FAO INPUTS IN RELATION TO RESOLUTION A/RES/69/245 CONCERNING "OCEANS AND THE LAW OF THE SEA" FOR THE REPORT OF THE SECRETARY-GENERAL TO THE SEVENTIETH SESSION OF THE UNITED NATIONS GENERAL ASSEMBLY

24 JUNE 2015

EXECUTIVE SUMMARY

Implementation of the Convention and related agreements and instruments

FAO has continued supporting its Members in the review and development of national legislation in the field of food and agriculture, including fisheries. In this context, FAO has facilitated the implementation of obligations deriving from international agreements, including UNCLOS, in national legislations in as far as they are relevant for fisheries, aquaculture, and food security in general.

Development of technical legal skills at national level for the implementation of the UNCLOS

FAO, in collaboration with the Pacific Forum Fisheries Agency and the Secretariat of the Pacific Community has assisted Small Island Developing States of the Pacific in raising awareness of the importance of delimitation of EEZs, in accordance with UNCLOS, to enable these States to effectively conserve and sustainably use marine living resources in these areas in view of potential effects of rising sea levels on maritime areas under national jurisdiction.

FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing

The FAO Conference on 22 November 2009 approved the FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (Port State Measures Agreement). 23 FAO Members signed the Agreement. As at June 2015, eleven FAO Members (including the European Union) had become Parties to the Agreement. The Port State Measures Agreement shall enter into force 30 days after the date of deposit with the Director-General of FAO of the twenty-fifth instrument of ratification, acceptance, approval, or accession.

Voluntary Guidelines on Flag State Performance

The FAO Committee on Fisheries (COFI) endorsed the Guidelines at its 31st Session. The Guidelines are being promoted by FAO alongside the Port State Measures Agreement, through the global capacity development programme related to the latter.

Monitoring and compliance - Questionnaire on the Implementation of the Code of Conduct for Responsible Fisheries

In line with the request from COFI, FAO has further developed the web-based system together with the related data processing tools and usability features, reviewed the contents of the questionnaire and developed two supplementary specific web-based questionnaires on trade and aquaculture which were launched in the first half of 2015. The second edition of the general questionnaire on the Code will be launched in the fourth quarter of 2015.

Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication

The final text of the SSF Guidelines was endorsed by the 31st session of COFI in June 2014. In accordance with the recommendations emanated by the 29th and 30th sessions of COFI, FAO proposed the outline for a Global Assistance Program (GAP) to COFI at its 31st session in June 2014. In December 2014, the FAO organized an expert workshop to further discuss elements of the GAP and is organizing a series of regional workshops to work towards the development of regional action plans as called for in the SSF Guidelines in 2015.

Deep-sea Fisheries and Areas beyond national jurisdiction

In December 2014, the Database on Vulnerable Marine Ecosystems (VME database) was launched. The VME database was developed in collaboration with the regional bodies with mandates to manage deepsea fisheries in ABNJ and provides interactive maps and factual information on management measures taken to reduce current or potential impact on areas where VMEs are known or likely to occur.

UN-Oceans

FAO, together with the other UN-Oceans members, continues to work towards the development of the "inventory of the mandates and priorities approved by the respective governing bodies of UN-Oceans participating organizations with a view to identifying on-going and planned activities in respect of those mandates and priorities, and making this inventory available on the UN-Oceans website". FAO developed and funded the initial version of the electronic platform for the inventory in the form of a user-friendly online searchable database detailing the mandates and the activities of each of the members of UN-Oceans.

Global Forum on the Governance of Tenure in Fisheries (UserRights 2015)

FAO and the Government of Cambodia co-organized the international forum "Tenure and Fishing Rights" (UserRights 2015) in Siem Reap, Cambodia, 23-27 March 2015. The purpose of the forum was to advance and consolidate knowledge on the governance of tenure as well as the available rights-based arrangements that can promote social, environmental and economic sustainability in fisheries.

Marine pollution and marine debris

FAO, in collaboration with UNEP, hosted a workshop of the GESAMP Working Group 40 on Sources, fate and effects of microplastics in the marine environment. With the expectation of planning and developing a study, the workshop took stock of the information available on occurrence and impacts of microplastics in the marine environment and discussed the possibility of developing a risk assessment framework so as to cope with the still remaining knowledge and information gaps. Socio-economic and communication aspects as well as the development of a communication plan were also discussed.

Collaborative platforms

FAO has played a leading role in the EU/FP7 funded iMarine initiative which develops a data-infrastructure enabling new forms of scientific data sharing and multidisciplinary collaborative science in support to policy development and implementation, towards goals of the Ecosystem Approach to fisheries management and conservation of living marine resources. A White Paper on a Public Partnership business model has been produced to address the sustainability of the iMarine initiative expected to primarily rely on a public partnership between IT specialized institutions and global, regional, and national marine knowledge institutions such as FAO, IOC, EC, ICES, and other Regional Fishery Bodies, WFC, IRD, VLIZ. As follow-up to this White Paper, an MoU is under development between FAO and CNR (the Italian Consiglio Nazionale delle Ricerche owning the IT platfom) with the goal to maintain the iMarine operational beyond the project, and to further shape an iMarine.org Partnership.

Regional Cooperation for Sustainable Fisheries and Aquaculture in the Red Sea and Gulf of Aiden

The second Regional Consultative Meeting was held from 22 to 24 June 2014 in Cairo, Egypt. The regional consultation—agreed the outline for the envisaged regional fisheries management agreement and for a zero draft to be formulated by FAO in coordination with the members of the purposely established Coordination Group, notably: Egypt, Saudi Arabia, Sudan, and PERSGA.

FAO INPUTS IN RELATION TO RESOLUTION A/RES/69/245 CONCERNING "OCEANS AND THE LAW OF THE SEA" FOR THE REPORT OF THE SECRETARY-GENERAL TO THE SEVENTIETH SESSION OF THE UNITED NATIONS GENERAL ASSEMBLY

24 JUNE 2015

I - Implementation of the Convention and related agreements and instruments

OPERATIVE PARAGRAPH 5

FAO has continued supporting its Members in the review and development of national legislation in the field of food and agriculture, including fisheries. In this context, FAO has facilitated the implementation of obligations deriving from international agreements, including UNCLOS, in national legislation, in as far as they are relevant for fisheries, aquaculture, and food security in general.

SECTION II - CAPACITY-BUILDING

OPERATIVE PARAGRAPH 13

Development of technical legal skills at national level for the implementation of the UNCLOS

FAO has continued supporting its Members in developing legal capacities, including through the involvement of national experts in the review and development of national fisheries legal frameworks to inter alia implement UNCLOS and in particular its provisions related to fisheries and conservation and sustainable utilization of marine living resources.

FAO, in collaboration with the Pacific Forum Fisheries Agency and the Secretariat of the Pacific Community has assisted Small Island Developing States of the Pacific in raising awareness of the importance of delimitation of EEZs, in accordance with UNCLOS, to enable these States to effectively conserve and sustainably use marine living resources in these areas in view of potential effects of rising sea levels on maritime areas under national jurisdiction.

FAO has also supported regional fisheries bodies (RFBs), functioning as the intergovernmental mechanisms for cooperation called for in article 63, 64 and 118 of UNCLOS. FAO has continued providing the secretariat function of the Regional Fisheries Body Secretariats Network (RSN), which will hold its sixth meeting in July 2015. FAO also provides legal assistance to the Secretariats of those RFBs that have been established under the FAO Constitution, as well as others.

OPERATIVE PARAGRAPH 25

Regional capacity development workshops on FAO 2009 Port State Measures Agreement

FAO has continued to expand its programme to support the implementation of the 2009 FAO Agreement on Port State Measures to Prevent, Deter and Eliminate IUU fishing (Port State Measures Agreement). The programme activities aim to facilitate the entry into force of the Port State Measures Agreement and its implementation. In addition, they contribute to the development of national capacity to maximize the benefits available through the effective use of the Port State Measures Agreement and promote bilateral, subregional and/or regional coordination.

Three regional capacity development workshops have been conducted in the 2014 - 2015 period for Caribbean States (Port of Spain, Trinidad and Tobago, 24 - 29 March 2014), Latin American States (Montevideo, Uruguay, 29 September - 3 October 2014), and North-West Indian Ocean States, including those bordering the adjacent Seas and Gulfs (Colombo, Sri Lanka, 1 - 5 June 2015). Another workshop for the West African region is scheduled to be held in Cape Verde from 20 to 24 July 2015¹. It is envisaged that the outcomes of the regional workshops shall be followed up by specific support at the national level, as appropriate, through supplementary tailor-made capacity development programmes, subject to the

¹ Co-funded by the Government of Norway and in cooperation with relevant international and regional entities.

availability of funds. The workshops were largely supported through an FAO project funded by the Norwegian Government.

