in Port of Spain, Trinidad and Tobago in 2014. At that session the WECAFC adopted a resolution on the implementation of the Port States Measures Agreement and the Voluntary Guidelines on Flag State Performance³⁰. The WECAFC Secretariat, with support from FAO headquarters, organised also a workshop on implementing the PSMA in 2014, in Port of Spain, Trinidad and Tobago. This workshop focussed on the steps that need to be taken in policy, institutional, legal and capacity building for PSMA implementation.

The CRFM adopted the Castries (St Lucia) declaration on illegal, unreported and unregulated fishing in 2010. The Castries declaration urges the CRFM Members to implement multiple international instruments in their legislation, like the Code of Conduct on Responsible Fisheries, and to become party to UNCLOS, the UNFSA, and the FAO Compliance Agreement if they have not done so already.

The Caribbean Community Common Fisheries Policy (CCCFP), a binding treaty focusing on cooperation and collaboration of Caribbean people, fishermen and their Governments in conserving, managing and sustainably utilising fisheries and related ecosystems, also notes in its preamble the importance of these international instruments and that states should make an effort to ratify and implement these instruments.

NEAFC, NAFO and ICCAT all have issued binding decisions and recommendations on fisheries management and conservation of fish stocks on the high seas and on Port State Measures and related inspection schemes.

The international (binding) instruments are important in setting the framework for the tasks and responsibilities for RFBs and RFMOs.

In addition, voluntary instruments, such as the FAO Code of Conduct for Responsible Fisheries and the International Plan of Action to deter and eliminate illegal, unreported and unregulated fishing (IPOA-IUU) also refer to the important tasks and responsibilities of RFMOs.

4.5 The track record of RFMOs in establishing management systems according to International Law

Most RFMOs and some RFBs have in the last ten years undertaken external performance reviews. NEAFC was the first one in 2006³¹. NEAFC repeated it again in 2014. The criteria for the performance reviews of RFMOs have been very similar and are intended to cover all instruments and international processes³². It is, therefore, suggested to use these criteria to describe the present day roles of RFMOs.

²⁹ The resolution adopted is available in Annex D of the Report of the 14th session, which can be found at: http://www.fao.org/3/a-i2677t.pdf

³⁰ Report of the 15th Session of WECAFC, SLC/FIPI/FIRF/R1069 (Tri), Resolution WECAFC/15/2014/9

³¹ Ceo, M.; Fagnani, S.; Swan, J.; Tamada, K.; and Watanabe, H. *Performance Reviews by Regional Fishery Bodies: Introduction, summaries, synthesis and best practices, Volume I: CCAMLR, CCSBT, ICCAT, IOTC, NAFO, NASCO, NEAFC.* FAO Fisheries and Aquaculture Circular. No.1072. Rome, FAO. 2012. 92 pp.

³² This Paper assesses the performance of WECAFC on the basis of the criteria used in 2006 for the performance review of NEAFC. It should be noted that these criteria were established taking into consideration the provisions, programme of work and instruments of NEAFC. For instance, the criterion of flag State duties is assessed on the basis of States' compliance with NEAFC Scheme of Control and Enforcement. Furthermore, the assessment of criteria of "compatibility of management measures", "Port State measures", "transparency" etc. are evaluated against the provisions of the UN Fish Stocks Agreement (UNFSA). These criteria were subsequently used to assess the performance of tuna-RFMOs (ICCAT, IOTC, WCPFC and CCSBT). Specifically, the Secretariat of these RFMOs used the NEAFC criteria in consideration of "the common elements of the tuna RFMO charters, the best practices of each tuna RFMO and relevant provisions of applicable international instruments". It is clear that the status and institutional framework of WECAFC is different from the one of NEAFC, or those of tuna-RFMOs. Assessing the performance of an Article VI Regional Fishery Body against criteria tailored for organizations established by an international treaty could therefore lead to misleading outcomes. Nevertheless,

	Area	General Criteria
1	The Convention/Agreement	Effectiveness of meeting the objective of the Convention/Agreement
2	Conservation and management	State of living resources
		Ecosystem Approach
		Data collection an sharing
		Quality and provision of scientific advice
		Adoption of conservation and management measures
		Capacity management
3	Compliance and enforcement	Flag state duties
		Port State measures
		Monitoring control and surveillance (MSC)
		Follow-up on infringements
		Cooperative mechanisms to detect and deter non-
		compliance
		Market-related Measures
4	Decision making and dispute settlement	Decision-making
	~ *	Dispute settlement
5	International Cooperation	Transparency
	·	Relationship with non-Contracting Parties
		Cooperation with other international organisations
		Special requirements of developing States
6	Financial and administrative issues	Availability of resources for activities
		Efficiency and cost effectiveness

 Table 2: Summary of the criteria commonly used in the RFMO performance reviews

The most important aspect of being able to set up robust conservation and management schemes is to acquire the best scientific advice available on the status of stocks and fisheries. Some examples on how the provision of scientific advice is handled under RFMOs are given below.

In the <u>North-East Atlantic</u>, there has been for many years one provider of scientific advice to underpin management measures and that is the International Council for the Exploration of the Sea (ICES). It was founded more than 100 years ago and has since been a forum for cooperation on science and management advice. It undertakes over hundred stock assessments each year. ICES advice, based on peer-reviewed expert group reports, is prepared in an advice drafting group and approved by the ICES Advisory Committee (ACOM).

ICES advisory process contains the following steps:

- 1. A request for advice is received from a client.
- 2. Data are collected by expert groups, which then make assessments and draft a first scientific/technical response to the request.
- 3. Expert group reports are peer-reviewed by independent experts.
- 4. In cases of stock assessments where the benchmark (established assessment method to be used) has been agreed upon, the reviewing is carried out within the expert group and then followed by an advice drafting group.
- 5. The expert group report together with the review is used in the advice drafting group.
- 6. Draft advice prepared by the advice drafting group is discussed and finally approved by the Advisory Committee (ACOM).
- 7. The advice is delivered to the client.

the author considers the criteria used suitable for demonstrating the general functions of RFBs and RFMOs and to use these criteria as they are commonly applied elsewhere.

ICES Maximum Sustainable Yield (MSY) advice rule requires a relatively high level of data and knowledge on the dynamics of the stocks concerned. If the data and knowledge requirements are not fulfilled ICES cannot provide advice consistent with MSY; instead ICES applies an advice rule that is only based on precautionary considerations.

For the purposes of identifying the advice rule to be applied when giving advice on fishing possibilities, ICES classifies the stocks into six main categories on the basis of available knowledge. Clients of the ICES advice are the coastal states in the NE-Atlantic (all Members in ICES) and the RFMOs NEAFC and NASCO.

The arrangement between NEAFC and ICES include that the RFMO mentioned does not have to set up a scientific department or organize the sampling of data for the assessments. In some cases, the RFMO provides data to the ICES assessments. The RFMO has no influence on how the assessments are carried out.

In contrast, in the <u>North-West Atlantic</u>, the science component of **NAFO** is an integral part of the organization. It is not outsourced. Scientific meetings are held throughout the year to address issues of importance to NAFO. Initiatives and recommendations coming from the scientific community within NAFO prompt research on fisheries and environmental issues sponsored and carried out by the Contracting Parties themselves. Through cooperation and consultation, many of these research projects are joint efforts by research institutes from more than one country. NAFO greatly benefits from the fact that scientific information from very diverse sources is regularly exchanged and integrated to its best advantage. The Scientific Council is a constituent body of NAFO as laid out in its Convention. The Scientific Council compiles and maintains statistics and records, and publishes information pertaining to the fisheries including environmental and ecological factors affecting the fisheries.³³

In the <u>Mediterranean and the Black Sea</u>, the General Fisheries Commission of the Mediterranean (**GFCM**) has a similar arrangement and uses a Scientific Advisory Committee on Fisheries (SAC) consisting of Members' Representatives, who may be accompanied by alternates, experts and advisors. Under the SAC there are sub-committees on stock assessment, statistics and information, economics and social sciences, and marine environment and ecosystems. In addition, four sub-regional committees are in the process of being used and tested as tools in support of scientific advice by SAC on target species (Eastern Mediterranean, Central Mediterranean, Adriatic Sea and Western Mediterranean) and a special mechanism is in place for the Black Sea region which has specific scientific priorities and needs as opposed to the Mediterranean sub-regions.

ICCAT³⁴ has established panels, which are, responsible for keeping under review the stocks under its purview, and for collecting scientific and other information relating thereto. Based on investigations from the Standing Committee on Research and Statistics (SCRS), Panels may propose to the Commission recommendations for joint action by the Contracting Parties to ICCAT.

In other RFMOs, for example, at the Inter American Tropical Tuna Commission (**IATTC**), stock assessments are undertaken by the staff at the secretariat. The work of the IATTC staff is divided into four programs: Stock Assessment; Biology and Ecosystem; Data Collection and Database; Bycatch and International Dolphin Conservation Program (IDCP).

The performance reviews undertaken by all these RFMOs recognized the high value of scientific advice for the decision making process on fisheries management advice. Each of the structures that have been set-up to generate the specific advice for the RFMOs has its pros and cons.

³³ http://www.nafo.int/science/science.html

³⁴ http://www.iccat.int/en/organization.htm

While scientific advice is the basis for good management decision making, another role of the RFMOs in fisheries management should not be overlooked. The role of RFMOs in monitoring, control and surveillance (MCS) of fisheries is very important as well. ICCAT, NEAFC, NAFO and most other RFMOs use authorized vessel lists, IUU vessel lists, Port State Measures or Controls, Vessel Monitoring Systems (VMS), catch documentation schemes and procedures for identification of cases of non-compliance. These MCS tools are regarded as essential to deter and eliminate IUU fishing.

In summary, it is clear that the aforementioned RFMOs have established ways for providing a scientific basis for fisheries management and the tools for MCS and in the process have found solutions that meet the demands appropriate to the conditions in the geographical area they operate in and the species and fisheries they deal with.

5. Costs and benefits of maintaining WECAFC as FAO article VI RFB

Maintaining WECAFC as regional fishery advisory body would mean a *status quo*. Although the 2013/2014 Performance Review of WECAFC showed that many improvements had been made in WECAFC's operations since 2011, it was clear that the organization as such, with a tiny secretariat and little funds had reached its limits in terms of serving the WECAFC Members. On the other hand, the nature of the target fisheries resources (shared, transboundary, ecosystem wide) and the increasing requests for capacity building and technical and policy advice coming from the Members made that the demands on WECAFC continued to increase rapidly.

5.1 Costs

5.1.1 Current costs

WECAFC activities are funded from the FAO Regular Programme, including the FAO Technical Cooperation Program (TCP), as well as extra-budgetary resources provided by other organizations/resource partners. The total estimated budget that was necessary to carry out the approved WECAFC Work Programme for the period 2012–2013 was some USD2.6 million. Thanks to partnerships with others (NOAA, CFMC, CITES, World Bank, CRF, OSPESCA, CLME, GEF, IDB, etc.) and in-kind contributions by WECAFC Members and FAO the WECAFC managed to carry out most activities for much less budget; approximately USD1.2 million. For the period 2014–2015 the initially estimated budget necessary to carry out the Programme of Work almost doubled. However, as some USD20 million³⁵ in resources were mobilized the WECAFC could extend its Programme of Work tremendously; addressing the needs of the WECAFC Members much better.

In contrast to the period before 2011, the WECAFC programme included in recent years not only FAO Regular Programme support, but also now extra-budgetary resources mobilized through a range of projects with partners; projects that contribute to the implementation of the agreed programme of work.

Some 75 percent of the activities under the work programme (period 2012–2013) were actually implemented to a greater or lesser extent, but real funding obtained was too limited (insufficient) to fully achieve what the Members agreed needed to be done. Much of the funding provided under TCP (because of the nature of TCP assistance) went to activities that have only limited linkage with WECAFC's Programme of Work and substantial in-kind support was needed. Similarly, both in terms

³⁵ The USD20 million includes the development, formulation and implementation of various large GEF funded projects, such as the REBYC II LAC (5.6 million), CC4Fish (5.4 million), Caribbean Billfish (1.9 million) and the shrimp and groundfish component of the CLME+ project (1 million) as well as TCP projects funded by FAO.

of budget mobilized and activities realized in the period 2014–2015 some 80 percent of the programme of work has been carried out, or has started and will continue into 2016 and 2017 or even further³⁶.

Being WECAFC an FAO Article VI Body FAO provides the secretariat and organizes the sessions of the Commission and its subsidiary bodies through the Organization's Regular Programme (which consists of annual assessed contributions by FAO's Member Nations).

Over its 40+ years of existence WECAFC sessions and meetings of its Scientific Advisory Group have been financed by FAO's Regular Programme, thus from the FAO Membership contributions. Similarly, the Secretariat operations have been funded by the regular programme; many years these were operated from FAO Headquarters in Rome, and since the 1990s from Trinidad and from Barbados, when the Subregional office for the Caribbean was established in Barbados in the 1990s.

The WECAFC Regular Programme budget requested for the biennium – 2012–2013 was nearly USD255 000, but only an allocation was made of USD120 000 (Table 3). Approximately 57 percent (USD69 000) of the allocated budget has been used for interpretation and translation services (English, Spanish, French) as well as publication of the WECAFC session reports.

Approximately USD13 000 was used for the 6th SAG session in 2013 (travel, organization and publication of the report) and USD13 000 was spent on supporting the organization of Working Group meetings and covering travel for some SIDS experts in 2013–2014. Moreover, some USD9 000 was spent on supporting travel for Cuban experts to enable them to join in specific Working Group activities. Some USD6 000 was used for General office support (mainly administrative/liaison assistant support) and USD8 000 on legal assistance for updating the Rules of Procedure.

Travel and participation costs of Headquarters staff in WECAFC activities added up to some USD25 000, financed under the Regular Programme funds of the Fisheries and Aquaculture Department at FAO headquarters.

In the 2014–2015 biennium, the allocation to WECAFC from Regular Programme was further reduced to approximately USD110 000. With the support of the Government of Trinidad and Tobago, by organizing the 15th session in 2014 back-to-back with the training workshop on the Port State Measures Agreement, it was possible to use less of the available funds (only USD42 000) in support of travel of the delegates from Member SIDS and interpretation/ translation services, than were needed for the 14th session in 2012. The first WECAFC reorientation and Strategic Planning Meeting was supported by the Government of France/Guadeloupe and the European Commission, while the remainder of the costs (USD18 000) were covered by FAO's Regular Programme.

The partnerships with other organizations and the development of extra-budgetary projects led to an increase in expenditures in terms of travel and communication/liaison services for the Secretariat in 2014–2015. The other expenditures remained largely similar as in the biennium earlier.

The FAO Regular Programme provides also an (in-kind) contribution to the Secretariat in terms of 50 percent of the SLC Fishery and Aquaculture Officer (P4 level) staff time, which should be valued at USD70 000 per year and the office, furniture and administrative support infrastructure, which can be valued at USD30 000 per year. FAO Headquarters technical assistance (staff time) to the Commission can be valued at an average of USD40 000 per year, although some fluctuation could be noticed in the support provided in recent years.

³⁶ This is the case in various ongoing projects with duration of 2 to 5 years.

Table 3: Budget allocations a	nd expenses for WECAFC activities under the FAO Regular
Programme, 2012–2015	

(Figures are approximate in USD)				
	Allocation and	Allocation		
	expenses	and expenses		
	2012–13	2014–15		
Subregional Office for the Caribbean (SLC)				
FAO Regular Programme (per biennium) budget allocated	120 000	110 000		
by SLC (non-staff resources)				
Organization of bi-annual session, interpretation and	69 000	42 000		
translation, publication of reports of WECAFC session	09 000	42 000		
1 st WECAFC reorientation meeting (travel and		18 000		
publications)		18 000		
SAG Sessions (6 th and 7 th) and publication of reports	13 000	12 000		
(Travel, organization)	13 000	12 000		
Working Group meetings, travel for experts and	13 000	10 000		
Secretariat	13 000	10 000		
Travel for Cuban experts for Working Groups	9 000	6 000		
General office support (mainly administrative/liaison	6 000	11 000		
assistant support)	0 000	11 000		
Legal assistance	8 000	5 000		
Participation of the Secretariat in partner organization	2 000	6 000		
meetings	2 000	0 000		
SLC Office (Furniture, equipment and administrative	60 000	60 000		
assistance) contribution	00 000	00 000		
SLC Staff Resources (Fishery + Aquaculture Officer)	140 000	140 000		
50% -WECAFC Secretary+ technical assistance	140 000	140 000		
FAO Headquarters (FIPI, FIPS, FIRF)				
Headquarters Staff Resources -technical assistance	80 000	70 000		
Headquarters staff travel and participation costs in	25 000	20,000		
WECAFC activities	23 000	20 000		
Total (staff + non-staff) contribution by FAO's	425 000	400 000		
Regular Programme to WECAFC	423 000	400 000		

The annual contribution in cash and kind by FAO's Regular Programme to WECAFC is therefore approximately USD200 000–220 000.

Although (at the request of the 14th session) a dedicated WECAFC Trust Fund was established, in support of the WECAFC Work Programme, the contributions received were generally in-kind (e.g. hosting and funding the organization of Working Group meetings). FAO Trust Fund and regular programme assistance in fisheries and aquaculture to WECAFC countries is estimated for 2012–13 at some USD600 000. These funds are administered through trust funds established for each project activity, in accordance with FAO Financial Regulations.

In-kind contributions by Members and partner institutions, with an estimated combined total of around USD400 000, were received in support of the 2012–2013 work programme from:

- CFMC- Queen Conch Working Group and Spawning Aggregations Working Group
- TBF/IGFA/World Bank Recreational Fisheries Working Group (2 meetings)
- CRFM/CLME Flying Fish Working Group (2 meetings)
- IFREMER/EU/JICA/CRFM FAD Working Group (2 meetings)

In-cash and in-kind contributions by Members and partner institutions, with an estimated combined total of around USD9 million, were received in support of the 15th session and the 2014–2015 Programme of Work.

Source		Purpose (years of implementation)		
	(USD)			
Inter-American Development	75 000	Shrimp and Groundfish Working Group		
Bank		(2014–15)		
GEF (International Waters)	150 000	Shrimp and Groundfish Working Group		
		(REBYC II LAC PPG phase) (2014)		
GEF (International Waters)	5 600 000	Shrimp and Groundfish Working Group		
		(REBYC II LAC PPG phase) (2015–19)		
CITES	90 000	Queen Conch Working Group (2014–15)		
CFMC	40 000	Queen Conch Working Group (2014–15)		
CITES	80 000	Shark Working Group (2014–16)		
World Bank/GEF	1 949 000	Recreational Fisheries Working Group		
		(Caribbean Billfish Project) (2015–18)		
NOAA	62 000	Lobster Working Group (2014–15)		
Government of Japan	45 000	Deep Sea Fisheries Management Working		
_		Group (2014)		
Government of Japan	30 000	CARIFICO-through CRFM- FAD working		
		Group (2014–15)		
GEF (Climate change)	150 000	Climate change adaptation activities (CC4Fish		
		PPG Phase) (2014–15)		
Government of Norway	90 000	Port State Measures Agreement Workshop		
		(2014)		
Government of Japan	50 000	Marine Protected Areas Workshop (2014)		
Government of France/EU	40 000	WECAFC Reorientation meeting (2014)		
Government of Trinidad and	80 000	15 th Session of WECAFC (2014)		
Tobago				
European Commission (DG	100 000	WECAFC Cost-benefit study (2015–16)		
Mare)				
European Commission (DG	120 000	Fisheries Statistics training (scheduled for		
Mare)		January 2016) (2015–16)		
FAO TCP Programme ³⁷	600 000	Various national level TCPs on fisheries policy		
		legislation and capacity building		
Total contributions	9 351 000			

Table 4: Extra budgetary resources/trust fund support to WECAFC's Work Programme

The above projects covered the participation of relevant WECAFC Members in the activities of the 10 Working Groups and other activities agreed in the 2014–2015 Programme of Work. The participation of SIDS, Central and South American WECAFC Member delegates and SIDS in regional level activities was largely paid from project budgets. This means that in effect only the USA, Japan, France, and The Netherlands consistently supported the participation of their own experts and delegates in regional level WECAFC activities.

Most WECAFC Member countries, as well as CRFM and OSPESCA Secretariats, contributed however in-kind staff time for participation in regional (joint) events. Assuming that a Member country participates on average some 20 staff days per year in regional level WECAFC activities (training/workshop/working group meetings), and an average honorarium of USD200/day is applied,

³⁷ In the budget estimate provided only those components from TCP projects that directly contribute to the WECAFC programme of work have been included.

this would mean that the 34 Members together provide in-kind support of some USD136 000. In addition, national level follow-up on regional work, data and information collection, as well as preparations and reporting related to regional travels for WECAFC activities, may require at present some 50 staff days per Member, adding up to some USD340 000. The total in-kind contributions/costs by all Members and key partner institutions (e.g. OSPESCA, CRFM, CFMC) can thus be estimated around USD0.5 million annually.

Those WECAFC Members that are also Member of CRFM already provide annually contributions to maintain the CRFM Secretariat, organize the meetings of its governing bodies and carry out the core activities of CRFM, based on an annual work plan. The contributions by the 17 CRFM Members to the autonomous budget of CRFM amount to USD1 million annually. Extra budgetary resources from Members and resource partners add annually approximately 800 000 to CRFM's programme of work to carry out more activities.

Similarly, the OSPESCA Member states that are Member of WECAFC provide annual contributions to the autonomous budget of SICA (Central American Integration System), which covers the costs of the OSPESCA Secretariat and its main meetings. The annual contributions add up to approximately USD300 000, while additional resources are mobilized to assist implementation of the programme of work.

Over the last decade the collaboration between the three RFBs increased and strengthened tremendously, through joint working groups (e.g. Queen Conch, Spiny Lobster, Shrimp and Groundfish, etc.), agreements/MOUs and joint projects (e.g. CLME, Caribbean Bill Fish Project, REBYC II LAC). It is clear that scientific work, fisheries research, information sharing and efforts to harmonize fisheries management measures by each of the RFBs have benefited the other RFBs. This is likely to continue in the coming years. Therefore, a significant part of the contributions by the Member states to one sub-regional RFB can actually be regarded as contribution to regional fisheries advisory services and regional level fisheries management in the whole Wider Caribbean region. The interim mechanism described under chapter 3.3 is another example of the ongoing collaboration between the three RFBs.

Future costs estimated (annually for FAO and Members) (2016–2020)

It is anticipated by the author (although not formally confirmed by FAO management) that in a *status quo* situation the allocation and technical support from FAO to WECAFC will continue to decline slowly, following the trend of recent years.

