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COMMITTEE ON FISHERIES

SUB-COMMITTEE ON AQUACULTURE

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PROGRESS REPORTING ON THE IMPLEMENTATION OF THE CODE OF CONDUCT FOR RESPONSIBLE FISHERIES (CCRF), PROVISIONS RELEVANT TO AQUACULTURE AND CULTURE- BASED FISHERIES AND UPDATE ON THE NEW REPORTING SYSTEM

Executive Summary

This document comprises two parts: the status of progress in implementing the aquaculture and culture-based fisheries provisions of the 1995 FAO Code of Conduct for Responsible Fisheries (CCRF) as informed by member countries in 2010 and the progress in the development of the new reporting instrument.

Part I describes the current status and some trends in the progress of implementation, globally and by region, based on comparable data from the 2010 and past reporting. As in previous reports, owing to the low responses and the overall poor quality of information obtained from the current questionnaire surveys, it is difficult to determine progress in the implementation of the code and the assistance required by the members to better implement the aquaculture provisions of the CCRF. Nevertheless there are signals of global improvement for some of the elements in the code such as the adoption of environmental impact assessments for the sector activities and the monitoring of aquaculture operations indicated by 89 percent and 84 percent of responding countries respectively.

The second part outlines the process to improve the new questionnaire and the results of the testing and training on the use of the instrument and the embedded guide for the responses, in different countries and regions. The Sub-Committee is invited to support and endorse the global implementation of the new instrument, to be used in electronic form, on trial for the following two reporting periods.

The Sub-Committee is invited to:

- 1) Approve the proposed questionnaire and reporting system for global testing for two two-year terms and conduct an evaluation of its success/performance;
- 2) Consider and recommend the creation of a national response teams as a strategy to improve the reporting system, to provide more comprehensive responses and to enhance the use of the questionnaire as a self assessment tool to improve and strengthen the adoption of the CCRF.

TRENDS IN THE PROGRESS OF IMPLEMENTING THE CCRF PROVISIONS ON AQUACULTURE AND CULTURE-BASED FISHERIES

Introduction

1. FAO has been monitoring the implementation of the 1995 FAO Code of Conduct for Responsible Fisheries (hereinafter referred to as the Code or CCRF) with a standard questionnaire distributed to member countries, regional fishery bodies (RBF) and international non-governmental Organizations¹ (INGOs). The questionnaire includes sections on aquaculture, in particular Article 9 and some elements in Articles 5 and 10 of the CCRF.
2. Article 4.2 of the Code states, *inter alia*, that FAO will report to the FAO Committee on Fisheries (COFI) on the application and implementation of the Code using a standard questionnaire. In this regard, the COFI Secretariat biannually reviews the responses received from FAO Members, regional fishery bodies (RFBs), and international non-governmental organizations (INGOs), and reports on the progress to COFI. The Secretariat of the COFI Sub-Committee on Aquaculture (COFI/SCA) also regularly reviews the progress in the implementation of the Code's aquaculture-related provisions^{2,3} using the same methodology and presents this to the Sub-Committee for discussion and decision. This document is the fifth of such reports prepared by the Secretariat of the Sub-Committee.
3. This report: i) summarizes the reporting from member countries to the 2010 survey and ii) provides the final revised version of the new questionnaire and reporting mechanism to improve the CCRF reporting process.
4. In 2010, 69 members⁴ (i.e. 36 percent of the FAO members) responded, this is about the same figure as in 2008. Of particular relevance is the fact that there were fewer responses from Africa and Asia (only 11 out of 45 and 4 out of 17 countries respectively) in the current period. This represents an important global reduction in the reporting for aquaculture, considering that more than 90% of production comes from Asia. In Europe of the 18 countries which answered the questionnaire, only five responded to the questions related to aquaculture. In Latin America and the Caribbean, South West Pacific and Near East 15, 9 and 7 countries responded respectively as well as two countries in North America. In addition 18 RFBs and 11 NGOs responded to the questionnaire; equal to 47 percent and 34 percent respectively of the total number of organizations that received the questionnaire.
5. Such poor responses and limited regional representation in the case of Asia do not allow an in-depth and reliable analysis of the trends in the implementation of the Code both in the regions and globally. Therefore this document, as in previous ones, provides a cautious indication of the 2010