FAO has also conducted country specific training in Port State Measures in the Maldives, the Philippines, Thailand and Tonga. Capacity development and training material produced by FAO includes a guide (in English, Spanish and French) for the implementation of the Port State Measures Agreement² and training manuals for port inspection (in English and Thai)³. In addition, FAO has supported Papua New Guinea, St. Kitts and Nevis and Philippines in strengthening national fisheries legislation including in support of the implementation of the Port State Measures agreement.

FAO has participated in a number of workshops and meetings organised by its Members, IGOs, NGOs and other international entities, where it delivered presentations on the status of the Agreement and the benefits of its global implementation.

SECTION VII - MARITIME SAFETY AND SECURITY AND FLAG STATE IMPLEMENTATION

OPERATIVE PARAGRAPH 91 AND 98

Safety at sea in the fisheries sector

Recently, as part of a global study, FAO sponsored 16 case studies from around the world to review the issue of the relationship between safety at sea and fisheries management practices for fisheries or for a specific fishery in each country. The purpose of a synthesis report of those case studies, which is in the process of being published, is to document (globally) the relationship between safety at sea and fisheries management practices and to provide practical guidelines for fisheries managers on how they can help to make fishing safer.

The importance of safety at sea in the fisheries sector was highlighted at the 31st Session of the FAO Committee on Fisheries (9-13 June 2014). The Committee welcomed the effective cooperation established in this regard between FAO, ILO and IMO. Many Members stressed the link between safety at sea and forced labour and the occurrence of IUU fishing activities. They referred, in this context, to the ILO Convention 188 and to the Cape Town Agreement of 2012 on the implementation of the provisions of the Torremolinos Protocol of 1993.

OPERATIVE PARAGRAPH 92

Child labour in fisheries and aquaculture

The FAO ILO Guidance on addressing child labour in fisheries and aquaculture, which was officially launched during World Day against Child Labour on 12 June 2013 in Rome, is available in English and Spanish⁴. FAO continues its support at the country level to address child labour in fisheries and aquaculture, for example in Cambodia and in Tanzania. A National Action Plan to Eliminate the Worst Forms of Child Labour and Mainstream, Gender in Cambodia is currently finalized.

OPERATIVE PARAGRAPH 100

Counter Piracy Measures

Within its mandate, FAO continues to support member countries and partners in addressing piracy and IUU fishing in the horn of Africa, Western Indian Ocean and West Africa. Piracy affects fishing itself directly through interference with legal fishing operations (for example through the hijacking of vessels for piracy) but also indirectly through interfering with fishing operation and reduction in licensing revenue. Piracy has been a problem in areas where there is weak governance and policing of waters.

FAO continues to support the Contact Group on Piracy off the Coast of Somalia, established by the UN Security Council as well as the "Kampala Process", which promotes an integrated approach to the

² http://www.fao.org/docrep/015/i2590e/i2590e00.htm

³ http://www.apfic.org/port-inspection-training-course.html

⁴ www.fao.org/docrep/019/i3318s/i3318s.pdf

development of a safe and secure maritime and fisheries sector in Somalia. In addition, FAO has a number of projects in Somalia, i) to improve fisheries management, diversify livelihoods, develop landing facilities, ii) address IUU fishing, and iii) supports the Somali Seafarers initiative to improve dialogues between fishers and international navies (EUNAVFOR and NATO). FAO is implementing a fisher ID card and vessel registration systems for Somalia, coordinates with regional fisheries bodies and projects and provides policy and legal advice to the government of Somalia and Federal member States. FAO is cooperating, within its mandate, with IMO through the Joint Commitments to a strategic partnership which was signed on 15 May 2012 to combat piracy in and off the coast of Somalia.

With respect to the request from Iran at the thirtieth session of the Committee on Fisheries to establish an Ad hoc Intersessional Working Group, FAO intends to carry out (should funds permit) a joint FAO-IMO technical workshop to address these and related counter piracy measures.

OPERATIVE PARAGRAPH 100 - cont -

Global Record of Fishing Vessels Refrigerated Transport Vessels and Supply Vessels (Global Record)

The Global Record, as a major tool in implementing the 2009 Port State Measures Agreement, will assist Port States in carrying out inspections and follow-up actions of foreign flag vessels, as called for in the Agreement. In 2012, the 30th session of the FAO Committee on Fisheries (COFI) recognized the necessity of global unique vessel identifiers (UVI), as a key component of the Global Record to identify and track vessels and suggested that the UVI be applied as a first step to vessels above 100 GRT (Phase 1). In December 2013, the IMO Assembly agreed to a proposal, co-sponsored by FAO, to include fishing vessels of 100 gross tonnages or more in the IMO Ship Identification Number Scheme through the adoption of Resolution A.1078 (28). The Scheme is now applicable to both merchant ships and fishing vessels. Consequently, the preconditions of using the IMO Number as the UVI for Phase 1 of the Global Record have now been met. The IMO Number is associated with the vessel for its entire life, even when subject to changes of flag, ownership, name, etc. Several regional fisheries management organizations (RFMOs) have made provisions for the IMO Number to be compulsory for eligible vessels fishing in their convention areas.

In a side event at the 31st Session of the FAO Committee on Fisheries, FAO presented the Global Record strategy document and demonstrated the prototype of the Global Record system. Recognizing the role of the Global Record in the concerted fight against IUU fishing, the Committee: (a) reiterated its support for the Global Record's continued development by FAO and commended FAO on the preparation of the strategy document and the demonstration of the prototype; (b) welcomed FAO's efforts in coordinating the Global Record with other existing systems to keep it cost-effective, while working towards standardization at the global level; (c) appreciated the collaboration with IMO in extending its ship identification number scheme to fishing vessels and agreed that the IMO number should be used as the Global Record's unique vessel identifier for Phase 1; (d) noted that several RFMOs have made provisions for the IMO number to be compulsory in their convention areas; (e) agreed that States were responsible for the data and its provision to the Global Record, possibly through RFMOs, and (f) appreciated FAO's continued assistance to developing States. In addition, some Members recognized the need for an advisory committee to clarify outstanding issues and to find a solution for the long-term financing. In addressing some of the issues raised at the Committee, the 1st meeting of the Global Record Informal Open-Ended Technical and Advisory Working Group was held from 23 to 25 February 2015. The meeting addressed key issues related to the Global Record, such as the scope, system development and governance framework. The way forward, including options for financial mechanism for the long-term sustainability of the Global Record Programme was also discussed.

OPERATIVE PARAGRAPH 100 - cont -

Monitoring and compliance - Questionnaire on the Implementation of the Code of Conduct for Responsible Fisheries

At its 31st session in June 2014, the FAO Committee of Fisheries (COFI) commended the work undertaken by FAO to develop the new web-based questionnaire⁵ on the implementation of the FAO Code of Conduct for Responsible Fisheries (the Code) and welcomed the substantial increase in response rates of members,

⁵ http://www.fao.org/fishery/code/codequest

regional fishery bodies (RFBs) and non-governmental organizations (NGOs) which provided for a more thorough and reliable analysis to be carried out. In line with the request from COFI, FAO has further developed the web-based system together with the related data processing tools and usability features, reviewed the contents of the questionnaire and developed two supplementary specific web-based questionnaires on trade and aquaculture which were launched in the first half of 2015. The second edition of the general questionnaire on the Code will be launched in the fourth quarter of 2015.

OPERATIVE PARAGRAPH 100 - cont -

Fishery Resources Monitoring System (FIRMS)

FAO is leading the Fishery Resources Monitoring System (FIRMS) partnership which major aim is to facilitate access to a wide range of high-quality information on the status and trends of global marine fishery resources, fisheries and their management. FIRMS is expected to provide decision-makers with necessary information to develop effective fisheries policies in accordance with the Code of Conduct for Responsible Fisheries. The partnership, steadily growing, now brings together 14 Institutions representing 19 RFBs, and disseminates through the FIRMS website status and trends reports structured on an inventory backbone of over 1000 marine resources and about 200 fisheries.

On-going efforts aim at broadening geographic and thematic coverage; facilitating the usage of FIRMS data by various actors including national governments, champions of the State of the marine environment, actors involved in seafood traceability and certification; and data monitoring and reporting; the later includes a standard protocol for streamlining national contribution on fishing activities through the partner RFBs and related capacity building in RFBs of developing regions (e.g. CECAF, SWIOFC, RECOFI, WECAFC, BOBLME).

