



联合国
粮食及
农业组织

Food and Agriculture
Organization of the
United Nations

Organisation des Nations
Unies pour l'alimentation
et l'agriculture

Продовольственная и
сельскохозяйственная организация
Объединенных Наций

Organización de las
Naciones Unidas para la
Alimentación y la Agricultura

منظمة
الغذية والزراعة
للأمم المتحدة

COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Item 3.2 of the Provisional Agenda

Sixteenth Regular Session

Rome, 30 January - 3 February 2017

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

TABLE OF CONTENTS

	Paragraphs
I. Introduction	1 - 5
II. The rationale for <i>The State of the World's Aquatic Genetic Resources for Food and Agriculture</i>	6 - 9
III. Activities undertaken towards the preparation of <i>The State of the World's Aquatic Genetic Resources for Food and Agriculture</i>	10
IV. Current status and next steps towards the completion of <i>The State of the World's Aquatic Genetic Resources for Food and Agriculture</i>	11 - 20
V. Guidance sought.....	21 - 22
<i>Appendix I:</i> Countries with officially designated National Focal Points on Aquatic Genetic Resources	
<i>Appendix II:</i> Officially submitted country reports on the status of aquatic genetic resources for food and agriculture	
<i>Appendix III:</i> Cost estimate for the finalization of <i>The State of the World's Aquatic Genetic Resources for Food and Agriculture</i>	

This document can be accessed using the Quick Response Code on this page;
an FAO initiative to minimize its environmental impact and promote greener communications.
Other documents can be consulted at www.fao.org



mr407

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.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

2. At its Fourteenth Regular Session, the Commission also agreed on the structure of the Report³ 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.⁴ The Commission called on countries to participate in the process by preparing country reports on AqGR and to strengthen related information systems.⁵

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.⁶ The Commission invited countries to prepare country reports for the Report with the involvement of all relevant stakeholders.⁷ It established the *Ad Hoc* Intergovernmental Technical Working Group on Aquatic Genetic Resources for Food and Agriculture (Working Group) with the task to guide the preparation and review of the Report.⁸ The Commission also invited the Committee on Fisheries Advisory Working Group on Aquatic Genetic Resources and Technologies (COFI Advisory Working Group) to contribute to the preparation of the Report and requested information about the contributions of the COFI Advisory Working Group to the preparation of the Report⁹

4. The Working Group, at its First Session, held from 20 to 22 June 2016, reviewed the *Draft Report on the State of the World's Aquatic Genetic Resources for Food and Agriculture* (Draft Report)¹⁰, noted that it was a preliminary analysis based on a limited set of country reports, that a higher number of country reports was needed to finalize the Report and made detailed comments and recommendations with regard to the finalization of the Report. The reports of the Working Group and of the COFI Advisory Working Group have been made available as separate documents.¹¹

5. This document provides an update on the status of preparation of the Report, for consideration by the Commission.¹² The document summarizes activities undertaken, reflects comments and recommendations provided by the Working Group and proposes next steps towards the finalization of the Report.

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

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

² CGRFA-14/13/Report, paragraph 76.

³ CGRFA-14/13/Report, *Appendix H*.

⁴ CGRFA-14/13/Report, paragraph 79.

⁵ CGRFA-14/13/Report, paragraph 78.

⁶ CGRFA-15/15/Report, paragraph 60.

⁷ CGRFA-15/15/Report, paragraph 61.

⁸ CGRFA-15/15/Report, paragraph 63.

⁹ CGRFA-15/15/Report, paragraph 65.

¹⁰ CGRFA-16/17/Inf.13.

¹¹ CGRFA-16/17/10; CGRFA-16/17/Inf.14.

¹² CGRFA-15/15/Report, paragraph 63.