¹ Questionnaire for Monitoring the Implementation of the 1995 FAO Code Of Conduct For Responsible Fisheries. The International Plans Of Action On Capacity, Sharks, Seabirds, And Illegal, Unreported And Unregulated Fishing and The Strategy For Improving Information On Status And Trends Of Capture Fisheries.

² FAO 2002, 2003, 2006, 2008, 2010. Progress made on the implementation of the Aquaculture related provisions of the Code of conduct for responsible fisheries. COFI:AQ/I/2002/4. 8 p.; COFI:AQ/II/2003/4. 8 p.; COFI: AQ/III/2006/3. 11 p; COFI:AQ/IV/2008/4. 11 p; COFI:AQ/V/2010/3/Rev.1.

³ FAO 2010. Improving progress reporting on the implementation of the Code of Conduct for Responsible Fisheries (CCRF), provisions relevant to aquaculture and culture-based fisheries and the proposal for a revised reporting mechanism on CCRF with an interactive questionnaire. Fifth session of the Committee on Fisheries Sub-Committee on Aquaculture, Phuket, Thailand. COFI:AQ/V/2010/3/Rev.1. 10 p.

⁴ FAO 2011. Progress in the implementation of the Code of Conduct for Responsible Fisheries, including related international Plans of Action and Strategy and other matters. Twenty- ninth Session of the Committee on Fisheries. Rome, Italy, 31 January- 4th February 2011. COFI/2011/2. <http://www.fao.org/docrep/meeting/021/k9050E.pdf>

status and needs while less attention is given to temporal trends, although in some cases there are relevant indications of improvement.

General status

6. **Priority accorded to aquaculture:** In 2010, 58.9 percent of responding countries considered aquaculture development as top priority, a slight decline compared to the 61 percent in 2008. The Asian region showed a decline in priority to aquaculture (only 50 percent compared to 82 percent in 2008). This is certainly due to the fact that only four countries reported, thus regional representation should not be considered in this instance. On the contrary, 81.8 percent of the responding African countries gave high priority to aquaculture, an increase over the 63% accorded in 2008.

7. **Legal and institutional framework:** Seventy one percent of the responding countries reported having some type of framework in 2010. As in previous reports, most responses lacked specificity, which did not permit an assessment of the appropriateness or effectiveness of the regulatory frameworks.

8. **Codes of practice:** In 2010, 62 percent of countries reported some code of practice being adopted by government agencies; 42 percent reported codes of practice being adopted by producers, an increase compared to 33 percent in 2008; 25 percent reported having codes of practice for suppliers and 20 percent have codes of practice for manufacturers.

9. **Environmental impact assessment (EIA):** Eighty nine percent of responding countries declared having an EIA in place in 2010 and this is a significant increase over the 47 percent reported in 2008. All the reporting countries in Asia, Europe, North America and Southwest Pacific indicated having EIA in place, while in the Near East, Africa and Latin America the percentage varied between 60 and 90. However at a global level, 19 percent of all reporting countries indicated the need to improve environmental assessment techniques, 15 percent indicated the need for improvements in the legal frameworks for implementation.

10. **Monitoring of aquaculture operations.** Eighty four percent reported having some monitoring in place in 2010, an apparent big improvement compared to 2008 (42 percent). Globally, 20 percent of countries indicated the need to improve monitoring effectiveness in terms of coverage, species included and facilities. Nine percent of the countries indicated the need for a legal framework to improve monitoring and seven percent indicated the need for institutional strengthening. The other 13 percent referred to various kinds of deficiencies and bottlenecks to an effective monitoring system.

