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# COMMITTEE ON FISHERIES

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### PROGRESS IN THE IMPLEMENTATION OF THE CODE OF CONDUCT FOR RESPONSIBLE FISHERIES AND RELATED INSTRUMENTS

#### Executive Summary

One hundred and eighteen FAO Member States and the European Union (EU)<sup>2</sup> participated in the 2020<sup>3</sup> edition of the questionnaire on the implementation of the Code of Conduct for Responsible Fisheries (the Code) and related instruments, representing 60 percent of FAO Members. This shows a 7 percent decrease in respondents compared to the 2018 edition but a 3 percent, 24 percent and 95 percent increase in respondents compared to the 2015, 2013 and 2011 editions, respectively. Thirty-six Regional Fishery Bodies and 13 Non-governmental Organizations also submitted their respective responses to the questionnaire, an increase from the 33 and 11, respectively, in comparison to the 2018 edition. A detailed analysis of the responses to the questionnaire is presented in this document. Statistical tables summarizing Members' responses referred to in this document are made available on the COFI website<sup>4</sup> and in document COFI/2018/SBD.5, which is to be read in conjunction with this document.

The year 2020 marked the 25<sup>th</sup> anniversary of the Code, providing an opportunity to monitor progress in the implementation of the Code and its related instruments as well as its effects on fisheries, following Article 4.2 of the Code, and based on reporting by Members in biannual questionnaires. Questionnaires have been sent out to Members in 2000, 2002, 2004, 2006, 2008, 2010, 2011, 2013, 2015, 2018 and 2020. Number of responding Members ranged from 49 Members in 2004 to 128 Members in 2018. Some trends emerged from these reports on the implementation of the Code structured around the themes fisheries management (Art. 7), fishing operations (Art. 8), aquaculture (Art. 9), integration of fisheries in coastal area management (Art. 10), post-harvest practices and trade (Art. 11), and fisheries research (Art. 12). A summary of these trends is presented in section III of this document.

<sup>1</sup> Rescheduled from 13-17 July 2020

<sup>2</sup> The EU responded on behalf of its Member States, except for sections 19.2, 19.3, 20, 21, 41 and 51. In the case of 41 and 51, both the EU and its Member States have provided a response.

<sup>3</sup> The questionnaire is usually initiated in the year preceding COFI; in this case it initiated in January 2020.

<sup>4</sup> [www.fao.org/about/meetings/cofi/documents-cofi34/en/](http://www.fao.org/about/meetings/cofi/documents-cofi34/en/)

## I. ACTIVITIES AND APPLICATIONS OF THE CODE AT NATIONAL LEVEL

### A. General

1. In Article 2, the Code of Conduct for Responsible Fisheries (the Code) lays out ten objectives. Members<sup>5</sup> were invited to rank the relevance of these objectives (Table 3). Top priorities continued to be assigned to objectives (b)<sup>6</sup> and (a)<sup>7</sup>, as has been the case since 2007. As in 2018 and 2015, Members rated (j)<sup>8</sup>, (h)<sup>9</sup> and (d)<sup>10</sup> as the three least relevant objectives.
2. The Code is subdivided into themes, touching on eight technical domains of fisheries and aquaculture sectors (fisheries management, aquaculture development, fishing operations, fisheries research, trade, post-harvest practices, integration of fisheries into coastal and basin area management, inland fisheries development). Members were invited to assign priority ratings to these (Table 4). Fisheries management and aquaculture development continued to be ranked as top priorities, reflecting results obtained since 2001. Similar to four previous editions of the questionnaire, inland fisheries development and integration of fisheries into coastal and basin area management were given comparatively lower priority.
3. Members have reported an average degree<sup>11</sup> of conformity to the Code of 3.72 for policy, 3.74 for legislation, 3.61 for institutional framework and 3.48 for operations and procedures (Table 5) which are all very close to the reports of 2018. Out of those who were not fully in conformity, 90 percent, 84 percent, 83 percent and 87 percent reported they intend to become fully in conformity with regard to policy, legislation, institutional framework, and operations and procedures, respectively.
4. Forty-two percent of the respondents reported to have enacted their main fisheries legislations currently in force prior to 1996 (Table 6), 30 percent in the 15 years from 1996 to 2010 and 28 percent in the recent years since 2010. The regions with the highest percentage of respondent having enacted changes to their main fisheries legislation since 2010 are Africa (47 percent) and Southwest Pacific (40 percent).
5. Eighty-six percent of the Members reported having increased awareness about the Code, a similar percentage as reported in 2018 (Table 7). To do so, the mechanisms that were most frequently reported as key included, meetings, workshops and seminars (74 percent), training and administration of staff (44 percent), publishing and distributing documents on the Code (44 percent) and developing guidelines and codes based upon the Code (44 percent).

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<sup>5</sup> Percentages within document are only reflective of the Members to which the question or section was relevant, while also having provided a response to the question or section.

<sup>6</sup> Objective b): Establish principles and criteria for the elaboration and implementation of national policies for responsible conservation of fisheries resources and fisheries management and development to implement policies for the conservation of fishery resources and fisheries management and development.

<sup>7</sup> Objective a): Establish principles for responsible fisheries taking into account all their relevant biological, technological, economic, social, environmental and commercial aspects.

<sup>8</sup> Objective j): Provide standards of conduct for all persons involved in the fisheries sector.

<sup>9</sup> Objective h): Promote the trade of fish and fishery products in conformity with relevant international rules and avoid the use of measures that constitute hidden barriers to such trade.

<sup>10</sup> Objective d): Provide guidance which may be used where appropriate in the formulation and implementation of international agreements and other legal instruments, both binding and voluntary.

<sup>11</sup> Members were asked to rate the extent of conformity from “1” being “not at all” to “5” being “fully”.

## B. Fisheries management

6. Respectively 76 percent and 61 percent of the respondents reported to have identified at least one marine and one inland fishery. Of those that did identify fisheries, 89 percent and 72 percent reported to have developed marine and inland fisheries management plans (FMPs), respectively. Of those that had developed FMPs, 97 percent and 93 percent reported to have implemented marine and inland FMPs, respectively, equating a reported total of 761 marine FMPs and 433 inland FMPs implemented (Table 8), lower than the 826 marine and 501 inland implemented FMPs reported in 2018.
7. Out of the Members who reported to have developed FMPs, the most common categories of management measures to promote responsible resource use in marine fisheries include: prohibiting destructive fishing methods and practices, providing for stakeholder participation in determining management decisions (*ex aequo* at 99 percent), addressing the interests and rights of small-scale fisheries (96 percent), and providing for the protection of endangered species (94 percent). The least common categories of marine measures were: making use of stock-specific target reference points (TRPs) (72 percent) and targeting or addressing abandoned, lost and otherwise discarded fishing gear (ALDFG) (56 percent) (Table 9).
8. In the case of inland fisheries, the most commonly reported categories of measures differed from those reported for marine fisheries and relate to: using precautionary approaches which provide for conservative safety margins in decision making, recognizing a process for identifying ‘vulnerable habitats’ or other types of significant and/or sensitive vulnerable areas (*ex aequo* at 91 percent), and plans falling within (or constituting an integral part of) wider management plans of the coastal zone (87 percent). The inland measures that were least reported were those prohibiting destructive fishing methods and practices (46 percent) and addressing biodiversity of aquatic habitats (39 percent) (Table 9).
9. Eighty-one percent of the respondents reported having started implementation of the ecosystem approach to fisheries (EAF). Of those 92 percent reported having established ecological, socio-economic and governance objectives, 92 percent reported having identified issues to be addressed by management actions, and 78 percent reported having established monitoring mechanisms (Table 10).
10. Of those implementing EAF, 93 percent reported having management and institutional systems in place, 89 percent reported retaining species (target catch and bycatch) and 87 percent reported having addressed social and/or economic elements at the community and national levels. Issues relating to external drivers were least reported (68 percent) (Table 11).
11. Since 2010, the number of Members reporting to have developed TRPs has gradually increased from 56 percent to 69 percent. The total number of TRPs having been developed has also increased from 845 in 2011 to 1739 in 2018, although in 2020 only 1540 have been reported by Members. Sixty-seven percent of Members reported that one or more TRPs were being approached, while 43 percent reported that they had been exceeded (Table 12). These were relatively similar to figures from 2018 reporting but show a general reduction since 2010 where 76 percent of Members reported to have exceeded one or more TRPs.
12. Types of indicators used for managing stocks other than TRPs include: catch and effort indicators (74 percent), socio-economic indicators (59 percent), validated stakeholder knowledge (52 percent), and ecosystem indicators (37 percent) (Table 13). When TRPs were exceeded, the most commonly reported remedial actions were: carrying out more research (96 percent), limiting fishing effort (92 percent), strengthening monitoring, control and surveillance (MCS) and closing fisheries (*ex aequo* at 88 percent) (Table 14).

