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Food and Agriculture Organization of the United Nations Organisation des Nations Unies pour l'alimentation et l'agriculture Продовольственная и сельскохозяйственная организация Объединенных Наций Organización de las Naciones Unidas para la Agricultura y la Alimentación

WESTERN CENTRAL ATLANTIC FISHERY COMMISSION (WECAFC)

FIFTH SESSION OF THE SCIENTIFIC ADVISORY GROUP (SAG)

Puerto Morelos, Mexico, 27-29 October 2011

Intersessional activities – review of the WECAFC Work Programme 2008-2011

Introduction

- 1. This document provides brief information on the intersessional activities of the WECAF Commission and FAO in the WECAFC area. The document needs to be read in conjunction with WECAFC/SAG/V/2011/inf.3: Report of the Thirteenth Session of the Commission (Fisheries and Aquaculture Report No. 905).
- 2. The work of the Commission was largely conducted as planned in the WECAFC Work Programme 2008-2011 for the last months of 2008 and part of 2009. The passing away of the WECAFC Secretary, Mr. Chakallal, in early 2010 paralyzed the work of the Commission. As a consequence no activities were conducted by WECAFC in 2010 and the first semester of 2011. The appointment of the new WECAFC Secretary, Mr. Van Anrooy, took place in mid-2011.
- 3. The Draft Work Programme of WECAFC, 2008–09, as approved by the thirteenth session of the Commission was largely subject to obtaining the required extra-budgetary funding support. Consequently, many earlier foreseen activities have not been carried out.

Review of the WECAFC Work Programme 2008 - 2009 and 2010 -2011

4. Under work programme component "A. Brazil-Guianas Shrimp and Groundfish" activities were undertaken by FAO under the CLME project. Specifically, a case study for the shared stocks of the shrimp and groundfish fishery of the Guianas-Brazil shelf was undertaken by FAO, in collaboration with CANARI, CERMES and CRFM. The aim of the case study is to mainstream the Ecosystem Approach to Fisheries (EAF) in the management of shrimp and ground fish fisheries of six participating countries/territories: Venezuela, Trinidad and Tobago, Guyana, Suriname, French Guyana and Brazil. Eventually the case study will help filling knowledge gaps that will contribute to the final CLME Transboundary Diagnostic Analysis (TDA) as a basis for preparation of the Strategic Action Programme (SAP), with priority actions for the sustainability of the shrimp and groundfish fisheries. The objectives will be addressed through assessments/studies at the national and regional levels and with the participation of relevant stakeholders, following some of the key steps of the planning process under an EAF framework. The first training workshop was held 11-15 July 2011 in Port-of-Spain and aimed at building capacity on facilitation; it was attended by representatives of four countries.

- 5. Under work programme component "B. Caribbean Spiny Lobster" no activities were undertaken. The Working Group on Caribbean Spiny Lobster, Panulirus argus has not met in recent years. Part of the activities of the Working Group has been assumed by the CLME pilot project on spiny lobster, which is being implemented by OSPESCA. The SAG is requested to consider the implications of this development for the future of the Working Group, for example whether it requires changes to the terms of reference for the Working Group, or whether the Working Group is no longer required and should be discontinued.
- 6. Work programme component "C. Flyingfish in the Eastern Caribbean" received follow-up from WECAFC and from the CLME Case study on Flying Fish which is being implemented under the technical leadership of the CRFM Secretariat. WECAFC held a Third Meeting of the WECAFC Ad Hoc Flyingfish Working Group of the Eastern Caribbean in Mount Irvine, Tobago, 21–25 July 2008.
- 7. The discussions and findings of the meeting were published as FAO Fisheries and Aquaculture Report. No. 929¹ in 2010. At the meeting a Draft Subregional Fisheries Management Plan for Flyingfish in the Eastern Caribbean was discussed and amended. In terms of intersessional work, the meeting agreed that the Draft Subregional Fisheries Management Plan for Flyingfish in the Eastern Caribbean would be further updated with country-specific information. Moreover, country representatives agreed to send updates of national information not readily available on the Internet, in particular, information on:
 - Social and economic indicators of the importance of flyingfish to the eastern Caribbean.
 - Policy and legislation specific to flyingfish.
 - Credit and monetary incentives for fishery development.

