

**Workshop to discuss implementation of paragraphs 80 and 83 to 87 of resolution 61/105 and paragraphs 117 and 119 to 127 of resolution 64/72 on sustainable fisheries, addressing the impacts of bottom fishing on vulnerable marine ecosystems and the long-term sustainability of deep-sea fish stocks**

**Summary of the Moderator<sup>1</sup>**

1. The Workshop to discuss implementation of paragraphs 80 and 83 to 87 of resolution 61/105 and paragraphs 117 and 119 to 127 of resolution 64/72 on sustainable fisheries, addressing the impacts of bottom fishing on vulnerable marine ecosystems and the long-term sustainability of deep-sea fish stocks was convened in accordance with paragraph 128 of General Assembly resolution 64/72 of 4 December 2009. It was held at United Nations Headquarters in New York on 15 and 16 September 2011.
2. The Workshop was attended by representatives of 43 States, 19 intergovernmental organizations and other bodies, including regional fisheries management organizations and arrangements (RFMOs), and 12 non-governmental organizations. Ms. Alice Revell, Permanent Mission of New Zealand to the United Nations, was appointed as Moderator of the Workshop.
3. In accordance with the Organization of work,<sup>2</sup> the Workshop was comprised of six thematic segments. Each segment was introduced by presentations from relevant experts,<sup>3</sup> followed by a general discussion among participants.

**Impacts of bottom fisheries on vulnerable marine ecosystems and the long-term sustainability of deep-sea fish stocks (Segment 1)**

4. In Segment 1, presentations were made by: Ms. Ellen Kenchington (Bedford Institute of Oceanography, Department of Fisheries and Oceans, Canada); Mr. Odd Aksel Bergstad (Institute of Marine Research, Norway); Ms. Merete Tandstad (Food and Agriculture Organization of the United Nations (FAO)); Ms. Karen Sack (Pew Environment Group) and Mr. Matthew Gianni (Deep Sea Conservation Coalition); and Mr. Alastair Macfarlane (International Coalition of Fisheries Associations (ICFA)).
5. Participants discussed the characteristics, status and vulnerability of deep-sea habitats and species and the impacts of bottom fishing on vulnerable marine ecosystems (VMEs). Although considerable efforts had been made to increase scientific knowledge on VMEs, including the cartographic and bathymetric mapping of the distribution of VMEs, it was noted that gaps in knowledge still existed. The need for further research on the location and characteristics of VMEs and on the scale and impacts of bottom fishing activities was emphasized. In particular, participants stressed the need for fisheries-independent research, monitoring, recovery studies and stock assessments. It was noted that the cost of research could be a barrier, especially in the high seas and for developing countries. Difficulties in determining data on deep sea catches for the high seas were also emphasized as this data was usually not reported separately from data on catches within EEZs.

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<sup>1</sup> The summary is intended for reference purposes only and not as a record of the discussions.

<sup>2</sup> Available at [www.un.org/Depts/los/reference\\_files/workshop\\_fisheries\\_2011.pdf](http://www.un.org/Depts/los/reference_files/workshop_fisheries_2011.pdf).

<sup>3</sup> The presentations of panellists at the Workshop are available at: [www.un.org/Depts/los/reference\\_files/2011\\_fisheries\\_wrkshp\\_panellists.pdf](http://www.un.org/Depts/los/reference_files/2011_fisheries_wrkshp_panellists.pdf).

6. Participants noted that deep-sea catches were declining in some areas and it was suggested that expansion of bottom fishing into deeper waters was unlikely due to a variety of factors, including gear limitations. Several participants stressed that damage to VMEs and the depletion of fish stocks was already evident and that recovery would take decades in some cases, if not longer. Participants discussed trade-offs and the relative value of bottom fishing in light of environmental concerns and economic returns. Participants also discussed the spatial impact of bottom fishing activities in areas beyond national jurisdiction. It was noted that technological advances in fishing gear and practices, as well as the use of predictive modeling to identify VMEs, could help to reduce the impacts of bottom fishing activities. The important role of the fishing industry in food security was emphasized and the industry's interest in maintaining consumer confidence was noted.