11. **Use of exotic species in aquaculture:** In 2010, 84 percent of reporting countries indicated having some provisions to minimize potential impacts from the use of exotic species. Indeed all the reporting countries in Asia, Europe, Latin America and North America indicated having such provisions. However, globally, 23 percent of countries indicated the need to improve their technical capacity in order to make such provisions work effectively.

12. **Promoting responsible aquaculture in support of rural communities, fish farmers and other stakeholders:** Ninety six percent of the reporting countries indicated having some measures or activities to support rural communities through responsible aquaculture. However, as in previous reports, measures were very diverse and not easy to classify. Three types of actions dominated the answers; (i) extension and training programmes to strengthen producers and their organizations (38 percent), (ii) improvement of legal frameworks in support of rural communities, producer organizations and fish farmers (34 percent) and (iii) strengthening national aquaculture policies and plans (24 percent).

13. **Implementation of measures and request for assistance:** As indicated above the diversity of measures and sometimes the quality of the responses does not allow to categorize these. There were also differences among regions; e.g. in Africa most responding countries mentioned the need for improved extension, training and government support while in other regions such as Latin America and the Caribbean and the Southwest Pacific the strengthening of producer organizations and of national aquaculture policies and plans seemed more relevant.

14. In summary, over the past biennium, the surveys showed some improvement on the implementation of the CCRF provisions for aquaculture and culture-based fisheries. However the number of responses received and their regional representations did not allow us to conclude this phenomenon as a “trend” at the global level. Therefore, it is important and timely to continue the process of improving the reporting procedure.

IMPROVING THE REPORTING OF THE IMPLEMENTATION OF AQUACULTURE AND CULTURE-BASED FISHERIES PROVISIONS OF THE CCRF

Background

15. In order to improve the reporting rate and implementation of the Code, both COFI and COFI/SCA have requested FAO to develop a questionnaire to assess the status of compliance of States to the aquaculture provisions of the CCRF. In response, FAO, drafted a reporting template (i.e. questionnaire) specific to aquaculture to supplement the aquaculture section in the comprehensive CCRF questionnaire. This draft questionnaire was presented to COFI/SCA IV in 2008⁵. The Sub-Committee recommended further action on the questionnaire, which was endorsed by the 28th session of COFI (Rome, March 2009).

16. The recommended actions included the revision of the pilot version of the questionnaire and its testing in different regions to reflect different environmental conditions of the sector and ensure global applicability. To carry out these recommendations, a pilot testing process of the new questionnaire was organized and the results were presented to COFI/SCA V in 2010⁶ where it was recommended that the questionnaire be accompanied by an instruction manual and completed on a biennial basis by all Members and that the two consecutive reporting periods could serve as a trial.

17. The 29th session of COFI (Rome, February 2011) emphasized the importance of improving the Members responses to FAO reporting on the progress in the implementation of the aquaculture provisions of the Code and recommended that the new reporting questionnaire on aquaculture be simplified, finalized and implemented⁷.

18. Pursuant to the above recommendations, during the last intercessional period the secretariat conducted the following activities: (i) improving the questionnaire based on the recommendations of COFI/SCA V and the 29th session of COFI ; (ii) developing an instruction manual and (iii) conducting testing trials, that also served as training, on the process and use of the questionnaire and manual in several countries and regions.

The Process

19. **Improving the questionnaire and developing a guiding manual of instructions.** The manual contains suggestions for governments regarding the organization and terms of reference of a national team to respond to the Questionnaire and guidelines for the team in responding to it. Each question in the questionnaire is close-ended with a range of responses from “0” for No or None, to 5 for the best possible status such as effectiveness and extent of the implementation of a measure (if in existence), or the degree of capacity for compliance of the State. To enable the national team to decide on the most appropriate response, each question has an explanation, elaboration, example, or a brief explanation. For most questions, ratings are suggested for a given degree of implementation of a measure (see Annex I).

⁵ Paras 30, 33 and 34. COFI SCA IV, Puerto Varas Chile, October 2008.