It was further agreed that all member countries would improve their flyingfish catch and effort data. At present the WECAFC Secretariat has no evidence that the data availability has improved in recent years.

| The CFMC/WECAFC ad hoc Nassau Grouper Working Group (NGW) did not meet |
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| in the inter-sessional period. Reference is made to the report of the 13th session of WECAFC, and particularly the Regional Workshop on Nassau Grouper, which was coordinated by the Caribbean Fishery Management Council (CFMC) and WECAFC, and held on 20 and 21 October 2008. In that workshop some recommendations were made for joint follow-up by CFMC and WECAFC, such as: |
| The workshop recommended that WECAFC and the CFMC establish an ad hoc Nassau grouper working group (NGW). Regional fisheries organizations should be encouraged to participate in the NGW as partners. |
| $\ \square$ This group should meet in two years, prior to the fourteenth session of WECAFC. Other countries not present at the workshop should be invited to participate in the NGW. |
| The main purpose of the group is to foster regional cooperation in the management and conservation and restoration of Nassau grouper stocks in the WECAFC region; and to include coordination and harmonization of efforts for the management and conservation of the Nassau grouper. |

The SAG is requested to advice on the next steps, if any, to be taken by WECAFC in respect of the recommendations of the 2008 regional workshop.

9. Under Work Programme component "D. Working Group on Development of Sustainable Moored Fish Aggregating Device (FAD) Fishing in the Lesser Antilles" IFREMER, assisted by WECAFC, finalized the MAGDELESA project proposal on the

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¹ Report of the Third Meeting of the WECAFC Ad Hoc Flyingfish Working Group of the Eastern Caribbean. Mount Irvine, Tobago, 21–25 July 2008.FAO Fisheries and Aquaculture Report. No. 929. Rome, FAO. 2010. 88p.

- sustainable development of anchored FAD fishing. The project has been approved in 2011 and is financed by INTERREG European funds. The project will initiate its activities at the end of 2011 and will complete its activities by the end of 2013.
- 10. The MAGDELESA Project results from activities undertaken within the framework of the WECAFC Working Group on Development of Sustainable Moored Fish Aggregating Device (FAD) Fishing in the Lesser Antilles, aiming at supporting conservation, managing as well as sustainable and concerted valorization of the biodiversity of the coastal areas and natural marine resources.

The objectives of the project are:

- The reduction of fishing pressure on the coastal resources (primarily the fauna of the coral reefs) by re-addressing some fishing effort towards the pelagic high-sea species (tunas and similar) that still provide some possibility for increased catch, by the use of FADs (Fish Aggregation Devices).
- Increase knowledge, through research, on the current situation and development of sustainable fishing for shared pelagic resources and of maintenance of FADs located far away from the islands shelves and the associated coral ecosystems, with the Lesser Antilles and Haiti.

The activities foreseen include:

- Sinking of experimental anchored FADs in the territorial waters of each participating island
- Installation of an integrated methodology for monitoring the anchored FADs covering the following fields:
 - Improvement of the FADs designs
 - Development of selective fishing techniques
 - Fish catches data collection for the assessment of main targeted stocks (contribution of data in particular to the CRFM for the evaluation of black tuna stock and to ICCAT for the other important species like yellowfin tuna and/or blue marlin)
 - Evaluation of the socio-economic impacts of FAD fishing
 - Analyses and definition of the modes of governance of FADs in the Lesser Antilles
 - Quality of the products
 - Analyses of working and safety conditions on board the fishing vessels.
- 11. Concerted processing of the collected data and production of indicators enabling to develop comparative approaches is foreseen.
- 12. The project also aims to develop together with the scientific teams and fisheries managers in the Lesser Antilles and Haiti an integrated and participative approach on the sustainable and responsible development of the blooming anchored FAD fishing in the region.
- 13. The countries that take part in the project are: St Kitts & Nevis, Guadeloupe, Dominica, Martinique, St Vincent & Grenadines, Grenada and Haiti. The other countries of the Lesser Antilles will be invited to the debriefing meeting of the project to be informed of the results and to discuss recommendations which could be formulated for a sustainable development of this emergent fishing.
- 14. The findings and recommendations of the MAGDELESA Project will be brought to WECAFC in 2013 or 2014 for dissemination and identification and agreement on follow-up steps and measures by the WECAFC members. Moreover, FAO/WECAFC will participate in the project debriefing meeting and assist in distribution of the results of the project through a joint IFREMER/FAO/WECAFC publication.