Towards this goal, FIRMS is currently involved in the following projects:

- Strengthening national data collection and regional data sharing through FIRMS to support priority regional fishery management plans in the WECAFC area
- Support to three Fishery Management Plans in Bay Of Bengal Large Marine Ecosystem (BOBLME project)
- Implementation of a Regional Fishery Strategy for the East and South Africa-Indian Ocean Region (SmartFish project)
- Development of a global record of stocks and fisheries (Blue Bridge project Building Research environments for Innovation, Decision making, Governance and Education)

OPERATIVE PARAGRAPH 156

Voluntary Guidelines on Flag State Performance

The Technical Consultation on Flag State Performance was held at FAO Headquarters, Rome, Italy, from 2 to 6 May 2011, and resumed from 5 to 9 March 2012 and from 4 to 8 February 2013. In accordance with the request given by the FAO Committee on Fisheries (COFI) the Technical Consultation engaged in negotiations on the basis of a draft document with the following structure: statement of purpose and principles; scope of application; performance assessment criteria; procedure for carrying out assessments; cooperation between flag States and coastal States; encouraging compliance and deterring non-compliance by flag States; cooperation with, and assistance to, developing countries with a view to capacity development, and the role of FAO. The Technical Consultation came to a close at the second resumed session with agreement being reached on "Voluntary Guidelines for Flag State Performance". The Guidelines were endorsed by the FAO Committee on Fisheries at its 31st Session. The Guidelines are being promoted by FAO alongside the Port State Measures Agreement, through the global capacity development programme related to the latter.

FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing

The FAO Conference on 22 November 2009 approved the FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (Port State Measures Agreement). 23 FAO Members signed the Agreement. As at June 2015, eleven FAO Members (including the

European Union) had become Parties to the Agreement. The Port State Measures Agreement shall enter into force 30 days after the date of deposit with the Director-General of FAO of the twenty-fifth instrument of ratification, acceptance, approval, or accession.

SECTION IX - MARINE ENVIORNMENT AND MARINE RESOURCES

OPERATIVE PARAGRAPH 162, 164, 181, AND 182

Marine pollution and marine debris

FAO continues to provide technical inputs and guidance through IMO on the impacts of marine pollution on fisheries and aquaculture including the revision of MARPOL Annex V and its guidelines. FAO also continues to strengthen its collaboration with UNEP including the provision of technical advice into the Global Partnership on Marine Litter (GPML) and agreeing to take the lead role in goal B of GPML to "Reduce levels and impact of sea-based sources of marine debris including solid waste, lost cargo, abandoned, lost or otherwise discarded fishing gear (ALDFG), and abandoned vessels introduced into the aquatic environment".

In April 2014, FAO, UNEP and IMO participated in the Global Oceans Action Summit for Food Security and Blue Growth held in The Hague, The Netherlands. This summit brought together global leaders, ocean practitioners, business leaders, scientists, civil society and international organizations and tasked them with identifying priority actions critical to preserving the earth's natural resources and food security. The Summit agreed that marine plastics pose serious threats to marine based activities such as fisheries, aquaculture, shipping, mining, power stations, desalination plants, harbours and rescue services and that the absence or lack of data to verify and quantify the potential effects of plastics (especially microplastics) in the ocean environment including effects on biodiversity and commercial food fish was a major concern and constraint to understanding the full significance of plastics in the oceans. In the report of the chair of the summit, it was agreed that in order to minimize the impacts of plastics in ABNJ as well as in EEZs, UNEP, FAO and IMO should collaborate on a programme to: (1) establish a robust baseline on the magnitude and impacts associated with plastics and microplastics in the ocean and food chains, (2) raise awareness and educate on the state and impact of plastics on the ocean and the food supply chain, and (3) target actions to remove abandoned, lost and otherwise discarded fishing gears and rehabilitate fishing grounds.

In this regard, FAO, IMO and UNEP have planned collaborative activities to commence in 2014-2015 to mitigate the impacts of ocean based sources of marine pollution. Initial activities include *inter alia*: i) studies of "Methods to Estimate the Efficiency and Duration of Ghost Fishing, Estimates of Derelict Gear, estimates of Megafauna Ghost Fishing Mortality, and Regional Fisheries Management Organization Management Measures", ii) review and analysis of national and regional legal and policy frameworks for selected countries / regions where recovery and clean-up missions have been successful, and iii) a desk review/study of technologies and methodologies used to remove ALDFG from the marine environment. UNEP, FAO and IMO are also collaborating on a co-authored OP-ED article on plastics in the aquatic environment.

Moreover, FAO, in collaboration with UNEP, hosted a workshop of the GESAMP Working Group 40 on Sources, fate and effects of microplastics in the marine environment, attended by international experts, as well as staff of 3 UN agencies (FAO, UNEP, IOC-UNESCO). With the expectation of planning and developing a study, the workshop took stock of the information available on occurrence and impacts of microplastics in the marine environment and discussed the possibility of developing a risk assessment framework so as to cope with the still remaining knowledge and information gaps. Socio-economic and communication aspects as well as the development of a communication plan were also discussed, given the interest raised in the press in microplastics. Drafting sub-groups were identified on the basis of an agreed table of content. FAO will be specifically involved in supporting the sub-group dealing with fisheries and aquaculture issues. A synthesis report is due to be prepared for the United Nations Environmental Assembly in 2016.

OPERATIVE PARAGRAPH 167, 171, 172 AND 179

Climate change - impacts on marine and coastal ecosystems and Ocean acidification

Greenhouse gas emissions

In line with the suggestions from the FAO Committee on Fisheries at its 29th Session, FAO should provide Members with information on possible fishing industry contributions to climate change, and on ways to reduce the sector's reliance on, and consumption of, fossil fuels, respecting the principles embodied within UNFCCC. FI conducted two related expert workshops. The first workshop's (23 to 25 January 2012) aim was to develop and progress agreed methods framework to assess Greenhouse Gases (GHG) emissions and the implications of different methods in the quantification of GHG from different seafood production systems.⁶ The second workshop (4 to 5 March 2013) discussed the potential for reducing GHG emissions through changes in technology and practices and the impacts such changes may have on the system⁷. Follow-up activities in supporting GHG mitigation efforts with capture fisheries and aquaculture are underway. A fuel saving manual for small scale fishing vessels has been published in English French and Spanish.⁸ A pilot project to monitor fuel consumption patterns in selected fishing fleets in Thailand is currently in progress and case studies on reducing GHG emissions in aquaculture include improving food conversion ratios in tilapia, carp, catfish and salmon systems.

Climate change and fisheries and aquaculture

In line with the FAO Adapt Programme⁹, FAO is giving priority to identifying and reducing the vulnerability of fisheries and aquaculture systems through improving the resilience and adaptability of the fisheries and aquaculture sectors to climate variability and change and ocean acidification. These activities will support calls from recent sessions of regional bodies to 1) support policy, legal and implementation frameworks at local, national and regional levels to mainstream climate change into fisheries and aquaculture; 2) reinforce capacity of regional and national agencies and institutions to address climate change issues; 3) plan for adaptation and mitigation within Members' fisheries and aquaculture sectors; and 4) integrate fisheries and aquaculture into national climate change adaptation and mitigation plans and enabling financial mechanisms, such as through the National Adaptation Programmes of Actions (NAPA) and the supporting adaptation funds¹⁰.

Therefore, the FAO and partners have been working to identify climate change implications, vulnerabilities and context-specific adaptation strategies to improve the resilience of vulnerable aquatic ecosystems and their dependent communities, and that provide shoreline and riverine protection, food and nutrition security, maintenance of water quality, income and livelihoods services. Examples of related activities include 13 workshops ¹¹ around the globe, bringing together climate change experts with fisheries and aquaculture experts to review current scientific knowledge and define priorities activities to guide actions and investments in the near future. FAO has initiated and is continuing NAPA and UNFCCC National Communication fisheries and aquaculture implementation assistance in 11 countries/regions ¹²¹³. FAO continues to support the UNFCCC LDC Expert Group through its regional technical workshops and the UNFCCC National Adaptation Program (NAP) ¹⁴ initiation support through the development of NAP Guidelines for the Agriculture Sectors as well as through the GEF Global NAP Support Programme.

⁶ FAO. 2012. Report of the Expert Workshop on Greenhouse Gas Emissions Strategies and Methods in Seafood. Rome, 23–25 January 2012. FAO Fisheries and Aquaculture Report No. (also available at

¹⁰¹¹www.fao.org/docrep/017/i3062e/i3062e.pdf.(

 $^{^7}$ FAO. 2015. Report of the FAO Expert Workshop on Strategies and Practical Options for Greenhouse Gas Reductions in Fisheries and Aquaculture Food Production Systems.

⁸ Gulbrandsen, O. 2012. Fuel savings for small fishing vessels - a manual. Rome, FAO. 57 pp. see http://www.fao.org/docrep/017/i2461e/i2461e.pdf

⁹ http://www.fao.org/docrep/014/i2316e/i2316e00.pdf

¹⁰ Including the GEF LDCF, SCCF and the Green Climate Fund

¹¹ For proceedings of a Near East/North Africa workshop, see http://www.fao.org/docrep/014/i2146e/i2146e.pdf. For the Asia/Pacific workshop see http://www.apfic.org/uploads/2011-17.pdf

¹² For a review of the sector in NAPA, see FAO Fisheries and Aquaculture Circular No. 1064 http://www.fao.org/docrep/014/i2173e/i2173e.pdf

¹³ GEF LDCF/SCCF fisheries and aquaculture projects have been approved in the Bangladesh (PIF approved), Benguela region (project approved), Chile, (PIF approved), Eastern Caribbean (PIF approved), Malawi, (PIF approved), Myanmar (PIF approved).