	2016	2017	2018	2019	2020
FAO Regular Programme support	80 000	80 000	80 000	80 000	80 000
Staff resources					
FAO Regular Programme support	70 000	70 000	60 000	60 000	50 000
Non-staff resources – session					
support					
Members and partner institutions	500 000	500 000	500 000	500 000	500 000
(in kind) Staff time ³⁸					
Members and partner institutions	80 000	$40\ 000^{39}$	80 000	40 000	80 000
(in cash) Hosting of meetings					
Total costs in USD	730 000	690 000	720 000	680 000	710 000

Table 5: anticipated contributions by FAO and Members 2016-2020 (BAU)

 $^{^{38}}$ See section 5.1.1 for the estimates used.

³⁹ In years that no session will be held the costs of meetings hosted will be lower for Members. Sessions will be held biannually in 2016, 2018 and 2020.

The costs of implementation of the programme of work will have to be covered by extra-budgetary resources provided by Members and regional and international institutions. The business as usual scenario implies that activities can <u>only</u> be financed by these extra-budgetary resources.

5.2 Benefits

Under the current institutional structure the benefits of WECAFC are expected to largely remain at the same level as currently, however, much will depend on the dedication of the FAO secretariat to WECAFC to the WECAFC cause.

5.2.1 Benefits to Members

During the period 2011 to 2014 WECAFC (Members supported by the Secretariat) carried out many activities in response to Members' requests at the sessions.

During the period 2012–2013 the following was realized:

- 6 of the 7 joint Working Groups have been active.
- 10 (expert) Working Group meetings were organized by WECAFC and partners
- 35 FAO projects have supported work on fisheries and aquaculture of WECAFC Members
- 12 publications were issued
- 31 WECAFC Members participated in WECAFC activities
- 22 Members assigned their WECAFC National Focal Points
- Some 75 percent of Programme of Work (2012–2013) was carried out

Scientific and technical advice was given to support fisheries management objectives and implement the Code of Conduct for Responsible fisheries. Specific advice related to Queen Conch, Flying Fish, Nassau Grouper and FADs. Four (non-binding) fisheries management recommendations and five resolutions⁴⁰ were adopted by the 15th session of WECAFC in March 2014. At the same session the Members thanked FAO for the Performance Review, adopted the Strategic Plan 2014–2020, approved the Programme of Work (2014–15), endorsed the WECAFC – FIRMS partnership, adopted the revised Rules of Procedures and discussed the options for strategic reorientation.

⁴⁰ For the purpose of clarity and in line with best practices, the use of WECAFC Resolutions and Recommendations is defined below. Both conform with the WECAFC objective to promote the effective conservation, management and development of the living marine resources in the WECAFC area and address common problems of fisheries management and development faced by Members, and are legally non-binding.

a) WECAFC Recommendations promote harmonized sub-regional or regional fisheries conservation, management and development, establish regional measures, and endorse fisheries management plans for sub-regional or regional implementation.

b) WECAFC Resolutions encourage all stakeholders in the WECAFC area to implement or support implementation of sub-regional, regional or international voluntary or binding instruments related to fisheries, or address other issues of common interest.

Box 1: 10 main achievements of WECAFC

- Capacity built among Members for effective uptake and implementation of the 1995 Code of Conduct for Responsible Fisheries
- 2) Provided the main platform for <u>all</u> countries <u>and</u> overseas territories in the Caribbean and north-brazil-Guianas shelf to collaborate on fisheries science and sustainable development and management of fisheries, facilitating countries that are not part of CARICOM or SICA to collaborate with these groupings.
- 3) Enabled the Members to produce true regional fisheries management advice for the main commercially exploited marine aquatic resources in the Western Central Atlantic; advice that has been incorporated in national level fisheries management plans and regulations.
- 4) Developed the capacity of the Members for carrying out fish stock assessments in the 1980 and 1990, which led to great knowledge about these stocks, their status and fisheries opportunities.
- 5) Empowered Members and CITES to take the necessary binding trade measures to support the conservation and better management of Queen Conch resources in recent years.
- 6) Introduced the 1st regionally harmonized closed season for Nassau Grouper fisheries in 2014; the first true regionally harmonized management measure, which has been made binding by most Members that have Nassau grouper fisheries.
- 7) Increased the capacity of Members for fisheries data and information collection, analysis and dissemination and the establishment of functional statistical systems.
- 8) Mobilized effectively resources from Members and donors for capacity building, information exchange and the functioning of WECAFC's expert working groups.
- 9) Advanced partnerships between the regional fisheries bodies and supported their strengthening in recent years, including the establishment of joint working groups, supporting their capacity building activities and promoting of their sub-regional fisheries management advice at regional level.
- 10) Functioned as an effective tool for FAO to disseminate global fisheries developments in the region and to promote its fisheries technical guidelines and the Ecosystem Approach to Fisheries among the Members.

During the period 2014–2015 the following was realized:

- 8 of the 10 joint Working Groups have been active
- 15 Working Group meetings and workshops were organized by WECAFC and partners
- Over 40 FAO projects have supported work on fisheries and aquaculture of WECAFC Members
- 8 publications were issued
- 32 WECAFC Members participated in WECAFC activities
- Some 70-80 percent of Programme of Work (2014–2015) was actively implemented

Scientific and technical advice was given Queen Conch, Lobster, Shrimp and Groundfish, Deep Sea fisheries and Vulnerable Marine Ecosystems, Marine Protected Areas, Small-scale Fisheries, United Nations Fish Stocks Agreement, Port State Measures Agreement, spawning aggregations, sea cucumbers, lionfish, FADs and fisheries policies and legislation.

WECAFC, through its joint working groups with CRFM, CFMC, OSPESCA and IFREMER, contributed to harmonization of fisheries research methodologies and management tools, application of the Ecosystem Approach to Fisheries (EAF) and harmonization of fisheries management measures (e.g. regulations, policies and strategies). In this way the countries benefited from increased information, exchange of experiences and best-practice guidance in fisheries. Capacity was built

among senior and junior fisheries officers and scientist from the Member countries in a range of subjects.



 With Better understanding and knowledge of transboundary and shared stocks and fisheries More sustainable fishing technologies and safety-at-sea practices applied Augmented sustainable fish production and fisheries employment in the region Reduced IUU fishing -increased application of international fisheries instruments in the region Information base for rational and fact-based fishery management decision making provided Fisheries sector institutional and management capacity increased Conflicts between countries and fisheries reduced due to provision of a platformfor discussion and negotiation Increased collaboration, transparancy and sharing of information between countries in the region 	 Without Less understanding of fish stocks and fisheries in the region Higher levels of unsustainable fisheries and overexploited resources Higher levels of Illegal, Unreported and Unregulated (IUU) fishing Reduced availability of fish in local markets – reduced food security Reduced fisheries sector employment None or limited collaboration between countries on fisheries research and management issues Inadequate capacity in fisheries administrations for fishery policy development and management Insufficient information available for fishery management decision making More conflicts on fisheries matters between countries Fisheries best-practices and guidelines scarcely applied
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The benefits of WECAFC Membership depended largely on participation in WECAFC Working Groups and projects. Members that actively participated in expert and technical meetings and applied the capacity building and information received at national level reaped considerably larger benefits from their Membership than those that did not. For some Members the subjects being covered under the Programme of Work are more important than for others. It can be that due to limited activities taking place under a specific Working Group during a biennium a Member country participates less in WECAFC activities in one biennium and more in another biennium.

The WECAFC Performance review, which goes into more detail in terms of the benefits of WECAFC Membership, indicates also the strengths and weaknesses of WECAFC⁴¹.

Box 3: Some benefits of WECAFC Membership for CRFM/CARICOM Member countries

- 1. Empowers the SIDS to harmonize fisheries management at regional level, increasing the scope of their decisions made at sub-regional level.
- 2. Allows the SIDS to effectively participate in decision making processes regarding fisheries management and conservation in Areas beyond National Jurisdiction (ABNJ) in the Western Central Atlantic that affect their fisheries.

⁴¹ This report (as presented to and endorsed by the 15th session) is available at: <u>ftp://ftp.fao.org/FI/DOCUMENT/wecafc/15thsess/11e.pdf</u>

- transboundary stocks and fisheries in the region.4. Provides a cost-effective opportunity to share information, discuss and negotiate fisheries matters with neighbouring states and overseas territories that are not Member of CARICOM/CRFM.
- 5. Provides an opportunity to collaborate with the larger fish producers in the region and their experts in regional working groups that address shared and transboundary stocks and fisheries.
- 6. Enables the SIDS to influence decision making processes by main fish export markets (USA and EU) with regards to trade in fish and fisheries products.
- 7. Increases access to fisheries research and project information, findings and methodologies from the region that would not be available or shared otherwise.
- 8. Benefit actively from FAO information, capacity building and technical, policy and legal support in the field of fisheries.

The Performance Review of 2013/2014 showed that more than 70 percent of the Members rated WECAFC's performance as good to excellent in the following areas:

- Promote implementation of international fisheries instruments, including the FAO Code of Conduct for Responsible Fisheries
- Promote implementation of the FAO Port State Measures Agreement
- Promote management of specific species (Queen Conch, flying fish, lobster, grouper, shrimp, billfish)
- Promote management of small-scale, artisanal and subsistence fisheries
- Promotion of fisheries management approaches (ecosystem, precautionary)
- Contribute to improved governance through institutional arrangements that encourage cooperation among Members

5.2.2 <u>Future benefits</u>

Benefits of WECAFC membership will <u>decrease</u> compared to the benefits received from WECAFC in recent years. Problems in the fisheries sector due to limited coordinated fisheries management will increase; problems that cannot be addressed properly by a WECAFC in the current state.

Non-binding scientific, technical and policy advice will be provided on a request basis. Member Nations will remain sovereign in terms of implementing non-binding recommendations, resolutions and other decisions taken at regional level within the WECAFC framework.

At the WECAFC sessions Members will be able to discuss management and policy directions for fisheries harmonization in the region. Real fisheries sustainability improvements will depend on the implementation of regional decisions at the national level. WECAFC advice will be merely used to introduce voluntary guidance and best practices in fisheries, while in a few cases advice will be taken up into legislation and policy at national level. Capacity building, training, information and experiences exchanges will continue, provided that adequate extra-budgetary resources can be found.

5.3 Legal, Financial and administrative implications of this option

In case WECAFC remains an article VI RFB under FAO's Constitution the legal, financial and administrative implications are limited. The "Options Paper" prepared by Ms. Judith Swan, a consultant for the 1st WECAFC reorientation and strategic planning meeting and the 15th session provide the necessary information⁴².

⁴² This options paper is available at: <u>ftp://ftp.fao.org/FI/DOCUMENT/wecafc/15thsess/12e.pdf</u>

5.3.1 Legal issues

At the 15th session WECAFC amended its Rules of Procedure (RoP) in such a way that WECAFC can operate more efficiently and effectively, with its own Executive Committee⁴³. Tasks for chairpersons and the secretariat are clarified in these RoP and the observer status of NGOs and IGOs is facilitated. Moreover, each country can (since 2014) designate National Focal Point(s), voting procedures were improved, a trust fund facility established and the use of the three languages (English, Spanish and French) was clarified. The amended RoP are forward looking and modern. There would not be a need to amend the WECAFCs statutes. The legal framework currently in force can be considered suitable and effective for an FAO advisory RFB under Article VI of FAO's Constitution.

5.3.2 Financial issues

The ongoing reduction in Regular Programme funds allocated by FAO to WWECAFC will make it hard to ensure a quorum of presence at the sessions, without organization of an extra-budgetary funded technical meeting (e.g. workshop) back-to-back with a session. Moreover, the ever increasing costs of translation and interpretation will remain a burden for the limited budget. The level of WECAFC activities is likely to increasingly rely on financial and in kind contributions from WECAFC Members and other international institutions.

The WECAFC Trust Fund, created between the 14th and 15th session would potentially ensure a healthy WECAFC, however, the absence of responses by the WECAFC Membership to calls from the WECAFC chairpersons and the FAO Assistant Director General for voluntary support to the Programme of Work of WECAFC is not very promising.

5.3.3 Administrative issues

As mentioned in the "Options Paper", it is highly likely that substantially more time and human resources would be needed for administration, particularly if it involves oversight of the reforms and development of a long-term strategy, strengthening the Secretariat and WECAFC procedures and project development and coordination.

A Secretary with limited and decreasing amounts of time allocated to the Commission would not be able to meet the transaction costs that allow for effective functioning of the Secretariat. The current situation with one part-time WECAFC Secretary and one part-time secretarial assistant at the FAO subregional office in Barbados shows already that the Secretariat is unable to meet all requests from WECAFC Members effectively and in a timely manner, particularly, as many requests involve the need for additional resources mobilization.

5.4 Fisheries production, management and conservation implications of the status quo situation

5.4.1 <u>Production, value and employment generation outcomes</u>

Stocks and production

The current level of cooperation in fisheries between the countries fishing in the WECAFC area leads to overexploitation and may result in depletion of various fisheries stocks. Landings by capture fisheries declined with some 40 percent over the last two decades.

⁴³ Report of the 15th Session of WECAFC, SLC/FIPI/FIRF/R1069 (Tri), paragraph 32; the Rules of Procedure of WECAFC, as adopted by the Commission, are contained in Annex I to document WECAFC/XV/2014/15

The WECAFC area is one of the most over-exploited fisheries region in the world (figure 16). It was estimated in 2009 that some 55 percent of the commercially harvested fisheries stocks in the region are overexploited or depleted and some 40 percent of the stocks are fully exploited⁴⁴.

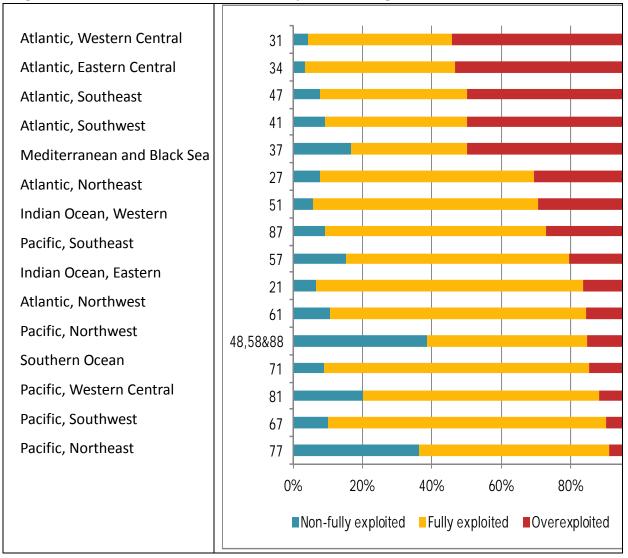


Figure 16: Global state of marine stocks by FAO fishing area

The current situation is not much better, as many stocks status reports have moved from over-exploited to not-known. In any case, the current situation means that there is scope for development of the fisheries, only if fisheries management collaboration at regional level is handled differently.

Under the current situation the production by the sector will likely continue to reduce slowly. Following the trend line (figure 1) by 2026–2030 the production within the WECAFC mandate area might be reduced to 1 million tonnes annually, if we follow the current trends and no remedial activities are taken⁴⁵. This production reduction of between 30 and 40 percent will be uneven; some countries will show a (temporary) increase in production, while others may encounter a sharp decrease. Aquaculture may provide options to partially mitigate the fall in capture fisheries production, and improvements in utilization of fish (in processing) and food safety may have positive effects on fish availability for food as well, but these won't be able to compensate fully a region-wide decrease.

⁴⁴ Review of the state of world marine fishery resources, FAO Fisheries and Aquaculture Technical Paper No. 569, FAO, Rome, 2011. Available at: <u>http://www.fao.org/docrep/015/i2389e/i2389e.pdf</u>

⁴⁵ See also footnote 6 under section 2.1.

Food security and fish imports

Associated with a fish decrease, but also with a situation of stable supply of fish in the WECAFC area is an increased need for imports of fish and fisheries products. This trend has already been observed in recent years (section 2.3) and is likely to continue. The population increase, trends towards healthy food consumption and in the Caribbean an increase in tourism add to the demand for fish and fisheries products. In Caribbean island states at least 30 percent of fish consumed is imported already, and this is expected to increase further. Consequently the trade balance and food security status of the countries is negatively affected by the increased dependence on imports.

Fish and fishery products markets

A reduction in fish production in the region will also have its effects on fish prices, which tend to go up in local markets, decreasing access to fish as high quality protein for poorer segments in the society. The current global trend in fish prices is presented in figure 17, showing an increase of around 50 percent compared to 2002. The trend in the region is largely similar. The trade in fish and fisheries products in the WECAFC area is affected by global market prices. When the price of imported fish increases this is likely to have its effects on the market prices of locally produced fish as well.

IUU fished products tend to cause general reduction in fish prices in domestic markets which is detrimental for the "legitimate" sector's viability.

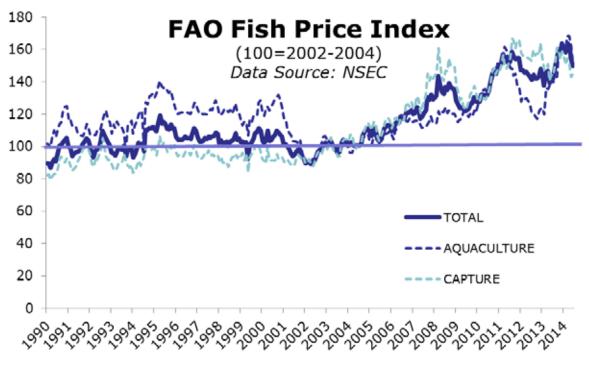


Figure 17: FAO Fish Price index (FPI)

Source: FAO Globefish, 2015.

Employment in fisheries

On the employment side in fisheries it is clear that with reduced stocks less fishing vessels will be required, fishers should fish more efficiently and effective and will probably have to move further offshore. As a major part of the Caribbean fisheries sector is small-scale and coastal fisheries, the options for most of these fishers will be slim. A reduction in fish stocks available for fisheries of 30 percent will imply a reduction between 20 and 30 percent in employment in the sector⁴⁶ (see also section 2.4), causing important losses to employment opportunities in coastal communities throughout the region, with associated negative consequences for coastal livelihoods, social and economic cohesion.

Fisheries and tourism

Not just the commercial fisheries will be affected by reduction in fish stocks, but also those sectors which depend on healthy reefs and reef fish stocks (such as tourist divers) and those depending on pelagic stocks (recreational and game fishers). Employment and income opportunities for these sectors will be negatively affected as well. However the full implications are not well understood at this moment.

5.4.2 <u>Fisheries management outcomes, enforcement expenditures, options</u> for fisheries management cost-recovery

The WECAFC status quo situation implies that fisheries management work at regional and subregional level by WECAFC, but also by CRFM and OSPESCA, continues to be non-binding (voluntary)⁴⁷. The countries have a choice to apply the recommendations and decisions by these bodies; decisions that are made based on the best available science and information and after lengthy and participatory discussions with all key stakeholders from the region. However, relevantly few decisions are (currently) translated into national level fisheries management measures. The limited number of countries that have fisheries management plans in place and are effectively implementing or enforcing these plans is sufficient evidence. Expenses on fisheries management and enforcement are limited in the WECAFC area as a recent CRFM/FAO/WECAFC study⁴⁸ showed, which seems to indicate that fisheries is not high on the priority list of governments in the region.

Open access to resources: "tragedy of the commons"

Without proper cooperation in "common pool" fisheries resources, that are open to exploitation by all, achievement of the regional objectives of long-term sustainability and optimum utilization of fisheries resources as outlined in the WECAFC Statutes and Caribbean Community Common Fisheries Policy (CCCFP) is impossible.

Fact is that transboundary fish stocks and transboundary fishing fleets require transboundary fisheries management, which is not in place at present. Most of the stocks targeted by fisheries in the Caribbean region of the WECAFC mandate area are shared as they migrate at certain stages in their life cycle and move between the EEZs of WECAFC Member Nations. Such stocks include fish species (kingfish, dolphin fish, tunas, billfishes, flying fish, groupers, etc.) but also include shrimp, seabob, spiny lobster, and even queen conch. Highly migratory stocks (e.g. tunas) are difficult to manage if few countries are Member and/or actively involved in ICCAT. Other shared stocks require management interventions that are taken jointly to increase impact and ensure long term sustainability. Management interventions are generally not harmonized at present.

Limited management = limited follow-up

There is currently limited regional fisheries management. The focus is on national problems, without recognizing that many fisheries problems need to be tackled at regional level to ensure an impact. Regional and sub-regional fisheries management plans will be prepared by scientists, experts, fisheries decision makers and fishers, and may be approved at regional level, but there is no obligation to implement these. Hence, limited follow-up by WECAFC Members.

⁴⁶ Current average annual fish production per fisher is 1.1 tonnes. Total production and employment in 2013 were estimated at respectively 1.4 million tonnes and 1.3 million fishers (source of data FAO FishStat J).

⁴⁷ Through CARICOM and SICA respectively CRFM and OSPESCA can issue binding recommendations and regulations for fisheries, although this option is not frequently used yet.

⁴⁸ This study is available at: <u>http://www.fao.org/publications/card/en/c/da5cd80f-0e6e-427b-9ac1-9f0be50cf1c5/</u>

The high seas

Apart from the collaboration in those areas under national control (coastal waters and EEZs), which has been the focus so far of the RFBs in the WECAFC area, a large part of the WECAFC area (51 percent) constitute so called high seas, or Area Beyond National Jurisdiction(ABNJ) (figure 18).

Considering the limited surveillance and monitoring of fisheries resources and activities in the ABNJ area in the WECAFC the latter should be considered by WECAFC Members as an immediate priority.

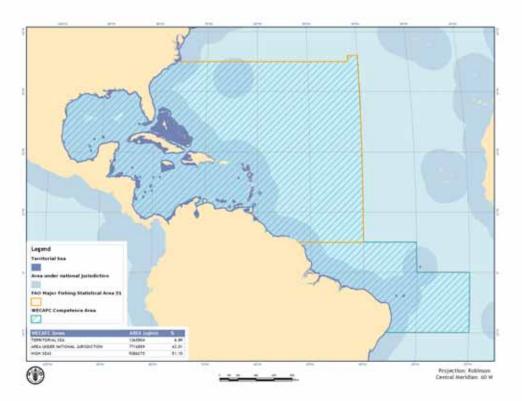


Figure 18: The WECAFC competence area presenting the EEZs and ABNJ areas.