- 15. Under Work Programme component "E. **Working Group on Queen Conch,** *Strombus gigas*", an updated manual was produced as FAO Fisheries Technical paper No. 514 ². FAO, in close collaboration with OSPESCA and CITES discussed and gave guidance through a regional workshop in 2008 on the Conversion Factors for Processed Queen Conch to Nominal Weight³.
- 16. In addition a draft proposal for an FAO Technical Cooperation Programme (TCP) project on queen conch management in the region was prepared by the CRFM secretariat; however this proposal was never finalized. The working group on Queen Conch has not met in recent years and WECAFC needs to decide at its 14th session on whether to maintain the working group. The Secretariat was informed that CFMC is planning to organize a Queen Conch Conference in 2012 and WECAFC could maybe team-up with this important event. Advice from the SAG on this matter would be required.

17. F. Other Activities

F1. Preparation of draft fisheries management plans for shark fisheries in selected member countries.

18. No draft fisheries management plans for sharks have been prepared by WECAFC in the intersessional period as no specific requests were received. Funding is available within FAO for supporting the preparation at national level of two National Plans of action (NPOAs) on Sharks in the Caribbean. Moreover, FAO is currently (August –September 2011) undertaking a survey on the status of the implementation by the FAO Member States of the FAO's International plan of action for the conservation and management of Sharks (IPOA Sharks) adopted under the FAO Code of Conduct for Responsible Fisheries. The survey is a follow-up of a request made at the twelfth session of the COFI Sub- Committee on Fish Trade in 2010 that FAO "compile current regulations and activities by States and RFMOs related to the conservation of sharks independently of whether they have been formalized in a NPOA". This request was echoed by COFI at its twenty-ninth session in early 2011.

F2. Facilitate formulation of sound national fisheries policies through national dialogue in selected member countries.

19. Although WECAFC has not assisted in the formulation of national fisheries policies in the region in recent years, FAO has. Various TCPs and TCP facility projects have been carried out in assistance of national planning and policy formulation processes in fisheries. Information on these activities can be found below. Moreover, FAO has been instrumental in the initial phases in the formulation process of the ACPFishII project in the Caribbean; a project under which the preparation of 6 national fishery policy frameworks and the Caribbean Community Common Fishery Policy preparation is supported.

F3. Diagnostic study to describe and quantify the problem of derelict fishing gear in the Wider Caribbean.

20. Within the WECAFC region not much follow-up seem to have been realized on this subject, while at global level FAO, UNEP, NOAA and other partners have made

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² **Medley, P.** Monitoring and managing queen conch fisheries: a manual. *FAO Fisheries Technical Paper*. No. 514. Rome, FAO. 2008. 78p. Available at: ftp://ftp.fao.org/docrep/fao/011/i0256e/i0256e.pdf

³ **Aspra, B.; Barnutty, R.; Mateo, J.; Marttin. F.; Scalisi, M.** Conversion factors for processed queen conch to nominal weight/Factores de conversión para el caracol reina procesado a peso nominal.FAO Fisheries and Aquaculture Circular/FAO, Circular de Pesca y Acuicultura. No. 1042. Rome/Roma,FAO. 2009. 97p. Available at: http://ftp.fao.org/docrep/fao/012/i0996b/i0996b00.pdf

considerable progress on this issue, which resulted amongst others in a publication⁴. FAO have also been active in the review of MARPOL Annex V and its Guidelines through IMO meetings. SAG advice is sought on how to proceed on this matter.

21. In terms of **Coordination and Liaison** (component G of the Work Programme), the fourteenth session is scheduled to be held in Panama City, at invitation of the Government of Panama, in the period 6-9 February 2012. The 5th session of SAG has been organized and liaison with regional and national agencies, organizations and projects has been taken up again by the WECAFC Secretariat.