<ftp://ftp.fao.org/docrep/fao/011/i0615t/i0615t00.pdf>

⁶ Paras 18, 19 and 20. COFI SCA V, Phuket Thailand, September 2010

<http://www.fao.org/docrep/013/k9426t/k9426t00.pdf>

⁷ Para 20, FAO Fisheries and Aquaculture Report No. 973

<http://www.fao.org/docrep/014/i2281e/i2281e00.pdf>

20. For the questionnaire in Word format, the manual contains the written guides for replying to each question; for the one in Excel format, placing the cursor on the question box will make the explanation appear on the screen as a pop-up. It is expected that the first global trial and use of the new questionnaire in the next biennium will use the excel formats (electronic) or word format if preferred by the country, while the web based system will be implemented in the next biennium.

21. **Results based management.** As a result of the reform process, now FAO must increasingly engage in a “results based management” approach. Considering the modifications to the questionnaire the secretariat has also considered this instrument as an opportunity to assess the impact of FAO’s direct assistance to the member countries as well as normative outputs such as technical publications, guidelines etc. Therefore there is an additional column where for each question or statement members can rate FAO assistance. This column also offers (as a pop-up in the excel file) the links to different FAO publications or products related to the specific question or statement, therefore, even if members are unable to answer the question because they have not had access to the specific product provided in these links, they now become aware. Access to such information can improve the compliance of a specific element of the Code, improvement that will be scored in the following reporting period. The scoring for this question goes from 0 to 3 (See Annex).

Testing the questionnaire and manual

22. The specific objectives of the pilot testing and training were:

- To assist countries in understanding the relevance of the Code and the importance of the reporting system for FAO member countries as a whole, for FAO and for the country as a self evaluation tool;
- To assist the country in consolidating a response team;
- To test the value of the guiding manual intended to facilitate and clarify the responses;
- To explore the use of the questionnaire as a self assessment tool;
- To explore the use of the questionnaire to assess effectiveness of FAO technical assistance to the countries.

CCRF Aquaculture Questionnaire Response Team

23. The training and testing exercise specifically requires the countries to nominate a CCRF response team. The team is constituted by the Government and provides the authority to respond to the Questionnaire and to enable a reliable, accurate, comprehensive and speedy response, the Team shall be composed of middle level management officers and technical specialists working in the government agencies in the key areas of the aquaculture provisions of CCRF, as follows:

- policy and regulations;
- aquaculture management and development;
- aquaculture monitoring and data management;
- environment and resource use (land, water etc.);
- biosecurity and health management;
- food safety, and
- research and extension.

24. Countries were also advised to include field officers in active contact with farmers and familiar with the enforcing processes and related issues. It was also requested that the team be authorized to seek assistance and information from any appropriate person or organization including the private sector (farmers association, industry association), academic institution, NGOs, and others, for the purpose of providing the appropriate responses. There should be a team focal point and leader.

25. The testing and training was carried out in eight countries by a team from the Fisheries and Aquaculture Department of FAO. In each country, the activity lasted two days and consisted of: (i) an introductory session to the CCRF, the new questionnaire, the reporting process and the use of the

manual, (ii) a facilitated discussion to answer the questions and statements after agreement among the team, (iii) an evaluation of the responses with a graphics tool, assessing the issues that require more urgent efforts and improvement, and (iv) a final analysis on ways to improve the questionnaire, the manual and of the usefulness of the whole exercise and the reporting system.

The overall evaluation

26. Those who undertook the training and testing exercise considered it to be most useful. In most cases, the opportunity to form a team to discuss and reach an agreement on each question and provide an objective and participatory assessment of the sector was particularly acknowledged. Some countries specifically requested that due consideration be given to including members belonging to other institutions for their role in aquaculture development, permits, reinforcing etc. The joint analysis and discussion on the responses provided the opportunity for a well structured and critical review of the sector from the government's perspective.