Currently, the WECAFC is not able to secure access rights to high seas resources in Areas 31 and 41 for its Members or restrain fisheries access to non-Members outside de areas under national jurisdiction of the Member countries. There is some evidence however that catches by certain WECAFC Members and non-Members in the ABNJ of the WECAFC are affecting negatively the catches in the EEZs; however, without a management regime nothing can be done to stop this from continuing or worsening.

IUU fishing

Illegal, Unreported and Unregulated (IUU) Fisheries is widespread in the Caribbean region. There are some studies that suggest that at least 20 percent (but probably nearly 30 percent) of the fish caught goes unaccounted for and thus does not get recorded in national fisheries statistics⁴⁹.

Present collaboration initiatives in the regions, such as the CRFM Monitoring, Control and Surveillance (MCS) protocols and IUU Fisheries Working Group (established by the 15th session in 2014) are promising.

⁴⁹ See also the background paper on "Regional collaboration in addressing IUU Fishing", presented to the 15th session of WECAFC (WECAFC/XV/2014/9), available at : <u>ftp://ftp.fao.org/FI/DOCUMENT/wecafc/15thsess/9e.pdf</u>

RFMOs in other areas of the world have managed to bring down IUU fishing significantly, however there is still much to accomplish. NEAFC has reduced IUU fishing in its mandate area to nearly zero. Such a reduction will not be realistic in the WECAFC area, due to the fact that most fisheries are small-scale and thus more difficult to monitor and control than industrial fisheries elsewhere. If we consider that current IUU fishing represents between 20 and 30 percent of the total catch in the region, than we can estimate (with a level of 30 percent IUU) that the real fisheries production would have been annually 1.8 million tonnes on average over the last 10 years. A 20 percent IUU fishing level would then mean that in reality 1.7 million tonnes were produced annually, an increase of 300 thousand tonnes over currently reported production. A reduction of IUU fishing levels by half (50 percent) would thus imply that between 150 thousand and 200 thousand tonnes more would be officially reported than currently is the case. This volume would become available for the domestic and export markets, rather than black- and parallel markets.

The market prices of legally landed fish on the market are generally higher than illegal fish, thus the fisheries sector benefits as a whole of increased levels of legally caught and reported fish. In addition, dependency on fish imports may be lowered if more legally landed fish enters the market. Moreover, in the value chain of legally landed fish tax (VAT, income, export, etc.) is being paid that contributes to society. IUU fishing practices cause significant financial losses for WECAFC Members, estimated between USD700 and 930 million per year⁵⁰. Regional policies, as well as effective enforcement mechanisms, can substantively contribute to reduce IUU fishing by half, generating thus between USD350 and 460 million in extra value to the Members. In this sense, Members' commitments and contributions towards a more effective WECAFC could play a paramount role in addressing IUU fishing. The political will to do so will be key to the success of addressing IUU fishing.

In the WECAFC area, there is currently no regional plan of action to combat IUU fisheries (RPOA-IUU). Efforts are however being made with support from the CLME+ project to prepare an RPOA in 2017. Such RPOA would nevertheless be a voluntary instrument that does not bind the countries to implement the regionally agreed measures. At present only few WECAFC Members⁵¹ have already adopted and are implementing NPOAs-IUU.

5.4.3 **Fisheries conservation outcomes and enforcement expenditures**

Fisheries conservation is addressed on a fisheries-by-fisheries basis currently. Whenever funding becomes available, such as for Queen Conch conservation and management, via CITES and CFMC, regional efforts are made by WECAFC and its partner organizations to make progress. Sometimes significant progress is reached at regional level, but resources are lacking at regional level to better assist the countries with implementation at national level. Consequently, fisheries divisions are expected to deal with national level implementation without the required support and collaboration from regional level entities.

In terms of enforcement, it is clear that most WECAFC Members have significant budgets for coast guard, navy, customs and port authorities but fisheries authorities are generally left without sufficient enforcement capacity. Coordination between the various agencies that should collaborate at national level is key, but in reality such collaboration is often poor and only in a few countries proper mechanisms are put in place to coordinate in fighting IUU fishing and support conservation efforts. Considering that coordination between various sectors/stakeholders at national level is inadequate in many countries, the situation is worse at regional level.

An increased participation, involvement and commitment at the regional level is desirable, with a view to enhancing collaboration and coordination among national and regional stakeholders towards more

⁵⁰ Estimates derived from average off-vessel landing value per tonne of product (USD2 363 in 2013).

⁵¹ To FAO knowledge these Members are: Antigua and Barbuda, Belize, Costa Rica, European Union,

Guatemala, Japan, Nicaragua, Panama, St Kitts and Nevis and the USA. For a list of NPOAs-IUU, please visit: <u>http://www.fao.org/fishery/ipoa-iuu/npoa/en</u>

effective fisheries conservation and management. For instance, collaboration in enforcement efforts and in tackling IUU fishing would contribute to effective management and enforcement of Marine Protected Areas (MPAs).

5.5 Summary conclusion of maintaining WECAFC as FAO RFB under article VI of the FAO Constitution

Maintaining WECAFC as FAO Article VI RFB will have the following outcomes (using the assessment criteria from section 4.5) compared to the current situation:

	Area	General Criteria	Effect	Observation/statements
1	The Statutes	Effectiveness of meeting the objective of the Statutes	=	Limited capacity to meet objective continues
2	Conservation + management	State of living resources	-	State of resources is likely to reduce further –see trend line. In accordance with Article 6.d, of WECAFC Statutes WECAFC is committed "to keep under ongoing review the state of the fishery resources in the area"
		Ecosystem Approach	-	Capacity building will continue, but implementation is hampered
		Data collection an sharing	=	No improvements foreseen, although collaboration with FIRMS partnership can result in improvements
		Quality and provision of scientific advice	=	The advice will depend on availability of donor resources
		Adoption of conservation and management measures	n.a.	Adoption of binding measures is not envisaged
		Capacity management	-	Fleet capacity will not be managed
3	Compliance and enforcement	Flag state duties	-	Flag state duties cannot be effectively enforced in the region, leading to opportunities for IUU fishers
		Port State measures	n.a	Port state duties cannot be enforced effectively in the region, leading to opportunities for IUU fishers
		Monitoring control and surveillance (MSC)	n.a	At CRFM and OSPESCA level collaboration, but not regionally
		Follow-up on infringements	n.a	Difficult without collaboration
		Cooperative mechanisms to detect and deter non- compliance	-	Limited collaboration will continue – low effectiveness of regional management recommendations and other joint measures
		Market-related Measures	n.a	Some WECAFC Members (e.g. USA and EU) will enforce market measures, but access to markets elsewhere will remain likely
4	Decision making and dispute settlement	Decision-making	=	Process will remain to take decisions by consensus or majority vote, which is common practice also in many RFMOs
		Dispute settlement	n.a.	
5	International Cooperation	Transparency	-	The limited availability of information constrains transparency

		Relationship with non- Members	=/-	No specific tools in place to work with non-Members; however observer arrangements are in place
		Cooperation with other international organisations	Ш	Will continue within the framework of FAO
		Special requirements of developing States		These cannot be addressed without donor support
6	Financial and administrative issues	Availability of resources for activities	-	Resources allocated from FAO's regular programme are slowly reducing
		Efficiency and cost effectiveness	=/-	No improvements can be expected compared to current situation

Legend:

= stable, no large improvements or deteriorations in the situation (expected)

Decrease or deterioration of the situation
 + Increase or improvement of the situation
 n.a Not applicable

In case WECAFC maintains the current *status quo* situation, in which WECAFC remains an RFB under Article VI of the FAO Constitution, then the impact on fisheries production, fisheries employment, contribution of fisheries to food security and nutrition and the trade balance for fisheries products it is <u>likely to be limited in the region as a whole⁵²</u>.

6. Costs and benefits of a transition of WECAFC to an FAO RFMO under Article XIV of the FAO Constitution

A transformation of WECAFC into an RFMO established under the constitution of FAO is the second option discussed in this paper.

Specifically, the FAO Council established WECAFC and its legal framework is set out in its Statutes and Rules of Procedure. Similar legal instruments are provided for other Article VI Bodies operating in the fields of agriculture, animal health and production, commodities and trade, fisheries, forestry, food policy and nutrition, land and water development, plant production and protection and statistics⁵³. While some Article VI Bodies – such as WECAFC – have regional scope, others have a global mandate such as the Codex Alimentarius Commission.

In contrast, RFMOs established under Article XIV of the FAO Constitution have some level of autonomy within the FAO framework. Such Bodies are established on the basis of an international treaty and, where such treaty provides for it, they may establish legally binding obligations on Contracting Parties adhering to the treaty. From a financial viewpoint, Article XIV Bodies may be, in part or fully, funded from sources outside the Regular Programme, for example, through assessed contributions which Members are legally obliged to pay under the establishing treaty.

⁵² It should be noted that this outcome has been assessed on the basis of criteria tailored on intergovernmental organizations, which are not all suitable for an Article VI Body. WECAFC is facing financial constraints and the management of fisheries in the region should be improved. The WECAFC is implementing most of the activities defined in its Programme of Work. The results of the assessment could therefore be more nuanced, realistically reflecting both negative and positive outcomes of WECAFC, if other criteria would be applied.

⁵³ In the Latin American and Caribbean region for instance, COPESCAALC, the Latin American and Caribbean Forestry Commission (LACFC), and the Commission on Livestock Development for Latin America and the Caribbean (CODEGALAC).

As stated by the Conference, "any agreement concluded under Article XIV of the Constitution among Member Nations of the Organization should entail financial or other obligations going beyond those already assumed under the Constitution of the Organization. Failing this, there would be no grounds for such an agreement, at least not in the legal form prescribed under Article XIV of the Constitution"⁵⁴. An Article XIV Body being established by an international treaty, is negotiated by Governments, approved by the Conference, and submitted to the relevant Member Nations. This procedure normally requires sufficient time for negotiation and consultation among the relevant Governments. The treaty establishing an Article XIV Body enters into force in accordance with the terms and conditions set out therein. Sometimes, such entry into force may be subject to the deposit with FAO's Director-General of a minimum number of instruments of ratification, acceptance of approval, as applicable⁵⁵.

So far for the main differences in status and autonomy of the two types of statutory bodies established under FAO; more information can be found in annex 7 to this document.

There are various examples of RFMOs established under Article XIV of the FAO Constitution that could serve to present costs and benefits to the WECAFC Members of a transition into this type of organization. These include the Indian Ocean Tuna Commission (IOTC), the Asia Pacific Fisheries Commission (APFIC), the Regional Commission for Fisheries (RECOFI), the Central Asian and Caucasus Fisheries and Aquaculture Commission (CACFish), and the General Fisheries Commission for the Mediterranean (GFCM). The latter is selected as main example because GFCM was established in the time that FAO was founded, covers developed and developing Member Nations, as well as some distant water fishing nations, includes small-scale, industrial fisheries and aquaculture and has a mandate area with similar production levels⁵⁶ as WECAFC. Moreover, GFCM has modernized in the last decade, including an amendment to its constitutive agreement in 2014, and is now considered a "best-practice" example among RFMOs.

Figure 19 presents the level of production in the GCFM mandate area and the catches by main ISSCAAP⁵⁷ species groups.

⁵⁴ Basic Texts, Part O, Basic Considerations, paragraph 5

⁵⁵ Review of procedures for the establishment and abolition of Statutory Bodies - Implementation of Conference Resolution 13/97, 99th session of the Committee on Constitutional and Legal Matters (CCLM) (Rome, 20-23 October 2014)

⁵⁶ On average some 1.3 to 1.4 million tonnes of capture fisheries production annually over the last decade.

⁵⁷ International Standard Statistical Classification of Aquatic Animals and Plants

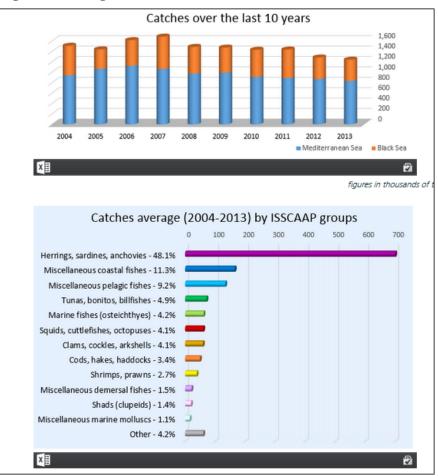


Figure 19: Background data GFCM (FAO Area 37)

Source: GFCM website/FAO FishstatJ (October 2015)

6.1 Costs

6.1.1 Current costs

The current total costs of an RFMO under Article XIV of the FAO Constitution, using the example of GCFM is presented in table 6. The autonomous budget of GFCM has been between 1.8 million and 2.2 million annually over the last decade. The autonomous budget is financed completely by Member Nations' contributions. In addition, Trust Fund projects provide extra-budgetary resources that cover certain meetings and activities and the hiring of external expertise. The total budget in 2014 was some USD3 million. More information on the GFCM budget and expenditures can be found in annexes 8-10.

		US (\$)	Share of total %
S	Professional staff (9)	1,363,000	57.76 %
STAFF	Administrative staff (5)	300,000	12.71 %
ΡF	TOTAL STAFF	1,663,000	70.48 %
	Temporary human resources (Security Guards, admin. support, Overtime)		3.81 %
	Consultants (including translators of scientific publications)	25,000	1.06 %
FUNCTIONING	Travel (Staff, Bureau, Coordinators, interpreters, Experts' DSA and tickets)	110,000	4.66 %
G	Training	5,000	0.21 %
TIO	Expendable procurement (including printing of publications)	12,000	0.51 %
Ň	Non-expendable procurement	5,000	0.21 %
G	General Operating Expenses	15,000	0.64 %
	Internal/External services backcharge	165,000	6.99 %
	Task force	70,000	2.97 %
	TOTAL FUNCTIONING	497,000	21.06 %
	AUTONOMOUS BUDGET (staff + functioning)	2,160,000	
	Hospitality and Miscellaneous (1% of autonomous budget)	21,600	
M	FAO Support Costs (4.5% of total)	98,172	
MISC	Capital Fund (3.5% of above)	79,792	
	Participation fund (2.5% of autonomous budget)	-	
	TOTAL AUTONOMOUS BUDGET (US Dollars)	\$ 2,359,564	

Figure 6: Current costs FAO Article XIV RFMO Example GFCM⁵⁸

<u>6.1.2. Future costs estimated</u>

If WECAFC would transform into an RFMO under article XIV of the FAO Constitution, similar as GCFM, this would imply that the costs of maintaining the secretariat would have to be covered by the Members. In general, a transition period of some five years is applied within which a sufficient number of Members are expected deposit their instrument of acceptance to the new agreement establishing the RFMO. During that period subject to availability of resources, FAO provides an interim secretariat.

Once the agreement enters into force, the autonomous budget of the FAO RFMO, to which the Members contribute mandatorily, should fully cover the costs of the secretariat and main meetings of the WECAFC.

It is estimated that within the first 5 years of the RFMO a secretariat should be established, which, in order to carry out its duties effectively, would require the following staff:

- Executive Secretary (P5 level Senior Fisheries Officer) USD230 000
- Scientific Manager (P4 level Fisheries Officer) USD190 000
- MCS support to Members (P4 level Fisheries Officer) USD190 000
- Administrative Support (P3 level Administrative Officer) USD150 000
- Secretarial support (G4 level Secretary) USD80 000
- Translation/technical editorial support (G4 level) USD80 000

Total: USD 920 000

⁵⁸ Table from the report of the 39th session of the GFCM, available at: <u>http://www.fao.org/fileadmin/user_upload/gfcm/docs/GFCM-FinalReport-Commission-39-en.pdf</u>

Organization of the annual sessions and scientific meetings in the three languages of the Commission would require an estimated: USD350 000 Travel of the Secretariat: USD80 000 Office rental/premises: USD80 000 IT services –to ensure transparency, database and website management: USD50 000

The total costs to be covered by the Members of the RFMO through their contributions to the autonomous budget would thus be around USD1.5 million.

The secretariat of an Article XIV Body is normally hosted within FAO premises, *e.g.* FAO Headquarters or its decentralized offices. In some cases, where a country offers to host the secretariat and provides all relevant support, facilities and privileges and immunities, the secretariat can be hosted in other premises. In that case, a host country agreement must be concluded between FAO and the hosting country. The cost of the secretariat office will normally be borne by the host government of the RFMO.

FAO charges for its administrative and operational support services to GFCM a support cost rate of 4.5 percent over expenditures made. This rate has been established a long time ago. Currently the common rate applied for FAO Trust Fund projects is 7 percent, (since 2016) as determined by the FAO Members at the FAO Conference. The support cost rate of WECAFC, for its Trust Fund, was determined in 2013 to be 5.9 percent, however this rate may need to be re-negotiated in the establishment process of a new RFMO under Article XIV of the FAO Constitution.

The costs related to implementation of the programme of work of the RFMO will depend largely on the programme agreed among its Members and will (similar to now) be mainly financed from extrabudgetary resources (Member or donor funded projects and programmes).

An important question to address will be whether the RFMO will carry out its own scientific research in support of fisheries management decision making, or will the research tasks be conducted by CRFM, OSPESCA, or other institutions (e.g. NOAA, IFREMER) that already have a research infrastructure that could support the regional level fisheries decision making processes.

The probably most cost effective option to ensure adequate fisheries research being generated would be through above mentioned institutions; in contrast, establishing a subsidiary body under the RFMO or increasing the size of the secretariat will likely duplicate sub-regional level research undertaken by CRFM and OSPESCA, show overlap and/or discrepancies. Any research or study would be, in any case, subject to review and approval by the Members of the relevant RFMO under Article XIV of the FAO Constitution.

6.2 Benefits

6.2.1 Benefits to Members

The benefits of GFCM to its Members have been clear to the Members of the GFCM.

The GFCM now has 24 Members, including 19 from the Mediterranean, three from the Black Sea basin, as well as Japan and the European Union. There are two Cooperating-non Contracting Parties (Georgia and Ukraine) and there is a smooth cooperation with other non-Member riparian states (Bosnia and Herzegovina and the Russian Federation).

Only since 2004 GFCM has a well-established Secretariat and an autonomous budget fully paid for by Members and the power to adopt binding decisions and recommendations. The GFCM Agreement was

amended in 2014 to incorporate new elements such as focus on sub-regional aspects and multi-annual management plans. There are many regional trust fund projects that support the GFCM work, and coordination between the GFCM Secretariat and other FAO technical divisions is strong.

GFCM has recognised the need to work towards blue growth and sustainable development, acknowledging the roles that GFCM can play in both conservation of marine living resources and protection of their marine ecosystems.

GFCM has been introducing adaptive management on the basis of a sub-regional approach, including the adoption of multiannual management plans at sub regional level. In recent years GFCM has particularly strengthened the importance of area-based management tools, with particular reference to fisheries restricted areas.

The GFCM Scientific Advisory Committee of Fisheries (SAC) carries out between 20 and 40 stocks assessed per year. There has been a gradual increase in number of validated stock assessments. The percentage of the landings being assessed doubled between 2013 (20 percent) and 2014 (40 percent).

GCFM has issued some important recommendations that are followed-up well by the Members and Cooperating non-Contracting Parties, such as:

Recommendations on data collection:

• Countries whose fleets operate in the area have to report a minimum set of data and information to the GFCM, including catches, effort, biologic and socio/economic data, etc.

Recommendations on technical measures or fleet control:

- Regional Fleet Register for all vessels, boats, ships, or other crafts that are equipped and used for commercial fishing activity in the GFCM Area.
- Authorized Vessel List, referring to fishing vessels larger than 15 meters in length overall authorized to fish in the GFCM Area.
- Minimum Mesh Size, for all vessels involved in trawling activities exploiting demersal stocks when operating in the GFCM Area.
- Vessel Monitoring System, proposing all commercial fishing vessels exceeding 15 m length overall to incorporate a Satellite-based VMS.
- Port State Measures for establishment of a regional register of ports where foreign fishing vessels are authorized to land their catch and inspection procedures are clearly detailed.

Recommendations on spatial protection:

- Fisheries Restricted Areas (FRAs): Geographically-defined sea area in which all or certain fishing activities are temporarily or permanently banned or restricted to i) improve the exploitation and conservation of living aquatic resources and/or ii) to protect marine ecosystems vulnerable to fishing activities.
- Bottom trawling ban: in 2005 the GFCM endorsed the decision of prohibiting bottom-trawling activities in waters deeper than 1000 m in order to protect the deep-sea benthic environments of the Mediterranean and Black Sea.

GFCM also conducts case studies for fisheries management, which are triggered by:

- Resource is of interest to several Members of the GFCM (shared resource)
- A resource that has been identified as being under some kind of threat (overexploitation, overexploited, vulnerable species, etc.)

- status of fisheries and management (national);
- stakeholders views

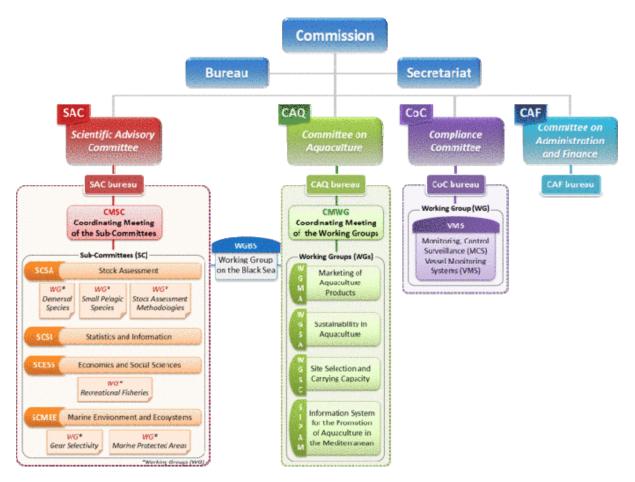


Figure 20: current institutional structure of GFCM is shown in the following organigram⁵⁹.

There are considerable benefits for GFCM through its linkage with FAO, which are for instance visible in the cooperation on regional projects and networks in the mandate area.

The FAO regional projects currently being implemented are:

- AdriaMed Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea
- <u>CopeMed II</u> Advice, Technical Support and Establishment of Cooperation Networks to Facilitate Coordination to Support Fisheries Management in the Western and Central Mediterranean
- <u>EastMed</u> Scientific and Institutional Cooperation to Support Responsible Fisheries in the Eastern Mediterranean
- <u>MedSudMed</u> Assessment and Monitoring of the Fishery Resources and the Ecosystems in the Straits of Sicily

In summary, GFCM has, as a RFMO established under Article XIV of the FAO Constitution, adopted procedures to secure the scientific basis for management of capture fisheries, cooperation on MCS through its compliance committee and created robust institutions, including the Commission and its Secretariat.

