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منظمة  
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# COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

## Item 2.1 of the Provisional Agenda

### Sixteenth Regular Session

Rome, 30 January - 3 February 2017

## BIODIVERSITY FOR FOOD AND AGRICULTURE - NEEDS AND POSSIBLE ACTIONS

### Note by the Secretariat

1. In adopting its Multi-Year Programme of Work, the Commission on Genetic Resources for Food and Agriculture (Commission), at its Eleventh Regular Session, decided to initiate the preparation of a global assessment of the state of biodiversity for food and agriculture (BFA). It decided that the report on *The State of the World's Biodiversity for Food and Agriculture* (Report) be presented to the Commission at its Sixteenth Regular Session.<sup>1</sup> At its Fourteenth Regular Session, in 2013, the Commission endorsed the proposed structure of the Report.<sup>2</sup>

2. At its last session, in January 2015, the Commission reviewed the status of preparation of the Report and requested the Secretary to continue working towards the finalization of the Report and to submit a draft for consideration by the Commission at its next regular session.<sup>3</sup> In addition, the Commission called upon donors and relevant international organizations to make available extra-budgetary financial resources as well as in-kind support for the preparation of the Report, including for regional consultations and the preparation of country reports.<sup>4</sup> The document *Preparation of The State of the World's Biodiversity for Food and Agriculture*<sup>5</sup> provides an update on the preparation of the Report, including the preparation of country reports, on information received from other sources and on the informal regional consultations held to share information on and identify needs and possible actions for the conservation and sustainable use of BFA. The draft Report is contained in the

<sup>1</sup> CGRFA-11/07/Report, *Appendix E*.

<sup>2</sup> CGRFA-14/13/Report, section II.

<sup>3</sup> CGRFA-15/15/Report, paragraph 11.

<sup>4</sup> CGRFA-15/15/Report, paragraph 13.

<sup>5</sup> CGRFA-16/17/3.

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document *The State of the World's Biodiversity for Food and Agriculture – Draft Report*.<sup>6</sup> The reports of the regional consultations held during the intersessional period are available, for information of the Commission.<sup>7</sup>

3. The Conference of the Parties to the Convention on Biological Diversity, held from 4 to 17 December 2016, noted the preparation of the Report and invited FAO and its Commission “to consider developing a global plan of action on the basis of the State of the World’s Biodiversity for Food and Agriculture report.”

4. This document contains needs and possible actions for the conservation and sustainable use of BFA, as identified during the informal regional consultations and consolidated by the Secretariat. In consolidating the document, the Secretariat made an attempt to reduce redundancies, summarize and restructure the needs and actions identified, as appropriate.

5. The Commission may wish to

- (a) Take note of the draft needs and possible actions for the conservation and sustainable use of BFA, as contained in *Appendix I*;
- (b) Request the Secretary to invite Members and observers to comment on the needs and possible actions contained in *Appendix I* and to propose additional needs or possible actions for the conservation and sustainable use of BFA by 15 February 2018, taking into account the findings of the Revised Draft Report,
- (c) Request the Secretary to review and revise, as appropriate, the draft needs and possible actions for the conservation and sustainable use of BFA in the light of comments and suggestions received and taking into account the findings of the Revised Draft Report;
- (d) Request each region to appoint up to two National Focal Points designated for the preparation of country reports on biodiversity for food and agriculture by notifying the Secretary through their Bureau member; and
- (e) Request the Secretary to convene the National Focal Points nominated by the regions for a 3-day meeting to review and revise, as appropriate, the draft needs and possible actions for the conservation and sustainable use of BFA, for consideration by the Commission at its Seventeenth Regular Session.

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<sup>6</sup> CGRFA-16/17/Inf.10.

<sup>7</sup> CGRFA-16/17/11.1 to 11.6.