Projects

A number of FAO projects have been carried out in the WECAFC region in the period 2008 - 2011. The most notable projects are described in summary below.

Regional TCP projects

Improvement of the Domestic markets for seafood in the Latin American and Caribbean region, February 2007 to 2010, TCP/ RLA/3111 (D)

The overall objective of the project was to increase food supply in Latin America and the Caribbean through more and higher quality fish products for domestic markets. The expected outputs included: personnel trained at the national level in domestic marketing of seafood, production of a handbook on domestic seafood marketing, increased public's awareness on domestic seafood distribution, better informed fish operators to apply modern marketing techniques and a web-based data bank with up-to-date marketing information for domestic and intra-regional fish trade in Latin America and the Caribbean. The recipient countries included: Argentina, Belize, Brazil, Colombia, Costa Rica, Dominican Republic, Honduras, Mexico, Nicaragua, Uruguay and Venezuela.

Establishment of a programme of cooperation for the sustainable management of river fisheries in the transboundary areas of the rivers Parana' and Paraguay, 2010 -2011, TCP/RLA/3302

This programme aims to improve in the medium term the inland fisheries management in the transboundary rivers of the three countries (Brazil, Paraguay and Argentina), through bringing all stakeholders and interested parties of the countries together.

Regional TCP facility projects

<u>Assessment of the Eastern Caribbean flying fish resource. 2008 – 2010. TCP/RLA/3201.</u> The recipient countries included: Dominica, Grenada, St Lucia and St Vincent and the Grenadines.

The general objective of the project was to facilitate the assessment of the status of the Flying fish resource of the Eastern Caribbean through the provision of technical assistance to member countries of WECAFC. The direct aim was to finalize the updating and cleaning of flying fish data-sets in preparation for the third meeting of the WECAFC Working Group on Flying Fish; standardize and synthesize the national data sets; perform an assessment using the most suitable statistical tools available; and review and update the draft Flying Fish Management Plan.

⁴ Macfadyen, G.; Huntington, T.; Cappell, R. Abandoned, lost or otherwise discarded fishing gear. UNEP Regional Seas Reports and Studies, No. 185; FAO Fisheries and Aquaculture Technical Paper, No. 523. Rome, UNEP/FAO. 2009. 115p. Available at: ftp://ftp.fao.org/docrep/fao/011/i0620e/i0620e.pdf <u>Design of a project to strengthen and increase technology transfer in aquaculture and inland fisheries between the countries in South America. 2009 – 2011, TCP/RLA/3208.</u> The recipient countries included Brazil, Chile and Paraguay.

Global Trust Fund Projects with relevance to the WECAFC region and WECAFC membership

Various WECAFC members have supported FAO fisheries projects in the WECAFC region and at global level.

The **Government of France** is financing a global project on "<u>Development of a data base on Vulnerable Marine Ecosystems of the high seas"</u>, 2011 -2014. GCP/GLO/309/FRA. This project, which aims to develop a database, with GIS application, on VMEs, is carried out by Fishery and Aquaculture Department at FAO Headquarters, in line with United Nations General Assembly Resolutions 61/105 and 64/72. The database will be of use to the WECAFC members as well.

The **Government of Spain** has supported in 2009 -2010 a preparatory phase of a Regional project for the development of aquaculture in Latin America and the Caribbean (GDCP/INT/002/SPA). The objective of the project was to prepare a detailed project document on rural and small-scale aquaculture in Latin America and the Caribbean.

The **Government of Japan** financed various global FAO programmes and projects in recent years, of which some are of relevance to the fisheries sector in the WECAFC area. Those with most relevance are the following:

Project "Promotion of sustainable fisheries: support for strengthening functions of and coordination among Regional Fishery Bodies (RFBs)/ Regional Fisheries Management Organizations (RFMOs)", 2008 -2012 (GCP/INT/069/JPN), supported amongst others the development of the Regional Fishery Body Network (RSN) in which the WECAFC Secretary participated.