7. Participants drew attention to the need for effective conservation and management measures to protect VMEs and ensure the long-term sustainability of deep-sea fish stocks. Challenges in adopting measures to reduce the catch of target and non-target species were highlighted. In this context, participants also discussed the applicability of coastal States measures in the regulation of deep-sea stocks in areas beyond national jurisdiction.

8. Many participants noted that considerable progress had been made by States and RFMOs in the implementation of General Assembly resolutions 61/105 and 64/72, including the establishment of new RFMOs and the adoption of measures by RFMOs that limit bottom fishing activities to existing fishing areas. Significant work had also been undertaken by FAO. It was generally recognized, however, that further actions were needed to fully implement the resolutions and the 2008 FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas (FAO Guidelines).

9. Many participants expressed the view that, if fully implemented, the resolutions and the FAO Guidelines provided the necessary tools to protect VMEs from significant adverse impacts due to bottom fishing and ensure the long-term sustainability of deep-sea fish stocks. Several participants noted specific challenges, including gaps in scientific knowledge, the need for technical assistance, and resource constraints, as well as shortcomings in implementation, in particular regarding impact assessments, area closures and encounters with VMEs. It was suggested that the cumulative impacts of fishing activities were not sufficiently taken into account in impact assessments. Some participants indicated that encounters with dead structural organisms, such as dead corals, should be considered in VME encounter protocols. Challenges were also noted in identifying encounters with VMEs and in measuring negative impacts on rare species.

10. The need for precautionary, not reactionary, measures was also emphasized, in particular area closures. The view was expressed that States should not authorize bottom fishing activities until proper regulatory measures were in place to protect VMEs and ensure the long-term sustainability of deep-sea fish stocks. The need to respect the sovereign rights of coastal States over the continental shelf in the conduct of bottom fishing activities and marine scientific research was also emphasized.

11. The impacts of resolutions 61/105 and 64/72 on the actions taken by States, RFMOs and industry operators were highlighted. Participants discussed the need for both policy guidance and technical assistance, but divergent views were expressed on the role of the General Assembly in the consideration of these issues. Some participants supported further review of the implementation of the resolutions by the General Assembly, given the need for globally coherent policy guidance, the cross-cutting nature of the issues and the range of interests affected. Other

participants emphasized that regulation was becoming increasingly technical and should be undertaken by specialized entities, such as the FAO and RFMOs. Several participants suggested that further review of the implementation of the resolutions should be conducted by the FAO, given the technical nature of the discussions, and that the FAO should facilitate discussions among States, RFMOs and relevant industry groups on future actions.

### **Experience of States in addressing the impacts of bottom fisheries on vulnerable marine ecosystems and the long-term sustainability of deep-sea fish stocks (Segment 2)**

12. In Segment 2, many States described actions that had been taken to implement the relevant paragraphs of resolutions 61/105 and 64/72. A presentation was also made by Mr. John Brincat (European Commission) on the experience of the European Union in addressing bottom fisheries impacts. Some States indicated that they either did not authorize, or did not engage in, bottom fishing in areas beyond national jurisdiction. A number of States stressed the importance of implementing the resolutions within areas of national jurisdiction and described actions that had been taken within their exclusive economic zones, including the closure of areas to bottom fisheries.

13. It was generally recognized that progress had been made by States, individually and through RFMOs, to implement the resolutions. Particular attention was drawn to the adoption of measures relating to area closures, impact assessments, mandatory observer coverage, and encounter protocols. Participants highlighted the importance of adopting measures based on the best available scientific information, as well as the need to apply precautionary and ecosystem approaches. Participants also provided information on specific measures taken to ensure the long-term sustainability of deep-sea fish stocks, including gear restrictions, limits on fishing capacity, data collection and monitoring and control.