### C. Fishing operations

13. Members were invited to report on the most important measures taken to control fishing operations undertaken by vessels flying their flag within and beyond their exclusive economic zone (EEZ). Ninety-eight and 93 percent reported having taken these measures within their EEZ and beyond, respectively. As since 2011, the strengthening of monitoring, control and surveillance (76 percent), penalties and sanctions (58 percent) and vessel registers (47 percent) were reported to be the most important actions taken to ensure that fishing operations within the EEZ comply with license provisions (Table 15).

14. With respect to measures taken outside of their EEZ and as since 2011, 68 percent reported that the application of mandatory authorization schemes was the most important measure of the measures taken to control fishing operations. The next two categories of measure given the most importance were enhancement of MCS measures and enforcing compliance with laws of other States, and regional fisheries management organizations (RFMOs) decisions (*ex aequo* at 41 percent) (Table 16).

15. Seventy-four percent reported that bycatch and discards occur in major fisheries and 65 percent reported having formal bycatch and discard monitoring schemes in place. This represents a slight increase from 72 percent and 61 percent, respectively, compared to 2018. Of those formally monitoring bycatch and discards, 75 percent consider that bycatch and discards contribute to unsustainability. Of those that consider bycatch and discards contribute to unsustainability, like 2018, all respondents reported to have management measures in place to minimise bycatch and discards. Ninety-six and 73 percent of Members who have management measures for bycatch and discards also have measures to address the protection of juveniles and ghost fishing, respectively (Table 17).

16. Seventy-five percent of Members reported to have either partially or fully implemented vessel monitoring systems (VMS). Thirty percent of Members, all from Africa and the Near East, reported that although they had not implemented VMS, they demand foreign vessels in their EEZ to carry VMS and report to other monitoring centres (e.g. regional fisheries management organizations) (Table 18).

17. Members were invited to rate their concerns from 1-5<sup>12</sup> with regard to abandoned lost or otherwise discarded fishing gear (ALDFG). The average response from Members was 3.5 or slightly above medium concern but marks an increase when compared to 2018 (3.17). The issues of highest concern related to: harm to the environment (90 percent) loss of fish stocks (74 percent) and entanglement of wildlife (67 percent). The issues of least concern were negative impacts on tourism (28 percent) and damage to vessels (25 percent) (Table 19).

18. Twenty-eight percent of the Members that considered ALDFG to be a concern reported having information on gear loss rates, with 52 percent of those reporting to have this information by gear type (Table 20). Of those that reported having information by gear type, the more frequently identified types were: trawl; fish traps; gillnets and entangling nets; and longline (Tables 21 and 22).

19. Fifty-one percent of Members reported to have the requirements for gear marking. The most widely used types of gear marking reported were marking pen or spray (67 percent), and printed metal or plastic tags (39 percent) (Table 23).

20. Eighty-four percent and 37 percent of Members reported that they have included inspection of on-board gear within observer programs to ensure relevant compliance with regulations and safety and reporting mechanisms for ALDFG, respectively. Twenty percent of Members reported to have requirements for reporting ALDFG in logbooks for vessels above a certain size; 18 percent reported to have this requirement for all vessels (Table 24).

21. Members were asked to report on port facilities with regard to waste disposal and recycling. Thirty-nine percent reported having requirements for ports to provide facilities for receiving fishing vessel waste, while 24 percent reported being required to have facilities for receiving old fishing gear. Sixteen percent reported to have public and/or private programs for recycling and/or upcycling of old fishing gear (Table 25).

<sup>12</sup> “1” being “no concern”, “3” being “medium concern”, and “5” being “major concern”.

#### D. Aquaculture Development

22. Similar to 2018, 96 percent of Members reported that aquaculture development occurs in their countries (Table 26). Slightly less than half of these Members had largely complete and enabling policy (45 percent), legislation (47 percent) and institutional (44 percent) frameworks. The majority of the remainder had partially developed policy, legal and institutional frameworks, and less (19 percent, 12 percent and 8 percent respectively) had no or largely insufficient frameworks.

23. The Code encourages Members to promote responsible aquaculture practices. Sixty-eight percent of Members reported that government agencies have adopted codes or instruments in this regard, compared to 74 and 85 percent in 2018 and 2015 respectively. Private sector actors were reported by Members to also have adopted such codes or instruments at the producer level (65 percent), supplier level and manufacturer level (*ex aequo* at 44 percent) (Table 27).

24. Members were invited to report on the presence of procedures to undertake core activities for responsible development of aquaculture in accordance with the Code. Eighty-six percent reported conducting environmental assessments of aquaculture operations, 83 percent reported that they monitor aquaculture operations and also 83 percent reported having measures to minimize harmful effects of alien species introductions (Table 28). After a consistent improvement from 2013 to 2018, these figures are similar or slightly lower than in 2018 when 85, 89 and 91 percent of Members reported the presence of these procedures respectively. More than 60 percent of Members that implement these procedures (79, 74 and 63 percent respectively) reported that improvements were needed (Table 29). For all procedures, over 85 percent of Members identified the strengthening of institutional technical capacity as the major area where improvements are needed (Table 30).

25. Members are encouraged to promote responsible aquaculture practices to support rural communities, producer organizations and fish farmers. Ninety-six percent of Members stated that they had taken measures in this regard, and as in 2018 the most frequently reported measure was the design and implementation of extension programs/awareness campaigns/training (49 percent) (Table 31).

#### E. Integration of fisheries into coastal area management<sup>13</sup>

26. Of the Members who reported having a coastline (87 percent), 21 percent, 20 percent and 21 percent have a largely complete and enabling policy, legal and institutional framework for integrated coastal zone management in place, respectively. These are similar figures as in 2018, although reflecting a drop in comparison to figures reported any other reporting year through to 2011. Close to half have partially developed policy (47 percent), legal (44 percent) and institutional frameworks (45 percent). The remainder have not developed any or have largely insufficient governance frameworks for integrated coastal zone management (Table 32).