Project "Fisheries management and marine conservation within a changing ecosystem context", 2009 -2014, (GCP/INT/253/JPN), included two focus areas with activities of interested for the WECAFC region.

Focus area 1: Sustainable fisheries

- Component 1 Enhance management and practices of sustainable deep-sea fisheries in the high seas within an Ecosystem Approach to Fisheries (EAF);
- Component 2 Increase the efficiency of MPAs as a fisheries management tool within an EAF;
- \bullet Component 3 Build up more efficient management of fishing capacity at the national level and enhance capacity to reverse the detrimental situation of overcapacity and overcapitalization;
- Component 4 Improve the management and conservation of sharks, when targeted, as well as when caught accidentally or as bycatch, within national jurisdiction as well as in the high seas;
- Component 5 Improve protection of specific endangered species vulnerable to fishing operations; especially in regard to marine turtles;

Focus areas 2: Impacts of climate change on fisheries and aquaculture

• Component 6 – Increase awareness among FAO Members of the likely impacts of climate change on fisheries and aquaculture and develop insight into necessary adaptation mechanisms.

The project is ongoing and as such there may be opportunities to tap into its resources over the coming years for the WECAFC region.

National level TCP and TCP facility projects

Belize

Review of draft Fisheries Act of Belize, July-October 2011, TCP/BZE/3301.

The Government of Belize is developing a draft framework Act on Fisheries in cooperation with the Wildlife Conservation Society. FAO supports the Government to ensure that the Act complies with current international management standards of fisheries and accepted international environmental principles and approaches.

Jamaica

Formulation of an aquaculture development plan for Jamaica, Jamaica June 2011 to December 2011, TCP/JAM/3301.

This project aims (i) to inform stakeholders about the aquaculture development plan project, (ii) to work with them in identifying the main issues to consider when developing the plan and (iii) to create ownership of the process and (iv) to introduce the consultants to facilitate the development plan. The output foreseen is a "Strategy and road map to enhance aquaculture sector in the country".

Guyana

Development of a Policy and a Strategic Plan for Inland Fisheries in Guyana, 2010 -2011, TCP/GUY/3301. This ongoing project aims to contribute to the development of the continental fishing and rural aquiculture within a frame of viability of the ecosystems and fishing resources in order to improve means of life of the local communities. It is foreseen that by the end of 2011 a Strategic Plan for responsible inland fisheries management in Guyana will be developed.

<u>Formulation of National Activities of the Second Phase of the project to determine the shrimp</u> trawl fishery to be included for management, 2009-2010, TCP/GUY/3202

Brazil

Formulation of national activities of the second phase of the project -Reduction of Bycatch in Tropical Shrimp Trawling (REBYC), 2010, TCP/BRA/3201.

Costa Rica

Assistance to the development of parameters for a restructuring policy of the national fishing fleet and marine aquaculture in the Gulf of Nicoya, 2008 -2011, TCP/COS/3201.

Cuba

Assistance to formulate a project to develop a fishery management plan for the conservation and sustainable use of Queen conch, 2010 -2011, TCP/CUB/3201.

Dominica

Assistance to improve disaster risk management capacities in agricultural sectors, 2010 -2011, TCP/DMI/3203

This ongoing project aims to enhance the resilience of Dominica's agriculture sector (including fisheries and forestry) to natural disasters, thus contributing to the promotion of sustained economic growth and poverty reduction.

Honduras

Assistance for the identification and formulation of fishery sector projects, 2008 -2010. TCP/HON/3202. This project aimed to assist Honduras with technical assistance to prepare a project proposal for funding by the Spanish Government International Cooperation Agency.

St Lucia

Enhanced capacities for disaster risk mitigation in agriculture, fisheries and forestry, 2009-2011, <u>TCP/STL/3202</u>. This project is ongoing. Backstopping missions were undertaken by the Lead Technical Officer, Fisheries, Micro Finance and Insurance, Communication Officers.

Training workshops were conducted in planning for community based Disaster Risk Management and Climate Change Analysis, to support planning for community based adaptation to climate change. A number of livestock best practice demonstrations were completed.