14. Some participants provided specific information on measures that had been adopted to implement resolutions 61/105 and 64/72 in areas where no competent RFMOs existed. Efforts to conduct scientific research in these areas were highlighted, including actions taken to unilaterally close areas to bottom fishing activities following the identification of areas containing VMEs through seabed mapping programmes. Information was also provided on interim measures that had been adopted by participants in negotiations to establish new RFMOs to regulate bottom fishing activities. Some participants called for the early entry into force of the instruments to establish new RFMOs, in particular in the Southern Indian Ocean, the South Pacific Ocean and the North Pacific Ocean. Other gaps in RFMO coverage were highlighted, including in the Southwest Atlantic Ocean and, in this regard, participants emphasized the need for States to cooperate, in accordance with the 1982 United Nations Convention on the Law of the Sea.

15. Many participants stressed that, despite the progress achieved, further efforts were needed to fully implement the resolutions. Some participants expressed concerns over the slow pace of implementation of the resolutions. It was generally recognized that there was a need for further scientific information and data on the location and characteristics of VMEs, including clear definitions of VMEs. In this context, participants discussed possible adverse impacts to VMEs during survey or exploratory activities and the relative costs and benefits of such activities. Some participants highlighted the utility of predictive modelling in determining the spatial pattern of VMEs, while other participants noted the need to verify such modelling exercises.

16. Challenges in the application of encounter protocols and “move-on rules” were highlighted, including threshold levels that were too high in triggering encounters with VMEs and move-on distances that were arbitrary. Difficulties in identifying the location of VMEs and in

lack of reporting were also noted. In addition, problems were observed in attempting to apply the same criteria in different regions. Many participants stressed that, given the length of some bottom fishing tows, move-on rules did not provide adequate protection for VMEs, in particular in new fishing areas. It was suggested by some participants that encounter protocols should be limited to existing fishing areas and that threshold levels should be reduced. The need to take into account differences in regional features and taxa in the development and application of these management tools was emphasized.

17. Some participants described challenges in adopting measures to ensure the long-term sustainability of deep-sea fish stocks. Participants noted, in particular, difficulties in determining sustainable levels of fishing effort, as well as high levels of by-catch and discards in certain fisheries. The vulnerability of some stocks to fishing was also noted. Participants highlighted challenges due to illegal, unreported and unregulated (IUU) fishing and shared information on vessels that had been engaged in bottom fishing when the flag State could not be determined. Some participants suggested that bottom fishing in contravention of the General Assembly resolutions should be considered to be IUU fishing. A number of participants also highlighted concerns over the use of harmful subsidies, which encouraged bottom fishing to continue where it would not otherwise be economic.

18. Some participants highlighted difficulties in evaluating the effectiveness of recently adopted measures to implement the resolutions, including lack of data and scientific information. In this regard, the need for technical support to achieve adequate implementation of the FAO Guidelines was emphasized. Some participants stressed the need for time to study the effectiveness of adopted measures, while other participants indicated that reviews would be conducted on the basis of experience already gained, as well as developments in international fora.

### **Experience of RFMOs in addressing the impacts of bottom fisheries on vulnerable marine ecosystems and the long-term sustainability of deep-sea fish stocks (Segment 3)**

19. In Segment 3, presentations were made by: Mr. Andrew Wright (Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)); Mr. Stefán Ásmundsson (North East Atlantic Fisheries Commission (NEAFC)); Mr. Vladimir Shibanov (Northwest Atlantic Fisheries Organization (NAFO)); Mr. Shingo Ota (Interim Secretariat for the Conservation and Management of High Seas Fisheries Resources in the North Pacific Ocean (NPFC)); Ms. Karen Sack (Pew Environment Group) and Mr. Matthew Gianni (Deep Sea Conservation Coalition); and Mr. Ross Shotton (Southern Indian Ocean Deepsea Fishers Association (SIODFA)).

