



COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Item 4 of the Provisional Agenda

AD HOC INTERGOVERNMENTAL TECHNICAL WORKING GROUP ON AQUATIC GENETIC RESOURCES FOR FOOD AND AGRICULTURE

First Session

Rome, 20–22 June 2016

PREPARATION OF *THE STATE OF THE WORLD'S AQUATIC GENETIC RESOURCES FOR FOOD AND AGRICULTURE*

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I. INTRODUCTION

1. At its Eleventh Regular Session, the Commission on Genetic Resources for Food and Agriculture (Commission) agreed that improving the collection and sharing of information on aquatic genetic resources (AqGR) is of high priority and included the preparation of *The State of the World's Aquatic Genetic Resources for Food and Agriculture* (Report) into its Multi-Year Programme of Work (MYPOW).¹ At its Thirteenth and Fourteenth Regular Sessions, the Commission considered the scope of the Report and decided, at the latter session, “*that the scope of the report would be farmed aquatic species and their wild relatives within national jurisdiction. Countries were also invited to provide a species list of nationally important aquatic genetic resources of capture fisheries within national jurisdiction.*”

2. At its Fourteenth Regular Session, the Commission also agreed on the structure of the Report² and requested FAO to adjust the draft *Guidelines for the Preparation of Country Reports for The State of the World's Aquatic Genetic Resources for Food and Agriculture* (Guidelines) and to reduce the number of proposed thematic studies by prioritizing them in line with the agreed scope and focusing on the core issue of genetic diversity.³ The Commission called on countries to participate in the process by preparing Country Reports on AqGR and to strengthen related information systems.⁴

3. At its Fifteenth Regular Session, the Commission endorsed a revised timeline for the preparation of the Report, an indicative list of thematic background studies and cost estimates.⁵ The Commission also invited countries to prepare Country Reports for the Report with the involvement of all relevant stakeholders.⁶

4. This document provides an update on the status of preparation of the Report, for review by the *Ad Hoc* Intergovernmental Technical Working Group on Aquatic Genetic Resources for Food and Agriculture (Working Group). The Commission established the Working Group, at its last session, in order to facilitate the preparation of the Report and mandated it to guide its preparation and to review it.⁷ The draft Report is contained in the document, *Draft Report on the State of the World's Aquatic Genetic Resources for Food and Agriculture*.⁸

5. The Commission, at its last session, also invited the COFI Advisory Working Group on Aquatic Genetic Resources and Technologies to contribute to the preparation of the Report.⁹ It requested to be informed about the contributions of the COFI Advisory Working Group to the preparation of the Report. A summary of the report of the first session of the COFI Advisory Working Group as well as the full report are therefore made available to the Working Group.¹⁰

II. THE RATIONALE FOR THE STATE OF THE WORLD'S AQUATIC GENETIC RESOURCES FOR FOOD AND AGRICULTURE

6. Despite the crucial role of farmed aquatic species and their wild relatives in contributing to global food security and sustainable livelihoods, information available on farmed AqGR and their wild relatives tends to be scattered and is generally incomplete. There are still major gaps in reporting aquaculture data at country level, and, as a result to FAO. Furthermore, characterization of aquatic

¹ CGRFA-11/07/Report, paragraphs 60-61.

² CGRFA-14/13/Report, *Appendix H*.

³ CGRFA-14/13/Report, paragraph 79.

⁴ CGRFA-14/13/Report, paragraph 78.

⁵ CGRFA-15/15/Report, paragraph 60.

⁶ CGRFA-15/15/Report, paragraph 61.

⁷ CGRFA-15/15/Report, paragraph 63.

⁸ CGRFA/WG-AqGR-1/16/Inf.2.

⁹ CGRFA-15/15/Report, paragraph 65.

¹⁰ CGRFA/WG-AqGR-1/16/3; CGRFA/WG-AqGR-1/16/Inf.3.

genetic diversity at levels below that of the species is limited to a limited number of species and countries.

