

STRATEGY FOR IMPROVING INFORMATION ON STATUS AND TRENDS OF CAPTURE FISHERIES

PART 1: INTRODUCTION

1. Knowledge of the status and trends of capture fisheries and fishery resources, including socio-economic aspects, is a key to sound policy-making and responsible fisheries management. It is necessary at the national level for the maintenance of food security and for describing social and economic benefits of fisheries. Fisheries policy-making and management is a dynamic interdisciplinary process that needs to take account of the status and trends of fisheries. Information on the status and trends of fisheries is also essential for assessing the validity of fisheries policy and for tracking the performance of fisheries management.

2. There is a high level of public interest for information on the status and trends of fisheries. More accurate and timely information should result in a better informed public that supports efforts to manage fisheries in a responsible manner. Disseminating timely and readily understandable information on the status and trends of fisheries should help to ensure transparency in fisheries management, as called for by the Code of Conduct for Responsible Fisheries (Paragraphs 6.13 and 7.1.9).

3. Application of the precautionary approach, based on the best scientific evidence available, is a key element of efforts to achieve responsible fisheries. This requires making information on the status and trends of fisheries available in a manner that supports policy-making and fisheries management.

4. Information on the status and trends of fisheries is either needed for, or consistent with, many international instruments concerning fisheries, including:

- the United Nations Convention on the Law of the Sea (UNCLOS) (1982) which establishes the need to take account of the best scientific evidence available; the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (1995), which specifies responsibilities for collecting and exchanging data necessary for stock assessments, including provisions for transparency (Article 12);
- the FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (1993), which requires the exchange of some information on fishing vessels (Article VI);
- the Code of Conduct for Responsible Fisheries (hereafter referred to as the Code of Conduct), which calls for use of the best scientific evidence

available, bilateral and multilateral cooperation in research and data collection (Article 6.4), regional mechanisms for cooperation to compile and exchange data (including information on socio-economic factors, Article 7.4), and publication and dissemination of results (Article 12);

- FAO International Plans of Action (IPOAs) for implementing various aspects of the Code of Conduct, such as the IPOA for the Management of Fishing Capacity, which broadens the scope of the needed information on the status and trends of fisheries, to include measures of fishing capacity;
- the Reykjavik Declaration on Responsible Fisheries in Marine Ecosystems (2001), which calls for greater consideration of ecosystems, thus implying that the scope of status and trends information should be further expanded to reflect ecosystem considerations;
- the Commission for Sustainable Development, as called for by United Nations Conference on Environment and Development (UNCED) in Chapter 40 of Agenda 21, which requires States to report on sustainability indicators, which are likely to be partially based on fisheries status and trends information;
- International conventions, such as the Convention on Trade in Endangered Species (CITES) (1973) and the Convention on Biological Diversity (1992), which call for the collection and exchange of information on the status of biota; and
- International programmes, including the (a) United Nations Environment Programme (UNEP), (b) United Nations Education, Scientific and Cultural Organization's (UNESCO) Intergovernmental Oceanographic Commission (IOC), (c) Large Marine Ecosystem projects sponsored by the Global Environmental Facility, (d) Coordinating Working Party on Fishery Statistics (CWP), and (e) Inter-Agency Committee on Sustainable Development, which call for, or need, fisheries information.

In order to promote sustainable fisheries, most countries have revised their national legislation to align it with various international instruments such as those above. Promoting sustainable fisheries at the national level requires improved status and trends information.

5. The Strategy for Improving Information on Status and Trends of Capture Fisheries (Strategy-STF) was approved by consensus at the Committee on Fisheries (COFI) on 28 February 2003.

PART 2: NATURE AND SCOPE

Nature of the Strategy

6. This Strategy has been elaborated within the framework of the Code of Conduct, as envisaged by Article 2 (d) and (e). The provisions of Article 3 of the Code of Conduct apply to the interpretation and application of this document and its

relationship with other instruments. All concerned Members and non-members of FAO and fishing entities are encouraged to support its implementation.

7. This Strategy applies to the assembly and dissemination of information on the status and trends of fisheries. Data collection and research needs for monitoring the status and trends of fisheries are established by other international instruments, such as those noted in Paragraph 4 and existing obligations of States to report fisheries statistics to FAO under Article XI of the FAO Constitution. While this Strategy does not establish new legal obligations, it does propose to significantly invigorate data collection and research and it provides impetus for fulfilling those that already exist. This impetus should include additional support from relevant international organizations, whether governmental or non-governmental, and financial institutions (development partner agencies) for capacity building in developing countries.