Nicaragua

Technical assistance for the implementation of a Strategy for artisanal fisheries development in the RAAN. 2011 -2013, TCP/NIC/3305. This project aimed to contribute to responsible utilization of the fisheries resources, food security objectives and income of the fisheries communities in the RAAN, through capacity building and technical assistance supporting the organization of fishers and market access for fisheries products.

Surinam

Formulation of National Activities of the Second Phase of the project. 2008- 2009, TCP/SUR/3202. This small TCP facility project aimed to assist with the preparation of a project proposal to incorporate national activities in Phase II of the international project REBYC; assist the Ministry of Agriculture to determine operational arrangements to support project implementation; to determine the shrimp trawl fishery to be included for management.

Regional and National level Trust Fund activities supported by FAO

Regional

Improvement of interdisciplinary fisheries research in support of responsible fisheries in the Central American countries. 2005 -2009, GCP /RLA/150/SWE. The beneficiary countries were: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama.

The objectives of the project were to increase the contribution of the fisheries sector to food security in the region through development of responsible fisheries practices in line with the CCRF. Main focus of the project was on institutional strengthening of fisheries administrations, interdisciplinary fisheries research and improve the scientific information and advice available in support of policy and strategy development and for making better fisheries management decisions.

Haiti

<u>Promotion of small-scale aquaculture and poultry farming for food security in Haiti, January 2009 to February 2011, GCP/HAI/022/OPF.</u>

This project was carried out in the Southern and Artibonite Districts. Its objectives were to assist the Haitian government, represented by Ministry of Agriculture, Natural Resources and Rural Development, in promoting the development of rural aquaculture and poultry production in selected sites of the country. The following outputs were realized: A total of 89 earthen ponds were constructed or rehabilitated during the project and several fish stocking campaigns were carried out. The main cultured species were Nile tilapia (*Oreochromis niloticus*), red tilapia (*Oreochromis mossambicus x Oreochromis niloticus*) and common carp (*Cyprinus carpio*) which were reared in polyculture. About 30 000 fingerlings (average of 300 fingerlings per fish pond) have been freely distributed among the project sites to complete a first production cycle (lasting 6-8 months).

Support to food security and livelihood of rural populations affected by food prices increase and technical assistance for environment rehabilitation and agriculture sustainable development", April 2009 to June 2011, GCP/HAI/024/EC.

This European Union funded project had an aquaculture component and was implemented in the North-East District of Haiti. There will be probably a second phase funded again by the European Union. The main objectives of the project were: the extensive fish production in small water bodies; and (ii) grow-out red tilapia in floating cages in lakes. The outputs achieved so far include the following: the project installed 32 floating cages (4 m³ in PVC) in three different lakes for intensive red tilapia production. This activity is carried out through a contract signed with a private aquaculture farm (Caribbean Harvest) based in Port-au-Prince. This company provided the project with cages, red tilapia (*Oreochromis mossambicus x Oreochromis niloticus*) fingerlings and commercial feed imported from the United States of America, covering one production cycle (lasting 4–6 months). The main constraints are limited production of fingerlings and the limited availability of feed.

Cuba

Assistance for the rehabilitation of productive capacities in the agriculture sectors and aquaculture in the special community of Isla de la Juventud which was affected by hurricanes Gustav and Ike, 2009-2010, OSRO/CUB/804/NOR

Nicaragua

Assistance for the reactivation of the artisanal fisheries sector affected by Hurricane IDA in Caribbean Coast communities, 2009 -2010, OSRO/NIC/904/CHA. This project aimed to assist the government in a rapid reestablishment of livelihoods and replacement of fishing equipment for fishermen in areas affected by Hurricane IDA.

Regional and National level activities in the WECAFC region supported by the FAO Regular Programme

Training and testing on the FAO aquaculture code of conduct for responsible fisheries new questionnaire with aquaculture authorities in Brazil, Nicaragua and Chile.

This training was supported by the Aquaculture Service (FIRA) and was held in Brasilia, Managua and Santiago in April 2011. The objectives of the training sessions were: (i) To assist countries in understanding the relevance of the code and the importance of the new reporting system for FAO member countries as a whole, (ii) assist countries in consolidating a response; (iii) test the complexity, length and effectiveness and clarify the responses and (iv) explore the use of the questionnaire as an assessment tool of FAO impact.