7. Lack of data and information and inadequate standardization result in poor understanding of the status and trends of AqGR. There is, however, growing recognition that improved information on the status, trends and drivers affecting AqGR will be increasingly important to support sustainable aquaculture and to improve food security and nutrition. There is also an increasing body of information on farmed aquatic, including aquatic plant, genetic resources and on genetically distinct fish stocks and cryptic species, but there is an increasing need for more information to underpin sound management. At the same time, many countries lack the capacity and/or the resources to collect information on AqGR diversity.

8. Improvements in knowledge of the status and trends of the use and conservation of farmed aquatic species and their wild relatives will enable stronger and more comprehensive policy and planning, and overall management of these essential resources.

9. The country-driven Report aims to provide a global assessment of the status and trends of farmed aquatic species and their wild relatives. Opportunities to enhance the contribution of AqGR to food security and rural development will emerge with greater understanding of their current and potential uses. Moreover, the Report will assist the Commission as well as national policy makers in considering the need for and priorities of conservation and management strategies and it will contribute to raising awareness among relevant national and international stakeholders.

III. ACTIVITIES UNDERTAKEN TOWARDS THE PREPARATION OF THE STATE OF THE WORLD'S AQUATIC GENETIC RESOURCES FOR FOOD AND AGRICULTURE

10. Since the last regular Session of the Commission in January 2015, FAO undertook the following activities towards the preparation of the Report in collaboration with relevant regional and sub-regional organizations:

- Publication of the Guidelines in English;¹¹
- Translation of the Guidelines into all languages of the Organization, and gradual adaptation into dynamic format;¹²
- Regular support to National Focal Points (*Appendix I*) for the collection, compilation and analysis of data relating to the status of AqGR;
- Regular exchange with relevant aquaculture and fisheries Regional and Sub-Regional Organizations regarding the collection, compilation and analysis of data on the status of AqGR at regional levels;
- Organization of regional training workshops on the status of AqGR to support National Focal Points in the preparation of Country Reports in Asia-Pacific (Bangkok, Thailand, March 2015); China (Wuxi, May 2015); Latin America and the Caribbean (Ciudad de Guatemala, Guatemala, May 2015); and Africa (Entebbe, Uganda, July 2015);
- Collection, compilation and analysis of data from officially submitted Country Reports (*Appendix II*);
- Establishment of a database that contains data and information extracted from officially submitted Country Reports;
- Selection and engagement of authors for the four thematic background studies:
 - Incorporating genetic diversity and indicators into statistics and monitoring of farmed aquatic species and their wild relatives;
 - Biotechnology and genomics in aquaculture;
 - Genetic resources for farmed seaweeds and freshwater macrophytes; and

¹¹ <http://www.fao.org/3/a-mm469e.pdf>

¹² <http://www.fao.org/fishery/AquaticGeneticResources/en>

- Genetic resources for microorganisms of current and potential use in aquaculture.
- Organization of an Expert Workshop to advise on the thematic background study Incorporating genetic diversity and indicators into statistics and monitoring of farmed aquatic species and their wild relatives (FAO, Rome, April 2016).
- Collection, compilation and analysis of data on the status of AqGR from international organizations.
- Drafting of the Report based on: (1) data of available official Country Reports; (2) thematic background studies' summaries; (3) review of relevant literature; and (4) data from international organizations.

IV. CURRENT STATUS AND NEXT STEPS TOWARDS THE COMPLETION OF THE WORLD'S AQUATIC GENETIC RESOURCES FOR FOOD AND AGRICULTURE