27. Members were asked to report on the issue of conflict not only within fisheries but also between the fisheries sector and other sectors operating within the coastal area. Of the reporting Members, the highest ranked activities have remained the same since 2010: conflicts between fishing gear types (18 percent), and conflicts between coastal and industrial fisheries which this year was *ex aequo* at 12 percent with fisheries and port development. More than 60 percent of the concerned countries reported having resolution mechanisms in place for these three conflicts (68 percent, 79 percent and 60 percent respectively) (Table 33).

#### F. Post-harvest practices and trade

28. The percentage of Members that reported having in place a largely complete and enabling effective food safety and quality assurance system for fish and fisheries products dropped from 71 percent in 2013 to 49 percent in 2018 to increase again to 65 percent in this year's reporting, whilst the number of Members having no or largely insufficient systems has increased from zero percent in 2013 to eight percent in 2018 and 2020 (Table 34).

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<sup>13</sup> The questions under this header were responded by individual EU Member States with the exception of those relating to policy framework in table 32.

29. The issue of post-harvest losses and waste was relevant to almost all respondents (95 percent), of which 97 percent have taken measures to address it, including, enacting food-safety regulations (70 percent) and enhancing monitoring, control and surveillance (55 percent) (Table 35).
30. Improving the use of bycatch is relevant to 88 percent of Members of which 93 reported having implemented measures to improve bycatch utilization, a 12 percent increase since 2015. As was the case in 2015 and 2018, awareness raising (43 percent) and mandatory landing of bycatch (37 percent) were identified as the most important measures to achieve improved use of bycatch (Table 36).
31. Similar to the reporting since 2011, the large majority of processors were in a position to trace the origin of the fisheries products they purchase (89 percent), while only 43 percent of consumers could do so (Table 37).
32. The elimination of processing and trading in illegally harvested fisheries resources was deemed relevant by 93 percent of Members, and 93 percent of those have taken measures to address these matters. The most common reported measures include enhances fisheries control and inspections (63 percent), enhanced customs and border controls, and implementing product traceability systems (*ex aequo* at 37 percent) (Table 38).

### G. Fisheries Research

33. Members reported that they obtained reliable estimates on stock status for a cumulative total of 1683 stocks. On average, Members responded that stocks for which an estimate had been obtained represented 41 to 50 percent of their total stocks (Table 39).
34. Similar to reporting since 2010, 77 percent of Members indicated that statistics on catch and fishing effort were collected in a timely, complete and reliable manner, and 61 percent of Members reported that sufficient qualified personnel were available to generate data in support of sustainable fisheries management (Table 40). The subject areas for which the need for additional qualified personnel are greatest are fish biology and stock assessment (71 percent) and fisheries statistics and sampling (49 percent) (Table 41).
35. The most prominent data sources used by Members for the development of fishery management plans are: historical data (82 percent), in-port/landing site sampling surveys (76 percent), routine data collection (74 percent), MCS data (66 percent), and FAO and/or RFMO statistics (63 percent) (Table 42).
36. As in 2018, 95 percent of Members reported that they have data gaps in the management of their fishery resources with the most prominent data gaps being: stock status (47 percent), illegal, unregulated and unreported (IUU) fishing and/or MCS (37 percent), catch and ecosystem (*ex aequo* at 33 percent), and effort (22 percent) (Table 43). Stock status was also the type of data for which there were the most gaps in all surveys since 2011.
37. Fifty-eight percent of Members reported that they routinely monitored the state of the marine environment. This was similar to 2013, 2015, and 2018 but still afar from the 78 percent and 66 percent reported in 2009 and 2011, respectively. Of the Members reporting to perform such monitoring, the most common routine monitoring programmes focused on coastal parameters and monitoring of threatened and endangered species (*ex aequo* at 87 percent), oceanographic parameters (85 percent) and on coastal and offshore habitats (83 percent) (Table 44).
38. Members were asked to report on research and programmes addressing the impacts of climate change on fisheries. Seventy-five percent of Members indicated that formal research was in place to assess/predict the impact of climate change on fisheries, showing an increase of 11 percent from 2018 reporting. Similar to 2018 reporting, 77 percent of these implemented formal programmes to mitigate its potential ecological, economic and social impacts and to build resilience (Table 45).

## H. International instruments

39. Members were invited to report on the activities of flagged vessels conducting fishing and fishing related activities. Eighty-one percent reported to be doing so in waters within their national jurisdiction, 57 percent on the High Seas, and 45 percent in waters under the jurisdiction of another State (Table 46). With respect to the occurrence of fishing vessels flagged by the responding Members that were authorized by another State to conduct fishing and fishing related activities, 45 percent responded that this was occurring in waters under the jurisdiction of another State, and 32 percent reported that it was occurring on the High Seas (Table 47). Sixty percent of Members reported that authorized foreign-flagged vessels were authorized to enter and use their ports, while 40 percent authorize foreign vessels to operate in waters within their national jurisdiction (Table 48).

40. Forty-nine percent of Members reported to have launched a preliminary fishing capacity assessment with 19 percent planning to do so in the future, significantly fewer than in 2018. Of those who had launched a preliminary assessment, 89 percent reported to be implementing measures to adjust capacity (Table 49). The most prevalent methods were using potential effort generated by the fleet (84 percent), and using key fleet and vessel characteristics (82 percent) (Table 50).

41. Of the Members that have launched a preliminary fishing capacity assessment, 50 percent reported to having developed a National Plan of Action for the Management of Fishing Capacity (NPOA-Capacity). Of those having developed an NPOA-Capacity, using a 1-5<sup>14</sup> scale, Members reported an average degree of implementation with regard to policy (4.23), legislation (3.95), institutional framework (4.05) and operations and procedures (3.82) (Table 51).

42. Fifty-two percent of Members identified fishing overcapacity as a problem. Of these, 89 percent have taken steps to prevent further build-up of overcapacity. The most prominently steps reported were: limited entry regimes (70 percent) and freeze on number of vessels/licenses (53 percent) (Table 52). Furthermore, 83 percent reported to be taking steps to reduce overcapacity, with the most prominent being NPOA-Capacity development and implementation (28 percent), public buy-back and decommissioning schemes as well as monitoring and research into fishing overcapacity (*ex aequo* at 26 percent) (Table 53). Eighty-nine percent of those who identified overcapacity as a problem also took steps to prevent it from causing further negative impacts on stocks, with the most prominent measures remaining seasonal closures of particular fisheries (66 percent) and spatial closures (47 percent) (Table 54).

43. Forty-six percent of Members reported that sharks were caught either through targeted fisheries or bycatch, 12 percent less than reported in 2018 (Table 55). In the States where this was occurring, of those that conducted an impact assessment (77 percent), 94 percent concluded the need of a National Plan of Action for the Conservation and Management of Sharks (NPOA-Sharks). Of those having developed an NPOA-Sharks, using a 1-5<sup>15</sup> scale, Members reported an average degree of implementation with regard to policy (4.22), legislation (4.19), institutional framework (4.26), and operations and procedures (4.00) (Table 56).