⁵⁹ www.fao.org/gfcm/en

The GFCM has the authority to adopt binding recommendations for fisheries conservation and management in its area of application and plays a critical role in fisheries governance in the region. In particular, its measures relate for instance to the regulation of fishing methods, fishing gear and minimum landing size, the establishment of open and closed fishing seasons and areas and fishing effort control. In cooperation with other RFMOs, the GFCM plays a decisive part in coordinating efforts by Governments to effectively manage fisheries at the regional level. ⁶⁰

6.2.2 Future benefits

If WECAFC decides to transform in a RFMO under Article XIV of the FAO Constitution the benefits for the Members will increase significantly.

WECAFC will have annual sessions in which matters of regional importance can be discussed and decisions can be made that are binding to the Members. This will, amongst others, ensure:

- Harmonization of management measures and positive impacts on targeted fish stocks
- Sustainable production/harvests that allow future generations to benefit as well
- The sector increase its contribution to food security and nutrition of the population
- A level playing field for small- and large-scale fishers in the region, supporting employment and livelihoods in coastal communities
- Reduction in IUU fishing, resulting in a viable "legitimate" fisheries sector.

The neutrality of FAO will enable all Members to benefit from equal treatments and opportunities in discussions and negotiations about regional fisheries management and fisheries governance in general. Being part of FAO, such Article XIV Body is subject to FAO's administrative rules and procedures (*e.g.* financial regulations, procurement rules, staff rules, etc.), which aim at safeguarding FAO's independence, neutrality and intergovernmental nature. Furthermore, consistent with the principles set out in FAO Constitution, any advice provided to the Members will be based on high-quality research data and technical studies.

The ties with FAO would further enable the RFMO to benefit from global FAO projects, FAO's services in fisheries data and statistics, policy development, capacity building methodologies developed by FAO, and will facilitate the uptake of decisions taken at the FAO Committee on Fisheries (COFI), as well as of any international or technical guidelines or other best-practice approaches developed by FAO elsewhere. Access to important fisheries information from around the globe will increase and the RFMO will benefit from global tools such as the Global Record (for fishing and fish transport vessels), FishStatJ and an increase in benefits derived from its current Fisheries Information Resources Management System (FIRMS) partnership.

Efforts to generate scientific advice in support to well-informed decisions making processes will increase. Capacity building and training of fisheries divisions/departments staff, fisheries scientists and fisherfolk can be augmented. Extra budgetary resource mobilization will be easier as the RFMO can take binding decisions. This is of great interest also to Members and donors as they would like to see and secure an impact of the support they provide.

6.3 Legal, Financial and administrative implications of this option

The legal, financial and administrative implications of a transformation of WECAFC into an FAO RFMO are detailed in the "Options paper", which was presented to WECAFC 15.

⁶⁰ http://www.fao.org/gfcm/en/

6.3.1 Legal issues

A WECAFC decision to establish a FAO Article XIV body will first have to be formally communicated to FAO by one of the Member Nations. FAO will internally review the decision in terms of ensuring that the formal internal processes for setting up the new RFMO are set in motion⁶¹.

Agreements establishing a RFMO under Article XIV of the FAO Constitution are adopted by the FAO Conference on the recommendation of a technical conference or series of technical meetings comprising Members of the future Commission⁶². Agreements concerning questions relating to food and agriculture which are of interest to Member Nations of geographic areas specified in such agreements and designed to apply only in those areas are adopted by the Council under rules to be adopted by the Conference.⁶³

Agreements concluded on the basis of Article XIV of the Constitution enter into force in such a manner and upon such date as it may provide or as the negotiating Nations may agree. Where provided in the agreement, the entry into force may be subject to the deposit of a minimum number of instruments of acceptance by State signatories.

In parallel to this process, WECAFC would have to be abolished by an FAO Council Resolution at a time acceptable to its Members. In theory WECAFC could organize its sessions and (as necessary) technical meetings while the draft agreement, Rules of Procedure and Financial Regulations are being discussed and agreed among the future members.

This process may take a few years. When the future Members determine that the draft Agreement is ready for Conference or Council approval it will be reviewed by the CCLM (Committee on Constitutional and Legal Matters) of FAO and passed onwards to the Council. Formal abolishment of WECAFC could if agreed by the Members, take place when the new RFMO Agreement comes into force.

Should the agreement so provide, entry into force would happen when a minimum number of Contracting Parties has deposited the relevant instrument of acceptance. At that moment, those current Members of WECAFC that have not ratified/accepted the agreement may participate in the new RFMO as observers in accordance with the applicable FAO rules until the time that they become Member as well. This takes into account the governmental approval processes, which may differ between countries in steps to be undertaken and their duration.

Nor under an Article VI body, nor under an Article XIV body are there major constraints, with respect to the implementation of an Memorandum of Understanding (MoU) with sub-regional partner organizations, such as OSPESCA and CRFM, that facilitates the collaboration on fisheries governance in the region, based on the recently developed MoU between the three institutions on the interim arrangement for sustainable fisheries (see chapter 3.3). As a consequence the interim arrangement could develop into a long-term arrangement, under this option, which would benefit the three institutions.

⁶¹ There are two highly relevant FAO Conference Resolutions that set out the criteria for the establishment of Statutory Bodies, including Article XIV bodies. These are: Conference Resolutions 13/1971 on the "Review of Statutory Bodies", available at: <u>http://www.fao.org/docrep/W7475E/W7475e0f.htm#Resolution13</u> and Conference Resolution 11/2015 on "Review of Statutory Bodies", available at:

http://www.fao.org/docrep/meeting/017/MO153E/MO153E01.htm#Resolution11 ⁶² FAO Constitution, Article XIV, paragraph 1.

⁶³ EAO Constitution, Article XIV, paragraph 2(a)

⁶³ FAO Constitution, Article XIV, paragraph 2(a).

6.3.2 Financial issue

As mentioned under the Costs section above, a transformation of WECAFC into an FAO RFMO will have a cost, for establishing as well as for maintaining an RFMO. An example of the minimum required annual budget for maintaining the RFMO has been given above.

The establishment process would have a cost as well. It is anticipated that two preparatory meetings (or special sessions of WECAFC) would be held in which the Members, with FAO legal advice, would prepare together the draft Agreement establishing the RFMO, as well as the Rules of Procedure, Financial Regulations, Budget for the first financial period, Scheme and scale of contributions to the autonomous budget of the RFMO, first Programme of Work of the RFMO, and proposals for establishment of sub-commissions or other subsidiary bodies. The costs associated with these two meetings is estimated at around USD250 000 in total; a sum which should largely be covered by the WECAFC Members.

It should be noted that FAO RFMOs generally have as working languages those officially recognized FAO working languages that are utilized in the region, which means that the RFMO would continue to use English, Spanish and French as its working languages. The financial implications of this are known and incorporated in the estimations in section 6.1.

It will be necessary, also under this option, to seek additional funding for capacity building in Member states for the participation in training workshops and working group meetings.

This contribution by CRFM and OSPESCA Members to these RFBs could be regarded as in-kind contribution to the overall budget and functioning of the new RFMO. In this way they would not be requested to contribute to the RFMO for similar services as they pay already for under these two RFBs. Scale of contributions of a future Article XIV Body could take into consideration the contributions provided by Members to CRFM and OSPESCA⁶⁴.

The following figure (21) shows a proposal for funding of the RFMO, where the total budget of the new RFMO would be an estimated USD3.3 million annually, of which 1 million will be handled by CRFM and 300 thousand by OSPESCA. The contributions of their Members would be regarded as an in-kind contribution to the total budget of WECAFC as article XIV RFMO, adding up to 40 percent of the total budget required to operate the Commission. Some 45 percent of the total budget would be provided by the large fisheries countries in the region (and distant water fishing nations with an interest in the region), and 15 percent would be generated by the WECAFC Secretariat staff through resource mobilization.

⁶⁴ The proposed financial arrangement could be considered viable subject to the following conditions:

⁻ all negotiating Parties of a future agreement must agree on such an arrangement;

⁻ the instrument establishing the Article XIV Body must expressly set out rules and criteria for determining reduced contribution due by Members already contributing to these CRFM and OSPESCA;

⁻ Provisions must also be included for the reassessment of scales of contributions, in case collaboration with CRFM and/or OSPESCA ceases or is substantively limited;

⁻ Should such a contribution mechanism be set up, the collaboration between FAO (on behalf of the relevant Article XIV Body), OSPESCA and CRFM must be formalized through an appropriate legal instrument.

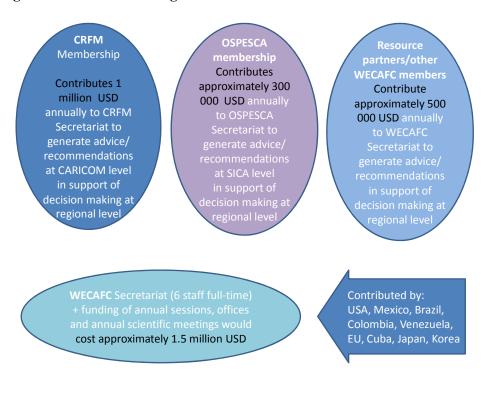


Figure 21: Potential funding structure of a new FAO article XIV RFMO

6.3.3 Administrative issues

The transformation of WECAFC into an FAO RFMO would require strengthening the secretariat significantly. The need to strengthen the secretariat was highlighted as one of the main outcomes of the 2013/2014 performance review of WECAFC, and this need would be even more expressed if WECAFC has to perform the RFMO functions properly. The minimum staffing needs to operate an effective and responsive secretariat are given in section 6.1.2 (see also annex 10).

Following the example of GFCM and establishing collaborations with CRFM and OSPESCA structures (recognising their roles in generation and provision of scientific advice, as well as the need to use their comparative advantages at sub-regional level) an organigram of the administrative set-up could be as follows (figure 22).

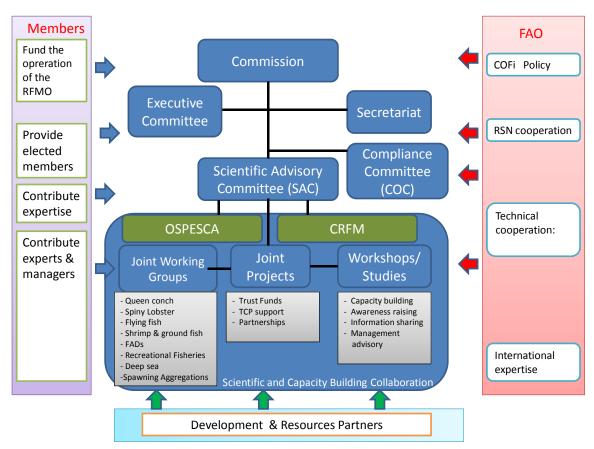


Figure 22: Organigram of a possible set-up of WECAFC

CRFM and OSPESCA would continue as independent sub-regional RFBs under CARICOM and SICA frameworks, but would engage in formal ties with FAO on behalf of the Article XIV RFMO for the provision of fisheries research, scientific advice and collaboration on data and information sharing, capacity building and compliance aspects. Their Members would be full-Members of the Article XIV RFMO and have individual voting rights in decision taking processes of the new Commission. The CRFM and OSPESCA secretariats would support the scientific and research work at sub-regional level and facilitate the generation of "common" or "joint" positions of their Member Nations in the decision making processes in WECAFC.

6.4 Fisheries production, management and conservation implications of this option

Getting fisheries science and management right, securing that fisheries take place within safe biological limits, will provide Members with more effective instruments to reduce overfishing and its negative impact on the state of the stocks as well as minimize stock fluctuations. This will reduce the risk of continuing decreases in catches.

Moreover, WECAFC Members will under this option be able to meet their obligations under international law and implement in an effective and coordinated manner the international fisheries instruments they have ratified.

6.4.1. Production, value and employment generation outcomes

The RFMO would provide its Members with a forum to effectively address stop the decline of fish landings in the region.

Through the implementation of binding management measures adopted by the RFMO Members could, in an optimistic scenario, considering the short lifecycles of most targeted species, and the opportunity to increase fisheries of some stocks that are recovering or already under sub-regional management (e.g. seabob, flying fish) result in higher fisheries production in the upcoming decade. Under a more stringent and better monitored fisheries management regime, which is well informed by science, it is foreseen that the average annual production of the region could increase again from the current 1.42 million tonnes to 1.72 million tonnes (30 years average)⁶⁵.

An RFMO has many management measures (or controls) at hand to ensure better and more sustainable use of the fisheries resources. These can be for instance input controls (e.g. license restrictions, limiting fishing power, MPAs and to alter gear selectivity) or output controls (such as catch limits and minimum sizes). Management measures such as seasonal and area closures to protect spawning aggregations (leading to increases in stocks and catches overall), establishment and enforcement of mesh-size and gears regulations (allowing fish to grow to maturity/reproduction size to ensure sufficient recruitment) and establishment and evaluation of MPAs (to protect vulnerable and/or threatened species and habitats, supporting overall rehabilitation efforts), are amongst those that can assist in region-wide rehabilitation of stocks to increase fisheries overall output, economic viability and environmental sustainability.

This 300 thousand tonnes production increase would add annually USD700 million (some 21 percent) to the fisheries sector value generation.

This 300 thousand tonnes would generate fisheries sector employment for 250 to 300 thousand people in the region (at current average catches per fisher), increasing thus employment opportunities substantially with some 19 percent to 23 percent. The livelihoods in coastal communities would benefit tremendously of this boost in employment. The economic viability of fishing fleets that would fish responsible, applying regionally agree management measures, would increase significantly as well. At the same time, reductions in fishing fleet capacity that currently seem unavoidable, could be smaller than anticipated, under regional management, due to the possibility to negotiate within the region transfers of non-utilized quota between fleets.

The same 300 thousand tonnes would also provide for the per capita supply of fish for between 20 and 25 million people in the region⁶⁶. The fish protein share in the diet of the Caribbean people could increase a few percent, improving their nutrition, health and helping to reach government food security objectives that strive to reduce malnutrition and obesity.

The above are just the anticipated annual benefits to the region for the near future. If we would look at the impact on the future generations, it would become clear that a decision in favour of investing in an RFMO could impact the livelihoods of millions of people, adding wealth in the billions to the economies in the region.

⁶⁵ Estimation by author, based on data available in FAO FishStatJ and communication with FAO and county experts.

 $^{^{66}}$ Considering that the per capita supply of fish and fisheries products in the region as a whole is somewhere in the range between 12 and 15 kg/capita/year.

<u>6.4.2 Fisheries management outcomes, enforcement expenditures, options for</u> <u>fisheries management cost-recovery</u>

Having a functioning RFMO covering the region will imply that an area beyond national jurisdiction (ABNJ) of the Atlantic Ocean of some 9.2 million km² would get the fisheries management it needs. The current situation where management of non-tuna fisheries resources is absent will be terminated and the Members of the RFMO will get a say on whom can fish in that area, when, where, how and how much. This is an extremely valuable improvement, considering the linkages between the stock status on the high seas and the catches in the region. The catches of many targeted fish species (not just tuna) in the EEZs depend on the health of the ocean ecosystem and the sustainability of the fisheries in the high seas.

It was argued in chapter 5.4.2 that IUU fishing cannot fully be eliminated by an RFMO, considering the characteristics of the sector in the region, but that a reduction of 50 percent compared to current levels would be within reach of an RFMO⁶⁷. This would imply that an FAO Article XIV RFMO would be able to have legitimate fisheries production increase with 150 to 200 thousand tonnes. The associated benefits of such a reduction have been discussed earlier, but can be summarized as⁶⁸:

- An increase in the legitimate value generated by the sector in the WECAFC area of some USD350 to 460 million.
- An increased contribution to legitimate jobs in fisheries for more than 100 000 people.
- Additional fish supply covered at the current per/capita levels for more than 10 million people in the region, reducing reliance on fish and fisheries products imports
- A significant (10 percent) increase in the tax incomes from exported fish and fisheries products.

With respect to combating IUU fisheries there are various low hanging fruits that an RFMO can take advantage off, such as cooperation with ICCAT and other RFMOs on sharing of authorized fishing vessel information and IUU vessels lists, harmonization of PSMA measures and integrating observer programmes for high seas fishing fleets.

No estimates of enforcement expenditures are available from GFCM that could serve as basis for estimating enforcement expenditures in the region. It should be noted however that RFMOs, through the possibility to issue binding agreements, can easily collaborate with collaborative networks and partnerships of coast guards, navy, port- and customs authorities. This facilitates the enforcement work of these partners at a cost which is negligible to the sector, as the duties to be performed are generally already incorporated in the mandates of these authorities at regional and national level.

6.4.3 Fisheries conservation outcomes and enforcement expenditures

Fisheries conservation is integrated in the Agreements governing many RFMOs, also those established under FAO. Some RFMOs, such as the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) have conservation as main priority and are very successful in doing so.

Within the WECAFC mandate area there are certain stocks that require increased efforts to ensure their conservation for future generations. Consequently, WECAFC had been working on some of these stocks (e.g. sharks, queen conch, Nassau grouper) with CITES, SPAW and others.

⁶⁷ This will depend on the mandate entrusted to the body to be established, as well as on the measures eventually adopted and implemented by the Members of such body.

⁶⁸ Estimations based on earlier calculations presented under sections 2.4 and 2.5. Variations in tax/duties incomes from fish exports are very high between the WECAFC members and it would go too much into detail for the purpose of this paper to elaborate further on this. Therefore a conservative estimate has been used here.

An RFMO in the WECAFC area would be able to support the establishment, monitoring and enforcement work on identified Vulnerable Marine Ecosystems (VMEs) in the high seas, as well as support MPAs established by Members within their EEZs. Ties with UNEP and the Convention on Biological Diversity (CBD) Secretariat would allow that Ecologically or Biologically Significant Marine Areas (EBSAs) are established, maintained and evaluated in those areas that are agreed between the fisheries sector and the environment sector.

The currently proposed VMEs in the ABNJ of FAO Area 31 would be, when approved by WECAFC 16, non-binding, on the Members. As such, the impact and effectiveness of the VMEs would entirely rely on the States' voluntary implementation. An RFMO could make the recommendations on these VMEs binding and ensure enforcement in collaboration with neighboring RFMOs, ICCAT and key stakeholders of the Members.

The RFMO option might become important for WECAFC Members to ensure some say over ongoing and future deep sea exploratory mining of the mid-Atlantic ridge and near various seamounts; giving the Members of the commission an opportunity to participate in the decision making processes that relate to the water column and the deep sea fish stocks depending on these areas.

Without an RFMO it could be impossible to ensure conservation of the marine aquatic resources in the ABNJ, at least for the near future, as the Biological Diversity Beyond National Jurisdiction (BBNJ) work by the ad hoc open ended working group is likely to continue for some years before effective decisions can be taken.

6.5 Summary conclusion of a transition of WECAFC into a RFMO under Article XIV of the FAO Constitution

The decision of the WECAFC Members to transform WECAFC into a RFMO under Article XIV of the FAO Constitution would be highly beneficial from a cost-benefit perspective. An investment of some USD1.5 million annually is likely to generate returns in the order of USD700 million to 1 billion annually within a few years after establishment. The associated social and livelihood benefits would be tremendous as well with hundreds of thousands of jobs generated and additional fish supplies for 20 to 25 million persons.

If the financial and administrative proposals presented in this chapter are followed, then the existing fisheries advisory and management structures within SICA and CARICOM, though OSPESCA and CRFM, would be maintained and their Members would not have to contribute much extra to get greater value for money than they get at present. In fact, it is proposed that their investments in OSPESCA and CRFM would be regarded as investments in and contributions to regional fisheries management as well.

A transformation of WECAFC into an RFMO under Article XIV of the FAO Constitution will have the following outcomes (using the assessment criteria from section 4.5) compared to the current situation. These outcomes would largely depend on the commitments that negotiating States will agree to undertake under the agreement establishing the Article XIV Body, as well as on the fisheries conservation and management measures that Contracting Parties adopt and implement. As for Article VI Bodies, most of the outcomes indicated below are subject to the availability of resources (both financial and in kind).