The outputs foreseen included: Awareness and capacity building on the FAO aquaculture code of conduct for responsible fisheries.

Second council meeting of the aquaculture network of the Americas, held in Cancun, Mexico, in March 2011. This meeting aimed (i) to assist the countries in the preparation of a work programme and facilitating the coordination with other current initiatives and (ii) to provide information of relevant FAO activities that could be supported by the network such as the implementation of CCRF. The output of the meeting was a "Priorization of themes for the activities of the network for the 2011-2012 period".

An Expert workshop on Regional shellfish hatchery feasibility workshop for the wider Caribbean was held in New Kingston, Jamaica, in October 2010. The objectives of the workshop were to discuss with interested Caribbean governments the feasibility of establishing a regional and shared aquaculture facility for the production and distribution of seed material of commercially valuable and marketable bivalve and other aquatic species. The workshop produced five main recommendations covering all technical and logistical issues discussed. The proceedings of the workshop and a separate glossy and easy to read policy brief aimed at policy makers were prepared.

Ecosystem approach to the management of harvested aquatic resources (fisheries and aquaculture): a case study on implementation. This FIRA supported project is targeted for countries where both fisheries and aquaculture are relevant. In Nicaragua, The Estero Real was

selected as a pilot for implementation of EAF/EAA. The project started in 2009 and is ongoing. The objectives of the project are to: (1) Review/assist national implementation of EAF/EAA, based on evaluation instruments in some field situations; (2) Familiarize countries with the principles and practices of the ecosystem approach to fisheries and aquaculture; (3) All the above objectives would focus on the interaction between fisheries and aquaculture and the best integrated management of both sectors with an ecosystem approach; and (4) Such pilot experience will assist the further development of CCRF guidelines for the implementation of an ecosystem approach to the management of harvested aquatic resources. In terms of outputs The First stage of the project has involved field visits and participatory workshops; The Second stage of the pilot implementation involved the development of the EAF/EAA implementation plan including the evaluation of the current situation, available information, needed information and resources in order to address the issues identified in the workshops; The Third stage of the project will involve discussion, agreement and the implementation of the management actions, some of these will include for example exploring other livelihood options for fishermen in aquaculture and in combined activities; improved value chain management for small scale fishers and farmers etc. FI is currently looking for additional resources for the follow up and further evaluations. One of the major outcomes of the project so far has been the degree of involvement of Nicaraguan institutions and local stakeholders and their level of ownership of this initiative; that is, slowly move forward in implementing an ecosystem approach to fisheries and aquaculture.

An Expert workshop on aquaculture development in desert and arid lands, was held in Hermosillo, Mexico, in July 2010. The objective of the workshop was: to discuss salient issues related to desert aquaculture development and to identify actions that will assist in strengthening this economic sector. The main outputs of this technical meeting were seven reviews on desert aquaculture from specific countries/regions and a draft document entitled "Desert and arid land aquaculture development: The way forward", resulting from the workshop discussions and recommendations

The OSPESCA/FAO Regional workshop on the Application of the Ecosystem Approach to fisheries in the shrimp and lobster fisheries in the Central American region was held in San Salvador in September 2009. The objectives of the workshop were to (i) introduce concepts and methodologies relevant to the ecosystem approach, showing how practical planning and implementation tools exist and can be applied for their successful implementation; (ii) explore how the EAF/EAA is being applied in the OSPESCA region and (iii) develop some initial recommendations for action as to how EAF/EAA could be used more comprehensively as a national and international planning tool and as the basis of regional cooperation in the future. The outputs foreseen included awareness and capacity building on EAF/EAA.

Some FAO Publications with relevance for WECAFC and its membership

In the last few years a number of FAO publications with relevance for the WECAFC members have been published by FAO. These include the following:

Wurmann, C.G. 2011. Regional Review on Status and Trends in Aquaculture in Latin America and the Caribbean – 2010/ Revisión Regional sobre la Situación y Tendencias en el Desarrollo de la Acuicultura en América Latina y el Caribe – 2010. *FAO Fisheries and Aquaculture Circular/FAO, Circular de Pesca y Acuicultura*. No. 1061/3. Rome, FAO. 212 pp.