44. Seventy-eight percent of Members reported that longline, trawl and/or gillnet fishing was conducted in waters under their jurisdiction, and of these 49 percent conducted an assessment of said fisheries. Sixty-one percent of these assessments concluded that a National Plan of Action for Reducing Incidental Catch of Seabirds (NPOA-Seabirds) was needed (Table 57), and of those 64 percent reported having developed an NPOA-Seabirds. Of those that had implemented an NPOA-Seabirds, using a 1-5<sup>16</sup> scale, Members reported an average degree of implementation with regard to policy (4.71), legislation (4.5), institutional framework (4.57), and operations and procedures (4.43) (Table 58).

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<sup>14</sup> Members were asked to rate the extent of implementation from “1” being “Not at all” to “5” being “Fully”.

<sup>15</sup> Members were asked to rate the extent of implementation from “1” being “Not at all” to “5” being “Fully”.

<sup>16</sup> Members were asked to rate the extent of implementation from “1” being “Not at all” to “5” being “Fully”.

45. Members were asked about mitigation measures with regard to seabirds and fisheries. Of the Members who reported to be conducting longline fisheries (71 percent), and trawl and/or gillnet fisheries (70 percent), 68 and 55 percent applied mitigation measures, respectively. The most prominent mitigation measures in both cases were legal framework improvements and observer programmes (Tables 59 and 60).

46. Members were invited to respond to questions relating to IUU fishing. Eighty-two percent of Members reported that IUU fishing was perceived as a problem. Sixty-seven percent of Members reported to have developed a National Plan of Action to Prevent, Deter and Eliminate IUU Fishing (NPOA-IUU). Of those that had implemented an NPOA-IUU, using a 1-5<sup>17</sup> scale, Members reported an average degree of implementation with regard to policy (4.12), legislation (4.37), institutional framework (4.17), and operations and procedures (4.00) (Table 61). The most prominent measures taken to prevent, deter and eliminate IUU fishing were legal framework improvements (72 percent), and improved coastal State controls and MCS (66 percent) (Table 62).

47. Seventy-nine percent of Members<sup>18</sup> reported to have ratified, accepted or acceded to the United Nations Convention on the Law of the Sea (UNCLOS)<sup>19</sup>, with a further 21 percent of the remaining Members reporting to have initiated the process to doing so. Using a 1-5<sup>20</sup> scale, Members reported an average degree of implementation with regard to policy (3.80), legislation (3.86), institutional framework (3.76), and operations and procedures (3.66) (Table 63).

48. Fifty-eight percent of Members reported to have ratified, accepted or acceded to the Agreement on Port State Measures (PSMA)<sup>21</sup>, with a further 41 percent of the remaining Members reporting to have initiated the process to doing so. Using a 1-5<sup>22</sup> scale, Members reported an average degree of implementation of the Agreement with regard to policy (3.41), legislation (3.49), institutional framework (3.36), and operations and procedures (3.30). As per the requirements of the Agreement, 53 and 57 percent reported having designated ports and contact points, respectively (Tables 64 and 65).

49. Members were invited to report on the implementation of their flag State responsibilities. Forty-nine percent of Members reported to have ratified, accepted or acceded to the Compliance Agreement<sup>23</sup>, with a further 14 percent of the remaining Members reporting having initiated the process to doing so. Using a 1-5<sup>24</sup> scale, Members reported an average degree of implementation of the provisions of the Agreement and/or flag State responsibilities with regard to policy (3.37), legislation (3.44), institutional framework (3.27), and operations and procedures (3.23) (Table 66). Thirty-three percent of Members reported to have undertaken an assessment of its performance as flag State in accordance with the FAO Voluntary Guidelines of Flag State Performance, with 65 percent of the remaining intending to do so in the future (Table 67).

50. Sixty percent of Members reported to be supplying a record of fishing vessels operating on the High Seas. Seventy-four and 78 percent, respectively, reported to be ensuring that their vessels were not engaged in activities undermining conservation and management measures and that their vessels were providing all necessary information to fulfil its obligations as flag State. Sixty-seven percent of Members reported that they had a fisheries access agreement prior to fishing in another coastal State (Table 67).

<sup>17</sup> Members were asked to rate the extent of implementation from “1” being “Not at all” to “5” being “Fully”.

<sup>18</sup> EU and its Member States reported a response to this section.

<sup>19</sup> UN Convention of the Law of the Sea of December 1982.

<sup>20</sup> Members were asked to rate the extent of implementation from “1” being “Not at all” to “5” being “Fully”.

<sup>21</sup> 2009 FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing.

<sup>22</sup> Members were asked to rate the extent of implementation from “1” being “Not at all” to “5” being “Fully”.

<sup>23</sup> 1993 FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas.

<sup>24</sup> Members were asked to rate the extent of implementation from “1” being “Not at all” to “5” being “Fully”.

51. Twenty-eight percent of Members reported to conducting deep sea fisheries in the High Seas. Of those that were conducting these fisheries, using a 1-5<sup>25</sup> scale, Members reported an average degree of implementation of the FAO International Guidelines for the management of Deep-sea Fisheries in the High Seas with regard to policy (4.00), legislation (4.25), institutional framework (4.13), and operations and procedures (4.17) (Table 68).

52. Sixty-seven percent of Members reported that they were aware of the Strategy for Improving Information on Status and Trends of Capture Fisheries (Strategy-STF), and 83 percent of Members are implementing Strategy-STF plans and programmes, including components to improve data collection, including components to improve data collection (100 percent), data analysis (98 percent), and data dissemination (94 percent) (Table 69).

53. Sixty-two percent of Members reported being aware of the Strategy for Improving Information on Status and Trends of Aquaculture (Strategy-STA), and 80 percent declared that related plans and programmes are being implemented. Of these, 100, 98 and 91 percent reported to include components to improve data collection, data analysis and data dissemination, respectively (Table 70).

### I. Small-Scale Fisheries<sup>26</sup>

54. Overall, small-scale fisheries (SSF) was reported taking place in 88 percent of Members' fisheries. On average, Members responded that SSF represented between 41 percent and 50 percent of both the volume and value of the total catch, lower than the 51 to 50 percent reported in 2015 and 2018. Respondents within the regions reporting the highest average ratio of SSF to total catch by volume are found in the near East (71 percent to 80 percent), followed by Africa and Latin America and the Caribbean (51 percent to 60 percent). In terms of value, Near East again reported the highest average ratio of SSF to total catch by value (71 percent to 80 percent), followed by Latin America and the Caribbean (61 percent to 70 percent). The overall average response given by Members on the proportion of people involved in SSF to that of the total in fisheries remained between 61 and 70, as in 2015 and 2018, with the regions showing the highest average proportion being the Near East and Latin America and the Caribbean at 71 percent to 80 percent (Table 73).

55. The availability of information about employment in SSF activities by gender and employment status remains limited. For full-time employment more information, including gender disaggregation, is provided than for part-time, occasional and unspecified employment. In full-time employment all regions reported to have a higher percentage of men than women involved in fishing activities. As in 2015 and 2018, the only cases where women were reported to make up a higher percentage of men under full-time employment were in post-harvest activities, and in 2020 this was the case in Africa, Asia, Latin America and the Caribbean and in the Southwest Pacific (Table 74).

56. SFF are reported as being legally defined by 47 percent of the Members and informally defined, and therefore not legally supported, by 24 percent. Compared to 2018, the percentage of countries that reported to have a legal definition for SSF was higher in all regions except Asia. Sixty-eight percent of the respondents that do have a legal or informal definition for SSF and 29 percent of those that do not have one reported intending to either review it or introduce it through a multi-stakeholder process as foreseen in the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines (Table 75).