¹⁴ http://unfccc.int/adaptation/workstreams/national adaptation plans/items/6057.php

2012-2015 publications include:

- Understanding water availability constraints in fresh water fishery and aquaculture for climate change planning A compilation of water- related indicators in selected countries. FAO Fisheries and Aquaculture Circular. (In preparation).
- Assessing climate change vulnerability in fisheries and aquaculture: available methodologies and their relevance for the sector. FAO Fisheries and Aquaculture Technical Paper 586. (In preparation).
- Report of the Expert Workshop on Strategies and Practical Options for Greenhouse Gas Reductions in Fisheries and Aquaculture Food Production Systems. Bergen, Norway, 4-5 March 2013. FAO Fisheries and Aquaculture Report. No. R1073. Rome, FAO. 2014.
- Disaster risk management and climate change adaptation in the CARICOM and wider Caribbean region – Formulating a strategy, action plan and programme for fisheries and aquaculture. Regional workshop 10–12 December 2012, Kingston, Jamaica. FAO Fisheries and Aquaculture Proceedings. No. 35. Rome. http://www.fao.org/3/a-i4369e.pdf
- Climate Change Adaptation in Fisheries and Aquaculture- Compilation of initial examples. FAO Fisheries and Aquaculture Circular C1088. Roma, FAO. http://www.fao.org/docrep/019/i3569e/i3569e.pdf
- Gap analysis of national and regional fisheries and aquaculture priorities and initiatives in Southern and Eastern Africa in respect to climate change and disasters. FAO Fisheries and Aquaculture Circular No. 1095. Rome, FAO. http://www.fao.org/3/a-i3756e.pdf
- Gap analysis of national and regional fisheries and aquaculture priorities and initiatives in Western and Southern Africa in respect to climate change and disasters. FAO Fisheries and Aquaculture Circular No. 1094. Rome, FAO. http://www.fao.org/3/a-i3753e.pdf
- Report of the FAO/PaCFA Expert Workshop on Assessing Climate Change Vulnerability in Fisheries and Aquaculture: Available Methodologies and their Relevance for the Sector, Windhoek, Namibia, 8–10 April 2013. FAO Fisheries and Aquaculture Report No. 1047. http://www.fao.org/docrep/018/i3357e/i3357e.pdf
- Priority adaptations to climate change for Pacific fisheries and aquaculture reducing risks and capitalizing on opportunities. FAO Fisheries and Aquaculture Proceedings 28. http://www.fao.org/docrep/017/i3159e/i3159e.pdf
- Social-ecological vulnerability of coral reef fisheries to climatic shocks. FAO Fisheries and Aquaculture Circular C1082. http://www.fao.org/docrep/018/ap972e/ap972e.pdf
- Vulnerability assessment methodologies: an annotated bibliography for climate change and the fisheries and aquaculture sector. FAO Fisheries and Aquaculture Circular 1083. http://www.fao.org/docrep/018/i3315e/i3315e.pdf
- Climate change implications for fisheries of the Benguela current region Making the best of change.
 FAO Fisheries and Aquaculture Proceedings 27. http://www.fao.org/docrep/017/i3053e/i3053e.pdf
- Climate change implications for fishing communities in the Lake Chad Basin What have we learned and what can we do better? FAO Fisheries and Aquaculture Proceedings 25. http://www.fao.org/docrep/017/i3037e/i3037e.pdf
- Fuel savings for small fishing vessels a manual.FAO. http://www.fao.org/docrep/017/i2461e/i2461e.pdf
- Building resilience for adaptation to climate change in the agriculture sector. FAO. http://www.fao.org/docrep/017/i3084e/i3084e.pdf
- Climate Smart Agriculture Sourcebook. FAO. http://www.fao.org/docrep/018/i3325e/i3325e.pdf
- Cambio climático, pesca y acuicultura en América Latina potenciales impactos y desafíos para la adaptación. FAO Actas de Pesca y Acuicultura No 29. http://www.fao.org/docrep/018/i3356s/i3356s.pdf

OPERATIVE PARAGRAPH 194

Post 2015 Development Agenda and Sustainable Development Goal on Oceans

The Report of the Open Working Group of the General Assembly on Sustainable Development Goals carries, among the proposed Goals and Targets, the ocean-specific Goal 14 "Conserve and sustainably use the oceans, seas and marine resources for sustainable development", which is considered by many

delegations as a success, as Goal 14 does provide for the expected stand-alone SDG on Oceans (or Blue Goal). As co-lead for the UN Oceans Technical Support Team to the OWG deliberations, FAO had contributed technical and policy suggestions to the formulation of Goal 14 and its targets, which in many cases were taken up during the negotiations. FAO, in its efforts to support discussions on the post-2015 development agenda and SDGs, had produced issue briefs on 14 themes relevant to sustainable development¹⁵, one of which was on fisheries, aquaculture, oceans and seas¹⁶.

FAO continues to engage in and support the main post-2015 intergovernmental negotiations which are leading up to the Post-2015 UN Summit in September 2015 during which the new Post-2015 Development Agenda including the SDGs will be adopted. In March 2015 the UN Statistical Commission established the Inter-Agency and Expert Group on Sustainable Development Goals (IAEG-SDGs) to facilitate the development of an indicator framework for the monitoring of goals and targets of the post-2015 development agenda at the global level. FAO has contributed suggestions for a range of indicators for the envisaged goals and targets including those of Goal 14 and in particular for fisheries-specific targets 14.4, 14.6, 14.7 as well as 14.b and 14.c. The IAEG-SDG met for the first time on 1-2 June 2015, and FAO supplied detailed methodological factsheets for each of the indicator proposals. The final selection of SDG indicators will be approved by the UN Statistical Commission in its next session, March 2016. FAO is also contributing to the preparation of the briefs for the UN Summit Interactive Dialogues, in particular to the theme: "Protecting our planet and combatting climate change: Promoting resilience and disaster risk reduction; promoting sustainable consumption and production; ensuring conservation and sustainable use of oceans, seas, biodiversity and ecosystems; addressing land degradation and desertification; and supporting sustainable cities and human settlements".

OPERATIVE PARAGRAPH 200

Ecosystem approach

The FAO has developed or supported the development of numerous normative products under the ecosystem approach to fisheries (EAF) framework to improve the understanding and furthering its implementation, more recently the EAF Toolbox.¹⁷

FAO continues to support the implementation of an ecosystem approach in a number of countries in Africa, Asia and Latin America, through a number of projects funded by extra budgetary resources.

Examples are provided below:

- The EAF Nansen project is an initiative to support the implementation of the ecosystem approach in the management of marine fisheries, mainly in Africa. To date, the project collaborates with more than 30 African coastal countries and 16 have finalised fisheries management plans coherent with the EAF principles. Thanks to the availability of the Research Vessel "Dr. Fridtjof Nansen", deployed in collaboration with the Institute of Marine Research (IMR) of Bergen, Norway, knowledge on the state of resources and ecosystems is provided to developing countries. Important data and information are being collected on marine resources and the marine environment in Myanmar with two cruises completed. Furthermore, the project supports capacity development on various aspects of fisheries research and management (institutional strengthening) in partner countries for them to be able to generate and use the knowledge required for EAF and to manage their fisheries following the EAF principles and methodologies. A key component of the project is the preparation of fisheries management plans for the implementation of EAF and the improvement of the fisheries management process in partner countries, including the use of best available knowledge and risk assessment to address ecological social and economic sustainability issues.
- Through the project Protection of the Canary Current Large Marine Ecosystem (CCLME) a draft Management Plan for the Shared Small Pelagic Fishery of Northwest Africa has been prepared in collaboration with the Sub-Regional Fisheries Commission. This document is the output of three

¹⁵ http://www.fao.org/post-2015-mdg/14-themes/en/

¹⁶ http://www.fao.org/post-2015-mdg/14-themes/fisheries-aquaculture-oceans-seas/en/

¹⁷ FAO, 2012. EAF Toolbox: The ecosystem Approach to Fisheries. Rome, 172 pp.

stakeholder workshops that identified overall sustainability objectives and the key issues to be addressed in order to achieve them.