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**APPENDIX I****DRAFT NEEDS AND POSSIBLE ACTIONS FOR THE CONSERVATION AND  
SUSTAINABLE USE OF BIODIVERSITY FOR FOOD AND AGRICULTURE**

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**TABLE OF CONTENTS**

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- 1. Assessment and monitoring of biodiversity for food and agriculture**
  - 1.1 Improve availability and access to information and knowledge
  - 1.2 Improve cooperation and financial support
  
- 2. Sustainable use and conservation of biodiversity for food and agriculture**
  - 2.1 Improve research and knowledge
  - 2.2 Develop markets and value chains
  - 2.3 Improve in situ and ex situ conservation
  - 2.4 Regulatory frameworks
  
- 3. Policies and programs, capacity development and cooperation relevant to biodiversity for food and agriculture**
  - 3.1 Policies and programmes
  - 3.2 Strengthen capacities
  - 3.3 Improve cooperation
  
- 4. Cross-cutting themes**
  - 4.1 Awareness raising
  - 4.2 Funding
  - 4.3 Gender and family-farming

Needs and actions for the conservation and sustainable use of biodiversity for food and agriculture (BFA) address the different sectors of genetic resources for food and agriculture (GRFA), ecosystem services, associated biodiversity and wild foods.

## **1. ASSESSMENT AND MONITORING OF BIODIVERSITY FOR FOOD AND AGRICULTURE**

### **1.1 Improve availability and access to information and knowledge**

1.1.1 Standard setting: clarify terms and concepts used in biodiversity for food and agriculture (BFA)-related discussions. Standardize data collection, protocols and inventory systems for BFA, particularly for associated biodiversity and wild foods; reach institutional agreement on the concept of BFA.

1.1.2 Overview of existing knowledge on BFA: compile and structure existing data at national level, identify existing indicators, and explore potential of indicators that serve multiple purposes (including Sustainable Development Goals and Aichi targets).

1.1.3 Review, and where feasible make use of or adapt, existing monitoring systems (e.g. Sustainable Development Goals, Convention on Biological Diversity [CBD], European Union Biodiversity Strategy) relevant to BFA, and strengthen monitoring systems developed under the auspices of the Commission.

1.1.4 Identify priority species, production systems or ecosystem services, within and across sectors, for monitoring, sustainable use and conservation of BFA at national, regional and global levels.

1.1.5 Strengthen and establish monitoring systems and assessment tools for BFA in a participatory way; review frameworks for the assessment of BFA (including the classification of production systems), for measuring the status and trends of ecosystem functions and the prevalence of management practices that impact on BFA and the delivery of ecosystem services.

1.1.6 Collect baseline information and monitor various aspects related to BFA, including management practices, impacts of management decisions on BFA, land-use pattern, 'culturally relevant' foods, socio-economic and environmental characterization of production systems, characterization of ecosystem services, traditional knowledge, risks and threats from drivers, including pests and diseases.

1.1.7 Develop knowledge management systems and improve exchange and dissemination of BFA-related knowledge, including on its sustainable use and conservation.

### **1.2 Improve cooperation and financial support**

1.2.1 Strengthen the involvement of informal research systems, including citizen science, in monitoring, particularly in relation to associated biodiversity.

1.2.2 Set clear goals for monitoring BFA and identify responsibilities. This could involve mandating a national agency to collect data, monitor and assess BFA (e.g. from the agriculture or environment sectors, or both).

1.2.3 Strengthen cooperation, as appropriate, between ministries, in particular agriculture sectors and environment, and different levels of government (local, regional, national) with respect to the assessment and monitoring of BFA.

1.2.4 Increase public support for the assessment and monitoring of BFA, by promoting the roles of public–private partnerships, farmers, livestock keepers, forest dwellers and fisherfolk and other sources of provision such as citizen science.

## **2. SUSTAINABLE USE AND CONSERVATION OF BIODIVERSITY FOR FOOD AND AGRICULTURE**

### **SUSTAINABLE USE**

#### **2.1 Improve research and knowledge**

2.1.1 Document use and management practices related to BFA to generate knowledge on how management practices influence BFA and identify best practices that could contribute to its sustainable use.

2.1.2 Conduct research on various aspects related to the use of BFA, including on the roles of micro-organisms and invertebrates in ecosystem functioning, their interactions, the sustainable use of locally adapted plants and animals for food and agriculture, the impacts of practices that are believed to promote BFA, opportunities for using native species to strengthen the delivery of ecosystem services, and the contribution of wild foods to food security and nutrition.

2.1.3 Develop guidelines and tools to facilitate the implementation of best practices.

2.1.4 Integrate knowledge of BFA, including associated biodiversity and wild foods, in natural resources management, including of protected areas and other effective area-based conservation measures.