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 genetic diversity at levels below that of the species is limited to a relatively small 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 management and conservation strategies and it will contribute to raising awareness among relevant national and international stakeholders. The Report may also assist the Commission in the implementation of one of its major outputs: the development of elements related to the Code of Conduct of Responsible Fisheries and associated tools for assessing their implementation, aimed to maintain a broad genetic basis and to ensure sustainable use and conservation of AqGR.¹³

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;¹⁴
- translation of the Guidelines into all languages of the Organization and adaptation into dynamic format;¹⁵
- 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 and August 2016); China (Wuxi, May 2015); Latin America and the Caribbean (Ciudad de Guatemala, Guatemala, May 2015); Africa (Entebbe, Uganda, July 2015 and Dar es Salaam, Tanzania, June 2016); and Central Asia and Eastern Europe (Zsarvas, Hungary, July 2016).

¹³ CGRFA-14/13/Report, *Appendix I*, Table 1.

¹⁴ <http://www.fao.org/3/a-mm469e.pdf>

¹⁵ <http://www.fao.org/fishery/AquaticGeneticResources/en>

- collection, compilation and analysis of data from officially submitted country reports;
- 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:
 - o Incorporating genetic diversity and indicators into statistics and monitoring of farmed aquatic species and their wild relatives;
 - o Biotechnology and genomics in aquaculture;
 - o Genetic resources for farmed seaweeds and freshwater macrophytes; and
 - o 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;
- preparing the Draft 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; and
- convening the first session of and presenting the Draft Report to the Working Group.

IV. CURRENT STATUS AND NEXT STEPS TOWARDS THE COMPLETION OF THE STATE 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. As of 15 May 2016, 79 National Focal Points had been officially designated. Since then, the number of designated National Focal Points has increased to 81 (see *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.¹⁶ Only a limited number of country reports was received by that deadline. As of 15 April 2016, 47 officially endorsed country reports had been received by FAO¹⁷. As of 10 October 2016, 75 officially endorsed country reports have been received as listed in *Appendix II*.

Thematic background studies and other sources of information

13. The Commission, at its Fifteenth Regular Session, endorsed an indicative list of thematic background studies to address specific aspects of the state of the world's AqGR.¹⁸ FAO commissioned four thematic studies which will be reflected in the Report and made available in due course.

14. Relevant data from international organizations as well as relevant literature are reflected throughout the Draft Report to complement information from country reports.

Status of the Draft Report

¹⁶ CGRFA-15/15/17, *Appendix II*.

¹⁷ CGRFA-16/17/Inf.13.

¹⁸ CGRFA-15/15/Report, paragraph 60.

15. The Draft Report contains data from the 47 officially endorsed country reports received before 15 April 2016. With these data, the Draft Report reflects data of 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 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. The analysis of additional country reports, in particular those from top aquaculture producing countries, and their reflection in the finalized Report seems necessary to provide a more comprehensive and balanced global assessment. Due to constraints in financial and human resources, the Draft Report also still suffers from some general shortcomings. It does not yet sufficiently reflect country data and experiences, or regional breakdowns. The Draft Report does not yet make use of three of the four thematic background studies. Further work needs to be done to specify and reference sources of information, including, in particular, country reports. Major parts of the Draft Report are of a preliminary nature and are based on incomplete analyses.

16. Since the finalization of the Draft Report, the Secretariat received 28 additional officially endorsed country reports. Thus, as of 10 October 2016, a total number of 75 country reports, as listed in *Appendix II*, have been received. More reports are expected to arrive. The 75 country reports received account for 36% and 44% of the aquaculture production in volume and value, respectively. While the report of China is still awaiting official endorsement, 14 of the top-15 aquaculture producing countries have now submitted officially endorsed country reports. With the data from the country report of China incorporated, the Report will cover 94% and 90% of the aquaculture production in volume and value respectively.

Review by the Working Group

17. The Working Group, at its First Session, noted that the Draft Report is a preliminary analysis based on a limited set of 47 country reports officially submitted before 15 April 2016. It noted that a higher number of country reports and additional work are needed to finalize the Report, and recommended that the Commission invite countries that have not yet done so to nominate National Focal Points and to submit country reports by 31 March 2017, and encourage countries that have already submitted a country report to submit a revised version, as appropriate, within the same deadline.