- Through the Caribbean Large Marine Ecosystem (CLME) project a case study was implemented on the shared stocks of shrimp and groundfish fishery of the Guianas-Brazil shelf aimed at mainstreaming EAF in the management of the shrimp and groundfish resources. Funding request was submitted to GEF to provide further support to administrations to develop, complete and implement an EAF sub-regional management plan.
- Though The FAO component of the Mediterranean Sea LME (MEDLME) three main activity areas are carried out including (a) mainstreaming EAF into fisheries management and research, under which a number of trainings on EAF have been carried out, (b) increasing fisher's participation in fishery monitoring, thus increasing simultaneously the knowledge base, stakeholder participation and the legitimacy of management, and (c) addressing by-catch and discards in the Tunisian bottom trawl fishery in the Gulf of Gabes. The whole FAO component addresses the improvement of fisheries management through increased and improved implementation of the EAF in its multiple dimensions.
- Several additional projects are in the pipeline, such as the EAF Nansen Programme (Phase II, 2016-2020) and the Indonesian Sea LME, that include the adoption of the EAF as part of their work.
- FAO has supported Regional Fisheries Bodies (e.g. GFCM, APFIC) to formally adopt the EAF and its integrated principles as part of their mandate. For example, APFIC endorsed EAF as an approach at its 32nd Session¹⁸ and provided an overview of the way that APFIC/FAO member countries have embraced EAF and moved forward with it. Countries that explicitly embrace EAF include Malaysia, Australia, Indonesia, Philippines.
- FAO carried out reviews and supported the development of draft fisheries legislation in a number of countries and regions, in which the implementation of the EAF is particularly emphasized, including in Belize, Maldives and the South-West Pacific Region. In addition, FAO supported Uruguay in developing a law on responsible fisheries and aquaculture in accordance with the EAF. Law No. 19.175 on "Responsible Fisheries and Aquaculture promotion" entered into force on 7 January 2014. Follow up work on the development of regulations for artisanal fisheries has been undertaken.
- The EAF Nansen project carried out a review on the implementation of EAF in national legislation in Africa (Legislating for an ecosystem approach to fisheries A review of trends and options in Africa).
- The Review of current fisheries management performance and conservation measures in the WECAFC area including the implementation of EAF and integrated decision-making in the review.
- EAF Management Training Course developed by FAO through the Bay of Bengal Large Marine Ecosystem (BOBLME) Project, the National Oceanic and Atmospheric Administration (NOAA) and the United States Agency for International Development (USAID) through the U.S. Coral Triangle Initiative (USCTI) and the Coral Triangle Support Program (CTSP).¹⁹
- A training of trainers in the Asia-Pacific is proceeding with Malaysia, Philippines, Bangladesh, Sri Lanka, and Indonesia undertaking national training courses using the framework of the course already developed.

¹⁸ See http://www.fao.org/docrep/017/i3141e/i3141e00.pdf

⁻

¹⁹ Available online as a three volume training course at http://www.fao.org/3/a-i3778e.pdf; http://www.fao.org/3/a-i3780e.pdf; http://www.apfic.org/eeafm-materials/viewcategory/44-ecosystem-approach-to-fishery-management-training.html

OPERATIVE PARAGRAPH 204

Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication

The Voluntary Guidelines for Securing Sustainable Small Scale Fisheries in the Context of Food Security and Poverty Alleviation (SSF Guidelines) seek to enhance the contribution of small-scale fisheries to poverty alleviation, food and nutrition security, and economic growth. They support the empowerment of small-scale fishing communities, including both men and women and vulnerable and marginalized groups, to participate in decision-making, receive and benefit from rights and assume responsibilities for sustainable resource utilization and livelihoods developments.

Acting on to the recommendations of the 29^{th} and 30^{th} sessions of the FAO Committee on Fisheries, FAO hosted a technical consultation to develop the SSF Guidelines, from May 20-24 in 2013 and from 3-9 February in 2014. A total of 87 COFI members, 11 inter-governmental organizations, 4 international nongovernmental organizations and 59 representatives from civil society organizations attended the meetings. The resumed session in February confirmed the importance of empowering the small-scale fisheries sector to act as responsible steward of aquatic resources and to allow for a dynamic development of the sector. To achieve this, the meeting acknowledged the need for an inclusive and integrated approach which allows for the active participation of all stakeholders. The final text of the SSF Guidelines was endorsed by the 31^{st} session of COFI in June 2014^{20} .

During its 30th session, COFI had also noted the need to develop implementation strategies for the future SSF Guidelines at various levels including related policy reforms. It was also recalled that the 29th session of COFI had agreed to the establishment and implementation of a Global Assistance Programme (GAP) that would support this process. In accordance with the Committee's recommendations, FAO proposed the outline for such a Global Assistance Program to COFI at its 31st session in June 2014²¹. COFI agreed on the inclusive and consensus-seeking overall strategic approach and the structure of the GAP around four components: raising awareness; strengthening the science-policy interface; empowering stakeholders and supporting implementation. It also confirmed that the principles of the SSF Guidelines should be mainstreamed in policies and actions at all levels. COFI emphasized the role of governments in the implementation of the SSF Guidelines, as well as regional and local fisheries organizations to ensure ownership of the SSF Guidelines. It also recommended building on existing experiences and institutional structures and processes.

In December 2014, the FAO organized an expert workshop to further discuss elements of the Global Assistance Programme and is organizing a series of regional workshops to work towards the development of regional action plans as called for in the SSF Guidelines in 2015.

The FAO calls upon its Members to continue their active participation and support of the SSF Guideline development process and their subsequent implementation.

SECTION X - MARINE BIODIVERSITY

OPERATIVE PARAGRAPH 211

Areas beyond national jurisdiction program

Seeking to generate a catalytic change, in November 2011, the Council of GEF approved the "Global sustainable fisheries management and biodiversity conservation in the Areas Beyond National Jurisdiction Program" (ABNJ Program) – also known as "Common Oceans"²². The program, led by FAO working in close collaboration with two other GEF agencies, namely, UNEP and the World Bank, as well as several other partners, aims at promoting efficient and sustainable management of fisheries resources and biodiversity conservation in ABNJ to achieve the global targets agreed in international fora.

²⁰ http://www.fao.org/3/a-i4356e.pdf

²¹ www.fao.org/cofi/23150-0e78a70aab4c667a91d6ddf2eacad8405.pdf.

²² http://www.commonoceans.org/

The five-year Program, whose implementation started in 2014, is an innovative, unique and comprehensive initiative working with a wide range of partners. It is made up of four Projects which bring together governments, regional management bodies, civil society, the private sector, academia and industry to work towards ensuring the sustainable use and conservation of ABNJ biodiversity and ecosystem services.

OPERATIVE PARAGRAPH 211 - cont -

Deep-sea Fisheries and Areas beyond national jurisdiction

The FAO programme on deep-sea fisheries in areas beyond national jurisdiction focuses both on applying an ecosystems approach to fisheries and protecting marine biodiversity in the deep seas and has been ongoing since the adoption of FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas (Deep Sea Guidelines) in 2008. The full ranges of stakeholders and partners have been involved from the fisheries management community, the biodiversity conservation community, the fishing industry and RFMOs and others. The continued work on the implementation of the Deep Sea Guidelines encompasses the above mentioned programme as well as ongoing work focusing on sustainable use of these resources, prevention of significant adverse impacts and conservation of marine biodiversity in the deep seas. Particular work has been done on gathering best practices and assisting with capacity development and knowledge sharing in different regions on the protection of vulnerable marine ecosystems, including the use of the criteria for identification and appropriate management actions. Regional VME workshops have taken place in the western Indian Ocean (Flic and Flac, Mauritius, 2012), South East Atlantic Ocean (Swampkopmund, Namibia, 2013) and the North Pacific Ocean (Tokyo, Japan, 2014) areas. In December 2014, the Database on Vulnerable Marine Ecosystems (VME database) was launched²³. The VME database was developed in collaboration with the regional bodies with mandates to manage deep-sea fisheries in ABNI and provides interactive maps and factual information on management measures taken to reduce current or potential impact on areas where VMEs are known or likely to occur.

OPERATIVE PARAGRAPH 219

Taxonomic capabilities

Through the "FishFinder Programme" FAO produces user friendly species identification guides and catalogues for aquatic resources. In forty years FAO FishFinder has produced over 200 identification guides for commercial aquatic species and has compiled a unique and important archive of more than 40 000 scientific illustrations as well as distribution maps, taxonomic descriptions, biological and fisheries information for over 8 000 species.

The tools developed by FAO FishFinder are essential for the implementation of sound sampling and reporting schemes for fisheries and biodiversity assessments and for fishery catch statistics. The Programme prioritizes the production of species identification tools for non-experts in developing countries and has recently developed a number of new products, such as pocket guides, on-board identification sheets and a soon-to-be published shark fin guide based on automatic image recognition. The FishFinder Programme is interested in exploring novel species identification techniques as reflected in a recent review of twelve different methods used in fish identification (Fischer 2013).

At the basis of FAO FishFinder products are the global catalogues for selected species groups, e.g. for invertebrates like shrimps, cephalopods and sea cucumbers and for vertebrates like sharks and rays, many commercially important bony fish groups, mammals and sea turtles.

FAO FishFinder pocket guides make use of local knowledge and are a user-friendly tool for fishery officers and other non-experts to reliably identify aquatic species in the field. They are small, sturdy and water-proof and contain a selection of the most common commercially important marine or inland-water species in one country. Currently, pocket guides are available for Kenya, Tanzania and Liberia, and for Pakistan. Several new pocket guides are at a planning stage, including Equatorial Guinea and the Caribbean.