57. Eighty-eight percent of those having defined SSF reported collecting sector-specific data. Data collected by Members concerned the volume of production (85 percent), value of production (68 percent), employment (54 percent), trade (48 percent) and consumption (28 percent) (Table 76).

58. Seventy-three, 72, 74, and 66 percent of Members reported having introduced or developed policies, laws, regulations, plans or strategies targeting or addressing SSF, respectively (Table 77).

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<sup>25</sup> Members were asked to rate the extent of implementation from "1" being "Not at all" to "5" being "Fully".

<sup>26</sup> The EU responded on behalf of its Member States to questions under this header.

59. Members were asked if they had specific initiatives to implement the SSF Guidelines. Forty-five percent of the Members responded positively, whilst 56 percent reported that they intended doing so in the future. Initiatives already in place were most prominently related to implementing capacity development of fisheries organizations and other stakeholders (90 percent), supporting SSF actors to take an active part in sustainable resource management (85 percent), and enhancing SSF value chains, post-harvest operations and trade (78 percent) (Table 78). The most prominent constraints encountered by Members in implementing such initiatives were the lack of financial resources (80 percent), insufficient coordination with other related administrations, (54 percent) and lack of organizational structures among small-scale fishers and fish workers (46 percent) (Table 79). Opportunities to implement the SSF Guidelines were mainly identified in the existing enabling legal, regulatory and policy framework (66 percent), in the context of on-going/planned projects, programmes and initiatives (63 percent), and the possibility of involving small-scale fishers and fish workers in decision-making processes (59 percent) (Table 80).

60. Mechanisms through which small-scale fishers and fish workers can contribute to decision making processes have been reported to exist for 79 percent of the respondents. The most common mechanisms include mechanisms for getting fishers' and fish workers' representatives into advisory/consultative bodies to the Ministries/Department of Fisheries and for involving small-scale fisheries in fisheries management (*ex aequo* at 81 percent). Out of the Members who responded to have mechanisms in place, 68 percent reported encouraging the active participation of women (Table 81).

## **J. Constraints and suggested solutions**

61. Eighty-seven percent of Members reported that they faced some constraints in implementing the Code. The top constraints were related to insufficient budgetary (70 percent) and human (46 percent) resources, followed by incomplete policy and/or legal frameworks (33 percent) and inadequate scientific research statistics and access to information (32 percent) (Table 71).

62. The top-ranking solutions proposed by Members to counter constraints faced in implementing the Code were: access to more budgetary means (67 percent) and to human resources (38 percent), more training and awareness raising (35 percent) and improvement of research, statistics and access to information (33 percent) (Table 72).

63. Members<sup>27</sup> were invited to report on which FAO technical guidelines they have received. The most widely available include the Ecosystem Approach to Fisheries (67 percent), and the Implementation of the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) (63 percent) (Table 82).

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<sup>27</sup> The EU and its Member States responded to this section.

## II. ACTIVITIES OF REGIONAL FISHERY BODIES AND NON-GOVERNMENTAL ORGANIZATIONS

### A. Regional fishery bodies

64. Thirty-six Regional Fishery Bodies (RFBs)<sup>28</sup> responded to the questionnaire on the implementation of the Code and related instruments, reflecting an increase in participation of nine and 44 percent in comparison to 2018 and 2015 reporting, respectively.

65. The number of contracting parties of responding RFBs varied between 2 and 53, with an average of 15 contracting parties. Over a third of the RFBs have cooperating non-contracting parties, ranging from one to eight, while two-thirds of them have observers.

66. RFBs include diverse subjects in their mandates. Sixty-seven percent of respondents reported having a primary mandate of fisheries management, 53 percent being advisory, 44 percent in scientific/research and 38 percent in environmental and biodiversity conservation. The main differences found in comparison to 2018 reporting regarded the decrease in the proportion reporting to be providing aquaculture development (from 30 percent in 2018 to 19 percent in 2020) and fisheries management (previously 76 percent) as primary mandates.

67. Twenty-two convention areas of responding RFBs include EEZs, 26 cover Areas Beyond National Jurisdiction (ABNJ) and 11 cover inland waters. Most RFBs cover more than one of these areas; five include EEZs, ABNJ and inland waters, while 13 others cover both EEZs and ABNJ.

68. Sixty-one percent of responding RFBs report having adopted binding measures. Since 2010, 11 of them have adopted more than 30 binding measures; one has adopted between 21 and 30 measures; three between 11 and 20; and seven between one and ten. Seventy-five percent of responding RFBs report having adopted non-binding measures. Out of these, since 2010, 14 have adopted between one and ten non-binding measures; three between 11 and 20; four between 21 and 30; and five have adopted more than 30 non-binding measures.

69. With regards to fisheries management plans specifically concerning marine capture fisheries, the measures most commonly included within RFB management plans concern the prohibition of destructive fishing methods and practices (63 percent), ensuring the level of fishing is commensurate with the state of fishery resources and those to allow depleted stocks to recover (*ex aequo* at 58 percent). In comparison, the least included measures were those addressing: fishing capacity

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<sup>28</sup> Agreement on the Conservation of Albatrosses and Petrels (ACAP), Asia-Pacific Fishery Commission (APFIC), Bay of Bengal Programme - Inter-Governmental Organization (BOB-IGO), Central Asian and Caucasus Regional Fisheries and Aquaculture Commission (CACFish), Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), Commission for the Conservation of Southern Bluefin Tuna (CCSBT), Committee for Inland Fisheries and Aquaculture of Africa (CIFAA), European Inland Fisheries and Aquaculture Advisory Commission (EIFAAC), Fisheries Committee for the West Central Gulf of Guinea (FCWC), Fishery Committee for the Eastern Central Atlantic (CECAF), General Fisheries Commission for the Mediterranean (GFCM), Indian Ocean Tuna Commission (IOTC), Inter-American Tropical Tuna Commission (IATTC), International Commission for the Conservation of Atlantic Tunas (ICCAT), International Council for the Exploration of the Sea (ICES), Joint Norwegian-Russian Fisheries Commission (JOINTFISH), Joint Technical Commission for the Argentina/Uruguay Maritime Front (COFREMAR), Lake Chad Basin Commission (LCBC), Lake Victoria Fisheries Organization (LVFO), North Atlantic Marine Mammal Commission (NAMMCO), North Atlantic Salmon Conservation Organization (NASCO), North Pacific Anadromous Fish Commission (NPAFC), North Pacific Fisheries Commission (NPFC), Northeast Atlantic Fisheries Commission (NEAFC), Northwest Atlantic Fisheries Organization (NAFO), Organización del Sector Pesquero y Acuicola del Istmo Centroamericano (OSPESCA), Regional Commission for Fisheries (RECOFI), Secretariat of the Pacific Community (SPC), South Pacific Regional Fisheries Management Organization (SPRFMO), Southeast Asian Fisheries Development Center (SEAFDEC), Southeast Atlantic Fisheries Organization (SEAFO), Southern Indian Ocean Fisheries Agreement (SIOFA), Southwest Indian Ocean Fisheries Commission (SWIOFC), Sub-Regional Commission on Fisheries (SRFC), Western Central Atlantic Fishery Commission (WECAFC), and Western Central Pacific Fisheries Commission (WCPFC).

including the economic conditions under which the fishing industry operates (39 percent), the interests and rights of small-scale fishers (42 percent) and the biodiversity of aquatic habitats and ecosystems, including identifying essential fish habitats (47 percent).