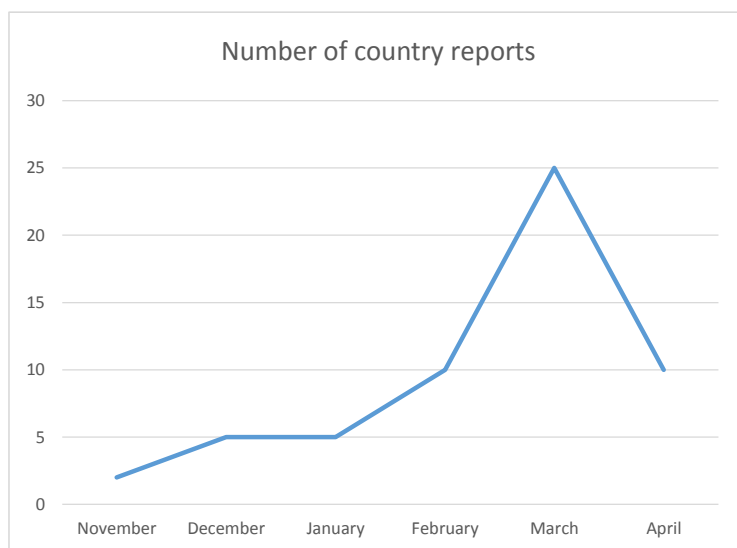
National Focal Points

11. By CSL C/FI-38 of 19 April 2012, the Director-General of the Organization invited countries to nominate, by 3 September 2012, National Focal Points for the preparation of Country Reports for the Report. At the time of preparation of this document, a total of 79 National Focal Points have been officially designated by FAO members (*Appendix I*).

Country Reports

12. In endorsing the revised timeline for the preparation of the Report, the Commission, at its last session, agreed that Country Reports should be submitted by the end of 2015 at the latest.¹³ Only a limited number of Country Reports was received by that deadline (*see* Figure 1). By end March 2016, 47 officially endorsed Country Reports had been received by FAO and could be included in the analysis of the draft Report (*Appendix II*).¹⁴

Figure 1. Receipt of official Country Reports in FAO from November 2015 to April 2016



13. The present *Draft Report on the State of the World's Aquatic Genetic Resources for Food and Agriculture*¹⁵ contains data from 10 of the top 15 aquaculture producing countries and accounts for 20% and 29% of the aquaculture production in volume and value, respectively. The regional coverage

¹³ CGRFA-15/15/17, Appendix II.

¹⁴ CGRFA/WG-AqGR-1/16/Inf.2.

¹⁵ CGRFA/WG-AqGR-1/16/Inf.2

and coverage of countries within different economic classifications is uneven. Furthermore, only 35% of the 135 countries that reported aquaculture production in 2014 contributed to the draft Report (47 Country Reports). The analysis of additional Country Reports, in particular those from top aquaculture producing countries, and their reflection in the Report seems necessary to provide a more comprehensive and balanced global assessment. At the time of preparation of this document, the Secretariat has received additional Country Reports (*see* Figure 1) which, together with additional Country Reports received after April 2016, could be included in a revised version of the Report, subject to recommendations by the Working Group.

Thematic background studies and other sources of information

14. The draft Report, as presented to this first session of the Working Group, reflects to some extent in Chapter 1 the results of the thematic background study on *The application of biotechnologies for sustainable use, conservation and management of aquatic genetic resources*. The review of this background study is currently ongoing. The other three thematic background studies are in the process of being finalized and will be reflected in the revised draft Report.

15. Relevant data from important international organizations as well as relevant literature is reflected throughout the draft Report to complement information from Country Reports.

Status of the Draft Report

16. The draft Report serves primarily the purpose of giving the Working Group a first impression of the concept. Additional work is needed to finalize the Report for publication by FAO. Given the data that could be reflected in the Report, as summarized above, it would seem premature to draw final conclusions from the draft Report at this stage, let alone determine gaps and identify priorities on its basis. Although the draft Report formulates preliminary key messages, these should clearly be verified in the light of more complete information. Due to constraints in financial and human resources, the draft Report also still suffers from some general shortcomings. The draft Report, for example, does not yet sufficiently reflect country data and experiences, or regional breakdowns; it does not yet make use of three of the four thematic background studies that have been commissioned; further work needs to be done to specify and reference sources of information, including, in particular, Country Reports; major parts of the Report are of a preliminary nature and are based on incomplete analyses; and the draft Report has not yet been reviewed by independent external reviewers.