8. In this Strategy, the reference to States includes the European Community in matters within its competence.

Scope of the Strategy

9. The Strategy is global in scope and designed to cover all capture fisheries in inland and marine waters, including all industrial, commercial, subsistence and recreational fisheries. It includes issues concerning species introductions (deliberate or unintentional), wild stock enhancement, wild fish destined for on-growing or fattening in captivity, and stock recovery.

10. The Strategy does not apply to aquaculture because aquaculture has distinctive requirements that need to be addressed specifically for this increasingly important sector.

11. The main focus of the Strategy is on information concerning fishery resources and the primary fisheries sector, including socio-economic information.

PART 3: OBJECTIVE

12. The overall objective of the Strategy is to provide a framework for the improvement of knowledge and understanding of fishery status and trends as a basis for fisheries policy making and management for the conservation and sustainable use of fishery resources within ecosystems.

13. The Strategy will be implemented through agreements between States, directly or through their participation in regional fishery bodies and arrangements, and FAO working cooperatively to assemble information on the status and trends of fisheries, and using modern information technology to manage and disseminate it. These agreements should be established at various geographic scales, ranging from local, to national, to regional, and should be linked to form a global system under the auspices

of FAO. Wherever and whenever possible, existing organizations should be used as the basis of the arrangements.

14. Global efforts to assemble and disseminate comprehensive information (e.g. through the FAO Fisheries Global Information System [FIGIS]) on the status and trends of fisheries are currently hindered because a complete inventory of the fisheries and fish stocks of the world does not exist. A key element of the Strategy is to prepare such inventories, which would be implemented in FIGIS.

15. Consistent with Article 5 of the Code of Conduct, the capacity of developing countries should be duly taken into account in implementing the Strategy. The capacity of developing countries, particularly the least developed among them, small island States, and countries whose data collection systems are in a critical condition, needs to be greatly enhanced so that they can fulfil existing commitments to collect fisheries statistics and to conduct fisheries research, thus allowing them to more fully participate in the Strategy.

PART 4: GUIDING PRINCIPLES

16. The arrangements for implementation of this Strategy should be based on the six guiding principles highlighted in the paragraphs that follow.

Sustainability

17. Arrangements for assembling and disseminating information on the status and trends of fisheries should be viable in the long term. As a consequence: (1) adequate funding should be provided at the national, regional and global levels, taking into account the resources available to countries, regional fishery bodies and arrangements and FAO; and (2) the programme should consider the particular needs of developing countries which may require large investments in training and capacity building, to facilitate the formulation of appropriate national programmes or strategies.

Best scientific evidence

18. Arrangements for assembling and disseminating information on the status and trends of fisheries should contribute to the best scientific evidence available. Protocols for assuring the quality of scientific information should be applied wherever and whenever practicable and appropriate. Such protocols should take account of the need to consider knowledge of participants in the fisheries, as well as traditional knowledge.

Participation and cooperation

19. Arrangements for assembling and disseminating information on the status and trends of fisheries should adopt mechanisms for inclusion of all relevant participants

in the preparation, analysis and presentation of fishery information. Relevant participants may include, *inter alia*, fishers, industry representatives and non-governmental organizations. States should, in accordance with international law, cooperate with other States in developing and maintaining such fishery information, as appropriate, either directly or through appropriate intergovernmental organizations, including regional fishery bodies and arrangements. States should provide feedback on the status and trends of fisheries to all relevant participants.

Objectivity and transparency

20. Arrangements for assembling and disseminating information on the status and trends of fisheries should contribute to providing the best scientific evidence available (Paragraph 18), and to transparency, in support of Article 6.13 of the Code of Conduct, while respecting any confidentiality requirements. Uncertainty associated with status and trends information should be expressed.

Timeliness

21. Arrangements for assembling and disseminating information on the status and trends of fisheries should result in information being provided in a timely manner.

Flexibility

22. Arrangements for assembling and disseminating information on the status and trends of fisheries should be flexible enough to permit adjustments as necessary to ensure that they effectively support fishery policy making and management through the provision of appropriate information.