70. Based on the 27 RFB responses, the most prominent topics in inland capture fisheries management plans included prohibiting destructive fishing methods, addressing the interests and rights of small-scale fishers, and providing for stakeholders participation in determining management decisions.

71. Sixty-six percent of RFB respondents reported having taken steps to ensure that only fishing operations in accordance with their adopted fisheries management plans are conducted within their area of competence. Seventy-two percent of RFBs reported that the precautionary approach had been applied to the management of fisheries resources within their area of competence. In the last two years, almost 61 percent have either taken or strengthened measures to limit bycatch and discards.

72. Data sources most used by RFBs in fisheries management include historical data (86 percent) followed by: routine data collection (77 percent), and research vessel surveys (60 percent). This was largely similar to 2018 reporting, with the biggest change being the use of in-port/landing site sampling surveys going from 73 percent in 2018 to 54 percent in 2020.

73. Twenty-six out of the 36 RFBs (72 percent) reported that reliable estimates of the status of fishery stocks have been obtained within the last three years, covering a total of 310 stocks<sup>29</sup>. Nine RFBs reported having estimates for over 80 percent of the stocks considered important, nine have estimates between 41 percent to 80 percent and four have reported having estimates for between 21 percent and 40 percent. Four RFBs did not have an approximate figure.

74. Twenty-one RFBs (56 percent of respondents) reported that they had developed at least one TRPs, with the cumulative total coming to 191 stocks<sup>30</sup>. Of these, 62 percent of RFBs reported that one or more TRPs had been approached, while 57 percent reported that one or more TRPs had been exceeded, reflecting very similar figures in comparison to 2018. Catch and effort indicators were by far the most popular alternative to the use of TRPs and applied by 54 percent of RFBs which did not develop TRPs, followed by validated stakeholder knowledge (31 percent). As was the case in 2015 and 2018 reporting, limiting fishing effort (92 percent) is the highest reported mitigation measure when TRPs are exceeded followed by carrying out research (83 percent).

75. One-third of responding RFBs reported having established requirements for the implementation of VMS for the entire fishing fleet, while another third have requirements in place for a portion of the fishing fleet. None of these reported having VMS implementation problems. Of those with requirements in place for VMS on their fishing fleet, half reported that between 91 and 100 percent of their members are in line with the implementation of these requirements. Of the remaining RFBs, four reported compliance ranging between 71 and 90 percent, three reported between 31 percent and 70 percent compliance, and three reported that they did not know.

76. Capacity Building together with other unspecified regional management measures (*ex aequo* at 35 percent), were the most common efforts of RFBs to assist in the implementation of the IPOA-Capacity, followed by the organization and/or hosting of meetings and seminars (32 percent). Assessing the conservation and management of sharks was the most common activity to assist in the implementation of IPOA-Sharks (53 percent), followed by publishing documents and other media (32 percent). RFBs engaged in supporting the implementation of the IPOA-Seabirds, did so most commonly through other unspecified management measures (29 percent), the assessment of the impact on incidental catch of seabirds in longline fisheries, and the publication of documents and other media (*ex aequo* at 26 percent).

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<sup>29</sup> Estimates may have been developed for the same stocks by different RFBs.

<sup>30</sup> TRPs may have been developed for the same stocks by different RFBs.

77. Several RFBs contributed to the implementation of the IPOA-IUU, mainly through initiatives aimed at: strengthening and developing innovative ways to prevent, deter and eliminate IUU fishing (65 percent), enhancing cooperation in the exchange of information on vessels involved in IUU fishing (62 percent); and assisting in the implementation of other activities prescribed by the IPOA-IUU (53 percent).

78. With regards to the Strategy-STF, RFBs mainly assisted through the adoption of processes which improve the availability of information on STF (56 percent) followed by the application of research to enhance the availability of scientific evidence to support conservation, management and sustainable use of fishery resources (50 percent).

79. RFBs to which aquaculture was relevant reported on the steps taken to ensure that their members have in place procedures of good aquaculture practices. The procedures reported related to: monitoring of aquaculture operations (addressed by eight RFBs), minimizing the harmful effects of the introduction of non-native species or genetically altered stocks used for aquaculture (addressed by eight RFBs), and environmental assessments of aquaculture operations (addressed by seven RFBs). Almost all of these RFBs indicated that these procedures required improvement in order to become effective. Areas that were most commonly reported to require improvements were institutional technical capacity, legal frameworks, periodicity, and widening the scope of assessment.

## **B. Non-governmental Organizations**

80. Thirteen Non-governmental Organizations (NGOs)<sup>31</sup> responded to the questionnaire on the implementation of the Code and related instruments.

81. NGOs were invited to rank their perception of the relevance of the ten objectives of the Code for the achievement of sustainable fisheries and aquaculture. The most highly ranked were objectives (a)<sup>32</sup> and (b)<sup>33</sup>; the lowest ranked objective was (f)<sup>34</sup>.

82. Of the eight substantive themes developed in the Code and in the relevant FAO Technical Guidelines for Responsible Fisheries, the themes most identified as top priority by NGOs was fisheries management, followed by fishing operations and fisheries research; the theme most identified as a low priority was inland fisheries development.

83. The main constraints identified by NGOs for the implementation of the Code related to institutional weakness, incomplete policy and/or legal frameworks, and difficult socio-economic climate, the first two also considered important in 2018, 2015 and 2013. The main suggested solution was improving research, statistics and access to (and/or usage of) information, a change in comparison to 2018 and 2015 whereby institutional and organisational structures and collaboration was more highly considered.

84. The activities NGOs considered to be most effective in making the Code more widely known and understood were similar to those identified in 2018, 2015 and 2013, including, the organization and/or hosting of national and international workshops, the promotion of standards based on the Code, and the publication of books and other information material.

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<sup>31</sup> Birdlife, Coalition for Fair Fisheries Arrangements (CFFA), European Bureau for Conservation and Development (EBDC), Federation of European Aquaculture Producers (FEAP), Global G.A.P. (GGAP), International Coalition of Fisheries Associations (ICFA), International Fishmeal and Fish Oil Organisation (IFFO), International Seafood Sustainability Association (ISSA), Marine Stewardship Council (MSC), Network of Aquaculture Centres in Central-Eastern Europe (NACEE), Organization for the Promotion of Responsible Tuna Fisheries (OPRT), Pew Charitable Trusts (PCT), and World Federation of Trade Unions (WFTU).

<sup>32</sup> Objective a) Establish principles for responsible fishing and fisheries activities considering all their relevant biological, technical, economic, social, environmental and commercial aspects.

<sup>33</sup> Objective b) Establish principles and criteria to implement policies for the conservation of fishery resources and fisheries management and development.

<sup>34</sup> Objective f) promote the contribution of fisheries to food security and food quality, giving priority to the nutritional needs of local communities.

85. NGOs were invited to provide their opinion on measures within existing country and/or RFB marine and inland fisheries management plans. Measures that were most reported to be already existent within marine and inland fisheries management plans were those aiming or addressing to prohibit destructive fishing methods and practices, the protection of endangered species and the interests and rights of small-scale fishers. With regard to measures most considered to be lacking within existing management plans, within marine fisheries it was those addressing the selectivity of fishing gear while in the case of inland fisheries it was those addressing the biodiversity of aquatic habitats and ecosystems, including identifying essential fish habitats.