2.1.5 Document and promote the use of traditional knowledge, including through knowledge sharing between countries.

2.1.6 Promote diverse production systems (e.g. integrated and agro-ecological farming systems).

2.1.7 Identify and implement appropriate technologies and strategies for restoration of biodiversity in production systems, including re-introduction and domestication.

2.1.8. Develop GIS tools for the monitoring and management of BFA in landscapes and seascapes.

#### **2.2 Develop markets and value chains**

2.2.1 Further develop markets and value chains for products from production systems that favour the maintenance and sustainable use of BFA and promote the use of local/traditional foods to improve nutrition and health, and raise consumer awareness.

2.2.2 Strengthen linkages between research and markets.

2.2.3 Conduct assessment, including participatory assessments, of the value of BFA, including ecosystem services, associated biodiversity and wild foods.

2.2.4 Add value to products and services that depend on BFA (e.g. through labelling, certification, traceability, denomination of origin, geographic identification, branding, gastronomy, tourism, etc.) and share information on product quality and positive environmental impact of production with consumers.

## CONSERVATION OF BIODIVERSITY FOR FOOD AND AGRICULTURE

### 2.3 Improve *in situ* and *ex situ* conservation

- 2.3.1 Establish priorities for the conservation of associated biodiversity and related ecosystem services.
- 2.3.2 Ensure complementarity between *in situ* and *ex situ* conservation approaches for BFA, in particular for associated biodiversity and wild foods.
- 2.3.3 Promote the conservation of BFA, when appropriate, through a combination of traditional management practices and modern technologies, promote research on new techniques for the long-term conservation of BFA and improve the use of modern technologies for characterization, collection, storage, documentation and data management.
- 2.3.4 Strengthen and establish effective gene banks, including for the conservation of micro-organisms and invertebrates, and improve recording and overviews of collections within countries.
- 2.3.5 Ensure safe duplication of genetic material of relevance to food and agriculture to ensure this material is maintained in the case of human-made and/or natural disasters (resilience).
- 2.3.6 Maintain and strengthen on-farm management efforts and programmes and the involvement of communities through awareness raising activities and capacity-building.
- 2.3.7 Promote the development and/or expansion of protected forest areas, national parks, wildlife sanctuaries, marine protected areas and zoological gardens or other effective area based conservation measures for BFA and related ecosystem services.
- 2.3.8 Strengthen networks related to the conservation of BFA, including at national and regional levels between users and communities that maintain biodiversity on-farm and/or *in situ* and between research institutes and/or scientists.
- 2.3.9 Develop national policy guidelines to strengthen *in situ* and *ex situ* conservation networks for BFA.
- 2.3.10 Improve infrastructures and ensure the maintenance of facilities for the conservation of BFA.
- 2.3.11 Strengthen research on the domestication, conservation and utilization of wild food species.

## ACCESS AND BENEFIT-SHARING

### 2.4 Regulatory frameworks

- 2.4.1 Coordinate national access and benefit-sharing schemes to facilitate exchange of BFA among countries and ensure fair and equitable benefit-sharing.
- 2.4.2 Identify needs and resources required to facilitate access and benefit-sharing for genetic resources for food and agriculture in line with the Nagoya Protocol.
- 2.4.3 Raise awareness of existing mechanisms for the exchange of genetic resources for food and agriculture.

### **3. POLICIES AND PROGRAMS, CAPACITY DEVELOPMENT AND COOPERATION RELEVANT TO BIODIVERSITY FOR FOOD AND AGRICULTURE**

#### **3.1 Policies and programmes**

3.1.1 Review and upgrade existing strategies on biodiversity (e.g. National Biodiversity Strategies and Action Plans (NBSAP), Global Plans of Action (GPA)) to include BFA. Mainstream BFA into existing policies, regulations and programmes.

3.1.2 Review existing policies, including their implementation and the extent of their (negative or positive) impact on sustainable use of BFA.

3.1.3 Develop, maintain or strengthen national strategies for the conservation and sustainable use of BFA in line with other relevant strategies such as NBSAPs and agro-ecological programmes. Develop policy frameworks/umbrellas for all sectors of BFA at national and (sub) regional levels, and addressing climate change. Promote the development of cross-sectoral policies and programmes at national and regional levels through the establishment of cross-sectoral working groups taking into account existing efforts.