20. Representatives of RFMOs provided information on measures that had been taken to implement resolutions 61/105 and 64/72, including impact assessments, identification of VMEs, area closures and encounter protocols, as well as fisheries management measures, such as catch, fishing effort and gear limits. In some RFMOs, the regulated area had been divided into new and existing fishing areas, and closures had been put in place where bottom fishing was not allowed. New areas had been effectively closed and were subject to impact assessments before fishing activities could take place. Efforts to identify VMEs within existing fishing areas were also ongoing. In some RFMOs, the assessment of the impact of bottom fishing in existing fishing areas had been conducted by the organization and not by individual States. Information was also provided to clarify how the cumulative impact of bottom fishing activities had been taken into account in the encounter protocol of one RFMO.

21. Many participants welcomed the progress that had been made by RFMOs in the implementation of the resolutions.<sup>4</sup> Several participants emphasized the important role of RFMOs in the management of bottom fisheries and the implementation of resolutions 61/105 and 64/72. Some participants stressed that RFMOs represented the most appropriate fora to address these issues, since they had the mandate to set legally binding measures and were already accepted by the fishing industry, making compliance more likely. Other participants noted that the language in the resolutions had assisted States and RFMOs in addressing these issues and indicated that future work by the General Assembly could also be useful.

22. It was generally recognized that further efforts were needed in RFMOs to fully implement the resolutions. Information was presented on the sufficiency of the measures that had been adopted by RFMOs, including in regards to impact assessments, area closures, encounter protocols and the sustainability of fish stocks. Challenges faced by RFMOs in the implementation of the resolutions were also noted, including lack of scientific information and data, the costs of research activities and the need for greater clarity in definitions and terminology (e.g. what constitutes a “VME” or a “significant adverse impact”; which species are “VME indicators”).

23. It was suggested that some RFMOs had been more effective in the implementation of the resolutions than others. Some participants noted differences in the mandates and objectives of RFMOs. It was noted, in particular, that the principal objective of the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) was conservation – including rational use – and that it was unique in being part of the Antarctic Treaty System. Efforts by other RFMOs to modernize, including in response to resolutions 61/105 and 64/72, were also highlighted. Some participants urged RFMOs to modernize their mandates and focus more on conservation. It was noted that some RFMOs were already reviewing the measures that had been taken to protect VMEs in light of existing experience and lessons learned.

24. Some participants indicated that implementation of the resolutions was an ongoing and gradual process. Other participants emphasized, however, that some of the commitments contained in resolutions 61/105 and 64/72 reflected long-standing obligations already found in existing international instruments, including the United Nations Fish Stocks Agreement, as well as in Agenda 21 and the Johannesburg Plan of Implementation.

25. Several participants stressed the need for transparency in the actions taken by RFMOs to conduct impact assessments, identify VMEs and adopt and implement measures to ensure the protection of VMEs. Some participants questioned the comprehensiveness of impact assessments and emphasized the need for RFMOs to make their activities more publicly available and for assessments to be conducted more frequently or on a regular basis. The need to ensure the confidentiality of commercially sensitive data was highlighted, as well as the need to ensure that assessments were properly conducted. It was suggested that the fishing industry would be motivated to produce fisheries information and data in some RFMOs in order for new fishing areas to open.

26. Some participants provided information on the actions taken by industry organizations to regulate fisheries and protect VMEs in areas where RFMOs did not exist, including impact assessments, fishing effort and data collection. The role of self-regulation in the fishing industry was noted, although it was emphasized that legally binding regulations were the preferred option.

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<sup>4</sup> The Southeast Atlantic Fisheries Organization (SEAFO) was not present at the Workshop and could not respond to remarks regarding management in the SEAFO Convention area.

Participants also discussed the need for appropriate incentives for the fishing industry to improve compliance with conservation and management measures, such as through the provision of secure fishing rights. Some participants also highlighted the role of consumers in promoting sustainable practices in the fishing industry.