18. The Working Group welcomed the structure of the Draft Report. It recommended that the Commission request FAO to continue its work towards the finalization of the Report, for consideration by the Working Group at its Second Session and by the Commission at its Seventeenth Session. It further recommended that FAO, in revising the Draft Report:

- Identify individual countries in the analysis in addition to the summaries by region or sub-region, as appropriate;
- Include specific country examples and case studies to illustrate issues, where relevant;
- Provide an analysis by developing versus developed countries, as appropriate;
- Include some examples of new species and farmed types identified from country reports that have not been previously been reported to FAO;
- Revise the references to all countries to ensure they accurately reflect the information provided in national reports, in particular in the last part of sub-chapter 7.2 of chapter 7;
- Revise the conclusions of sub-chapter 7.4 of chapter 7 that cannot be inferred from the information contained in the report, in particular on access and benefit sharing regimes;
- Streamline the quotation in the last paragraph of sub-chapter 6.5 of chapter 6;
- Use additional information (e.g. from the scientific literature, international, regional and national organizations and networks, and advanced scientific institutions) to complement country reports and contribute to a more comprehensive assessment;
- Harmonize definitions throughout the Report and provide a full glossary of key terms;

- Clearly identify all sources of information, including in tables and figures;
- Provide an in-depth analysis of findings, including inter alia on climate change, habitat change and invasive species as drivers impacting AqGR;
- Distinguish between policies and strategies and include soft law instruments, such as codes of conduct and voluntary guidelines;
- Clarify some of the concepts referred to in the chapters (e.g. in situ conservation and access and benefit sharing regimes);
- Acknowledge the challenges of collaboration for the management of AqGR, especially for the transboundary conservation of migratory species;
- Include some specific examples of successful AqGR ex situ and in situ conservation programmes and strategies, and stress the complementarity of the two conservation approaches;
- Acknowledge the value of aquatic protected areas in conserving AqGR and there must be a balance between conservation and development taking into consideration conditions in different areas;
- Demonstrate the close linkages between aquaculture and capture fisheries systems that depend on wild AqGR;
- Ensure that information provided complement the information contained in *The State of World Fisheries and Aquaculture* (SOFIA);
- Include an analysis of how effective the various networks contribute to the sustainable use and conservation of AqGR; and
- Highlight key findings and gaps that will require a policy response to improve the sustainable use and conservation of AqGR.

Planned activities for the finalization of the Report

19. 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 and reflect them in the Report:

- Invite countries that have not yet done so to nominate National Focal Points and to submit their country reports, and encourage countries that have already submitted a country report to submit a revised version, as appropriate;
- Prepare a Revised Draft Report, taking into account the information contained in the country reports, the thematic background studies, information provided by international organizations and the comments and recommendations provided by the Commission and its Working Group;
- Invite countries to provide comments on the Revised Draft Report;
- Consult the Committee on Fisheries and its subsidiary bodies, as appropriate, on the Revised Draft Report;
- Present the Revised Draft Report to the Working Group, for review at its Second Session; and
- Finalize, translate and publish the Report following its review by the Working Group.

Required resources

20. The finalization and publication of the Report will require additional extra-budgetary resources, as given in *Appendix III* to this document.

V. GUIDANCE SOUGHT

21. The Commission may wish to review the Draft Report and provide comments and recommendations with regard to its contents and the process for its finalization.
22. The Commission may wish to:
 - (i) Invite countries that have not yet done so to nominate National Focal Points and to submit country reports by 31 March 2017, and encourage countries that have already submitted a country report to submit a revised version, as appropriate, within the same deadline;
 - (ii) Welcome the structure of the Draft Report and request FAO to prepare a Revised Draft Report, taking into account the information contained in the country reports received by 31 March 2017, the thematic background studies, information provided by international organizations and the comments and recommendations provided by the Commission and its Working Group;
 - (iii) Invite countries to provide comments on the Revised Draft Report;
 - (iv) Request the Committee on Fisheries and its subsidiary bodies, as appropriate, to review the Revised Draft Report;
 - (v) Request the Working Group to review the Revised Draft Report at its Second Session, taking into account comments received from countries, the Committee on Fisheries and its subsidiary bodies;
 - (vi) Request FAO to finalize, translate and publish the Report following its review by the Working Group; and
 - (vii) Invite donors to support the preparation, finalization, translation and publication of the Report.