²³ http://www.fao.org/in-action/vulnerable-marine-ecosystems/en/

While the FAO FishFinder pocket guides facilitate the collection of fishery information by non-experts, the field guides are perfect instruments for biologists, well-trained fishery officers and resource users. They are much more comprehensive with regard to the number of species included and are essential for scientific studies of aquatic ecosystems, either for fisheries or ecological research. Therefore a FAO FishFinder field guide can play an important role in increasing a country's scientific capabilities and knowledge regarding its aquatic resources. The most recent FishFinder field guides are for Kenya and Pakistan.

FAO FishFinder collaborates with other FAO programmes and projects, e.g. those related to IPOA-Sharks, CITES, Guidelines for Deep-sea Fisheries in the High Seas and various inland fisheries projects. This is reflected in the recent production of identification tools for sharks, sea cucumbers, shark fins (iSharkFin), and deep-sea.

In addition to producing species identification tools, the FishFinder collaboration with the FAO Deep-Sea programme supports the taxonomic training of scientists, on-board observers, fishers and fishery officers through regional workshops (most recently in Mauritius in 2013 and 2014 and South Africa in 2015).

2012-2015 publications include:

- Anam, R. & Mostarda, E. 2012. Field identification guide to the living marine resources of Kenya. FAO Species Identification Guide for Fishery Purposes. Rome, FAO. 357 pp., 25 colour plates.
- Ebert, D.A. and Stehmann, M.F.W. 2013. Sharks, batoids, and chimaeras of the North Atlantic. FAO Species Catalogue for Fishery Purposes. No. 7. Rome, FAO. 523 pp.
- Ebert, D.A. and Mostarda, E. 2013. Identification guide to the deep-sea cartilaginous fishes of the Indian Ocean. FishFinder Programme, FAO, Rome. 76 pp.
- Ebert, D.A. and Mostarda, E. 2015. Identification guide to the deep–sea cartilaginous fishes of the Southeastern Atlantic Ocean. FishFinder Programme, FAO, Rome. 74 pp.
- Ebert, D.A. 2013. Deep–sea Cartilaginous Fishes of the Indian Ocean. Volume 1. Sharks. FAO Species Catalogue for Fishery Purposes. No. 8, Vol. 1. Rome, FAO. 256 pp.
- Ebert, D.A. 2014. Deep–sea Cartilaginous Fishes of the Indian Ocean. Volume 2. Batoids and Chimaeras. FAO Species Catalogue for Fishery Purposes. No. 8, Vol. 2. Rome, FAO. 129 pp.
- Ebert, D.A. 2015. Deep-sea Cartilaginous Fishes of the Southeastern Atlantic Ocean. FAO Species Catalogue for Fishery Purposes. No. 9. Rome, FAO. 251 pp.
- FAO. 2013 Report on the FAO Regional Workshop on the Development of Species Identification Guides for Deep-sea Cartilaginous Fishes of the Indian Ocean, Flic en Flac, Mauritius, 16–18 January 2013. FAO Fisheries and Aquaculture Report No. 1050. Rome. 31 pp.
- FAO. 2015. Report of the Regional Workshop on the Identification of Deep-sea Cartilaginous Fishes of the Indian Ocean. Albion, Mauritius, 10–13 June 2014. FAO Fisheries and Aquaculture Report No. 1091. Rome. 41 pp.
- Fischer, J. ed. 2013. Fish identification tools for biodiversity and fisheries assessments: review and guidance for decision-makers. FAO Fisheries and Aquaculture Technical Paper No. 585. Rome, FAO. 107 pp.
- iSharkFin: http://www.fao.org/fisherv/ipoa-sharks/iSharkFin/en
- Marshall, L., Ebert, D.A. and Guisande, C. In prep. Shark Fin Guide. FAO FishFinder.
- Psomadakis, P.N., Osmany H.B., Khan, W. 2014. Important coastal fishery species of Pakistan. A pocket guide. FAO FishFinder Programme. Rome, FAO. 63 cards + CD–ROM.
- Psomadakis, P. N., Osmani, H. and Moazzan, K. In press. Field Identification Guide to the Living Marine Resources of Pakistan. FAO FishFinder.
- Purcell, S.W., Samyn, Y. & Conand, C. 2012. Commercially important sea cucumbers of the world. FAO Species Catalogue for Fishery Purposes. No. 6. Rome, FAO. 150 pp. 30 colour plates.

With support from the EU FP7 iMarine initiative, BiOnym was developed to compare sets of scientific names against taxonomic reference lists including the Catalogue of Life. The goal of the comparison is to check the "correctness" of a set of scientific names with respect to the target taxa names and present suggestions for their correct spelling.

BiOnym is a complete framework that allows identifying and linking to Taxonomic Authority Files, composing the most appropriate matching order, and organizing the results. The framework approach allows to make BiOnym available in different constellations; from fully integrated in existing websites (e.g. to support FishBase) to complete mapping environments. The service exposed through FishBase is consulted some 20,000 times per month.

OPERATIVE PARAGRAPH 219 - cont -

Aquatic genetic resources

FAO is preparing the first State of the World's Aquatic Genetic Resources for Food and Agriculture (SoW AqGR) Report, through a country-driven process. As recommended by the Commission on Genetic Resources for Food and Agriculture (CGRFA), the scope will be on farmed aquatic species and their wild relatives in areas within national jurisdiction. Countries are also invited to provide a species list of nationally important aquatic genetic resources of capture fisheries in areas within national jurisdiction.

FAO's Director General invited all Member Countries to nominate National Focal Points who will be responsible for the preparation of Country reports. To facilitate the process, FAO prepared a questionnaire for the preparation of National Reports for the SoW AqGR, which are expected to be received by December 2015. Regional capacity building workshops for National Focal Points have been held in the Asia-Pacific region (Bangkok, March 2015), in the Latin America and Caribbean region (Guatemala, May 2015), and a workshop for the Africa region is scheduled to be held soon (Entebbe, July 2015). The presentation of the first SoW AqGR Report is scheduled for early 2017 at the 16th Regular Session of the CGRFA.

The work towards the preparation of the SoW AqGR Report should link to and build on the FAO Code of Conduct for Responsible Fisheries. This is on the agenda of the FAO's Committee on Fisheries' (COFI) Advisory Working Group on Aquatic Genetic Resources and Technologies which holds its first meeting in Brasilia from 1-2 October 2015, back to back with the 8th Regular Session of the COFI Sub-Committee on Aquaculture (5-9 October 2015).

OPERATIVE PARAGRAPH 222

Payments for ecosystem services

There is growing support for using markets to induce people to take account of the environmental costs of their behavior. Once such tool includes market-like "Payments for ecosystem services" (PES). PES schemes have been defined as voluntary and conditional transactions over well-defined ecosystem services between at least one supplier and one user. The basic idea behind these mechanisms is that the beneficiaries of an ecosystem service provision compensate the providers. Ecosystem services included most in market schemes so far include i) carbon sequestration in biomass or soils; ii) provision of habitat for endangered species; iii) protection of landscapes; and iv) various hydrological functions related to the quality, quantity, or timing of freshwater flows from upstream areas to downstream users.

PES have received a lot of academic attention in the recent years and are being adopted with great speed, and often without much critical discussion across the spectrum of conservation policy debate, developing a life of their own independent of its promulgators. In addition, the concept remains loose and many different conservation approaches are published under the 'PES label'. In addition, with an increasing global interest on placing monetary values on aquatic ecosystem services has come interest in the design of PES and other market based instruments to create economic incentives for conservation.

The FAO will develop a technical report to provide decision-makers and planners within the fisheries and aquaculture sector with an overview of the theory and practice of PES (through fisheries and aquaculture case studies) along with a critical analysis of the appropriateness and feasibility of PES as part of the fisheries and aquaculture management tool box within the ecosystem approach to fisheries and aquaculture.

OPERATIVE PARAGRAPH 223 AND 224

Spatial management measures

FAO developed technical guidelines on marine protected areas (MPAs) and fisheries²⁴ in 2011 and has conducted regional workshops in the western Indian Ocean, South East Asia and the Canary Current

²⁴ http://www.fao.org/docrep/015/i2090e/i2090e00.htm

region to bring the fisheries and biodiversity communities together to discuss common issues in relation to spatial management measures. FAO lead sessions on protected areas and food security including specific sessions focusing on fisheries and protected areas during the 2014 World Parks Congress held in Sydney, Australia, from 12 to 19 November 2014.