Pena, M. H.; Oxenford, H.A.; Parker, C.; Johnson, A. Biology and fishery management of the white sea urchin, *Tripneustes ventricosus*, in the eastern Caribbean. *FAO Fisheries and Aquaculture Circular*. No. 1056. Rome, FAO. 2010. 43p.

Olin, P., Smith, J. and Nabi, R. 2011. Regional Review on Status and Trends in Aquaculture Development in North America – 2010 FAO Fisheries and Aquaculture Circular No. 1061/2. Rome, FAO. 84 pp.

Lovatelli, A.; Sarkis, S. 2011. A regional shellfish hatchery for the Wider Caribbean: Assessing its feasibility and sustainability. FAO Regional Technical Workshop. 18–21 October 2010,

Kingston, Jamaica. FAO Fisheries and Aquaculture Proceedings. No. 19. Rome, FAO. 2011. 246p.

Crespi, V.; Lovatelli, A. 2011. Aquaculture in desert and arid lands: Development constraints and opportunities. FAO Technical Workshop. 6–8 July 2010 Hermosillo, Mexico. *FAO Fisheries and Aquaculture Proceedings* No. 20. Rome, FAO. 2011 (under preparation).

Medley, P. Monitoring and managing queen conch fisheries: a manual. *FAO Fisheries Technical Paper*. No. 514. Rome, FAO. 2008. 78p.

Aspra, B.; Barnutty, R.; Mateo, J.; Marttin. F.; Scalisi, M. Conversion factors for processed queen conch to nominal weight/Factores de conversión para el caracol reina procesado a peso nominal. *FAO Fisheries and Aquaculture Circular*/FAO, Circular de Pesca y Acuicultura. No. 1042. Rome/Roma,FAO. 2009. 97p

Purcell, S.W. Managing sea cucumber fisheries with an ecosystem approach. Edited/compiled by Lovatelli, A.; M. Vasconcellos and Y. Yimin. *FAO Fisheries and AquacultureTechnical Paper*, 520. Rome, FAO. 2010. 157p

Salas, S.; Chuenpagdee, R.; Charles, A.; Seijo, J.C. (eds). Coastal fisheries of Latin America and the Caribbean. *FAO Fisheries and Aquaculture Technical Paper*. No. 544. Rome, FAO. 2011. 430p

FAO, 2011. Report of the Latin America and Caribbean Regional Consultative Meeting on Securing Sustainable Small scale Fisheries: Bringing Together Responsible Fisheries and Social Development. San José, Costa Rica, 20–22 October 2010. *FAO Fisheries and Aquaculture Report/FAO Informe de pesca y acuicultura*. No. 964. Rome, FAO. 2011. 77p.

Suggested Action by the SAG

The SAG is invited to review the inter-sessional activities and progress made on the implementation of the Work Programme for the 2008–2009 biennium.

Particularly, the SAG is requested to:

- 1) Identify trends and emerging issues from the intersessional work that should be addressed by the Commission in its next session.
- 2) Advise on the future of the WECAFC Working Group on Caribbean Spiny Lobster given the CLME pilot study being implemented by OSPESCA.

3)

- 4) Advise on whether the Ad hoc Working Group on Queen conch should be maintained, and if so, to suggest new Terms of reference for the Working Group.
- 5) Advise on whether the WECAFC Ad Hoc Flyingfish Working Group of the Eastern Caribbean should become a joint WECAFC/CRFM Working Group and suggest new Terms of reference for this working Group.
- 6) Advise on the CFMC/WECAFC ad hoc Nassau Grouper Working Group (NGW) and its Terms of Reference for the period 2012 -2013.

SAG members are requested to take into account the limited resources (financial and human) which are presently available to the WECAFC Secretariat. They are invited to consider volunteering their support, in-kind and/or financially, to specific activities of the various Working Groups and other activities under the proposed Work Programme or to other activities that they wish to include in the programme. This might also galvanize additional support where needed.