86. As was the case in 2018, the large majority of the NGOs reported that most countries did not have procedures in place to undertake environmental assessments of aquaculture operations, monitor aquaculture operations, or minimize the harmful effects of the introduction of non-native species or genetically altered stocks used for aquaculture. Those NGOs that considered that Members did have such procedures in place, reported that the procedures required improvements to ensure their effectiveness.

87. NGOs were invited to report on their efforts to assist implementation of the IPOAs and Strategy-STF. The IPOA-IUU showed the highest number of NGOs providing assistance for its implementation, with all but three reporting to have assisted in its implementation, mainly thorough actions to strengthen and develop innovative ways to prevent, deter and eliminate IUU fishing and the development of education and/or public awareness programmes. This was followed by IPOA-Capacity and Strategy-STF, with all but four reporting to have assisted in its implementation, mainly through the publication of documents and other media, and the adoption of processes to improve the availability of information on the status and trends of capture fisheries, respectively.

### III. TRENDS: 25 YEARS OF IMPLEMENTATION OF THE CODE

#### A. General

88. Since the adoption of the Code by the FAO Conference in 1995 and based on biennial questionnaires, FAO has, in line with Article 4.2 of the Code, monitored progress in the implementation of the Code and its related instruments through a biennial questionnaire and reported the results to the Committee on Fisheries (COFI). Many States and relevant international organizations, whether governmental or non-governmental, have actively cooperated with FAO in this work over the 25 years of the Code's existence. Responding countries and organizations have varied in number and composition over the years and at times information provided in the questionnaire has been insufficient to reflect the status of implementation. However, based on the self-reporting in the biennial questionnaire some trends have emerged as to how the Code's principles and standards applicable to the conservation, management and development of all fisheries<sup>35</sup> have been applied over the years. The following trend analysis is limited to the responses provided by States.

89. After the introduction of the biennial questionnaire, the number of respondents went from 103 and 105 States in 2000 and 2002, respectively, to lower levels between 2004 (49 States) to 2011 (56 States), and finally rising again in recent with 115, 128 and 119 responding States in 2015, 2018 and 2020, respectively.

90. The highest ranked objectives of the Code have remained relatively constant over the 25 years with the objective of (1) establishing principles for responsible fisheries considering all their relevant biological, technical, economic, social, environmental and commercial aspects ranking highest in most years, followed by (2) establishing principles and criteria to implement policies for the conservation of fishery resources and fisheries management and development and (3) promoting the contribution of fisheries to food security and food quality giving priority to the nutritional needs of local communities.

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<sup>35</sup> The Code provides principles and standards applicable to the conservation, management and development of all fisheries (Art. 1.3).

## **B. Fisheries management**

91. The percentage of Members that have reported having developed FMPs for their identified marine and/or inland fisheries has fluctuated over the years, ranging from around 67 percent to 97 percent and overall a higher percentage reporting to have developed FMPs for marine fisheries than for inland fisheries.

92. Out of the Members who reported to have developed FMPs, the most common categories of management measures integrated within those plans for marine fisheries from 2002 to 2010 include: (1) prohibiting destructive fishing methods and practices, (2) providing for stakeholder participation in determining management decisions, and providing for the protection of endangered species. After incorporating more categories of management measures into the biannual questionnaire in 2001 and again in 2015, (1) prohibiting destructive fishing methods and practices remained a most prioritized category (in 2015 and 2020) along with (2) addressing the interests and rights of small-scale fishers (2011 and 2015) and addressing fishing capacity, including the economic conditions under which the industry operates (2013).

93. Some positive trends in fisheries management could be observed over the more recent years: An increasing number of Members reported that they have started to implement the Ecosystem Approach to Fisheries (EAF), the percentage of Members continuously increasing over the last decade from 69 percent (2011) to 81 percent (2020) along with an increased application of established ecological, socio-economic and governance objectives; identified key issues to be addressed by management actions; and established monitoring and evaluation mechanisms established. Equally, the number of countries reporting to have developed stock-specific reference points has increased over the same period from 56 percent of Members in 2010 to 69 percent in 2020.

## **C. Fishing operations**

94. Members have reported on the most important measures to control fishing operations undertaken by vessels flying their flag within and beyond their EEZ, with an increasing trend, albeit with fluctuations, over the last two decades, with more than 90 percent of Members reporting to take measures in recent years. This is particularly relevant for controlling fishing operations in waters beyond their national jurisdiction, for which 35 percent of Members in 2000 in comparison to 93 percent in 2018 and 2020 reported to have taken measures to ensure that fishing activities of their vessels are reported, monitored and carried out in a responsible manner. Over the last decade, mandatory authorization to operate beyond the EEZ, enhanced MCS measures and mandatory logbooks and reporting systems were consistently reported to be the most important measures taken outside of EEZs.

95. A clear increase can be noted over the years in the number of Members reporting to be either partially or fully implementing VMS to monitor vessels flying their flags within and beyond their EEZ. Whereas in 2000, only 25 percent of reporting Members had implemented VMS to monitor their vessels, this quickly rose to 70 percent of reporting Members by 2008 and continued to increase with 18 percent and 59 percent of reporting Members fully and partially, respectively, implementing VMS in 2020. An increasing number of countries reported that although they had not fully implemented VMS, they demanded foreign vessels in their EEZ to carry VMS and report to other monitoring centres. By 2020 this applied to 30 percent of reporting countries, all of these from Africa and the Near East.

## **D. Aquaculture Development**

96. Aquaculture has been playing an increasing role in supplying fish for human consumption and reducing pressure on capture fisheries. From 2011 to 2020 more than 95 of Members reported that aquaculture occurs in their countries. The development of policy, legal and institutional frameworks for the development of responsible aquaculture have had to keep pace with the rapid growth of the sector. However, over the last decade, the development of these frameworks has remained on a level of slightly less than half of the Members having largely complete and enabling policies (fluctuating

between 42 percent and 50 percent), around 40 percent having largely complete and enabling legal frameworks (increasing from 36 to 47 percent), and less than half of the Members having developed largely complete and enabling institutional frameworks (fluctuating between 40 percent and 50 percent). The majority of the remainder had partially developed policy, legal and institutional frameworks, and less than a fifth had no or largely insufficient frameworks throughout the same decade.

97. The Code encourages Members to promote responsible aquaculture practices. Members reporting that government agencies have adopted codes or instruments in this regard showed some progress from 51 percent and 36 percent in 2002 and 2004 to a peak of 85 percent in 2015 and has remained at a level around 70 percent since. More progress could be observed in the private sector over the last two decades: (1) at producer level, where around 30 percent of Members reported to have adopted codes or instruments in 2002 which has increased to 65 percent by 2020; (2) at supplier level where 17 percent reported codes and instruments in 2002 which has increased to 44 percent in 2020; and (3) at manufacturer level where less than 20 percent of Members reported having adopted codes and instruments from 2002 (18 percent) to 2006 (13 percent), increasing to 43 percent of Members by 2020.

### **E. Integration of fisheries into coastal area management**

98. Of the Members who reported having a coastline (between 88 and 95 percent of reporting Members from 2011 to 2020), no increase could be observed in the development of a largely complete and enabling policy, legal and institutional framework for integrated coastal zone management. Interestingly, the percentage of Members reporting to have these in place showed declining trends over the last decade, decreasing from, 40 percent in 2011 to 21 percent in 2020 for policy frameworks, 31 percent in 2011 to 20 percent in 2020 for legal frameworks and 26 percent, 31 percent and 32 percent for the years 2011, 2013 and 2015, respectively, to 21 percent in 2020 for institutional frameworks.