PART 5: REQUIRED ACTIONS

Need for capacity building in developing countries

23. States, relevant intergovernmental and non-governmental organizations, and financial institutions, should address developing country needs for financial and technical assistance, technology transfer, training and scientific cooperation, in order to build capacity to implement cost-effective and sustainable fishery data collection, data processing, analysis and reporting, and exchange information. Capacity building is necessary to fulfil national needs, the needs of regional fishery bodies and arrangements, and existing obligations for reporting fisheries data to FAO, so that developing countries can more fully participate in and benefit from the Strategy.

Data collection systems in small-scale fisheries and multispecies fisheries

24. States, relevant intergovernmental and non-governmental organizations, and financial institutions should recognize that many small-scale fisheries and multispecies

fisheries, particularly in developing countries, are not well monitored and awareness needs to be raised on the importance of monitoring these fisheries. They are probably underestimated and therefore under-represented in current fisheries status and trends information, and consequently they are not adequately considered in the development of plans and policies for fisheries.

25. States should, with support from development partner agencies and assistance from FAO, where necessary, enhance their capacities to collect data to ensure that the coverage of fisheries information is as complete as possible and includes all sectors, in particular the data necessary to evaluate small-scale and multispecies fisheries.

26. States should participate in and support the development of cost-effective methods for acquiring and validating data on small-scale and multispecies fisheries, including rapid appraisal methodologies and other approaches for data-poor situations and participatory processes that closely associate the fishers and their organizations to the data collection schemes. Regular surveys at appropriate frequencies rather than continuous monitoring may be more feasible, particularly for some inland and small-scale fisheries.

27. States should cooperate through their regional fishery bodies and arrangements and regional programmes, if necessary with the cooperation of FAO, to develop and adopt effective and pragmatic standards and systems for data collection, which should be compatible with FAO systems.

28. FAO, with support from its Members and development partner agencies, should address the special data collection and assessment needs for small-scale and multispecies fisheries, including the use of meetings of experts to develop innovative approaches and guidelines.

Expanding the scope of information on status and trends of fisheries, including the need to incorporate ecosystem considerations into fisheries management

29. States should approach the implementation of the Code of Conduct, in particular as this relates to Article 7 (Fisheries Management), especially Article 7.4.2, and Article 12 (Fisheries Research), by considering ways to expand the scope of status and trends reporting to meet the responsibilities recommended therein for research and the dissemination of information on the effects of climatic, environmental and socio-economic factors on fishery conservation and management.

30. States, directly or through participation in regional fishery bodies and arrangements, should consider broadening the collection of information on the status and trends of fisheries to support further development of fisheries management incorporating ecosystem considerations.

31. FAO, with support from its Members, and with full participation of regional fishery bodies and arrangements, should further address the issue of indicators of sustainable development, as a follow-up to the FAO Technical Consultation on Sustainability Indicators in Marine Capture Fisheries (Sydney, Australia, January 1999).

Global inventory of fish stocks and fisheries

32. States should participate in, or support coordinated efforts for the compilation of a global inventory of fisheries and fish stocks (biological management units) or stock-complexes as a basis to improve the completeness of available information on the status and trends of fisheries and for inclusion in FIGIS.

33. As a first step towards development of the inventory, States should collaborate with FAO to develop the definitions, form, content, methods and implementation (including the definition and allocation of responsibilities and the estimation of costs) of a programme for the compilation of a global inventory of fisheries and fish stocks (or stock-complexes), noting the requirements for and coordinating efforts with the actions being undertaken through IPOAs.

34. FAO, with support from its Members, either directly or through regional fishery bodies and arrangements, should consider establishing a process for scientific oversight of fishery status and trends information, including the global inventory of fish stocks and fisheries, the global reviews of fishery status and trends prepared for the biennial State of World Fisheries and Aquaculture (SOFIA) and the ongoing FAO submissions to FIGIS.

FIGIS participation, structuring and capacity building

35. States should support, both directly or through participation in regional fishery bodies and arrangements, development of FIGIS by:

- providing national user requirements for outputs from and inputs to the system;
- participating in national, regional and international processes to define the protocols for information exchange, quality assurance or quality rating, and transparency provisions to be specified in partnership agreements;
- contributing timely information to FIGIS;
- facilitating a systematic synthesis of information on fishery status and trends from national to regional and global levels; and
- participating in complementary information and communication technology initiatives aimed at improving the generation and dissemination of research-based knowledge relevant to sustainable development.

36. States should, either directly or through their participation in regional fishery bodies and arrangements, provide FIGIS with the best scientific information available. The assurance of information quality could be established by review processes at the national or regional level.