The Statutes/ Agreement Conservation + management ⁶⁹	Effectiveness of meeting the objective of the Statutes/Agreement State of living resources Ecosystem Approach Data collection an sharing Quality and provision of scientific advice Adoption of conservation and	+ + + + +	An RFMO would be able to respond better to the objectives of the Commission The state of the resources will be improved; rehabilitation of overexploited shared stocks is possible Capacity building will continue and EAF will be embedded in way of working of the RFMO, involving also the private sector Improvements through better systems and sharing of data and information The advice will improve through agreements with CRFM, OSPESCA, NOAA, IFREMER and other RFMOs
Conservation +	Statutes/Agreement State of living resources Ecosystem Approach Data collection an sharing Quality and provision of scientific advice Adoption of	+ + +	the Commission The state of the resources will be improved; rehabilitation of overexploited shared stocks is possible Capacity building will continue and EAF will be embedded in way of working of the RFMO, involving also the private sector Improvements through better systems and sharing of data and information The advice will improve through agreements with CRFM, OSPESCA, NOAA, IFREMER
+	State of living resources Ecosystem Approach Data collection an sharing Quality and provision of scientific advice Adoption of	+ + +	The state of the resources will be improved; rehabilitation of overexploited shared stocks is possible Capacity building will continue and EAF will be embedded in way of working of the RFMO, involving also the private sector Improvements through better systems and sharing of data and information The advice will improve through agreements with CRFM, OSPESCA, NOAA, IFREMER
+	Ecosystem Approach Data collection an sharing Quality and provision of scientific advice Adoption of	+ + +	 improved; rehabilitation of overexploited shared stocks is possible Capacity building will continue and EAF will be embedded in way of working of the RFMO, involving also the private sector Improvements through better systems and sharing of data and information The advice will improve through agreements with CRFM, OSPESCA, NOAA, IFREMER
	Ecosystem Approach Data collection an sharing Quality and provision of scientific advice Adoption of	+ +	overexploited shared stocks is possible Capacity building will continue and EAF will be embedded in way of working of the RFMO, involving also the private sector Improvements through better systems and sharing of data and information The advice will improve through agreements with CRFM, OSPESCA, NOAA, IFREMER
management ⁶⁹	Data collection an sharing Quality and provision of scientific advice Adoption of	+ +	overexploited shared stocks is possible Capacity building will continue and EAF will be embedded in way of working of the RFMO, involving also the private sector Improvements through better systems and sharing of data and information The advice will improve through agreements with CRFM, OSPESCA, NOAA, IFREMER
	Data collection an sharing Quality and provision of scientific advice Adoption of	+ +	Capacity building will continue and EAF will be embedded in way of working of the RFMO, involving also the private sector Improvements through better systems and sharing of data and information The advice will improve through agreements with CRFM, OSPESCA, NOAA, IFREMER
	Data collection an sharing Quality and provision of scientific advice Adoption of	+ +	and EAF will be embedded in way of working of the RFMO, involving also the private sector Improvements through better systems and sharing of data and information The advice will improve through agreements with CRFM, OSPESCA, NOAA, IFREMER
	sharing Quality and provision of scientific advice Adoption of	+	of working of the RFMO, involving also the private sector Improvements through better systems and sharing of data and information The advice will improve through agreements with CRFM, OSPESCA, NOAA, IFREMER
	sharing Quality and provision of scientific advice Adoption of	+	involving also the private sector Improvements through better systems and sharing of data and information The advice will improve through agreements with CRFM, OSPESCA, NOAA, IFREMER
	sharing Quality and provision of scientific advice Adoption of	+	Improvements through better systems and sharing of data and information The advice will improve through agreements with CRFM, OSPESCA, NOAA, IFREMER
	sharing Quality and provision of scientific advice Adoption of	+	systems and sharing of data and information The advice will improve through agreements with CRFM, OSPESCA, NOAA, IFREMER
	Quality and provision of scientific advice Adoption of		information The advice will improve through agreements with CRFM, OSPESCA, NOAA, IFREMER
	scientific advice Adoption of		The advice will improve through agreements with CRFM, OSPESCA, NOAA, IFREMER
	scientific advice Adoption of		agreements with CRFM, OSPESCA, NOAA, IFREMER
	Adoption of		OSPESCA, NOAA, IFREMER
	*		
	*		and other RFMOs
	*	-	
	conservation and	+	Adoption of binding measures will
	1		be possible
	management measures		
	Capacity management	+	Fleet capacity will be managed
			through regional collaboration –
			increasing economic viability
-	Flag state duties	+	Flag state duties can be enforced in
and			the region and ABNJ, reducing
enforcement			IUU fishing
	Port State measures	+	Port state duties can be enforced
			throughout the region, effectively
			deterring large scale IUU
		+	Jointly with CRFM, OSPESCA and other RFMOs and national
	survemance (MSC)		
	Follow up on		institutions of Members
		+	Through regional collaborative arrangements with other sector
	minigements		stakeholders
	Cooperative		Great improvements in terms of
		T	detection of non-compliance
			detection of non-compliance
		=/+	Will improve for WECAFC
			Members that are exporting
			outside the region
Decision	Decision-making		The current process (by consensus)
	2 consistent marking	=	will likely continue
-			
D D m d	Compliance nd nforcement Decision naking and ispute ettlement	nd nforcement Port State measures Port State measures Monitoring control and surveillance (MSC) Surveillance (MSC) Follow-up on infringements Cooperative mechanisms to detect and deter non-compliance Market-related Measures Market-related Measures Decision making and lispute Decision-making	nd nforcement Port State measures + Port State measures + + Monitoring control and surveillance (MSC) + Follow-up on infringements + Cooperative mechanisms to detect and deter non-compliance + Market-related Measures =/+ Decision making and ispute Decision-making =

⁶⁹ All functions listed under this section depend on the commitments that the negotiating States will agree to include in the relevant international treaty.

		Dispute settlement	=/+	So far this was not needed at WECAFC, but an effective mechanism for dispute settlement would be put in place for the RFMO
5	International Cooperation	Transparency	=/+	The volume of available information will increase, and most can be shared, increasing transparency
		Relationship with non- Members	=/+	There is now no relationship with non-Members, but an RFMO will ensure that non-Members collaborate
		Cooperation with other international organisations	=/+	The relationship with international and regional organizations is generally ok at present, but could be extended and improved through formalizing collaboration ⁷⁰
		Special requirements of developing States	+	These will be addressed more effectively under an RFMO arrangement
6	Financial and administrative issues	Availability of resources for activities	+	Access to resources from other donors will increase, while the allocation from FAO's regular programme are slowly reducing
		Efficiency and cost effectiveness	=/+	While current levels of resources are handled efficiently, the impact of the resources allocated can be improved under an RFMO arrangement.

Legend:

= Stable, no large improvements or deteriorations in the situation (expected)

- Decrease or deterioration of the situation

+ Increase or improvement of the situation

The outcomes of this option in terms of fisheries production, fisheries employment, contribution of fisheries to food security and nutrition and the trade balance for fisheries products will all be positive for the region as a whole. The example from GFCM shows that it is realistically possible to make an impact on all these subjects within a few years.

⁷⁰ The collaborations with other international organization can also be formalized where WECAFC maintains its current legal status. Collaborative activities are currently largely restrained by funding and the limited size of the secretariat.

7. Costs and benefits of a transition of WECAFC to an RFMO established outside of FAO (based on NEAFC data)

A transformation of WECAFC into an intergovernmental organization (IGO) with its own juridical personality is the third option described in this paper. This option may look more complicated from the start, but can have specific benefits attached to it, which could make it attractive for WECAFC Members to consider this option. First of all, an IGO type RFMO will be completely independent of other international and regional organizations and does not need to have ties with FAO. If an IGO is set up, this will also allow the Members to design it and establish a structure that is flexible and could be more modern than having to establish an RFMO within an existing legal and governmental framework. On the other hand, some current Members may not feel comfortable or may not be attracted by the potential innovativeness of establishing a completely new IGO. There may for instance be concerns about the power structure within the new IGO, about the role of SIDS compared to the large fish producing countries within the IGO or about the governance aspects related to inclusion or exclusion of certain potential Members. Examples of IGOs involved in fisheries in the Atlantic and Caribbean include CRFM, OSPESCA, OLDEPESCA, ICCAT, NAFO and NEAFC.

The paper on "Background, guidance and strategic options for the strategic re-orientation of WECAFC: Options paper", prepared by Dr Judith Swan and presented to WECAFC 15 as document WECAFC/XV/2014/12, describes a range of IGOs in the fisheries sector and gives an overview of the establishment process. Therefore in this chapter, we will refer in some places to that earlier presented paper.

The example of the North East Atlantic Fisheries Commission (NEAFC) is used in this chapter because of NEAFC is considered a best-practice example within the Network of Secretariats of Regional Fisheries Bodies (RSN), includes some large producers and much smaller states, has the EU as an important Member, has relatively modern basic texts (new convention from 1980 and amended in 2006) and is performing very effectively and efficiently. For a detailed description of NEAFC fisheries and management measures, see NEAFC Fisheries Status Report 1998–2007, edited by Kjartan Hoydal, NEAFC Secretariat.⁷¹

Total landings from the North East Atlantic have (since 1985) been above 10 million tonnes (see figure 23 below). This makes the North East Atlantic, (FAO Area 27) one of the most productive marine regions in fisheries terms. Please find more information on NEAFC production in annexes 11 and 12.

⁷¹ NEAFC website www.neafc.org



Figure 23: Total marine fisheries production in FAO Area 27 in million tonnes (period 1985-2013)

For the 4 coastal states in the North East Atlantic the following graphs show the dependency on fisheries of these economies.

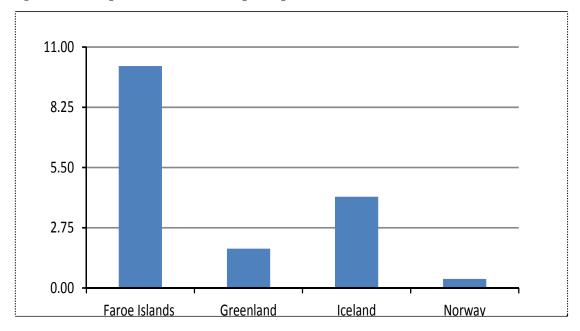


Figure 24: Fish production in tonnes per capita of selected NEAFC Member states (2013)

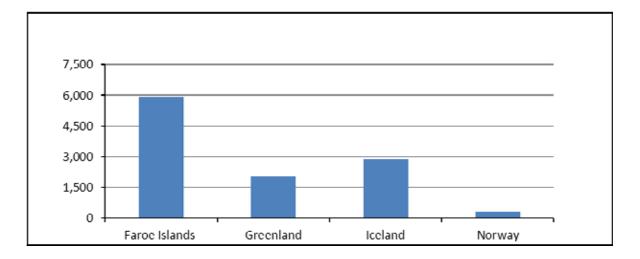


Figure 25: Fish production in off-vessel (landing) value (in Euros) per capita of selected NEAFC Member states (2013)⁷².

7.1.1 Current costs

The current total costs of an independent IGO RFMO is presented in table 7. The autonomous budget of NEAFC has been around USD2.2 to 2.5 million annually in recent years. The autonomous budget is financed completely by Member states contributions. The role of Trust Fund projects is minimal, as most research and capacity building takes place through partner agencies, such as ICES for research. NEAFC's main expenses are some 35 percent on staff and 23-25 percent on scientific work, outsourced to ICES. The Commission is expected to work only in English and Members may decide whether to undertake the relevant translations in other languages at their own expense.

⁷² From a Synthesis Report from the Nordic Marine Think Tank (edited by Kjartan Hoydal)Blue Growth in the North East Atlantic and Arctic - á working paper

Independent RFMOs	NEAFC	1
CATEGORY	GDP	USD ⁷³
Expenditures		
Staff	552,000	830,926
Premises, office, travel	197,600	297,447
Communication, IT	217,200	326,951
Meetings	243,500	366,541
Science	361,200	543,714
Translation services	0	-
Consultancies / external expertise	0	-
Total expenditure	1,612,800	2,427,748
		0
		U
Contributions	GBP	USD
Contributions Member States	GBP 1,612,800	-
	-	USD
Member States	-	USD
Member States Headquarter agreement	-	USD
Member States Headquarter agreement Trust funds	-	USD
Member States Headquarter agreement Trust funds International funds	-	USD

Table 7: Current costs –example NEAFC

The NEAFC Members are rather few and the constituent agreement provides for contributions by each of them using a base fee which is equal for all parties and a catch component. The system used is outlined in table 8 below.

⁷³ The original costs table was provided in GBP. An exchange rate of 1 GBP= 1.5053 USD (date 5 November 2015; source Bloomberg.com) was used to illustrate the costs in USD.

Table 8: Example of the calculation of contributions in an independent RFMO – example NEAFC

CONTRIBUTIONS FOR 2014 Annex 3 Amended September 2014 with revised statistics from ICES							
NEAFC CONTRIBUTIONS:	TOTAL AM	OUNT REG	UIRED	IN 2014: £ 1,	583,800		
Calculations applying Article 17. 4 (c) of the Convention							
					dia.		
Calculations appl (Denmark in respect of the Faroe Islan					et)		
					et) e	f	g
	nds and Greenla	and pays a max	dmum of 5	% of the total budg	e 79,190	f 79,190	9
(Denmark in respect of the Faroe Islan	nds and Greenla	and pays a max	dmum of 5	% of the total budg	e	f 79,190 586,438 -	9 64,240
(Denmark in respect of the Faroe Islan Denmark (for Faroes and Greenland)	nds and Greenla a	and pays a max	c c	% of the total budg d	e 79,190		
(Denmark in respect of the Faroe Islan Denmark (for Faroes and Greenland) European Union	a a 131,983.33	b 2,797,004 1,135,348	c c 39.95	% of the total budg d 390,214.74	e 79,190 522,198 290,378	586,438-	64,240
(Denmark in respect of the Faroe Islar Denmark (for Faroes and Greenland) European Union Iceland	a 131,983.33 131,983.33	b 2,797,004 1,135,348	c 39.95 16.22	% of the total budg d 390,214.74 158,394.31	e 79,190 522,198	586,438 273,012	64,240 17,366

The contributions of the Contracting Parties are calculated according to paragraph 17 of the Convention on Future Multilateral Cooperation in North-East Atlantic Fisheries (the Convention)⁷⁴

17. 4. The Commission shall determine the contributions due from each Contracting Party under the annual budgets according to the following formula:

(a) one-third of the budget shall be divided equally among the Contracting Parties,

(b) two-thirds of the budget shall be divided among the Contracting Parties in proportion of their nominal catches in the Convention Area, on the basis of the International Council for the Exploration of the Sea definitive catch statistics for the calendar year ending not more than 24 and not less than 18 months before the beginning of the budget year,

(c) however, the annual contribution of any Contracting Party which has a population of less than 300,000 inhabitants shall be limited to a maximum of 5% of the total budget. When this contribution is so limited, the remaining part of the budget shall be divided among the other Contracting Parties in accordance with sub-paragraph (a) and (b).

In comparison, GFCM in option 2, calculates Members' contribution to the autonomous budget by the following formula:

Basic fee	10% of the total autonomous budget, divided equally by all Member
GDP Component	35% of the total autonomous budget, divided in a way that wealthier Members pay a significant larger contribution than poorer Members
Catch component	55% of the total autonomous budget, divided equally in terms of average catches by each Member over a 3-year period.

Similar structures to calculate the Member contributions to the budgets of RFBs and RFMOs are very common.

7.1.2 Future costs estimated

The costs of operating NEAFC are not very high and the size of the Secretariat is moderate with five full-time staff. If WECAFC would be abolished and a new independent IGO RFMO would be established, the costs of this new Commission would have to be fully covered by the Members. In this respect it is likely that during a transition or transformation period FAO would still continue to operate WECAFC as article VI RFB, until the new RFMO would be formally established and its convention would enter into force.

 ⁷⁴ The Convention was adopted on 18 November 1980 and entered into force in 1982.
 It replaced the earlier 1959 North-East Atlantic Fisheries Convention.

Similarly as under option 2 (Article XIV RFMO) there must first be consensus to start negotiations towards an agreement, based on a perceived needs by the potential countries for such an agreement and there should be region-wide recognition of the potential benefits from Membership. The Members would also need to commit financial and human resources to the negotiating process. The negotiation process can involve several meetings over a few years, as has been seen recently in the Pacific.

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Once agreement is reached among the interested Governments on the text of the agreement (or convention), such text is submitted to a conference of plenipotentiaries for signature. The agreement will enter into force in such a manner and upon such date as it may provide or as the negotiating States may agree. Where provided in the agreement, the entry into force may be subject to the deposit of a minimum number of instruments of acceptance by State signatories. The Members would from than onwards be fully responsible for financially sustaining the organization so established.

The process of establishment, if handled efficiently by the Members (or with legal support from FAO) can be carried out for an estimated USD250 to 300 thousand and is likely to take a bit longer than the negotiation of an agreement under FAO. The latter depends largely on the leadership/coordinating role of one or more of the Members in the establishment process, and their efforts of making potential Members aware and building the necessary capacity and understanding within the region.

The fact that the Members (called contracting parties in NEAFC) have the full responsibility of running the organisation efficiently and making maximum use of possibilities of cooperation on all matters relevant to responsible management of the resources in its mandate area is conducive to keeping the costs low during implementation. Nevertheless, in a situation such as in the WECAFC area, it is likely that the secretariat would have to be slightly larger to take into account the needs to work in more than one language and the large number of (potential) Members. Within NEAFC, our example, the costs only change when there are new (additional) demands placed on the Secretariat.

Assuming a similar set-up (and size) of the secretariat under an IGO RFMO as under an FAO Article XIV RFMO, and acknowledging that the scientific research would be largely carried out by CRFM, OSPESCA, NOAA and IFREMER, it would be possible to operate the IGO for a similar budget as in option 2. This means an autonomous budget of USD1.5 to 1.8 million would be able to sustain the Secretariat and ensure that all necessary (basic) functions are carried out efficiently.

7.2 Benefits

7.2.1 Benefits to Members

Reference is made to the Report of the 2013/2014 Performance Review of NEAFC ⁷⁵, which is available on-line. Excerpts are given below to summarise the views of the independent panel that undertook the review. "As one of the premier RFMOs, comprised of some of the most technically sophisticated fishing nations in the world, NEAFC should exhibit a high level of performance in meeting sustainability goals. We appreciate the opportunity to evaluate the performance of this notable organization and to contribute, in a small way, to meeting the global challenge of securing sustainable, productive fisheries and healthy ocean environments for the future."

The Panel is satisfied that following the adoption of various measures since 2006, such as relevant amendments to the NEAFC Convention, the consolidation of the Scheme of Control and Enforcement (the Scheme) with the non-Contracting Party Scheme, the agreement on a comprehensive port State control system and its subsequent harmonization with the FAO Agreement on Port State Measures, as

⁷⁵ http://www.neafc.org/news/13885

well as the adoption of new decision-making procedures and mechanisms for the settlement of disputes in 2013, NEAFC has now the necessary legal and institutional framework to ensure effective conservation and sustainable use of fishery resources under its purview. The Panel also noted that effective implementation of fishery regulations provided under the Scheme of Compliance and Enforcement, has allowed NEAFC to abate Illegal, Unreported and Unregulated (IUU) Fishing of Non-Contracting Parties in the Regulated Area. All these positive developments have now shifted attention on the need for Contracting Parties to ensure implementation of all fishery regulations established under the Scheme and to agree on measures to ensure the "long-term conservation and optimum utilization of fishery resources in the Convention Area, including agreement on annual resource allocation keys for the Regulatory Area. Indeed, no matter how comprehensive fisheries regulations are in place for the whole Convention Area, they are only as effective as they are thoroughly implemented by all Contracting Parties".

It is clear from the above that NEAFC managed to complete eliminate IUU fishing in its convention area. The catches of the main commercial stocks, such as the Norwegian Spring Spawning (Atlanto Scandian) herring have completely recovered from depletion in the 1980s and 1990s and are now sustainably harvested by the Members, contributing to income in fisheries communities, livelihoods, food security and significant export earnings for the Members.

In summary, some of the main achievements of NEAFC relate to its deterrence of IUU fishing, establishment of an effective Port State Control system and finding agreement (in general) on the allocation of fishing rights/quotas for the various stocks under its realm.

7.2.2. Future benefits

The future benefits to Members of an IGO RFMO option would not differ significantly from those listed for an FAO RFMO (under chapter 6.2.2).

7.3 Legal, Financial and administrative implications of this option

The legal, financial and administrative implications of a transformation of WECAFC into an IGO RFMO are also detailed in the "Options paper", which was presented to WECAFC 15.

7.3.1 Legal issues

In order to establish an IGO RFMO, the WECAFC would have to be abolished by the FAO Council at an acceptable time, and the elements and substance of an agreement establishing the IGO agreed upon.

A framework for the Convention would likely include many of the components shown below⁷⁶:

- Definitions
- Objectives
- Area of application
- General principles
- Meeting of the parties
- Functions of the meeting of the parties
- Subsidiary bodies
- Decision making
- Secretariat

⁷⁶ This list is valid for any international agreement setting up a RFMO whether inside or outside FAO.

- Special requirements of developing States
- Transparency

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- Cooperation with other organizations
- Good faith and abuse of right
- Interpretation and settlement of disputes
- Final clauses (amendments, signature, ratification, Depositary, etc.)

These elements are very similar to the typical framework of a RFMO under Article XIV of the FAO Constitution, but have additional provisions on a Secretariat, contracting party duties, transparency, special requirements of developing States and good faith and abuse of right. An IGO established outside FAO's framework will not be subject to FAO's rules (*e.g.* reporting obligations, financial regulations, procurement rules, staff rules, *etc.*). All such rules and procedures should be established by the new IGO. The process of elaboration and adoption of such rules would require additional time and costs.

A headquarters agreement with the host country would be necessary, including provision of diplomatic status as appropriate. The negotiations for the host country agreement could follow earlier examples, such as from NEAFC. The IGO itself would be responsible for implementing any requirements relating to employment, such as work permits, medical insurance and other staff benefits. Savings could be made perhaps, but evidence from existing RFMOs shows that the expenses on staff and their benefits do not differ very much between these IGOs and are similar compared to those in the UN system agencies.

7.3.2 Financial issues

Under this option WECAFC would be financially responsible for its entire operation. Capacity building has to be considered under any option as well as the funding of participation in meetings.

As mentioned under the costs sections (7.1.1 and 7.1.2 above), a transformation of WECAFC into an IGO RFMO will have cost implications, for the establishment process as well as for the operations of the RFMO. An example of the minimum required annual budget for the IGO RFMO is given above.

The establishment process is expected to have slightly higher costs than for an FAO RFMO, due to the need for more participatory meetings between the potential Members. The flexibility embedded in the establishment of an IGO RFMO and the fact that it will be a completely new structure that will be established, will increase these costs. Nevertheless, with a budget of USD250 to 300 thousand it should be possible to have the necessary meetings and draft the Convention, Rules of Procedure, Financial Regulations, etc. The costs of this option will have to be covered in full by the Members through a project. There may be some support from the CLME+ project and the WECAFC Secretariat can, similarly as under the FAO RFMO option, support resource mobilization and provide logistical and technical support to the meetings, but the main costs have to be covered by the future Members.

In terms RFMO operational issues, an IGO RFMO is not bound by the UN language rules and can thus decide to work only in one or two languages. A decision on this subject will be required early in the establishment process of the RFMO. Moreover, there is more flexibility in setting up its secretariat and handling of salary and staff benefits aspects.

Nevertheless, as mentioned in section 7.1 above the total financial implications of the IGO RFMO will add up to some USD1.5 to 1.8 million.

Similarly as under the FAO RFMO option it will be necessary, also under this option, to seek additional funding for capacity building in Member states and for the participation in meetings by the SIDS Members in particular. In terms of generation of scientific advice for fisheries management, a similar arrangement as was proposed under 6.3.2 (Financial issues of the FAO RFMO) may be possible, following the pilot testing currently of the CLME+ interim arrangement for sustainable fisheries.

Also under this option an innovative mechanism could be set-up which would guarantee that countries would not pay double. Thus if they would make their annual contribution already to OSPESCA or CRFM, then they would not need to contribute to the IGO RFMO. Their contributions to these two RFBs would be regarded as in-kind contributions to the work of the IGO RFMO and thus be deducted from what they otherwise would have to contribute.

Again, also under this IGO RFMO option, it is expected that the USA, Mexico, Brazil, Venezuela, European Union, Cuba, Japan and Korea would assume together the above mentioned autonomous budget. The proposal for funding presented in chapter 7.3.2 will remain largely the same under this option. The exact details will have to be negotiated between the countries.