27. In general the tested countries considered that although the questionnaire was long, the exercise was well worth doing and the manual provided useful guidance. However, there were some specific questions and sections of the manual that required some improvement for example the scoring scale.

28. Most of the response teams in the designated countries indicated the need to include an additional column or to expand the ranking scale in order to capture enforcement and implementation of measures in the field as they considered this a key aspect of the CCRF implementation. In light of the aforementioned, the scale for rankings was increased from 0 to 5. A request was made to specifically include the reinforcing aspects into the guiding manual. Some instructions needed clarification and in some cases needed to capture the regional differences.

29. The testing process indicated that countries with decentralized administrative units, provinces etc. could face challenges in representing the status of the CCRF implementation at the national level in a single questionnaire. In such cases the country response team should have appropriate representation from the provinces and a mechanism should be devised to better represent the national situation; for example it is possible to produce a response for each province and generate the final national response by a weighting factor according to the production in the different provinces. The current questionnaire in the excel format with numerical scoring facilitates such a process.

30. The fact that the excel file, or other databases, can be kept provides the opportunity for the country to check the trends, advances and stagnation regardless of changes in the response team through time. Also the automatic averaging tool allows a quick assessment of the different components of the questionnaire and they could serve as indicators of the performance of the sector.

Reporting to COFI SCA and to COFI

31. The final questionnaire (Annex 1) comprises three sections. Section I addresses the **extent of compliance** to a provision or aspects of a provision and has three parts which are meant to assess the degree of implementation. Part A includes the essential management mechanisms to achieve the provisions of the CCRF; including the existence of an aquaculture policy (1), aquaculture plan (2) and regulations to support the policy (3). Part B covers the supporting measures, and part C covers the measures that enhance the implementation of the essential mechanisms. Section II is intended to assess the State's **capacity to support** compliance.

32. The reporting on the responses will be based as usual on regional and global assessments focusing on the overall values for A (1,2,3); B and C in Section I and Section II. The report will also analyze more critically specific elements at global and regional level (e.g. use of alien species, stocking, consultation to stakeholders and farmers associations etc., see Annex 1) within each part and will highlight main areas and elements of improvement.

33. The reporting to COFI and COFI SCA offers two possibilities: (a) providing the percentage distribution of countries under the scores 0 to 5 (six scores) for each subject/question or (b) providing the average score for each subject/question per region with standard errors and the coefficient of variation (based on geometric means). The second option provides an easier, more confidential and less cumbersome comparative perspective and analysis. This also provides a good indicator of performance of the sector at regional and global level.

34. Nevertheless both analysis (a) and (b) will be done by FAO for internal purposes such as better targeting members needs and the potential for regional projects and initiatives, interregional cooperation, enhancing actions by regional fishery bodies etc.

35. FAO is also developing a platform to manage in a coordinate way the information provided by the aquaculture questionnaire with the trade-questionnaire and with the general CCRF questionnaire.

Key Recommendations

36. The testing and training exercise reinforces the relevance of a multidisciplinary and often multiagency response team with a designated focal point to coordinate the discussion and completion of the questionnaire. The task of addressing the questionnaire every two years allows this “strategic team” to critically review the performance of the sector from a government perspective.

37. Upon request, FAO could develop a customized report for individual States. The customized report is confidential and could provide the recipient State initial advice for the purpose of improving its capacity for developing and managing a responsible and progressive aquaculture sector.

38. Governments are encouraged to develop self-assessment reports using their own benchmarks, this being one of the most relevant outputs of the questionnaire responses. Bench marks could simply be the proposed scores for individual elements of the questionnaire or for the average values for each main part (I; A, B, C or II).

39. Governments are also encouraged to use the average values for each section and for each part as **good indicators of performance of the sector.**

SUGGESTED ACTIONS BY THE COMMITTEE

40. The Committee is invited to consider the information provided in the document and:

- Approve the proposed questionnaire and reporting system for global testing for two two-year terms and conduct an evaluation of its success/performance;
- Consider and recommend the creation of a national response teams as a strategy to improve the reporting system, to provide more comprehensive responses and to enhance the use of the questionnaire as a self assessment tool to improve and strengthen the adoption of the CCRF.