SECTION XI - MARINE SCIENCE

OPERATIVE PARAGRAPH 239

Collaborative platforms

FAO has played a leading role in the EU/FP7 funded iMarine initiative which develops a data-infrastructure enabling new forms of scientific data sharing and multidisciplinary collaborative science in support to policy development and implementation, towards goals of the Ecosystem Approach to fisheries management and conservation of living marine resources. By interconnecting all concerned actors operating in different domains (in particular fisheries, biodiversity, environment) around common data and information and multidisciplinary knowledge, this initiative is expected to foster the emergence of global partnerships and related community of practices, in support of big societal challenges facing responsible fisheries such as the ecosystem approach, or climate change. A White Paper on a Public Partnership business model has been produced to address the sustainability of the iMarine initiative expected to primarily rely on a public partnership between IT specialized institutions and global, regional, and national marine knowledge institutions such as FAO, IOC, EC, ICES, and other Regional Fishery Bodies, WFC, IRD, VLIZ.

As follow-up to this White Paper, an MoU is under development between FAO and CNR (the Italian Consiglio Nazionale delle Ricerche owning the IT platfom) with the goal to maintain the iMarine operational beyond the project, and to further shape an iMarine.org Partnership.

Another result of this collaboration is the recently granted EU H2020 BlueBridge project. This project will extend the iMarine platform with concrete services developed for well-defined communities in the EAF, EAA and Blue Growth domains. The project will incorporate, and where necessary adapt, existing data work-flows to meet with $21^{\rm st}$ century data and computing needs. This implies opening data, sharing computing resources, and relying on open source software to support reproducible work-flows. It has a very practical approach, and builds on the iMarine infrastructure to deliver solutions for existing problems.

BlueBRIDGE products will include the Global Record of stocks and fisheries, an adaptable Regional DataBase for Fisheries Management support (RDB), semi-automated processing of geospatial data (including remote sensing) to support inventories of aquaculture systems (e.g. cages), and a dedicated spatial planning environment that can access and share data from all of the above. BlueBRIDGE recognizes the need for technology and knowledge transfer to resource poor entities, and dedicates a significant amount to the incorporation of an educational environment in the fisheries domain, based on the shared experience of ICES (a full consortium partner) training and extension programs. BlueBRIGDE will offer these training courses also to provide a base for Regional DataBases, where participants immerse in a training environment to define and design a solution that meets their specific environment, e.g. through identified opportunities in the WECAFC and BOBLME projects.

OPERATIVE PARAGRAPH 180, 250 AND 251

Increasing the resilience of livelihoods to disaster

A recent FAO publication²⁵ estimates that the agriculture sector – including crops, livestock, fisheries and forestry – absorbs approximately 22 percent of the economic impact caused by medium- and large scale natural hazards and disasters in developing countries. Through one of its five strategic objectives, FAO helps to increase the resilience of livelihoods to threats and crises affecting the agricultural sectors. Fishers, fish workers and their communities are particularly vulnerable to natural disasters such as storms, and cyclones/hurricanes, while inland fisheries and aquaculture can be significantly affected by

²⁵ http://www.fao.org/3/a-i4434e.pdf

droughts and floods. With climate change, both the severity and the frequency of these hazards are likely to increase. Disease outbreaks have cost the aquaculture industry tens of billions dollars over the last 20 years. The fisheries and aquaculture sector is also at risk from other disasters of human origin such as oil spills, conflicts and HIV/AIDS.

In line with FAO's commitment to the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030, the UNFCCC processes related to adaptation in which disaster risk reduction is considered as complementary action and essential for climate change adaptation, the post-2015 framework, and in collaboration with the World Organization for Animal Health (OIE), FAO is supporting regional organisations and member countries in strengthening institutions, communities, ecosystems and livelihoods systems around four main pillars. These are:

- 1. <u>Enable the environment</u> Institutional strengthening and governance of risk and crisis in agricultural sectors.
- 2. <u>Watch to safeguard</u> Information and early warning systems on food and nutrition security and transboundary threats.
- 3. <u>Apply risk and vulnerability reduction measures</u> Protection, prevention, mitigation and building livelihoods with technologies, approaches and practices across all agricultural sectors.
- 4. <u>Prepare and respond</u> Preparedness for and response to crises in all agriculture sectors.

In the fisheries and aquaculture sectors, examples of recent activities include the development and publication of the FAO Fisheries and aquaculture emergency response guidance. The guidance draws on best practice and lessons learned during response to disasters that have affected fisheries and aquaculture sector. The guidance was published in 2014 and a first Training of Trainers (TOT) course was rolled in March 23-28 2015. In the Caribbean, at the request of the Caribbean Regional Fishery Mechanism (CRFM), FAO supported countries in the region with the formulation of a Regional Strategy, Action Plan and Programme Proposal on Disaster Risk Management and Climate Change Adaptation in Fisheries and Aquaculture, which was subsequently adopted by CRFM (2014). FAO provides technical support to response to emergencies such as after cyclone Haiyan in the Philippines (2013-2014 ongoing) and to food insecurity situations in South Sudan and CAR (ongoing). The types of interventions cut across all technical areas of the work of the Organization and comprise for instance improving the safety of the fishing vessels and fishers in the aftermath of a disaster through better design and construction of fishing vessels and training and awareness raising of the crews and their families, introducing more responsible and safe fishing practices and technologies, strengthening fisheries management taking into account disaster and climate change risks, community based planning and access to microfinance and social protection schemes, diversifying and strengthening livelihoods through improved fish post-harvest, value-adding and alternative livelihood options, and building capacity in disaster preparedness and response.

Bibliography:

- FAO Fisheries and Aquaculture Proceedings No. 35. 2015. Disaster risk management and climate change adaptation in the CARICOM and wider Caribbean region: Formulating a strategy, action plan and programme for fisheries and aquaculture. Regional workshop 10–12 December 2012, Kingston, Jamaica. Rome. 123 pp: http://www.fao.org/3/a-i4369e/index.html
- McConney, P., Charlery, J., Pena, M., Phillips, T., Van Anrooy, R., Poulain, F., Bahri, T. 2015. Disaster risk management and climate change adaptation in the CARICOM and wider Caribbean region – Strategy and action plan. Rome. 29 pp.
- McConney, P., Charlery, J., Pena, M., Phillips, T., Van Anrooy, R., Poulain, F., Bahri, T. 2015. Disaster risk management and climate change adaptation in the CARICOM and wider Caribbean region – Programme proposals. Rome. 21 pp.
- Cattermoul, B.; Brown, D. & Poulain, F. (eds). 2014. Fisheries and aquaculture emergency response guidance: review recommendations for best practice. FAO Workshop, 15–16 March 2012, Rome. FAO Fisheries and Aquaculture Proceedings No. 30. Rome, FAO. 449 pp. http://www.fao.org/3/a-i3431e.pdf
- FAO Fisheries and Aquaculture Circular No. 1095. 2014. Gap analysis of national and regional fisheries and aquaculture priorities and initiatives in Southern and Eastern Africa in respect to climate change and disasters. Rome, FAO. 100 pp. http://www.fao.org/3/a-i3756e.pdf

- FAO Fisheries and Aquaculture Circular No. 1094. 2014. Gap analysis of national and regional fisheries and aquaculture priorities and initiatives in Western and Central Africa in respect to climate change and disasters. Rome, FAO. 107 pp. http://www.fao.org/3/a-i3753e.pdf
- FAO. 2014. Report of the FAO/NEPAD Workshop on Climate Change, Disasters and Crises in the Fisheries and Aquaculture Sector in Southern and Eastern Africa, Maputo, Mozambique, 22–24 April 2013. FAO Fisheries and Aquaculture Report/FAO Rapport sur les pêches et l'aquaculture No. 1055. Rome. 86 pp http://www.fao.org/3/a-i3843b.pdf
- FAO. 2014.Report of the FAO/NEPAD Workshop on Climate Change, Disasters and Crises in the Fisheries and Aquaculture Sector in West and Central Africa, Accra, Ghana, 1–2 November 2012. FAO Fisheries and Aquaculture Report/FAO Rapport sur les pêches et l'aquaculture No. 1037. Rome. 84 pp. http://www.fao.org/3/a-i3239b.pdf
- Brown, D. & Poulain, F. (eds). 2013. Guidelines for the fisheries and aquaculture sector on damage and needs assessments in emergencies. Rome, FAO. 114 pp. http://www.fao.org/3/a-i3433e.pdf
- Cattermoul, B.; Brown, D. & Poulain, F. (eds). 2014. Fisheries and aquaculture emergency response guidance. Rome, FAO. 167 pp.
- FAO Fisheries and Aquaculture Circular. No. 1081. 2013. The vulnerability of fishing-dependent economies to disasters. Rome, FAO. 19 pp. http://www.fao.org/docrep/018/i3328e/i3328e.pdf
- Westlund, L.; Poulain, F.; Bage, H.; van Anrooy, R. Disaster response and risk management in the fisheries sector. FAO Fisheries Technical Paper. No. 479. Rome, FAO. 2007. 56p. Rome, FAO. 2007. 56p http://www.fao.org/docrep/010/a1217e/a1217e00.htm
- State of World Fisheries. 2011. http://www.fao.org/docrep/016/i2727e/i2727e02.pdf

OPERATIVE PARAGRAPH 280

System of Environmental and Economic Accounting

The 2013 United Nations Statistical Commission adopted the System of Environmental and Economic Accounting (SEEA) Central Framework as the global standard to monitor sustainable use of natural resources. FAO actively participated in the process of developing SEEA Central Framework to ensure coherence as much as possible in overall concepts utilized in SEEA asset account of aquatic biological resources with those in UNCLOS. FAO is currently in a process of developing an implementation guideline of SEEA in fishery and aquaculture context as well as use-case scenarios of SEEA data to support sustainable management of fishery and aquaculture sectors. It also plans to compile SEEA for fishery and aquaculture using the existing data to obtain globally comparable indicators of sustainability of aquatic biological resource use including marine resource.