99. Since the adoption of the Code, the most important types of conflicts that arise between fisheries and other activities in coastal zones remained largely constant. Of the reporting Members, the highest ranked activities were consistent conflicts between coastal and industrial fisheries in 2000, 2002, 2004, 2006, 2013 and 2018 and conflicts between fishing gear types in 2010, 2011, 2015, 2018 and 2020. The conflicts that followed in the ranking across 2000 to 2020 were conflicts between fisheries and mineral extraction and between fisheries and recreational development.

### **F. Post-harvest practices and trade**

100. The percentage of Members that reported having in place a largely complete and enabling effective food safety and quality assurance system for fish and fisheries products showed an increasing trend over the last two decades. While 42 percent of Members reported to have no system in place in 2000, this number dropped over the following years and was at 8 percent by 2020. While fluctuations in the reporting in following biennial questionnaires may be difficult to explain and could be caused by inconsistencies in the understanding of what an effective food safety and quality assurance system for fish and fisheries products entails, it can nevertheless be concluded that systems were increasingly developed, underlining the importance of safety and quality standards for international trade of fish and fisheries products.

101. Reducing post-harvest losses and trading of illegally harvested fish have been considered important issues by almost all respondents over the years, followed by improving the use of bycatch and eliminating processing (Tables 35, 36 and 38). Since 2000, an increasing number of respondents has reported to have taken measures to address post-harvest losses and waste, with enacting food-safety regulations and enhancing monitoring, control and surveillance being the most frequently mentioned since 2011 (Table 35). Over the same two decades, reporting Members have increasingly taken measures to eliminate processing and trading in illegally harvested fisheries resources, with enhanced fisheries control and inspections being the most frequent measure taken, followed by enhanced customs and border controls and implementing product traceability systems.

### G. Fisheries research

102. Over the last 20 years combined, no obvious trend can be noted on the percentage of stocks important to national fisheries for which Members reported to have obtained reliable estimates of stock status, albeit with oscillations between years. On average, Members responded that stocks for which an estimate had been obtained represented consistently slightly less than half of key national stocks over the whole period, with the exception of 2002 and 2010 where it reached 64 percent. There were, however, marked differences in percentage range between different world regions in the period.

103. Key main data gaps in managing fisheries resources have remained more or less constant over the last decade. On average, Members ranked stock status data consistently as the most prevalent data gap from 2011 to 2020, followed by ecosystem data, IUU fishing and/or MCS data, catch data and effort data.

### H. International instruments in the Context of the Code

104. The 1999 International Plan of Action for the Management of Fishing Capacity (IPOA-Capacity) addresses the issue of excess fishing capacity that, among others, contributes substantially to overfishing, the degradation of marine fisheries resources, the decline of food production potential and significant economic waste. The percentage of Members reporting completed fishery capacity assessments rose over the last two decades from 9 percent in 2002 to 25 percent in 2020. By the year 2020, 50 percent of Members reported to have developed a NPOA-Capacity and a further 36 percent reported intending to do so. Interestingly, the percentage of reporting Members for which fishing overcapacity was identified as a problem decreased from 64 percent in 2011 and 74 percent in 2013 to 52 percent in 2020. Of the measures taken by these Members to prevent further build-up of overcapacity, limited entry regimes and freeze on number of vessels/licenses were consistently the most prominent ones reported in all questionnaires since 2011.

105. The 1999 International Plan of Action for Conservation and Management of Sharks (IPOA-Sharks) addresses the need for improved sustainable management in the light of declining abundance of many exploited shark species. The percentage of Members reporting to catch sharks either through targeted fisheries or bycatch has fallen from 78 percent in 2010 to 46 percent in 2020. Of those Members where this was occurring, Members increasingly conducted assessments of shark stocks to determine the need for a shark plan with 22 percent having conducted assessments in 2000 increasing to 77 percent in 2020. By the year 2020, 63 percent of Members reported to have developed an NPOA-Sharks.

106. The 1999 International Plan of Action for Reducing Incidental Catch of Bycatch in Longline Fisheries (IPOA-Seabirds) addresses the high rates of seabird mortality related to seabirds accompanying fishing vessels. Since 2011, between 78 and 87 percent of Members reported that longline, trawl and/or gillnet fishing was conducted in waters under their jurisdiction. The percentage of these Members that has conducted an assessment of these fisheries grew from seven percent in 2000 to 80 percent in 2011, then dropped to 36 percent in 2013 and has since 2015 stayed at a level of around 46 percent to 49 percent of Members. The percentage of assessments that concluded that an NPOA-Seabirds was needed also showed an increasing trend from 2002 to 2011 and has been levelling off at around 60 percent to 70 percent since. By the year 2020, 64 percent of Members reported to have developed an NPOA-Seabirds.

107. The International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) was adopted in 2001. By the year 2020, 67 percent of Members reported to have developed an NPOA-IUU. The most prominent measures taken to prevent, deter and eliminate IUU fishing were legal framework improvements, improved coastal State controls and MCS, improved port State control measures, bilateral and regional collaboration and developing and implementing NPO-IUUs.

108. By September 2020, 167 Members and the EU have ratified, accepted or acceded to UNCLOS. Forty-one Members and the EU have become Parties to the Compliance Agreement. Sixty-six Members and the EU have ratified, accepted or acceded to the PSMA by 2020 with 22 Members

becoming Party in 2016, the year of its entry into force. With currently 67 Parties the PSMA shows the fastest rate of accession to a binding international fisheries instruments related to the Code. In 2018 and 2020, Members reported an average degree of implementation with regard to policy, legislation, institutional framework and operations of all three instruments.

### **I. Constraints and suggested solutions**

109. Since 2010, close to or slightly more than 90 percent of Members consistently reported that they faced some constraints in implementing the Code over the last decade. The highest ranked constraint was related to insufficient budgetary and to insufficient human resources, and both of these rising in importance since 2010. These were consistently followed by the constraints related to incomplete policy and/or legal frameworks and to inadequate scientific research, statistics and information access over the ten-year period. Constraints that were also considered important were insufficient MCS arrangements, institutional weaknesses and lack of awareness and information about the Code, the latter of which showed a tendency to decrease in importance after being reported by 40 percent of Members in 2001 and only 18 percent in 2020.

110. Among the solutions proposed by Members to counter constraints faced in implementing the Code access to more budgetary means has increased, from 44 percent in 2011 to 67 percent in 2020, to currently being the highest ranking solution. This was followed by access to more human resources which has stayed more or less level between 29 and 38 percent. More training and awareness raising is a solution that rated highest among reporting Members ten years ago at 56 percent in 2010 but has decreased to 35 percent in 2020. Improved research statistics and access to information was proposed as solution by 28 to 37 percent of Members over the last decade, while the alignment of policy and/or legal frameworks slightly decreased from 40 percent to 26 percent over that same period. The improvement of institutional structures ranked high with 42 percent in 2011 but saw changes from one questionnaire to the next and currently only stands at 21 percent. The solutions to strengthened capacity and role of primary stakeholders and improving MCS arrangements have been at around 20 percent over the last five years.