**Experience of States and RFMOs in cooperating to collect and exchange scientific and technical data and information and develop or strengthen data collection standards, procedures and protocols and research programmes (Segment 4)**

27. During Segment 4, presentations were made by: Mr. Luis López Abellán (Centro Oceanográfico de Canarias, Instituto Español de Oceanografía, Spain); Mr. Pascal Lorance (French Research Institute for Exploitation of the Sea, France); Mr. Robert Brock (National Marine Protected Areas Center, National Oceanic and Atmospheric Administration (NOAA), United States of America); Mr. Vladimir Shibanov (NAFO); and Mr. Shingo Ota (NPFC).

28. Information was provided on current efforts to develop standards, procedures and protocols for the identification of VMEs, including rugosity analysis and fishing activity incident analysis, as well as the use and constraints on the projection of predictive models from study areas to more extensive areas. Participants also discussed current data and research programmes, including the use of certain data sources for fisheries assessment and management, such as VMS, video surveys, haul by haul catch and onboard vessel observations. Current approaches to enhance cooperation on scientific data and information exchange and the strengthening of data standards were also highlighted. Some participants noted that partnerships between fishers and scientists could be useful to provide commercial data from fishing vessels for scientific purposes.

29. Information was also provided on the experiences of some RFMOs in data collection and exchange and the dissemination of scientific and technical data and information, including the exchange of best practices and the development of regional standards and procedures. The view was expressed that data collection should not be conducted primarily by fishing vessels, since fishing gear was not designed for sampling or retaining VME indicator species and ultimately had the potential to adversely impact VMEs. Difficulties in identifying and protecting VMEs through encounter protocols and move-on rules were emphasized. It was suggested that encounter protocols should only be applied in heavily fished areas and that new areas should be subject to full impact assessments, including through video surveys and predictive modeling. The importance of observer coverage and the need to validate data through video monitoring and analysis was noted.

30. Challenges in conducting high-quality science in areas beyond national jurisdiction were discussed, including the high costs of research and the need to prioritize research. The important roles of RFMOs and the fishing industry in collecting fisheries data were emphasized. Some participants suggested the need to reconcile different approaches to the management of benthic communities, namely the absolute protection of all benthic communities and the protection of only representative habitats.

**Experience of developing States in addressing the impacts of bottom fisheries on vulnerable marine ecosystems and the long-term sustainability of deep-sea fish stocks (Segment 5)**

31. In Segment 5, presentations were made by: Mr. Osvaldo Urrutia (Subsecretaría de Pesca, Chile); Mr. Mario Aguilar (Comisión Nacional de Acuicultura y Pesca, Mexico); Mr. Robert Brock (NOAA); and Mr. Andrew Wright (CCAMLR).

32. Several participants described actions that had been taken by developing States to implement the relevant paragraphs of resolutions 61/105 and 64/72 in areas within national jurisdiction, including impact assessments, mapping, area closures, gear restrictions and the development of research programmes. It was emphasized that few developing countries actually engaged in bottom fishing in areas beyond national jurisdiction, as most lacked the necessary capacity, resources, expertise and access to scientific information. The need for increased capacity-building, technical and financial assistance and transfer of technology was thus emphasized. Participants highlighted, in particular, the need to facilitate the participation of developing countries in high seas fisheries and in RFMOs, in conformity with international law and consistent with the duty to ensure the conservation and management of those resources. The need for cooperation and full transparency was also highlighted.

33. Participants described particular challenges faced by developing countries in the implementation of resolutions 61/105 and 64/72 and the FAO Guidelines, including in conducting impact assessments, identifying and mapping VMEs, developing site-specific scientific information, training observers and ensuring compliance with measures. It was emphasized that the resolutions could create obstacles for the development of new fisheries by developing countries. Reference was made to the recommendations of the FAO Expert Workshop on the Implementation of the FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas – Challenges and Ways Forward held in Busan, Republic of Korea in 2010. It was suggested that these challenges should be taken into account by the General Assembly during its review of the implementation of the resolutions.