The table 9 below shows the Membership of WECAFC split between CRFM and OSPESCA and other Members. It is clear that the contributions to (sub-) regional fisheries management by CRFM and OSPESCA countries have been some USD5 per tonne of fisheries product in recent years. Apart from some extra-budgetary funding through projects and capacity building support the other WECAFC Members have not contributed to regional level fisheries management. The IGO RFMO option, as well as the FAO RFMO option, would require them to contribute between USD1 and 1.25 per tonne. This is approximately one-quarter of the current investment made by CRFM and OSPESCA countries.

CRFM		WECAFC Members outside CARICOM and SICA		
Antigua and Barbuda	Belize	Brazil		
Bahamas	Costa Rica	Colombia		
Barbados	Dominican Republic	Cuba		
Belize	Guatemala	European Union		
Dominica	Honduras	France		
Grenada	Nicaragua	Guinee		
Guyana		Japan		
Haiti		Korea, Republic of		
Jamaica		Mexico		
Saint Kitts and Nevis		Netherlands		
Saint Lucia		Spain		
Saint Vincent/Grenadines		United Kingdom		
Suriname		United States of America		
Trinidad and Tobago		Venezuela, Boliv Rep of		
UK – Anguilla, BVI and Montserrat				
Total fisheries production in Area 31:	Total fisheries production in Area 31:	Total fisheries production: ± 1.450 thousand tonnes		
\pm 180 thousand tonnes	\pm 55 thousand tonnes	(86% of total WECAFC		
(11% of total WECAFC area 31 +41)	(3% of total WECAFC	area 31+41)		
	area 31+41)	,		
Contributions by Members: 1 Million USD	Contributions by Members: 300 thousand USD	Contributions by Members: 1.5 -1.8 million USD		
Average contribution per thousand tonnes: USD5 556	Average contribution per thousand tonnes: USD5 455	Average contribution per thousand tonnes: USD1 034		

Table 9: Membership of WECAFC split between CRFM and OSPESCA and independent Members.

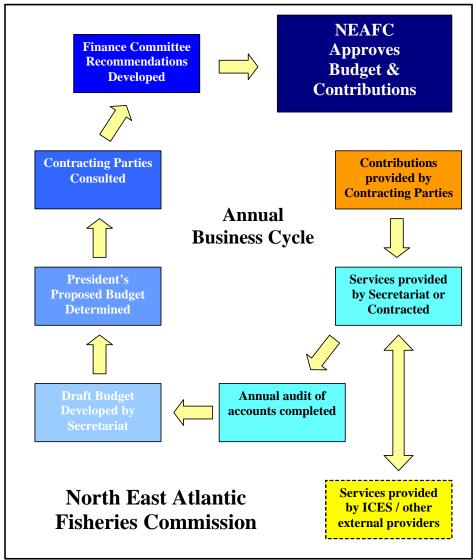
7.3.3 Administrative issues

Administration demands would be higher for an independent RFMO than for a body established under the FAO Constitution, because there would be no accommodation, technical, secretarial or other support provided by FAO.

The current arrangement where FAO provides for the offices, part-time secretary and administrative and logistical support will be discontinued under this option and would have to be covered fully by the Members.

The figure 26 below presents the business cycle within NEAFC, which is a good example of how the administration of an IGO RFMO operates.

Figure 26: Business cycle of an RFMO, example from NEAFC.



7.4 Fisheries production, management and conservation implications of this option

There are not any major differences expected between the FAO Article XIV RFMO option and the IGO RFMO option in terms of impact of the RFMO on stocks status, fisheries production, employment and food security contributions. Details are provided under section 6.4.

7.5 Production, value and employment generation outcomes

While details are provided in section 6.5, in summary, an IGO RFMO is expected to facilitate its members/contracting parties to:

- Enable an increase in production with 300 thousand tonnes to 30 year average fisheries production levels, within 5 to 10 years after establishment.
- Generate annually more than 20 percent additional value; contributing 700 million to the region's economies.
- Create additional direct employment in the fisheries sector for some 250 to 300 thousand people.
- Supply fish for an additional 20 to 25 million people, or allowing a substantial increase in consumption of fish of the Caribbean people.

7.6 Fisheries management outcomes and enforcement expenditures

Judging from the track records of RFBs and RFMOs it is clear that most RFMOs have robust systems for acquiring necessary scientific advice for management, cooperate on control and enforcement and are active with respect to IUU fishing (e.g. through blacklisting of IUU vessels). They often support and carry out management tasks in fisheries both in the EEZs and the ANBJ. In the Caribbean the economic benefit of establishing robust fisheries management in the same class is estimated to be in the order of USD700 million annually, through an additional annual investment of between USD1.5 and 1.8 million per year. The anticipated return on investment is thus tremendous.

In the establishment process and the generation and development of fisheries management advice, an IGO RFMO would not be left alone. In the last decade there are ample examples of RFMOs assisting each other, for instance NEAFC assisted SEAFO in setting up its Secretariat and establishing its VMS database (and is still running the IT part).

In terms of fisheries management outcomes and enforcement expenditures, the same holds true for IGO RFMOs as for FAO Article XIV RFMOs.

In summary an RFMO could serve as an international forum and provide effective instruments to achieve the following objectives:

- 1. The ABNJ area in the Atlantic Ocean of some 9.2 million km² would get the fisheries management it needs.
- 2. Catches in the EEZs of the Caribbean states will increase due to transboundary fisheries management.
- 3. A reduction in IUU fishing of 50 percent could be realized within 10 years allowing for a legitimate fisheries production increase with 150 to 200 thousand tonnes. This would generate:
 - An increase in the legitimate value generated by the sector in the WECAFC area of some USD350 to 460 million.
 - An increased contribution to legitimate jobs in fisheries for more than 100 000 people.
 - Additional fish supply covered at the current per/capita levels for more than 10 million people in the region, reducing reliance on fish and fisheries products imports

- A significant (10 percent) increase in the tax incomes from exported fish and fisheries products.
- 4. Enforcement expenditures will not have to increase much compared to current trends, as VMS are being introduced in most fleets in the region and RFMO binding recommendations will allow existing enforcement authorities (e.g. navy, coast guard, police and customs) to carry out their duties in terms of fisheries enforcement more effectively, due to clear instructions.

7.7 Fisheries conservation outcomes and enforcement expenditures

The fisheries conservation outcomes and related expenditures would be similar for an IGO RFMO as for an RFMO under article IXV of the FAO Constitution.

In summary, the RFMO will be more effective than an RFB in terms of:

- Conservation of stocks that require attention, such as certain shark and ray species, queen conch and Nassau grouper, and collaborate efficiently with CITES, SPAW and others.
- Identification, establishment and enforcement of Vulnerable Marine Ecosystems (VMEs) in the high seas.
- o Providing advisory and monitoring services to MPAs established by Members within their EEZs.
- Collaborate effectively with UNEP and the Convention on Biological Diversity (CBD) Secretariat on the monitoring and evaluation of Ecologically or Biologically Significant Marine Areas (EBSAs).
- Securing the interests of the fisheries sector towards other sectors that are exploring and exploiting the resources, or towards those that intend to stop fishing activities, in the deep seas and water column of the ABNJ area in the Western Atlantic.

7.8 Summary conclusion of a transition of WECAFC to an RFMO independent of FAO

A decision of the WECAFC Members to transform WECAFC into an IGO RFMO, similarly as into an FAO RFMO, could be highly beneficial from a cost-benefit perspective.

An investment of some USD1.5 to 1.8 million, which in effect means one USD1 to 1.25 investment in regional fisheries management per tonne of fisheries production is likely to generate returns 300 times larger. The associated social and livelihood benefits would be tremendous with hundreds of thousands of jobs generated and additional fish supplies for 20 to 25 million persons in the region.

If the financial and administrative proposals presented in this chapter are followed, then the existing fisheries advisory and management structures within SICA and CARICOM, though OSPESCA and CRFM, would be maintained and their Members would not have to contribute much extra to get greater value for money then they get at present. In fact, their investments in OSPESCA and CRFM would be regarded as investments in and contributions to regional fisheries management as well.

A transformation of WECAFC into an IGO RFMO will have similar outcomes as to a RFMO established under Article XIV of the FAO Constitution (using the assessment criteria from section 4.5) and are compared to the current situation. These outcomes would largely depend on the obligations that negotiating States will agree to undertake under the treaty establishing the IGO, as well as on the fisheries conservation and management measures that Contracting Parties adopt and implement. As for Article VI and XIV Bodies, most of the outcomes indicated below are subject to the availability of resources (both financial and in kind).

	Area	General Criteria	Effect	Observation
1	The Statutes/	Effectiveness of meeting	+	An RFMO would be able to
	Convention	the objective of the		respond better to the objectives of
		Statutes/Convention		the Commission
2	Conservation +	State of living resources	+	The state of the resources will be
	management	6		improved; rehabilitation of
				overexploited shared stocks is
				possible
		Ecosystem Approach	+	Capacity building will continue
				and EAF will be embedded in way
				of working of the RFMO,
				involving also the private sector
		Data collection an sharing	+	Improvements through better
				systems and sharing of data and
				information
		Quality and provision of	+	The advice will improve through
		scientific advice		agreements with CRFM,
				OSPESCA, NOAA, IFREMER
				and other RFMOs
		Adoption of conservation	+	Adoption of binding measures will
		and management measures		be possible
		Capacity management	+	Fleet capacity will be managed
				through regional collaboration –
				increasing economic viability
3	Compliance and	Flag state duties	+	Flag state duties can be enforced in
	enforcement			the region and ABNJ, reducing
	5			IUU fisheries
		Port State measures	+	Port state duties can be enforced
				throughout the region, effectively
				deterring large scale IUU
		Monitoring control and	+	Jointly with CRFM, OSPESCA
		surveillance (MSC)		and other RFMOs and national
				institutions of Members
		Follow-up on	+	Through regional collaborative
		infringements		arrangements with other sector
		C C		stakeholders
		Cooperative mechanisms to	+	Great improvements will be made,
		detect and deter non-		possible through collaboration with
		compliance		other RFMOs
		Market-related Measures	=/+	Will improve for WECAFC
				Members that are exporting outside
				the region
4	Decision making	Decision-making		Members can determine in the
.	and dispute		+	convention and rules of procedures
	settlement			their own preferred processes and
				streamline these as desired
		Dispute settlement	+	An effective mechanism for
				dispute settlement will be put in
				place for the RFMO
5	International	Transparency	=/+	The volume of available
	Cooperation			information will increase, and
	correnation			most can be shared, increasing
			1	most can be shared, mercashig

				transparency
		Relationship with non- Members	+	There is now no relationship with non-Members, but an RFMO will ensure that non-Members collaborate
		Cooperation with other international organisations	+	Collaboration with other international organizations and regional organizations can increase through MoUs and with limited red tape
		Special requirements of developing States	+	These will be addressed more effectively under an RFMO arrangement, probably similar as in ICCAT or NEAFC
6	Financial and administrative issues	Availability of resources for activities	=/+	Access to resources from other donors may increase, but will have to offset partly the lost support from FAO
		Efficiency and cost effectiveness	=/+	While current levels of resources are handled effectively, the impact of the resources allocated can be improved under an RFMO arrangement.

Legend:

= Stable, no large improvements or deteriorations in the situation (expected)

- Decrease or deterioration of the situation

+ Increase or improvement of the situation

The outcomes of this third option in terms of fisheries production, fisheries employment, contribution of fisheries to food security and nutrition and the trade balance for fisheries products will all be positive for the region as a whole. The example from NEAFC shows that an IGO in the Atlantic can make significant improvements to stock status and the economic viability of fisheries in a region.

8. Risks associated with the three options

The risks associated with the three options presented are difficult to quantify. From the assessment it looks like risks involved in maintaining the "status quo", the first option presented, are limited in organizational, institutional or political terms. However, the risks related to "business-as-usual", although improved through greater collaboration with CRFM and OSPESCA, would become apparent in the challenges to maintain fish production at current levels. Despite the opportunity that CRFM and OSPESCA currently have to issue binding regulations or measures for their members, a large part (51 percent high seas) would remain unmanaged and for some 80+ percent of capture fisheries production in the region there would not be an effective harmonized fisheries management regime available. Consequently, the risks in terms of continued reduction in catches in the region, as well as related social (e.g. employment and food security) and economic (incomes, coastal livelihoods and export earnings) would be substantially higher for the region than under the two RFMO options.

The risks associated with a selection of the second option are fairly low from an institutional point of view, as the RFB would transform into an RFMO within the FAO governance framework. A transformation process can therefore be rather smooth and current Members will be able to continue participation in the preparation process of the RFMO. From a political point of view this option carries limited risks because the same member countries can continue to participate in the RFMO. A one-

member one-vote approach and application of FAO's legal framework and procedures will guarantee agreed and transparent processes and neutrality of the RFMO secretariat. FAO would ensure that political differences within the region would not cause exclusion of potential members and that partnerships with CRFM and OSPESCA and other RFBs and RFMOs would be strengthened and extended. Therefore, institutional and political of this second option risks are low.

In terms of social, economic and environmental risks, it is foreseen that these will be reduced compared to the current situation. The RFMO will be able (through increasing the scientific basis for decision making, capacity building support and agreeing on binding and harmonized fisheries management measures) to contribute to more sustainable fisheries, higher value generation and in the mid-to long term food and employment security in fisheries.

The social, economic and environmental risks associated with the third option, an RFMO outside the FAO governance framework, will be similar as those for an FAO Article XIV Body. The institutional risks will be higher than the first two options, as a complete new governance structure, an Inter-Governmental Organization (IGO), will have to be established, which may cause disruption in the delivering the current functions of WECAFC. It is anticipated that FAO will continue to support WECAFC until the Members request FAO for abolishment of WECAFC. The political risks involved in this option may be larger compared to the other two options as other IGOs established in the region have tended to exclude some countries for a variety of reasons. Moreover, the cultural, socio-economic, language and political situation is highly diverse among the WECAFC Membership. Consequently it is likely that the negotiation process of an IGO RFMO agreement will take longer and may develop into an agreement that does not include all current WECAFC Members.

9. Conclusions and recommendations

The independent cost-benefit assessment of the options for strategic re-orientation for WECAFC was carried out by Dr Kjartan Hoydal over the period June – December 2015.

The consultant contacted key resource persons and used information from the FAO, WECAFC Secretariat, WECAFC Executive Committee, and Member Nations of WECAFC, NEAFC, GFCM and others. He also organized a small expert meeting in Barbados on 1–2 September 2015 in which some of the partner organizations (e.g. CRFM, OSPESCA, CLME+) participated, to get better informed and prepare for the 2nd WECAFC Strategic Reorientation Workshop, Port of Spain, Trinidad and Tobago, 1–2 December 2015.

The conclusions and recommendations below are the outcomes of the independent assessment and represent the views of the consultant and not necessarily those of FAO, WECAFC and/or its partners.

This draft report will be finalized after the second WECAFC Strategic Reorientation Workshop, taking in consideration the outcomes of the discussions there, for official submission by the WECAFC Secretariat to all WECAFC Members.

9.1 Conclusions

In order to understand the costs and benefits of WECAFC in its current form and potentially as RFMO it is important to understand the current situation in terms of stocks and fisheries in the WECAFC mandate area. The situation can be summarized as follows:

- The region is one of the most overexploited fisheries regions in the world. Many commercially targeted fish stocks are overfished or fully exploited at present.
- Fish production is currently around 1.4 million tonnes, which is 300 thousand tonnes below the 30 year average.
- Main fish producers are: USA, Mexico, Brazil, CRFM, Venezuela, OSPESCA, EU and Cuba.

- The total off-vessel value generated by the sector is some USD3.2 billion.
- The region is a net importer of fish; imports of fish and fisheries products are USD8.5 billion higher than exports.
- The fisheries sector provides direct employment for 1.3 million people in the region and supports the livelihoods of 4.5 million people.
- Fish consumption per capita is on average some 20 kg in Caribbean islands and between 6 and 12 kg in Central America, contributing between 2 and 15 percent to protein intake of the population in the region.
- 51 percent (9.4 million km²) of the WECAFC mandate area, the high seas, is not managed by any country or organization at present.
- IUU fishing is estimated at between 20 and 30 percent of total reported production levels.
- 19 of the 34 WECAFC Members are Member of other RFMOs in the Atlantic or elsewhere.

If WECAFC Members maintain its current *status quo* situation and institutional structure some of the following consequences may occur⁷⁷:

Stocks: further reduction in stock status, continued overfishing, continued IUU fishing, depleted stocks, more species threatened or endangered; reduction in ecosystem services provided by the area.

ABNJ: the fisheries in the Areas Beyond National Jurisdiction (i.e. the High Seas) in the WECAFC area will remain unmanaged, open access to all and (with the exception of tuna) no information will be collected or shared in support of fisheries management and conservation in these areas.

Fisheries volume: possible reduction in catches to 1 million tonnes (thus – 30 percent) by 2026-2030.

Fisheries value: off-vessel value of fisheries products will reduce between USD600 million and 1 billion compared to present, and further losses in the value chain will be added to this.

Employment: reduction in direct fisheries sector employment with an estimated 20-30 percent; thus a few hundred thousand jobs, by 2030.

Food security: dependence on import of fish and fisheries products will increase significantly.

Trade: the current negative trade balance for fish and fisheries products will further deteriorate.

Other stakeholders: tourism (e.g. scuba diving) may suffer from overexploited reef fish resources and recreational game fishing will move to other regions – resulting losses in income.

Current investments by CRFM and OSPESCA Member states in fisheries management in the region, which are in the range of USD1.3 million annually, may be able to secure some stability in catches and employment in these sub-regions, but it is likely that also these Members will suffer from degradation of transboundary- and straddling stocks originating by inadequate fisheries management at the regional level.

Under the RFMO options, the Members of WECAFC will be guaranteed that the stock status, fisheries production and employment will not further deteriorate, but instead is likely to improve.

⁷⁷ As mentioned above, the present legal status of WECAFC cannot be considered the cause of all these consequences. WECAFC is rather an instrument to address them. The ability for WECAFC to address them, however, primarily and largely depends on Member Nations willing to adopt decisions (binding or not) and implement them.

The establishment of either type of RFMO (FAO or IGO) may provide the opportunity to manage and conserve fisheries resources in the region in a sustainable manner and could result within a short period 5 to 10 years in substantial positive impacts that include⁷⁸:

Stocks: rehabilitation of some key commercially targeted stocks, through implementation of binding management measures, reduced IUU fishing and an increase in ecosystem services provided by the area.

ABNJ: fisheries management and conservation in the Areas Beyond National Jurisdiction (ABNJ) will be possible, ensuring flag- and port states responsibilities in these areas, and increasing the opportunities for sustainable harvest of high seas fisheries resources.

Fisheries volume: increase in production with 300 thousand tonnes within 10 years to a fisheries production level of around 1.72 million tonnes in Area 31, and an estimated increase of 20 to 40 thousand tonnes in the northern part of Area 41.

Fisheries value: off-vessel value of fisheries products will be annually more than 20 percent higher than currently the case, adding an estimated USD700 million to the current USD3.2 billion, generating thus additional value also further in the value chain.

Employment: Create additional direct employment in the fisheries sector for some 250 to 300 thousand people.

Food security: Increased supply fish for an additional 20 to 25 million people (at current per capita consumption levels), or allowing a substantial increase in consumption levels of fish of the Caribbean people, while dependence on import of fish and fisheries products will reduce slightly with a growing population.

Trade: the negative trade balance for fish and fisheries products will improve in favour of the region.

Other stakeholders: certain tourism sectors (e.g. scuba diving and recreational fishing) will continue to generate significant incomes for the region.

Most WECAFC Members are Member also in other RFBs and RFMOs that are active in the Atlantic region. Fifteen Members are also Member of CRFM and seventeen Members are either party or cooperating non-contracting party to ICCAT. Seven Members are also Member of OSPESCA and eight Members are involved in OLDEPESCA. Six Members are party to NAFO and 3 are involved in NEAFC.

The fisheries governance in the Western Central Atlantic can be presented as a patchwork of organizations, with each having its own limited Membership. WECAFC is the only organization incorporating all Caribbean, Gulf and North Brazil –Guianas Shelf countries and overseas territories, and the only organization with a mandate for the ABNJ area in this part of the Atlantic (apart from ICCAT for tuna-fisheries). The currently operational interim arrangement for sustainable fisheries between CRFM, OSPESCA and WECAFC is being tested and a transformation of WECAFC into an RFMO would build on the ongoing collaboration that has been established through an MOU between CRFM, OSPESCA and FAO/WECAFC on CLME+ Interim Coordination for Sustainable Fisheries.

WECAFC Members have in various meetings of CRFM, OSPESCA and WECAFC emphasized the need to ratify and implement the international fisheries instruments and agreements in the region. The international agreements give States the duties to control their flagged fishing vessels in their EEZs and in the high seas and to encourage flag, port and coastal States to cooperate (duty to cooperate) so as to ensure fisheries sustainability and stocks conservation. The main mechanism for organizing this

⁷⁸ Effective fisheries management, elimination of IUU, etc. largely depend on Member Nations' willingness to adopt binding measures and implement them. An Article XIV Body or an IGO may merely provide instruments (a forum of debate, the possibility to negotiate and adopt binding measures) to Contracting Parties to realize such objectives.

cooperative management is through RFMOs. Currently, 91 percent of WECAFC Members have ratified UNCLOS, 59 percent have ratified UNFSA, 41 percent have ratified the Compliance Agreement, and 24 percent have signed or ratified the PSMA.

This cost-benefit study recognizes the current situation and the trends in stock status and fisheries demands strengthening of fisheries management in the Wider Caribbean and there are potential economic benefits in the order of USD700 million/year by doing this through an RFMO.

If the potential reduction in IUU fisheries, coordinated through an RFMO, is added to the above, the benefits will increase likely to over USD1 billion per year. The RFMO further contributes to other more generic social and food security benefits a well through securing robust fisheries management. This should make the fisheries sector more resilient and create a better economic environment for sustainable investments in the sector.

Looking globally at other marine regions there is no doubt that RFMOs, where coastal and flag states take the responsibility of getting all elements of managing fisheries systems right, have the best track record in succeeding.

If the countries strive towards socially compatible, economically viable and environmentally sustainable fisheries in the Western Central Atlantic there are, therefore, in effect only two options which WECAFC Members should consider:

1. WECAFC becoming a regional fisheries management organization (RFMO) as an FAO Article XIV body, with a mandate to manage fisheries in a sustainable manner through adoption of legally binding decisions.

2. WECAFC becoming a regional fisheries management organization (RFMO) independent of FAO with a mandate to manage fisheries in a sustainable manner through adoption of legally binding decisions.

With respect to option 1 the development of GFCM is instructive; with respect to option 2 there are important lessons to be learned from RFMOs in the Atlantic, such as NEAFC and ICCAT, especially the ICCAT panel structure.