APPENDIX I**COUNTRIES WITH OFFICIALLY DESIGNATED NATIONAL FOCAL POINTS ON
AQUATIC GENETIC RESOURCES
(AS OF 15 SEPTEMBER 2016)**

Argentina	Malawi
Armenia	Malaysia
Austria	Mali
Belgium	Mexico
Belize	Morocco
Benin	Mozambique
Brazil	Myanmar
Bukina Faso	Nepal
Cabo Verde	Nicaragua
Cambodia	Niger
Cameroon	Nigeria
Chile	Oman
Colombia	Pakistan
Costa Rica	Panama
Croatia	Paraguay
Cuba	Peru
Cyprus	Philippines
Czech Republic	Poland
Djibouti	Republic of Korea
Dominican Republic	Romania
Ecuador	Samoa
Egypt	Senegal
Estonia	Seychelles
Fiji	Sierra Leone
France	Slovenia
Georgia	Spain
Germany	Sudan
Ghana	Sweden
Guatemala	Syrian Arab Republic
Honduras	Thailand
Hungary	Tonga
India	Trinidad and Tobago
Indonesia	Turkey
Iran (Islamic Republic of)	Uganda
Iraq	United Republic of Tanzania
Italy	Ukraine
Japan	Venezuela, Bolivarian Republic of
Kenya	Vietnam
Kiribati	Yemen
Lao People's Democratic Republic	Zambia
Latvia	

APPENDIX II**OFFICIALLY SUBMITTED COUNTRY REPORTS ON THE STATUS OF AQUATIC
GENETIC RESOURCES FOR FOOD AND AGRICULTURE RECEIVED
(AS OF 10 OCTOBER 2015)**

Argentina	Korea, Republic of
Belgium	Lao People's Dem. Rep.
Belize	Latvia
Benin	Madagascar
Bhutan	Malawi
Brazil	Malaysia
Burkina Faso	Mexico
Burundi	Morocco
Cabo Verde	Mozambique
Cambodia	Nicaragua
Cameroon	Nigeria
Canada	Norway
Chile	Panama
Colombia	Paraguay
Democratic Republic of the Congo	Peru
Costa Rica	Philippines
Cyprus	Poland
Czech Republic	Samoa
Denmark	Senegal
Djibouti	Sierra Leone
Dominican Republic	Slovenia
Ecuador	South Africa
Egypt	Sri Lanka
El Salvador	Sudan
Estonia	Sweden
Fiji	United Republic of Tanzania
Georgia	Thailand
Germany	Togo
Ghana	Tonga
Guatemala	Tunisia
Hungary	Turkey
India	Uganda
Indonesia	Ukraine
Iran (Islamic Republic of)	Vanuatu
Iraq	Venezuela, (Bolivarian Republic of)
Japan	Viet Nam
Kenya	Zambia
Kiribati	

APPENDIX III

**COST ESTIMATE FOR THE FINALIZATION OF *THE STATE OF THE WORLD'S
AQUATIC GENETIC RESOURCES FOR FOOD AND AGRICULTURE***

Item	Cost (US\$)	Calculation	Purpose and notes	YEAR
Staff costs	221,000	One P4 staff appointment for 12 months	Implementation and coordination tasks	2017
Translation, editing, layout, printing and distribution	180,800	Translation, editing, layout, printing and distribution	To translate into all UN official languages the Report and to edit, layout, print and distribute it.	2017
Total	401,800			