ANNEX 1

REFORMULATED QUESTIONNAIRE

Status of Compliance to the Provisions in Aquaculture and Culture-based Fisheries of the FAO Code of Conduct for Responsible Fisheries (CCRF)

I. INTRODUCTION

General Purpose: The information that the government is being requested to provide through this questionnaire is intended to supplement that from the larger survey on the Code. This questionnaire focuses on aquaculture and culture-based fisheries, in particular the provisions of Article 9 of the Code.

The Information will be used to assess the overall global progress of the Code's article 9 implementation and identify major constraints to implementation. These will provide FAO and the governments a basis for developing measures to improve performance

Expected outputs: (i) biannual assessment of national state of compliance of the code (for country use and planning FAO assistance) and (ii) biannual regional and global assessments of compliance of the code reported to COFI and COFI SCA

II. RESPONDENT

This will be kept confidential and a code will be used for the analysis.

State Responding: _____

Agency: _____

Coordinating Officer: _____

Role in Organization: _____

E-mail:

Fax:

Postal Address:

III. INSTRUCTIONS

It is important that you provide an answer to every question. Please do not leave a blank response.

Column 1 are the questions or statements to evaluate.

Column 2 is where you write your numerical response/scoring to the question or statement (0, 1, 2, 3, 4 or 5):

- "0" is No or None.
- If the instrument or measure or mechanism is present, rate the effectiveness and extent of its enforcement or implementation: Use 1 for very low effectiveness and extent of implementation or enforcement, 2 for low, 3 for moderate, 4 for high and 5

for very high including reinforcement. Use the same rating system for Sections I and II.

Column 3. Since the evaluation can be somewhat subjective specially when it combines the evaluation of a regulation, its quality and the reinforcement aspects, often it is necessary to provide explanations or commentaries. Therefore the Column 3, “Comments”, is for writing any explanation or additional information about your response in Column 2. Please write it briefly. You may also refer to a document, in which case make a bibliographic reference to it (Author/s, Date Published or Produced, Title, and Location) or provide a web link. Please send the document separately to FAO if it is not available in the Web. But if you strongly think there is no need for an explanation or additional information, leave it blank.

Column 4 in Section I is where you indicate the extent to which FAO guidelines/tools/technical assistance were used in developing and implementing the, instrument or measure. Rating is by a scale of **0 to 2**: **0** for No assistant or the publication has not been used at all, **1** for moderately used and **2** for very highly or extensively used.

The questionnaire has a guiding manual with an explanation for each question to help you decide on the appropriate response. For easy reading please print the guiding manual before attempting to answer the questionnaire in the excel or web version.

However **you will find the same explanations in the excel or web version** of the questionnaire once you place the cursor on the question box to make the explanation visible.

Please notice that when you use the excel or web version there will be automatic average calculations for the section I parts A, B and C and for section II. Please make sure to not enter a score o write in the shaded cells.

<p><u>Section I</u> has three parts. Part A consists of the essential management instruments or measures; Part B are the support mechanisms to facilitate the measures listed in Part A, and Part C are the enhancing mechanisms to improve the implementation of the measures listed in Parts A and B. (Refer to Summary of Instruction for the rating system).</p>			
	SCORING (0 to 5)	WRITE COMMENT	USE OF FAO GUIDELINES, TOOLS, AND ASSISTANCE (0, 1,2)
<p>A: ESSENTIAL MANAGEMENT INSTRUMENTS AND MEASURES</p> <p>The country has.....</p>	Automatic Average (questions A1 - A3)		Automatic Average (questions A1 - A3)
1) Aquaculture Policy			
2) Aquaculture Development Plan			
3) Regulatory measures to support aquaculture development:	Automatic Average (questions A3.1 - A3.17)		Automatic Average (questions A3.1 - A3.17)
3.1) Access rights to land and water bodies			
3.2) Registration of aquaculture farms and hatcheries			
3.3) Zonation (area for specific aquaculture system or for species culture)			
3.4) Carrying capacity (limits set on density)			
3.5) Environmental assessment and monitoring			
3.6) Effluents			
3.7) Feeds (environmental impact, quality, food safety issues)			
3.8) Seed (source – wild, hatchery - as environmental issue)			