NEAFC has only five Contracting Parties. This has made it possible to run a small Secretariat, but the demands on Secretariat are growing. The costs of the Secretariat are fully met by the Contracting Parties as is the funding of participation in the many meetings of NEAFC. NEAFC does not do capacity building. GFCM with a much larger Membership has consequently a larger secretariat and higher operational costs.

The expenses for premises of the Secretariat of an RFMO vary according to host country agreements. Generally Member countries contribute to premises of IGOs headquarters. There are not many differences between IGO and FAO RFMOs in terms of costs of staff, as many IGOs follow UN standards. The decisions to carry out scientific research by itself or outsource this to other organizations and to work in various languages have significant impacts on the costs of an RFMO.

The total costs of establishing an RFMO in the Western Central Atlantic, whether an IGO or FAO RFMO, are approximately USD250 to 300 thousand, to be provided for by the Members or a donor over a 1- to 3-year period.

The costs to operate an effective secretariat and organize the main scientific meetings and sessions on an annual basis are between USD1.5 million and USD1.8 million, depending on various choices made by the Members. In annex 13 three indicative scales of contributions for an RFMO with an autonomous budget of approximately USD1.56 million per year are presented (see also the comparison table in the executive summary).

An additional USD500 thousand would have to be generated annually through resources mobilization to enable the RFMO to carry out the necessary capacity building among its Members and support scientific research in support of its management decision making processes.

The annual budget required for enabling the effective operations of the secretariat and cover costs of annual scientific meetings and sessions could be covered through a contribution to regional management of just USD1/tonne produced by the countries. This means for example that the USA would be asked to contribute annually approximately⁷⁹ USD850 000, Mexico USD220 000, Brazil USD200 000, Venezuela USD150 000, EU USD50 000 and Cuba USD25 000. In contrast, the current annual contributions to regional fisheries management by CRFM and OSPESCA Members is over USD5/tonne, which justifies that these countries should not take up part of the RFMO bill.

The differences are generally limited between an FAO and IGO type RFMO in terms of functioning of the organization, the size of its secretariat, operational costs and impact on fish stocks status and fisheries. Some RFMOs function better than others and have a greater impact, because of more active involvement of their Members and better follow-up on implementation of management measures by the Members. The Members are the key factor that determines the success of an RFMO.

In the negotiations of the RFMO agreement it is important to agree early in the process on a key for calculating Member's contributions. Reference is made to the NEAFC approach limiting the contributions of Members with a population under a certain limit. GFCM contributions are calculated on a basic fee, wealth- and a catch component. The same approach could be used for determining which Members are entitled to assistance with funding their participation in sessions and for capacity building.

9.2 Recommendations

It is recommended that WECAFC Members continue the process of reorientation and in earnest move toward an organisation where the coastal and flag states take responsibility and cooperate through an RFMO that can make binding decisions.

It is clear that in terms of costs-benefits the benefits of establishing and operating an RFMO outweigh by far the limited extra costs to the Members and that the RFMO option is therefore recommended to the Members.

While the cost-benefits study shows that investment by the Members in a transformation of WECAFC into an RFMO is a rational step to take, it is indecisive on which of the two options (IGO or FAO) RFMO would be the most economical for the Members. For a budget between USD1.5 and 1.8 million/year either of the two options can deliver similar services.

An RFMO can deliver, with respect to all requirements in international law and instruments. An RFMO will also be able to get the science right with respect the state of the stocks, and advice better on levels of fishing effort and fishery and impacts of fisheries on the environment and biodiversity than is currently the case. These matters define the management measures that should be presented to the WECAFC parties. With management in place, the next important step is monitoring, surveillance and control, including cooperation between the Inspection services of the WECAFC Members. RFMOs also cooperate with other IGOs with a mandate to regulate fisheries and other activities in the Atlantic Ocean.

⁷⁹ The exact contributions depend on which years would be used to average annual production levels, and whether only the production is considered to determine contributions. Many RFMOs also apply a wealth component, where members that have a higher GDP/capita contribute relatively more. See example of GFCM in the annex

It is further recommended that an RFMO would have to be based on the existing institutional structure in the region. This means that WECAFC should transform into an RFMO and continue to cooperate with OSPESCA and CRFM through a Memorandum of Understanding (MoU) formalizing and building on the existing CLME+ interim coordination arrangement for sustainable fisheries. In effect this would mean close collaboration on scientific and management advisory matters between the three institutions, in which each would remain independent and the collaboration would be mutually beneficial.

WECAFC would act as an umbrella organization bringing all elements of science, management and cooperation together.

The following next steps are recommended:

- Within Strategy 2 of the CLME Strategic Action Plan, the role of WECAFC and the relationship with its partners OSPESCA and CRFM should be further assessed before the 16th session of WECAFC (Guadeloupe, June 2016), defining a clear institutional collaborative structure with operational linkages that are cost-effective, avoid and overlap and duplication, for presenttaion to the session.
- WECAFC Members consider establishing an RFMO, either as FAO Article XIV body or outside of FAO. At this moment an FAO Article XIV body, seems from a political point-of-view more within reach than an IGO. After all, the current political situation may constrain the Membership of some important countries under the IGO option, while all countries are Member already of FAO and collaborate closely with FAO and WECAFC. The most important element is that the new organization would have a mandate to make legally binding decisions and that the Members in that process take the full responsibility managing the fisheries resources in the WECAFC area. This organisation can have panels that deal with different fisheries or groups of Members. For example one CRFM panel, one OSPESCA panel, etc.
- WECAFC Members analyze within their administrations whether there is sufficient interest to collaborate in the potential establishment process of an RFMO (if the 16th WECAFC session would decide in favour of continuing in such direction).
- The Secretariat to inform the 16th session of WECAFC as to the availability of resources (in kind or financial) for FAO to provide legal and institutional support to a transformation process of WECAFC into an FAO RFMO and present a clear roadmap with budget proposal to the session.

Annexes

Annex 1: Status of signature or ratification of International Fisheries Instruments among WECAFC Members

Country	UNCLOS	Compliance	UNFSA	PSMA
Country	UNCLUS	Agreement	UNFSA	FSIMA
Antigua and Barbuda	✓	Agreement		
Bahamas	✓		✓ ✓	
Barbados	✓	✓ ✓	√	
Belize	√	√	✓	
Brazil	~	✓	~	 ✓
Colombia				
Costa Rica	✓		✓	✓
Cuba	\checkmark			
Dominica	\checkmark			
Dominican Republic	\checkmark			
European Union (EU)	\checkmark	\checkmark	\checkmark	\checkmark
France	\checkmark	(EU)	\checkmark	\checkmark
Grenada	\checkmark			
Guatemala	\checkmark			
Guinea	\checkmark		\checkmark	
Guyana	\checkmark			
Haiti	\checkmark			
Honduras	\checkmark			
Jamaica	✓		✓	
Japan	\checkmark	✓	\checkmark	
Mexico	\checkmark	✓		
Netherlands	✓	(EU)	✓	(EU)
Nicaragua	\checkmark			, ,
Panama	\checkmark		\checkmark	
Republic of Korea	\checkmark	\checkmark	\checkmark	\checkmark
Saint Kitts and Nevis	\checkmark	\checkmark	\checkmark	\checkmark
Saint Lucia	\checkmark	\checkmark	\checkmark	
Saint Vincent and the	\checkmark		\checkmark	
Grenadines				
Spain	\checkmark	(EU)	\checkmark	(EU)
Suriname	\checkmark			
Trinidad and Tobago	✓		✓	
United Kingdom	✓	(EU)	✓	(EU)
United States of		 ✓ 	✓	 ✓
America				
Bolivarian Republic of				
Venezuela				

countries with catch in area 31 in 2012 or 2013	WECAFC member	CRFM member	OSPESCA member	Non- members	reported catch 2012 (MT)	reported catch 2013 (MT)
Anguilla	member	member	member		1122	1335
Antigua and Barbuda					5951	6000
Aruba					138	
Bahamas					16756	
Barbados					1373	2987
Belize					5839	10616
Bernuda					516	
Bonaire/S.Eustatius/Saba					156	
British Virgin Islands					1198	
Cayman Islands					125	
China					25	
Colombia		-			2329	
Costa Rica					415	415
Cuba					20722	20415
Curaçao					1120	
Dominica		_			561	479
Dominican Republic		_			12711	12616
French Guiana					3900	
Grenada					2258	
Guadeloupe					9800	
Guatemala					358	
Guyana					53044	
Haiti					15910	
Honduras					6331	6389
Jamaica					21675	24610
Japan					1809	1285
Korea, Republic of					364	164
Martinique					4900	
Mexico					221138	190548
Montserrat					41	44
Nicaragua					15909	19878
Panama					257	3880
Philippines					314	321
Portugal					111	81
Puerto Rico					1276	1469
Saint Barthélemy					50	50
Saint Kitts and Nevis					2099	1733
Saint Lucia					2205	2241
Saint Vincent/Grenadines					2208	1682
Saint-Martin					200	200
Sint Maarten					193	
Spain					8657	11166
Suriname					38644	1
Taiwan Province of China					748	
Trinidad and Tobago					12063	
Turks and Caicos Is.				1	3815	
United States of America				1	841576	
US Virgin Islands				1	515	1
Vanuatu					354	
Venezuela, Boliv Rep of					126045	
TOTAL	45	5 17	7	′ 5		

Annex 2: List of countries reporting catch in 2012 or 2013 in Area 31 and their RFB Memberships

Annex 3: List of WECAFC Members, their membership of other relevant regional fisheries organizations, and the number of Atlantic region RFBs each Member is involved in

	WECAFC Members	CRFM Member	OSPESCA Member	OLDEPESCA Memb.	ICCAT Member	NEAFC Member	NAFO Member	Total RFB involvement
WECAFC Members				-				
Antigua and Barbuda	1							2
Bahamas	2					NC		3
Barbados	3							3
Belize	4							5
Brazil	5							2
Colombia	6							1
Costa Rica	7							3
Cuba	8							3
Dominica	9							2
Dominican Republic	10							2
European Union	11							4
France	12							3
Grenada	13				OTs			2
Guatemala	14							3
Guinee	15							2
Guyana	16				NC			4
Haiti	17							2
Honduras	18							3
Jamaica	19							2
Japan	20							3
Korea, Republic of	21							3
Mexico	22							2
Netherlands	23							1
Nicaragua	24							4
Panama	25							3
Saint Kitts and Nevis	26					NC		3
Saint Lucia	27							2
Saint Vincent/Grenadines	28							3
Spain	29							1
Suriname	30				NC			3
Trinidad and Tobago	31							3
United Kingdom	32				OTs			2
United States of America	33							3
Venezuela, Boliv Rep of	34							2

NC = non-contracting cooperating party; OTs = for overseas territories

overseas territories, Member of WECAFC through France, Netherlands, United Kingdom or the USA	WECAFC Members	CRFM Member	OSPESCA Member	ICCAT Member
Anguilla	via UK			
Aruba	via NL			
Bermuda	via UK			
Bonaire/S.Eustatius/Saba	via NL			
British Virgin Islands	via UK			
Cayman Islands	via UK			
Curaçao	via NL	NC		
French Guiana	via France			
Guadeloupe	via France			
Martinique	via France			
Montserrat	via UK			
Puerto Rico	via USA			
Saint Barthélemy	via France			
Saint-Martin	via France			
Sint Maarten	via NL			
Turks and Caicos Is.	via UK			
US Virgin Islands	via USA			

Annex 4: FAO approach to cost-benefit assessments under the EAF:

Ecological benefits and costs

Benefits	Costs
Healthier ecosystems (directly or with EAF linkages to effective ICOM)	Decreased fish stocks (if fishery management is now less effective than previously)
Increased global production of goods and services from aquatic ecosystems (a global	Increased habitat damage (if management is now less effective or creates induced impacts)
benefit) Improved fish stock abundance (due to healthier	Shift in fishing effort to unprotected areas, leading to a loss of genetic biodiversity
ecosystems) Reduced impact on threatened/endangered	Greater high-grading/dumping, and thus more wastage (if catch and/or by-catch is restricted)
species	Reduced fish catches (if more predators – e.g. seabirds, seals)
Reduced by-catch of turtles, marine mammals, etc.	
Less habitat damage (due to more attention to fishing impacts)	
Lower risk of stock or ecosystem collapse	
Reduced contribution of fisheries to climate change (if EAF leads to lower fuel usage)	
Improved understanding of aquatic systems	

- Management benefits and costs

Benefits	Costs
Better integration in management across fisheries, other uses, etc.	Increased cost of management
Clearer expression of management objectives, leading to greater societal benefits	Increased cost of research
Better balancing of multiple objectives	Increased cost of data collection and data management
Better balancing of multiple uses, leading to increased net benefits	Increased cost of coordination across fisheries & aquatic uses
More robust management due to broadening from single species tools	Increased cost of additional and more participatory meetings
Improved compliance due to more "buy-in" to management through better participation	Increased cost of monitoring, observers, etc.
	Increased risk of non-compliance (if regulations too complex or unacceptable)
	Increased risk of collapse of management system (if too demanding of resources)
	Risk of management failure (if excessive faith placed in "new" EAF paradigm)
	Poor management results and loss of support (if EAF imposed or implemented improperly)

- Economic benefits and costs

Benefits	Costs
Increase in benefits to fishers per fish caught (bigger fish from a healthier ecosystem)	Reduced catches (especially in short term)
Increased catches (especially in long term)	Loss of income to negatively affected fishers
Increased contribution to the economy (especially long term)	Increased income disparity among fishers (if EAF impacts are uneven)
Reduced fishing costs (if EAF results in reduced bycatch)	Reduction of government revenues from licenses, etc. (if there is reduced effort)
Increased net economic returns (if EAF involves reduced fishing effort, towards MEY)	Reduction in benefits to fishers (if lower government support)
Higher-value fishery (if increased availability of food to top predators increases stock sizes)	Reduced contribution to economy (short term)
Greater livelihood opportunities for fishers (e.g. in tourism, if charismatic species abundances increase through EAF)	Reduced employment in short term and possibly long term
Increased non-use (e.g. cultural) and existence values (the latter resulting from appreciation of healthier aquatic	
systems and a greater abundance of aquatic life, etc.)	

- Social benefits and costs

Benefits	Costs
Positive impacts on food supply in long term (if	Negative impacts on food supply in short term
greater catches become possible)	(and risk of this also in long term)
Synergistic positive effect of coordinated EAF across	Greater inequity (if EAF favours those able to
fisheries and/or nations (LME)	invest in appropriate technology)
Greater resilience (if there is emphasis on multiple	Greater inequity (if there is misplaced allocation
sources of fishery livelihoods)	of responsibility for EAF costs)
Greater resilience (if increased bycatch results in	Increased poverty among those adversely
more livelihood opportunities)	affected by EAF (short term, or both)
Reduced conflict (if EAF processes deal effectively	Reduced benefits to fishers (if EAF linked to
with inter-fishery issues)	ICOM, and tradeoffs detrimental to fishers)
	Greater conflict (if EAF leads to enforced
	interaction among a larger set of societal and/or
	economic players)

Annex 5: list of WECAFC Members involved in fishing or transporting fish in areas of RFMOs and other (non-WECAFC) high seas areas

Country	Fishing approved by other	Fish transport approved	Fishing/ fish
	RFMOs	by other RFMOs	transport on high seas not
			under RFMO
Antigua and Barbuda			
Bahamas		NEAFC	\checkmark
Barbados	ICCAT		
Belize	IATTC, ICCAT	ICCAT, WCPFC	\checkmark
Brazil	ICCAT		
Colombia	IATTC		✓
Costa Rica	IATTC		
Cuba	NAFO		
Dominica			
Dominican Republic			
European Union (EU)	ICCAT, IOTC, WCPFC,		√
-	NAFO, NEAFC		
France	ICCAT, IOTC, WCPFC, IATTC, NAFO	ICCAT, IOTC, WCPFC	\checkmark
Grenada	IATIC, NAPO	werre	
Guatemala	IATTC, ICCAT		
Guinea	ICCAT		✓
Guyana			
Haiti			
Honduras	ICCAT		\checkmark
Jamaica			
Japan	ICCAT, IATTC, IOTC,	ICCAT, IATTC,IOTC,	✓
	WCPFC, CCSBT,NAFO	WCPFC, CCSBT	
Mexico	ICCAT, IATTC		×
Netherlands (+Curacao)	ICCAT, IATTC WCPFC	ICCAT,IOTC, WCPFC	~
Nicaragua	IATTC	werre	
Panama	IATTC, ICCAT	IATTC, WCPFC	✓
Republic of Korea	ICCAT, IATTC, IOTC,	ICCAT, IATTC, IOTC,	✓
_	WCPFC, CCSBT, NAFO	WCPFC, CCSBT	
Saint Kitts and Nevis		NEAFC	~
Saint Lucia			\checkmark
Saint Vincent and the	ICCAT		\checkmark
Grenadines	ICCAT, IATTC, IOTC,	ICCAT LATTC IOTC	
Spain	WCPFC, CCSBT	ICCAT, IATTC, IOTC, WCPFC, CCSBT	v
Suriname		,	
Trinidad and Tobago	ICCAT		
United Kingdom	ICCAT, IOTC		\checkmark
United States of America	ICCAT, IATTC, WCPFC,		✓
	NAFO		
Bolivarian Republic of Venezuela	ICCAT, IATTC		\checkmark

Note: this list is likely to be incomplete and requires inputs from the Members.

Sources:

Consolidated list of authorized vessels (of Tuna RFMOs) <u>http://clav.iotc.org/browser/search/#stats</u> (accessed in October 2015) Fishing Vessel Finder (FAO)

http://www.fao.org/figis/vrmf/finder/search/#stats (accessed in October 2015)

RFB	Mandate	Resources	Advisory	Regulatory	EEZ	High seas	Members
ICCAT	Fisheries management and resources conservation	Tuna & tuna-like species		×	×	×	50
CRFM	Fishery sustainability	All fishery resources	×		×		16
OSPESCA	Fishery and aquaculture sustainable development	Marine, inland and aquaculture resources	×		× (incl. inland waters)		8
OLDEPESCA	Fisheries and aquaculture development	Marine, inland and aquaculture resources	×		× (incl. inland waters)		12
WECAFC	Sustainable fisheries development and management	All fisheries resources	×		×	×	34

Annex 6: basic comparison of important RFBs and RFMOs in the WECAFC area.

Annex 7: Comparison of FAO regional fisheries advisory bodies (under article VI of the constitution) and FAO regional fisheries management organizations (under article XIV of the constitution)

Article VI Bodies	Article XIV Bodies
Authority	for establishment
The FAO Conference, the Council or the Director-General on the authority of the Conference or Council	Established through international treaty under Article XIV of FAO Constitution. The treaty is subject to adoption by the Conference, and enters into force for each Contracting Party as the treaty may prescribe
Με	embership
Open to all FAO Member Nations and Associate Members	Non –Member Nations of the Organization (FAO) can be Members but must contribute towards the expenses incurred by the Organization with respect to the activities of the body.
Source	e of financing
Bodies financed by FAO except the participation of Members to sessions. Possibility for extra-budgetary support with a view to implementing projects activities relevant to the body concerned and its objectives. Cannot be funded through mandatory contributions from their Members	 Bodies that, in addition to being partly financed by the Organization may undertake cooperative projects financed by Members of the body (example RECOFI, APFIC). Bodies whose activities are facilitated by the Organization, but they have an autonomous budget to which Members contribute mandatorily based on a scheme and scale agreed by Members (IOTC, GFCM).
Se	ecretariat
Secretary appointed by the Director-General. Secretariat (support staff, back-stopping, servicing of meetings, etc.) is funded by FAO.	Secretary appointed by the Director-General, but such appointed may be made subject to consultation of the Contracting Parties under the constituent agreement.

Article VI Bodies	Article XIV Bodies
	Powers
 Have an advisory role. Can adopt recommendations on management issues, which are not binding. These bodies can establish their Rules of Procedure. 	 Institutional and administrative structure is not separate legal entity, i.e. such bodies are FAO Bodies. These bodies draw their legal personality from FAO. i
 2. Can have an important advisory role (e.g. Codex alimentarius) and create subsidiary bodies, subject to the availability of funds in the relevant approved budget. 3. Can establish rules of procedure for subsidiary bodies, provided that such rules 	2. The bodies are functionally autonomous within the framework of FAO. Where provided in their establishing treaty, such bodies may have regulatory powers to adopt legally binding fisheries management measures.
are in conformity with the Rules of Procedure of the parent body and the General Rules of the Organization.	3. May have regulatory powers to adopt fisheries management measures of a potentially binding nature.
4. Bodies may recommend amendments to Statutes, which must be transmitted to the Director-General and reviewed by the CCLM be and subsequently submitted to the Council or Conference for approval. 5. Can	4 These bodies can establish their Rules of Procedure and can create subsidiary bodies, subject to the availability of funds in the relevant approved budget.
establish trust funds in support of its programme of work.6. Cannot enter into agreements with other organizations on their own, as they do not	5. Bodies may adopt amendments to agreements which shall be reviewed by the CCLM and reported to the Council, which shall have the power to disallow them.
have autonomous legal personality.	6. Can establish rules of procedure for their subsidiary bodies, in conformity with the Rules of Procedure of the parent body and the General Rules of the FAO.
	7. Can establish trust funds for its programme of work.
	8. Cannot enter into agreements with other organizations on their own, as they do not have autonomous legal personality.