37. States should support FAO and other FIGIS partners, as appropriate, in the organization of and participation in pilot projects and workshops, to further develop and implement FIGIS, to develop training materials, and to conduct training.

38. FAO should continue to develop FIGIS, using modern information and communication technology, as a partnership between FAO, regional fishery bodies and arrangements, and national organizations, and other organizations that can make a positive contribution to the System.

Development of criteria and methods for ensuring information quality and security

39. States should participate in the development of criteria and methods to ensure information quality and security for the purposes of best scientific evidence, in accordance with internationally agreed standards and practices, through mechanisms for data verification, and in a manner consistent with applicable confidentiality requirements. States should apply the agreed criteria and methods.

40. FAO, with support from and participation by its Members, should facilitate the development of practical guidelines for quality assurance, transparency and security of fishery information.

Development of arrangements for the provision and exchange of information

41. States, directly or through their participation in regional fishery bodies and arrangements, should seek and agree on arrangements to facilitate the provision and exchange of information on the status and trends of fisheries with FAO, as appropriate. These arrangements should address the roles and entitlements of the partners, as well as information quality, transparency and confidentiality.

The role of working groups in assessing the status and trends of fisheries

42. Working groups, composed of fishery experts and set up by countries or regional fishery bodies and arrangements, that meet to assess the status and trends of fish stocks and fisheries and which conduct their work according to terms of reference which specify the scope of their activities, are an important mechanism for enhancing the quality and transparency of scientific information. They can also provide important opportunities for capacity building.

43. States, directly or through participation in regional fishery bodies and arrangements in their respective jurisdictions and regional programmes, should formalize arrangements for working groups to analyse fisheries data and fish stocks information towards the evaluation of their status and trends. The periodicity of these working group meetings would depend on available human and financial resources and the nature of the fisheries and the fish stocks concerned.

44. States and development partner agencies should work with FAO to ensure the participation of fishery experts from around the world in working groups, particularly where these working groups contribute to capacity building in developing countries. The Technical Cooperation Programme (TCP) and other FAO programmes could be used for this purpose.

Sustaining data collection, information on the status and trends of fisheries

45. States should monitor their systems for data collection, analysis and reporting. States should ensure the sustainability of these systems to meet the needs of fishery policy-making and management, and the agreed requirements of regional fishery bodies and arrangements and FAO, and take corrective actions as appropriate.

PART 6: PROMOTION AND IMPLEMENTATION MECHANISMS

General call for improving information on the status and trends of fisheries

46. States, regional fishery bodies and arrangements, and international institutions should develop and implement mechanisms for the improvement of fisheries information, the application of research to enhance the availability of best scientific evidence, and the adoption of a continuing process for the enrichment of fishery status and trends information to support conservation, management and sustainable use of fishery resources at local, regional and global levels.

The role of States

47. States should evaluate the actions they need to take to improve information on the status and trends of fisheries, address these requirements on a priority basis, and report on the improvements they make, as part of their biennial report to FAO on the Code of Conduct.

The role of regional fishery bodies and arrangements

48. Regional fishery bodies and arrangements, within the limits defined by their conventions and to the extent mandated by their members, should participate in the implementation of this Strategy by providing support to their members, participating in global programmes and decisions on the development and adoption of standards

and guidelines for information on the status and trends of fisheries, and becoming a partner in FIGIS.

The role of FAO

49. FAO will, as and to the extent directed by its Conference, and as part of its Regular and Field Programme activities, support States and regional fishery bodies and arrangements in the implementation of this Strategy.

50. FAO will, as and to the extent directed by its Conference, support member States' implementation of this Strategy, through in-country technical assistance projects using Regular Programme funds and by use of extra-budgetary funds made available to the Organization for this purpose. For better conservation and management of fishery resources, FAO should prepare a specific programme for establishing effective and sustainable systems for data collection, processing and analysis in developing countries, including in particular the least developed among them.

51. FAO will, through COFI, report biennially on the state of progress in the implementation of the Strategy.

Role of development partner agencies and non-governmental organizations

52. International and national development partner agencies, should give priority to the provision of financial and technical assistance to developing countries, in particular the least developed among them and small island developing states, and countries whose data collection systems are in a critical condition, for capacity building and information system development, as necessary for implementation of this Strategy.

53. Non-governmental organizations (national, regional and international) concerned with fisheries, fisherfolk and the aquatic environment and related research, should encourage implementation of the Strategy through appropriate support, information, development of methods and capacity building, and participation.