3.9) Water abstraction			
3.10) Use of alien species along the lines of FAO's or OIE's guidelines or CBD provisions (including potential transboundary issues)			
3.11) Movement of live animals (within country and across borders) along the lines of FAOs or OIE's			
3.12) Impacts on biodiversity			
3.13) Escapes			
3.14) Stocking and restocking			
3.15) Food safety, (along the lines of CODEX)			
3.16) Use of drugs, chemicals and other substances			
3.17) Fish health management along the lines of FAO or OIE			
B: SUPPORT MECHANISMS THAT FACILITATE THE IMPLEMENTATION OF THE REGULATORY MEASURES LISTED IN PART A In the country there is.../ In the country....	Automatic Average (questions B.1 - B.13)		Automatic Average (questions B.1 - B.13)
1) Government monitoring, data collection and analysis system on aquaculture			
2) Consultation with stakeholders in formulating the Aquaculture Policy and/or Aquaculture Development Plan			
3) Participation of farmers associations in sector development and management			
4) Aquaculture is integrated in coastal development and management plans			

5) Aquaculture is integrated in watershed management or land use development plans			
6) Integration of aquaculture in community development planning			
7) Ecosystems functions are considered in aquaculture planning and development (e.g. wildlife sanctuary, water quality improvement, recreation, greenhouse gas mitigation, carbon sequestration).			
8) An incentive system for farmers to restore or rehabilitate resources degraded by their aquaculture activities (e.g. mangrove, other forests, salt marshes, abandoned lands, polluted water bodies, degraded soil).			
9) Practices are adopted that lead to improvement in the sustainability of aquaculture farms (i.e. better management practices or BMPs, good aquaculture practices or GAPs, codes of practice, etc)			
10) Application of the polluter-pays principle			
11) Trend of investment in aquaculture research			
12) Trend of investment in aquaculture extension and training			
13) Trend of investment in infrastructure and facilities that support aquaculture development			
C: ENHANCING MECHANISMS THAT WOULD IMPROVE THE EFFECTIVENESS OF THE MEASURES LISTED IN PARTS A AND B.	Automatic Average (questions C.1 - C.5)		Automatic Average (questions C.1 - C.5)
In the Country there are.../ In the country...			

1) Mechanisms are in place to ensure that local communities are benefited and not adversely impacted by aquaculture development projects.			
2) There are voluntary certification system/s that promote the practice of responsible aquaculture			
3) Farms are covered by government assistance scheme in case of disasters			
4) Aquaculture farmers have access to institutional credit as well as microcredit			
5) Aquaculture farmers have access to commercial insurance			

<u>Section II</u> This section is designed to assess the capacity of the State to develop knowledge, information, technology and advice and promote their adoption to support the development, enforcement, implementation, and monitoring and evaluation of the measures in Section I.		
	SCORING (0 to 5)	WRITE COMMENT
THE LEVEL/DEGREE OF CAPACITY TO SUPPORT THE MEASURES IN SECTION I)	Automatic Average (questions 1-5)	
1) Capacity of the national research system to provide knowledge, information, technology, advice to policy, planning and management.		
2) Capacity of the extension systems to disseminate and utilize the outputs from the national or external research systems in support of aquaculture development.		
3) Specific capacity (of State) on	Automatic Average (questions 3.1-3.4)	

3.1) Health management and biosecurity		
3.2) Environmental management		
3.3) Food safety		
3.4) Conflict management		
4) Preparedness to respond to disasters		
5) Preparedness to manage the risk impacts from climate change.		