Planned activities for the finalization of the Report

17. The following activities have been planned to accelerate the preparation and finalization of the Report, with the main objective to increase the number of Country Reports:

- Capacity building actions targeting countries with specific difficulties in the reporting process (e.g. limited human and financial resources involved in aquaculture and data collection; highly diverse aquaculture sector at species and farming systems levels);
- Finalization of the three remaining thematic background studies;
- Incorporation of data from additional Country Reports and the three thematic background studies into a revised analysis of the Report;
- Preparation of a revised draft Report, for review by the Working Group at its Second Session; and
- Submission of the final Report to the Commission's Seventeenth Regular Session, for its endorsement.
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V. GUIDANCE SOUGHT

18. The Working Group may wish to review the draft Report and provide comments and recommendations with regard to its contents and further preparation.
19. The Working Group may wish to recommend that the Commission:
- Encourage countries that have not yet done so to nominate National Focal Points and to submit as soon as possible Country Reports;
 - Request FAO to continue its work towards the preparation of the Report;
 - Endorse the planned activities for the finalization of the Report as outlined in this document, subject to the availability of funds; and
 - Invite donors to support the preparation, finalization, translation and publication of the Report.

Appendix I: List of countries with officially designated National Focal Points on Aquatic Genetic Resources received as at 15 May 2016

- ARGENTINA
- ARMENIA
- AUSTRIA
- BELGIUM
- BELIZE
- BENIN
- BRAZIL
- BURKINA FASO
- CABO VERDE
- CAMBODIA
- CAMEROON
- CHILE
- COLOMBIA
- COSTA RICA
- CROATIA
- CUBA
- CYPRUS
- CZECH REPUBLIC
- DJIBOUTI
- DOMINICAN REPUBLIC
- ECUADOR
- EGYPT
- ESTONIA
- FIJI
- FRANCE
- GERMANY
- GHANA
- GUATEMALA
- HONDURAS
- HUNGARY
- INDIA
- INDONESIA
- IRAN, ISLAMIC REPUBLIC OF
- IRAQ
- ITALY
- JAPAN
- KENYA
- KIRIBATI
- LAO PEOPLE'S DEMOCRATIC
REPUBLIC
- LATVIA
- MALAWI
- MALAYSIA
- MALI
- MEXICO
- MOROCCO
- MOZAMBIQUE
- MYANMAR
- NEPAL
- NICARAGUA
- NIGER
- NIGERIA
- OMAN
- PAKISTAN
- PANAMA
- PARAGUAY
- PERU
- PHILIPPINES
- POLAND
- REPUBLIC OF KOREA
- ROMANIA
- SAMOA
- SENEGAL
- SIERRA LEONE
- SLOVENIA
- SPAIN
- SUDAN
- SWEDEN
- SYRIAN ARAB REPUBLIC
- THAILAND
- TONGA
- TRINIDAD AND TOBAGO
- TURKEY
- UGANDA
- UNITED REPUBLIC OF TANZANIA
- UKRAINE
- VENEZUELA, BOLIVARIAN
REPUBLIC OF
- VIET NAM
- YEMEN
- ZAMBIA

Appendix II: List of officially submitted Country Reports on the Status of Aquatic Genetic Resources for Food and Agriculture received as at 15 April 2016

- BELIZE
- BENIN
- BRAZIL
- BURKINA FASO
- CAMBODIA
- CANADA
- CHILE
- COLOMBIA
- COSTA RICA
- CZECH REPUBLIC
- ECUADOR
- EL SALVADOR
- ESTONIA
- FIJI
- GERMANY
- GHANA
- GUATEMALA
- INDIA
- IRAQ
- IRAN, ISLAMIC REPUBLIC OF
- JAPAN
- KENYA
- KIRIBATI
- REPUBLIC OF KOREA
- LAO PEOPLE'S DEMOCRATIC REPUBLIC
- LATVIA
- MALAWI
- MALAYSIA
- MOROCCO
- MOZAMBIQUE
- NICARAGUA
- PANAMA
- PARAGUAY
- PERU
- PHILIPPINES
- SAMOA
- SENEGAL
- SLOVENIA
- SWEDEN
- THAILAND
- TONGA
- UGANDA
- UNITED REPUBLIC OF TANZANIA
- UKRAINE
- VENEZUELA, BOLIVARIAN REPUBLIC OF
- VIET NAM
- ZAMBIA