SECTION XIII - REGIONAL COOPERATION

Regional Cooperation for Sustainable Fisheries and Aquaculture in the Red Sea and Gulf of Aiden

On 24 to 25 June 2002, PERSGA held a regional meeting in Jeddah to discuss the possibility of establishing a fishery management arrangement for the Red Sea and Gulf of Aden. The representatives of PERSGA Member countries attending that meeting unanimously agreed to set up a regional mechanism for the management of the Red Sea and Gulf of Aden fisheries, whose membership would embrace the Red Sea Littoral Arab and Africa States. At the 28th Session of the COFI, held from 2 to 6 March 2009, "Some members called for the establishment of a regional fishery body to bring together the coastal States of the Red Sea. The body would promote cooperation and management for sustainable fisheries similar to other regions".

In 2009 FAO established a Task Force to work on this matter and the Regional Office for Near East and North Africa took lead and a partnership was established with PERSGA to organize the 1st Regional Intergovernmental Meeting to Initiate the Establishment of a Red Sea and Gulf of Aden Fishery Management Arrangement (Jeddah, Kingdom of Saudi Arabia, 28 – 30 November 2011). The meeting reached consensus on the need to establish a regional fisheries mechanism. It was also agreed that the fisheries mechanism should have a management mandate capable of adopting measures for the sustainable management of marine fisheries and the development of aquaculture on the Red Sea and Gulf of Aden. At the 32nd Regional Conference for the Near East and North Africa held in Rome from 24 to 28

February 2014, specific reference to this RFMO was made, and finally in 2014 Egypt has officially requested FAO to continue supporting the process and to convene the 2nd Regional Meeting in 2014 in Egypt.

The 2nd Regional Consultative Meeting was held 22-24 June 2014 in Cairo, Egypt. The regional consultation agreed the outline for the envisaged regional fisheries management agreement and for a zero draft to be formulated by FAO in coordination with the members of the purposely established Coordination Group, notably: Egypt, Saudi Arabia, Sudan, and PERSGA.

SECTION XV - COORDINATION AND COOPERATION

OPERATIVE PARAGRAPH 299 AND 302

Blue Growth

A framework for the future

Building on the challenges identified in the Rio+20 outcome document *The Future We Want* and the post-2015 development agenda, FAO has launched the "Blue Growth Initiative" (BGI) as a coherent approach for the sustainable, integrated and socio-economically sensitive management of the living aquatic resources of oceans and wetlands. The BGI focuses on four components: capture fisheries, aquaculture, ecosystem services, food systems and livelihoods of coastal communities. Investing in Blue Growth – the sustainable management and use of living aquatic resources and the adoption of ecosystem approaches – can help to reduce stressors and restore the functions and structure of aquatic ecosystems. The initiative is of particular significance to small-island developing States and to coastal areas and wetlands around the globe. It offers an integrated approach in response to the increasing need for cooperation and coordination among all stakeholders and at all levels for more sustainable fisheries management and more effective conservation. It is an approach that could reap an estimated potential economic gain of US\$50 billion per year for fisheries alone. In addition, Blue Growth can further the capacity development efforts needed to strengthen the policy environment, institutional arrangements and the collaborative processes that empower fishing and fish farming communities, civil society organizations and public entities.

Grounded in the principles of the Code of Conduct for Responsible Fisheries and its associated guidelines and plans of actions, the BGI provides a global framework to promote responsible and sustainable fisheries and aquaculture. It will assist its Members and regional institutions in developing, fostering and implementing their blue economy agenda to help turn commitment into action. Blue Growth builds on the three pillars underpinning sustainable development by addressing the environmental, social and economic issues and challenges facing the sustainable and responsible management of living aquatic resources. This translates into recognizing and addressing the rights of those dependent on fisheries and aquaculture for their livelihoods – some 12 percent of the world's population. These rights relate to tenure, income, market access, and decent living and working conditions. By dynamically supporting an integrated approach, Blue Growth can foster and sustain the valuable contribution of oceans, seas and coasts to food security, nutrition and decent employment for future generations.

Global Network for Action on Blue Growth and Food Security

Following the launch of the FAO BGI in 2013, the Initiative and its concepts have been at the centre of international consultations, including the "Asia Conference on Oceans, Food Security and Blue Growth (18–21 June 2013, Bali, Indonesia)", the "First Blue Economy Summit (19–20 January, Abu Dhabi, United Arab Emirates)", the "Global Oceans Action Summit for Food Security and Blue Growth (22–25 April 2014, The Hague, Netherlands)", the John Kerry's "Our Ocean" Conference (16–17 June 2014), the "UN Conference on SIDS (1–4 September 2014, Apia, Samoa)", the "Workshop for the Development of a Voluntary Global Alliance/Network for Actions on Blue Growth and Food Security (8 – 9 September 2014, Jakarta, Indonesia)", the "Launch of the Global Action Network on Blue Growth and Food Security (27–30 January 2015, St George's, Grenada)". Concurrently, the Blue Growth concept has become important in the oceanic and freshwater development strategies of international organizations such as UNEP, the World Bank, OECD, the European Union, GEF, and many nations, both developed and developing.

The Global Action Network (GAN), formally launched at the Strategy Meeting for Action on Blue Growth and Food Security that was held in Grenada in March 2015, identified three Action Groups to address respectively i) BG + Essentials facilitated by Netherlands, FAO, Portugal and World Fish, ii) Investment Readiness Facility facilitated by Grenada, World Bank and WorldFish, iii) Knowledge & Technology facilitated by Cabo Verde, FAO and Rare. These groups have met recently in Lisbon during the Blue week in June 2015 to discuss the way forward. The GAN expects to organize a side event on BGI at a meeting to to be held in Chile in 2015.

OPERATIVE PARAGRAPH 302 AND 303

UN-Oceans

FAO has been an active participant in UN-Oceans since it was established. In line with the UN-Oceans Work Programme for the 2014-2015 period and as mandated in the revised terms of reference, FAO, together with the other UN-Oceans members, continues to work towards the development of the "inventory of the mandates and priorities approved by the respective governing bodies of UN-Oceans participating organizations with a view to identifying on-going and planned activities in respect of those mandates and priorities, and making this inventory available on the UN-Oceans website". FAO developed and funded the initial version of the electronic platform for the inventory in the form of a user-friendly online searchable database detailing the mandates and the activities of each of the members of UN-Oceans. As a follow up to the 14th meeting of the UN-Oceans held in London in March 2015, FAO is now in the process of refining the initial version of the database.

FAO is the Secretariat of the UN Atlas of the Oceans, a web portal developed under the authority of UN-Oceans which allows UN-Oceans members to provide relevant information on their respective activities with regards to the sustainable development of the oceans. FAO also hosts and manages the UN-Oceans website in consultation with UN-DOALOS.

OPERATIVE PARAGRAPH 302 - cont -

Global Forum on the Governance of Tenure in Fisheries (UserRights 2015)

FAO and the Government of Cambodia co-organized the international forum "Tenure and Fishing Rights" (UserRights 2015) in Siem Reap, Cambodia, 23-27 March 2015. The purpose of the forum was to advance and consolidate knowledge on the governance of tenure as well as the available rights-based arrangements that can promote social, environmental and economic sustainability in fisheries.

The 140 participants from 38 countries assessed the importance of tenure and rights for responsible resource management and equitable development in fisheries. The participants analysed how different types of rights-based systems and arrangements have worked in different settings and under different conditions to influence varying social, environmental and economic sustainability outcomes. Participants also shared their experiences about best practices for rights-based tenure systems and their implementation.

Designed as an interactive event, the programme consisted of: scene-setting presentations that focused on the main elements, challenges and best practices of tenure and rights in fisheries; discussion panels that provided a diverse range of perspectives from various stakeholders, including governments, gender specialists, CSOs; and working groups which held plenary discussions about their results.

In the weeks following the forum in Cambodia, a participants' survey indicated that a regular series of regional forums should occur every two to three years and with a more global discussion to be held every five to six years, and that. The top three areas for future work identified by participants were allocation: processes and implications (55%); the political economy of adopting and implementing rights-based systems for fisheries' (40%); and training for capacity development of rights-based systems (40%). Additional areas for future work included capacity development; financing transitions to rights-based systems and sustainable fisheries; and identifying alternative business or livelihood strategies for communities directly and indirectly dependent on fisheries.