3.1.4 Engage and empower communities in the development and implementation of policies related to the conservation and sustainable use of BFA.

3.1.5 Strengthen and establish national policies and strategies that improve support, including through incentives and technical support, to farmers, livestock keepers, forest dwellers, fisher folks and other stakeholders applying practices that favour the maintenance and sustainable use of BFA and contribute to strengthening food security and nutrition and climate change resilience.

3.1.6 Provide public support to smallholder family farming that promotes BFA.

3.1.7 Make an inventory of national legal acts regulating use, conservation, access to and exchange of BFA, including farmer's right regulations.

3.1.8 Involve scientists in policy development, training/workshops, regional and international meetings.

#### **3.2 Strengthen capacities**

3.2.1 Improve research capacity related to taxonomy, the functions of associated biodiversity in the provision of ecosystem services in production systems, wild foods, crop wild relatives and sustainable management practices, and other areas related to BFA.

3.2.2 Improve the teaching of taxonomy in universities, schools and in professional and informal education (e.g. by NGOs) targeting different stakeholders, such as citizen scientists, age groups and gender.

3.2.3 Increase the number of qualified researchers/scientists, in particular taxonomists, working on BFA. Incentivize through different means (e.g. increase recognition, for example through competitive compensation; provide adequate infrastructure, such as laboratories; logistical support) education and research in the field of biodiversity especially in certain specialties (e.g. taxonomy, ethnobiology).

3.2.4 Secure life-long education in sustainable use and conservation of BFA for farmers, fisherfolks, livestock keepers and forest dwellers.

### **3.3 Improve cooperation**

- 3.3.1 Map and profile relevant institutions and their mandates to enable the development of coordination mechanisms.
- 3.3.2 Consider formalizing collaboration between institutions (including the private sector and community organizations) by identifying focal points/experts;
- 3.3.3 Consider establishing a national BFA steering committee, or identifying leading agencies together with other supporting partners, to strengthen collaboration between the institutions involved, seek synergies and harmonize activities. Such a steering committee could be composed of representatives from the different relevant institutions.
- 3.3.4 Develop coherent national policy for BFA, addressing the different sectors of GRFA, ecosystem services, associated biodiversity and wild foods and establishing a system/mechanism that provides integrated and multi-sectorial support at national level.
- 3.3.5 Strengthen cooperation in the area of sustainable use and conservation of BFA between sectoral networks for GRFA, universities, governments, NGOs, communities, the private sector, research institutions and other relevant stakeholders, at all levels.
- 3.3.6 Improve cooperation and coordination among ministries to ensure coherence of governments' submissions on BFA across fora.
- 3.3.7 Improve the coordination and implementation of BFA programs at national level and relevant national reporting, including with respect to the implementation of biodiversity related conventions. This could involve the establishment of a single institution (e.g. National Focal Point) that would be responsible for coordinating the implementation of all the different programs related to BFA.
- 3.3.8 Strengthen regional and international collaboration to control invasive alien species.
- 3.3.9 Strengthen regional and international cooperation within existing initiatives, establish a working group at regional level to improve the conservation and sustainable use of BFA and establish regional networks and clearinghouse mechanisms.
- 3.3.10 Develop national, regional or global information hubs linking key experts and scientists, for sharing information on relevant areas such as research priorities and funding sources for BFA.
- 3.3.11 Further develop and strengthen international cooperation in research activities on ecosystem services, associated biodiversity and wild foods.

## **4. CROSS-CUTTING THEMES**

### **4.1 Awareness raising**

Raise awareness on the importance of the sustainable use and conservation of BFA among farmers, livestock keepers, fisher folks and forest dwellers, the broader public, donors, policy-makers, consumers and the media.

### **4.2 Funding**

4.2.1 Secure financial support for training, capacity development, assessment and monitoring, sustainable use, in-situ and ex situ conservation.

4.2.2 Invest in research on techniques for the characterization, monitoring, conservation and sustainable use of the different components of associated biodiversity and related ecosystem services.

4.2.3 Establish fund raising mechanisms; identify priority areas to maximize efficient use of resources; evaluate existing projects at the regional level to identify overlaps and expertise that can be shared between countries; and establish investment plans for the sustainable use and conservation of BFA.

### **4.3 Gender and family-farming**

Ensure special attention to gender and family-farming is given across areas and actions.