34. Some participants discussed the need for improvements in the regulation of fisheries and the protection of VMEs by developing States. It was emphasized that ensuring the protection of VMEs should not develop on two different tracks and that all States had a responsibility to implement the resolutions. Issues relating to the development of transparent measures, the role of markets and the importance of science were discussed in this context. Participants also emphasized the importance of establishing financial and technical partnerships between States, RFMOs and other stakeholders to enhance cooperation and develop effective implementation strategies.

35. A number of participants provided information on capacity-building activities, including the provision of research vessels and technical training. It was suggested that a trust fund should be established to assist developing States in undertaking impact assessments required by the resolutions. Some participants also raised the possibility of granting fishing allocations to new developing country members in RFMOs. Reference was also made to the Assistance Fund established under Part VII of the United Nations Fish Stocks Agreement.

36. Information was presented on the activities undertaken by RFMOs to provide assistance to developing States, including scientific scholarships, internship programmes and capacity-building workshops. Additional means of assistance for developing States that were described included reductions in assessed contributions, guaranteed participation in meetings and direct development initiatives.

### **FAO Programme for Deep-sea High Seas Fisheries (Segment 6)**

37. During Segment 6, a presentation was made by Ms. Jessica Sanders (FAO) and Ms. Merete Tandstad (FAO) on the FAO Programme for Deep-sea High Seas Fisheries, which was aimed at assisting States, specifically developing countries, institutions and RFMOs in the implementation of the FAO Guidelines. It was noted that the overarching goal of the FAO

Programme was to ensure the sustainable use of living marine resources and the protection of marine biodiversity. Information was provided on issues relating to implementation of the FAO Guidelines, including the recommendations of the recent workshop in Busan, Republic of Korea.

38. The components of the FAO Programme were described in detail, including the development of best practices and support tools for the implementation of the Guidelines, area specific demonstration activities, and global coordination, monitoring and evaluation and dissemination of information. It was noted that the FAO was organizing a workshop on the VME database in December 2011 and that the database would focus on VMEs that had been designated by management authorities. Information was also provided on FAO's current activities, including the development of a web space on deep-sea issues, species identification guides and a manual on data collection, as well as the organization of regional workshops. It was noted that a new programme was being developed by FAO, in cooperation with the Global Environment Facility (GEF), to promote efficient and sustainable management of fisheries resources and biodiversity conservation in areas beyond national jurisdiction in accordance with agreed global targets.

39. Participants highlighted the important role of FAO in the implementation of the resolutions and the FAO Guidelines. The need for priority in the provision of technical assistance to developing States in relation to bottom fisheries was emphasized. Some participants also stressed the need for transparency and inclusiveness in the convening of FAO meetings and workshops. Support for the work of the FAO in the development of the VME database was highlighted and it was suggested that the database should also include information on areas where VMEs were not located. Participants were also encouraged to submit to FAO their list of vessels authorized to fish in areas beyond national jurisdiction.

40. A question was raised over any mandate of FAO concerning marine biodiversity beyond areas of national jurisdiction. It was suggested that programmes of the FAO should reflect the work of the Ad Hoc Open-ended Informal Working Group of the General Assembly to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction. Information was provided to clarify that the FAO/GEF programme was being developed with other partners who were addressing complementary issues relating to marine biodiversity.

### **Summary Segment**

41. During the Summary Segment, participants noted the usefulness of the Workshop and expressed gratitude to the Moderator, as well as to the panellists for the high quality of their presentations. Appreciation was also expressed to the Secretariat, in particular the Division for Ocean Affairs and the Law of the Sea, for the high standard of secretariat services and assistance provided during the planning and organization of the Workshop.