	GFCM:	XXXIX/201	5/6
TABLE 1: Financial status in US dollars (as of 31 December	er 2014)		
Autonomous budget adopted for	r 2014	2,245,916	
Contributions to autonomous budget fo (only 90% re	nr 2014 caivad)	2,021,202	
	Arrears	117,859	
TOTAL INCOME of autonomous (contributions + a		2,139,061	
EXPENDITURES i	n 2014	2,253,214	
BALANCE: adopted autonomous budget vs. expen	ditures	-7,298	
OVEREXPENDITURE due to amendment p (unforeseen but necessary to carry on the p		41,332	
FINAL BALANCE: adopted autonomous budget vs. total expen	ditures	-48,630	
Status of GFCM extra-budgetary resources within the FWP 41. At its thirty-first session, the Commission requested that extra- voluntary contributions from Members) also be reflected in the financia situation is as follows:	al statem		
 At its thirty-first session, the Commission requested that extra- voluntary contributions from Members) also be reflected in the financia 	al statem		
 At its thirty-first session, the Commission requested that extra- voluntary contributions from Members) also be reflected in the financia situation is as follows: TABLE 2: Financial status of GFCM extra-budgetary resources in UK 	al statem	ent. The ove	
 At its thirty-first session, the Commission requested that extra- voluntary contributions from Members) also be reflected in the financia situation is as follows: <u>TABLE 2</u>: Financial status of GFCM extra-budgetary resources in U (as of 31 December 2014) 	al statem S dollars 1,560	ent. The ove	

Annex 8: GFCM budget, income and expenditures in 2014

				GF	CM:XXXIX/201	
					APPEND	EX 3
GFCM Members	Outstanding until 2013	Contribution due for 2014	Received as 2014 contribution	Arrears received for 2014	Total income received for 2014	Outstanding until 2014
ALBANIA	0.00	20,442.00	20,442.00		20,442.00	0.00
ALGERIA	0.00	72,120.00	72,120.00		72,120.00	0.00
BULGARIA	0.00	15,005.00	15,005.00		15,005.00	0.00
CROATIA	0.00	62,170.00	62,170.00		62,170.00	0.00
CYPRUS	0.00	62,170.00	48,960.00		48,960.00	13,210.00
EGYPT	0.00	90,922.00	90,922.00		90,922.00	0.00
EUROPEAN COMMISSION	0.00	735,268.00	735,268.00		735,268.00	0.00
FRANCE	0.00	114,574.00	114,574.00		114,574.00	0.00
GREECE	50,898.00	62,170.00	62,170.00	50,898.00	113,068.00	0.00
ISRAEL					0.00	
ITALY ⁷	0.00	114,574.00	110,703.95		110,703.95	0.00
JAPAN ^a	0.00	114,581.00	114,581.00		114,581.00	0.00
LEBANON	0.00	17,705.00	0.00		0.00	17,705.00
LIBYA	202,464.84	102,175.00	0.00		0.00	304,639.84
MALTA	50,898.00	62,170.00	0.00	45,490.50	45,490.50	67,577.50
MONACO	77,767.00	9,765.00	9,765.00		9,765.00	77,767.00
MONTENEGRO	0.00	10,887.00	10,887.00		10,887.00	0.00
MOROCCO	0.00	36,338.00	36,338.00		36,338.00	0.00
ROMANIA	12,685.00	15,005.00	15,005.00	12,685.00	27,690.00	0.00
SERBIA*	8,785.42		0.00	8,785.42	8,785.42	0.00
SLOVENIA	0.00	62,170.00	54,000.00		54,000.00	8,170.00
SPAIN	0.00	114,574.00	114,574.00		114,574.00	0.00
SYRIA	90,205.00	17,414.00	0.00		0.00	107,619.00
TUNISIA	0.00	91,626.00	91,626.00		91,626.00	0.00
TURKEY	0.00	242,091.00	242,091.00		242,091.00	0.00
TOTAL	493,703.26	2,245,916.00	2,021,201.95	117,858.92	2,139,060.87	596,688.34

Annex 9: Example GCFM - contributions by Members in 2014

* Contributions received until January 2015 and accounted for fiscal year 2014, excluding Israel

[†] Differences in the Euro/US dollar exchange rate applied resulted in an additional amount received from Italy of US dollars 7,691.01 in 2013 and a credit of US dollars 3,820.96 at the end of 2014

* Contribution of Japan received in January 2015

⁹ Outstanding contribution from Serbia before its withdrawal in 2008, disbursed in 2014

				:XXXIX/2
Status of incom-	and expenditure	t as at 31 Decer	nber 2014	APPENI
Autonomous Budget	Budget adopted in 2014	Budget based on income (*)	Expenditures 2014	Balance (expenditure vs. adopted budget)
ADMINISTRATION				
Executive Secretary, D-1	280,923		282,268	1,34
Deputy Executive Secretary, P-5	0		0	1
Senior Aquaculture Officer, P-5	260,000		259,562	-43
Fishery Resources Officer, P-4	202,000		203,733	1,73
Fishery Officer (Legal and Institutional Matters), P-3	140,000		145,428	5,42
Fishery Information Officer , P-2	166,500		179,698	13,19
Data Compliance Officer, P-2	139,000		140,161	1,16
Scientific Editor/Translator , P-2	135,500		134,572	-92
Sub-total Professional salaries	1,323,923		1,345,422	21,49
Programme Associate, 0-6	111,000		114,229	3,22
Programmen/Systems Analyst, G-5	103,000		104,472	1,47
Office Assistant, G-3	50,000		11,725	-38,27
Office Assistant, G-3	75,000		73,342	-1,65
Security Guard, O-2				
Sub-total General Service salaries	339,000		303,768	-35,23
Total Administration	1,662,923		1,649,199	-13,73
FUNCTIONING				
Temporary human resources (Security Ouards, adm. support, overtime)	70,000	56,827	61,029	-8,97
Consultancies (including translators of scientific publications)	27,500	22,325	14,403	-13,09
Travel (including interpreters and Task Force/FWP)	140,000	113,653	150,691	10,69
Training	5,000	4,059	1,534	-3,46
Expendable procurement (inc. printing of publications)	12,500	10,148	11,333	-1,16
Non-expendable procurement	6,000	4,871	-2,397	-8,39
Oeneral Operating Expenses	29,000	23,541	12,312	-16,68
Internal/External services backcharge	175,000	142,067	292,826	117,82
Total functioning	465,000	377,491	541,731	76,73
AUTONOMOUS BUDGET	2,127,923	2,026,681	2,190,921	62,99
Miscellaneous (1%)	21,279	20.266	4,817	-16,46
FAO servicing costs (4.5%)	96,714	92,113	98,808	2,09
TOTAL AUTONOMOUS BUDGET	2,245,916	2,139,060	2,294,546**	48,63

Annex 10: GFCM example - income and expenditures in 2014

(*) Adjustment of the income-based budget was only applied to activities

(**) Total includes expenditure incurred for Amendment and Clarification processes. 2014 contributions to GFCM running costs covered by the government of Italy and FAO (equivalent to US dollars 198,370) are not included Annex 11. NEAFC fisheries production figures 2011

This table shows the Total Nominal Catch (tonnes) of Fish and Invertebrates (so-called F08) in the NEAFC Convention Area 2011. (It is used to calculate Contracting Party contributions to NEAFC budget)⁸⁰

EU including:	
Belgium	22.192
Denmark	641.016
Estonia	5.318
France	341.314
Germany	144.962
Ireland	205.914
Latvia	0
Lithuania	6.435
Netherlands	24.394
Poland	5.257
Portugal	179.013
Spain	353.785
Sweden	65.741
UK+SCO	582.117
EU Total	2.797.004
Faeroe Islands	350.489
Greenland	42.479
Iceland	1.135.348
Norway	2.174.912
Russian Federation	893.416
IOM	6.672
Channel Islands	2.974
Grand total	7.403.294

⁸⁰ Compilation of extractions from ICES catch statistics submissions. Some data are not yet in the ICES FishStat database.

BUDGET 2014 & DRAFT ESTIMATE 2015 %									
		А	В	С	D	Е	F		
		2013	2013	2014	2014	2015	2016		
	EXPENDITURE	nov-13	Actual out turn	Budget	Budget at July 14	Draft budget	Draft Budget Estimate		
1a	Staff costs	32,9	34,6	28,3	33,9	29,4	28,6		
1b	Allowances	1,9	1,9	1,6	1,8	1,9	2,0		
1c	Insurance	3,1	3,3	2,8	3,4	3,1	3,0		
1d	Professional fees	0,2	0,1	0,2	0,1	0,2	0,7		
1e	Furniture	0,1	0,0	0,3	0,1	0,3	0,3		
1f i	Office accommodation rental	9,4	10,1	7,6	8,5	8,0	7,4		
1f ii	Other accommodation costs	2,5	2,1	2,5	2,8	2,8	2,7		
1g	Communication costs	1,4	1,5	1,5	1,5	1,7	1,7		
1h	System maintenance costs	11,0	8,4	19,5	8,5	14,7	9,3		
1j	Web development	1,7	1,7	1,5	1,4	1,7	1,6		
1k	Additional computer soft & hardware	0,6	0,8	0,8	0,9	0,9	0,9		
2	Travel and subsistence costs	2,1	1,7	2,1	2,1	2,3	2,2		
2a	Entertainment and hospitality costs	0,1	0,1	0,2	0,4	0,2	0,2		
3	Office consumables	0,8	0,7	0,7	0,7	0,8	0,8		
4	Audit fee	0,4	0,4	0,4	0,4	0,4	0,4		
5	Accountancy fee	0,8	0,8	0,8	0,8	0,4	0,4		
6	Miscellaneous	0,1	0,0	0,2	0,1	0,2	0,2		
7a	Annual meeting	2,3	2,3	2,2	2,4	2,4	3,7		
7b	Extraordinary meeting	0,0	0,0	1,0	0,0	1,1	1,0		
7c	Working group meetings	0,8	0,5	0,9	0,2	0,7	0,7		
7d	Other meetings	0,2	0,0	0,3	0,1	0,3	0,3		
7.	Preparatory meetings of	2.0	2.0	2.6	20	20	0.2		
7e 8	Coastal states ICES subscriptions (new MoU in 2007)	2,9 23,0	2,9 24,6	2,6	3,2 22,5	3,2 23,0	<u>9,3</u> 22,4		
<u> </u>	Honorarium to President	0,3	0,3	0,2	0,2	0,2	0,2		
			· · · ·						
10	Performance review	1,6	1,3	1,9	3,8	0,0	0,0		
	Expenditure total GBP Transfer to Building Fund	1.283.000	1.192.081	1.585.800	1.416.400	1.494.950 15.000	1.612.800		
	Transfer to or from General Fund	- 7.140	88.170	-	182.400	15.000	13.000		
	Grand Total Expenditure	1.290.960	1.295.251	1.600.800	1.613.800	1.509.950	1.627.800		

Annex 12: example NEAFC – table showing budget and estimations per item (2013–2015) in percentages of total in GBP

Annex 13: Three indicative scales of contributions for an RFMO with an autonomous budget of approximately USD1.56 million per year

Malanta	Total contribution		Wealth component 35 percent			Production component 55 percent			Base fee
Member country									10 percent
	USD	Percentage	GDP USD per capita	Shares	USD	2013 Production in	Percentage of total	USD	USD
			2013	Index		tonnes	production		
Antigua and Barbuda	29,282	1.88%	14,057	10	21,412	6,000	0.38%	3,282	4,588
Bahamas	33,080	2.12%	23,485	10	21,412	12,945	0.83%	7,080	4,588
Barbados	27,634	1.77%	16,804	10	21,412	2,987	0.19%	1,634	4,588
Belize	12,536	0.80%	4,620	1	2,141	10,616	0.68%	5,807	4,588
Brazil	115,154	7.38%	12,291	10	21,412	163,000	10.39%	89,154	4,588
Colombia	8,838	0.57%	8,238	1	2,141	3,856	0.25%	2,109	4,588
Costa Rica	26,227	1.68%	10,363	10	21,412	415	0.03%	227	4,588
Cuba	17,896	1.15%	6,789	1	2,141	20,415	1.30%	11,166	4,588
Dominica	6,991	0.45%	7,306	1	2,141	479	0.03%	262	4,588
Dominican Republic	13,630	0.87%	5,789	1	2,141	12,616	0.80%	6,900	4,588
France	57,382	3.68%	43,000	20	42,824	18,228	1.16%	9,970	4,588
Grenada	8,203	0.53%	7,785	1	2,141	2,695	0.17%	1,474	4,588
Guatemala	7,016	0.45%	3,415	1	2,141	524	0.03%	287	4,588
Guinea	4,588	0.29%	564	0	0	0	0.00%	-	4,588
Guyana	33,239	2.13%	3,872	1	2,141	48,468	3.09%	26,510	4,588
Haiti	13,290	0.85%	827	0	0	15,910	1.01%	8,702	4,588
Honduras	10,224	0.66%	2,272	1	2,141	6,389	0.41%	3,495	4,588
Jamaica	20,190	1.29%	5,601	1	2,141	24,610	1.57%	13,461	4,588
Japan	48,115	3.08%	40,442	20	42,824	1,285	0.08%	703	4,588
Korea, Republic of	26,090	1.67%	25,051	10	21,412	164	0.01%	90	4,588
Mexico	130,222	8.35%	10,989	10	21,412	190,548	12.15%	104,222	4,588
Netherlands	48,289	3.10%	48,091	20	42,824	1,603	0.10%	877	4,588
Nicaragua	17,602	1.13%	1,833	1	2,141	19,878	1.27%	10,872	4,588
Panama	8,852	0.57%	11,150	1	2,141	3,880	0.25%	2,122	4,588
Saint Kitts and Nevis	26,948	1.73%	13,118	10	21,412	1,733	0.11%	948	4,588
Saint Lucia	7,955	0.51%	7,621	1	2,141	2,241	0.14%	1,226	4,588
Saint Vincent/Grenadines	7,649	0.49%	6,676	1	2,141	1,682	0.11%	920	4,588
Spain	53,519	3.43%	30,108	20	42,824	11,166	0.71%	6,107	4,588
Suriname	28,071	1.80%	9,509	1	2,141	39,019	2.49%	21,342	4,588
Trinidad and Tobago	33,219	2.13%	20,054	10	21,412	13,199	0.84%	7,219	4,588
United Kingdom	51,268	3.29%	38,002	20	42,824	7,050	0.45%	3,856	4,588
USA	467,731	29.98%	51,248	20	42,824	768,465	48.99%	420,319	4,588
Venezuela, Boliv Rep of	90,815	5.82%	11,527	10	21,412	118,500	7.55%	64,815	4,588
European Community	68,255	4.38%	34,300	20	42,824	38,107	2.43%	20,843	4,588
TOTAL	1,560,000	100.00%	. ,	255	546,000	1,568,673	100.00%	858,000	156,000
	100 percent				35 percent	,,		55 percent	10 percent
	1,560,000				546,000			858,000	156,000

Example 1: contributions are based on GFCM scheme for the calculation of contributions

A draft scale of indicative annual contributions to a hypothetical autonomous of USD1 560 000 of an RFMO is shown above, using the "scheme for calculation of contributions⁸¹" from the GFCM. This autonomous budget would likely be required if WECAFC became a FAO Article XIV RFMO. The contributions formula used contains the following three components: 35% wealth component (based on per capita GDP), 55% production component and 10% in membership (or base).

Explanatory notes:

GDP per capita data from IMF: http://www.imf.org/external/pubs/ft/weo/2013/01/weodata/index.aspx

⁸¹ From the GFCM financial regulations: ftp://ftp.fao.org/fi/document/gfcm/web/GFCMFinancialRegulations.pdf

Cuba: USD6 789; no IMF figures available therefore WB data used from http://data.worldbank.org/indicator/NY.GDP.PCAP.CD.

EU: catch figure used is sum of total catches of all its member states (Spain, UK, Netherlands, France) in the WECAFC Area 31.

Brazil: catch in Area 41 only. The figure presented is the catch in the northern part of Area 41 by Brazil in 2013.

	Total contribution			Pro	Base fee		
Member country			Population> 300 000		33 percent divided equally		
			1 = yes	2013	Percentage		
	USD	Percentage	<u>2013</u>	Production in tonnes	of total production	USD	USD
Antigua and Barbuda	19,139	1.23%	-	6,000	0.38%	3,998	15,141
Bahamas	23,766	1.52%	1	12,945	0.83%	8,625	15,141
Barbados	17,131	1.10%	-	2,987	0.19%	1,990	15,141
Belize	22,215	1.42%	1	10,616	0.68%	7,073	15,141
Brazil	123,747	7.93%	1	163,000	10.39%	108,606	15,141
Colombia	17,710	1.14%	1	3,856	0.25%	2,569	15,141
Costa Rica	15,418	0.99%	1	415	0.03%	277	15,141
Cuba	28,744	1.84%	1	20,415	1.30%	13,602	15,141
Dominica	15,460	0.99%	-	479	0.03%	319	15,141
Dominican Republic	23,547	1.51%	1	12,616	0.80%	8,406	15,141
France	27,286	1.75%	1	18,228	1.16%	12,145	15,141
Grenada	16,937	1.09%	-	2,695	0.17%	1,796	15,141
Guatemala	15,490	0.99%	1	524	0.03%	349	15,141
Guinea	15,141	0.97%	1	0	0.00%	-	15,141
Guyana	47,435	3.04%	1	48,468	3.09%	32,294	15,141
Haiti	25,742	1.65%	1	15,910	1.01%	10,601	15,141
Honduras	19,398	1.24%	1	6,389	0.41%	4,257	15,141
Jamaica	31,539	2.02%	1	24,610	1.57%	16,398	15,141
Japan	15,997	1.03%	1	1,285	0.08%	856	15,141
Korea, Republic of	15,250	0.98%	1	164	0.01%	109	15,141
Mexico	142,103	9.11%	1	190,548	12.15%	126,961	15,141
Netherlands	16,209	1.04%	1	1,603	0.10%	1,068	15,141
Nicaragua	28,386	1.82%	1	19,878	1.27%	13,245	15,141
Panama	17,726	1.14%	1	3,880		2,585	15,141
Saint Kitts and Nevis	16,296	1.04%	-	1,733	0.11%	1,155	15,141
Saint Lucia	16,634	1.07%	-	2,241	0.14%	1,493	15,141
Saint Vincent/Grenadines	16,262	1.04%	-	1,682	0.11%	1,121	15,141
Spain	22,581	1.45%	1	11,166		7,440	15,141
Suriname	41,139	2.64%	1	39,019		25,998	
Trinidad and Tobago	23,936	1.53%	1	13,199		8,794	15,141
United Kingdom	19,839	1.27%	1	7,050		4,697	15,141
USA	527,166	33.79%	1	768,465	48.99%	512,025	15,141
Venezuela, Boliv Rep of	94,097	6.03%	1	118,500		78,956	15,141
European Community	40,532	2.60%	1	38,107	2.43%	25,391	15,141
TOTAL	1,560,000	100.00%	1	1,568,673	100.00%	1,045,200	514,800
			67 percent	33 percent			
	1,560,000				1,045,200		53 percent 514,800

Example 2: contributions are based on paragraph 17 of the NEAFC Convention.

Note: see section 7.1.1 for details.

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Member country	Total contribution		CRFM or OSPES CA	Production component				
	USD	Percentage	1 = yes <u>2013</u>	2013 Production in tonnes	Percentage of total production	Percentage of total production without CRFM & OSPESCA	USD	
		0.000/		< 000	0.200/			
Antigua and Barbuda	0	0.00%	1	6,000	0.38%			
Bahamas	0	0.00%	1	12,945	0.83%			
Barbados	0	0.00%	1	2,987	0.19%			
Belize	0	0.00%	1	10,616	0.68%	10.0111	100.10	
Brazil	190,424	12.21%	-	163,000	10.39%	12.21%	190,42	
Colombia	4,505	0.29%	-	3,856	0.25%	0.29%	4,50	
Costa Rica	0	0.00%	1	415	0.03%			
Cuba	23,850	1.53%	-	20,415	1.30%	1.53%	23,85	
Dominica	0	0.00%	1	479	0.03%			
Dominican Republic	0	0.00%	1	12,616	0.80%			
France	21,295	1.37%	-	18,228	1.16%	1.37%	21,29	
Grenada	0	0.00%	1	2,695	0.17%			
Guatemala	0	0.00%	1	524	0.03%			
Guinea	0	0.00%	-	0	0.00%	0.00%		
Guyana	0	0.00%	1	48,468	3.09%			
Haiti	0	0.00%	1	15,910	1.01%			
Honduras	0	0.00%	1	6,389	0.41%			
Jamaica	0	0.00%	1	24,610	1.57%			
Japan	1,501	0.10%	-	1,285	0.08%	0.10%	1,50	
Korea, Republic of	192	0.01%	-	164	0.01%	0.01%	19	
Mexico	222,607	14.27%	-	190,548	12.15%	14.27%	222,60	
Netherlands	1,873	0.12%	-	1,603	0.10%	0.12%	1,87	
Nicaragua	0	0.00%	1	19,878	1.27%			
Panama	0	0.00%	1	3,880	0.25%			
Saint Kitts and Nevis	0	0.00%	1	1,733	0.11%			
Saint Lucia	0	0.00%	1	2,241	0.14%			
Saint Vincent/Grenadines	0	0.00%	1	1,682	0.11%			
Spain	13,045	0.84%	-	11,166	0.71%	0.84%	13,04	
Suriname	0	0.00%	1				- / -	
Trinidad and Tobago	0	0.00%	1	13,199	0.84%			
United Kingdom	0	0.00%	1	7,050	0.45%			
USA	897,755	57.55%	-	768,465	48.99%	57.55%	897,75	
Venezuela, Boliv Rep of	138,437	8.87%	_	118,500	7.55%	8.87%	138,43	
European Community	44,518	2.85%	-	38,107	2.43%	2.85%	44,51	
spean continuinty	1,510	2.0370		50,107	2.1370	2.0570	1,51	
Total CRFM+ OSPESCA	0	0.00%	21	233,336	14.96%			
Total WECAFC other				1,335,337	85.13%	100.00%		
TOTAL	1,560,000	100.00%		1,568,673	100.00%		1,560,000	
	100 percent						100 percen	
	1,560,000						1,560,000	

In this example the current contributions by CRFM and OSPESCA members towards these RFBs functioning would be counted as in-kind contributions to WECAFC. The contributions to the autonomous budget of the RFMO would be covered by the non-SICA and non-CARICOM countries. In fact this would require a contribution of USD1.16/tonne of fish landed from the large fish producers in the WECAFC region towards regional fisheries management.

This circular contains the findings of the independent cost-benefit assessment of the options for strategic re-orientation of WECAFC, which was conducted over the period May - December 2015. The three options assessed are: 1) WECAFC should remain a regional level fisheries advisory commission as a FAO Article VI body and continue to coordinate joint work with the (sub-) regional advisory/management bodies; 2) WECAFC should become a regional fisheries management organization (RFMO) as an FAO Article XIV body, with a mandate to make legally binding decisions, and 3) WECAFC should become a regional fisheries management organization (RFMO) independent established outside of FAO's legal framework with a mandate to make legally binding decisions. This document discusses the status and trends of marine fisheries in the WECAFC area, regional fisheries bodies and RFMOs active in the area, international fisheries instruments and the role of RFMOs and the costs and benefits of the three options above. The assessment concludes that the establishment of an RFMO, either under FAO or outside FAO's framework would create significant economic, social and environmental benefits at limited costs to the members of WECAFC. The conclusions and recommendations from this circular will be presented to WECAFC 16 in June 2016.



