



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 3.1 of the Provisional Agenda

### INTERGOVERNMENTAL TECHNICAL WORKING GROUP ON ANIMAL GENETIC RESOURCES FOR FOOD AND AGRICULTURE

#### Ninth Session

Rome, 6-8 July 2016

### REVIEW OF IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION FOR ANIMAL GENETIC RESOURCES

#### TABLE OF CONTENTS

	Paragraphs
I. INTRODUCTION.....	1 - 2
II. <i>THE SECOND REPORT ON THE STATE OF THE WORLD'S ANIMAL GENETIC RESOURCES FOR FOOD AND AGRICULTURE</i> .....	3 - 4
III. REPORTING AND AWARENESS-RAISING ON THE GLOBAL PLAN OF ACTION FOR ANIMAL GENETIC RESOURCES .....	5 - 6
IV. FAO SUPPORT TO THE IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION FOR ANIMAL GENETIC RESOURCES .....	7 - 25
V. COLLABORATION .....	26 - 27
VI. GUIDANCE SOUGHT .....	28

*This document is printed in limited numbers to minimize the environmental impact of FAO's processes and contribute to climate neutrality. Delegates and observers are kindly requested to bring their copies to meetings and to avoid asking for additional copies. Documents for the meeting are available on the Internet at <http://www.fao.org/Ag/AGInfo/programmes/en/genetics/angrvent.html>*

## I. INTRODUCTION

1. The Commission on Genetic Resources for Food and Agriculture (Commission), at its Fifteenth Regular Session, requested FAO to continue supporting country implementation of the Global Plan of Action for Animal Genetic Resources<sup>1</sup> (Global Plan of Action),<sup>2</sup> and thus to help countries achieve relevant post-2015 sustainable development goals.<sup>3</sup>

2. This document provides a report on FAO activities since the Commission's Fifteenth Regular Session. The activities are grouped according to their relevance to the four strategic priority areas of the Global Plan of Action. More detailed information is provided in the document, *Detailed FAO progress report on the implementation of the Global Plan of Action for Animal Genetic Resources*.<sup>4</sup>

## II. THE SECOND REPORT ON THE STATE OF THE WORLD'S ANIMAL GENETIC RESOURCES FOR FOOD AND AGRICULTURE

3. A draft version of *The Second Report on the State of the World's Animal Genetic Resources for Food and Agriculture*<sup>5</sup> (Second Report) was presented to the Commission at its Fifteenth Regular Session.<sup>6</sup> In response to the Commission's request,<sup>7</sup> FAO made a revised draft Second Report available in March 2015 and invited comments from Members and observers by 31 May 2015. FAO then finalized the Second Report, taking into account comments received, and published it in English.<sup>8</sup> According to the request of the Commission,<sup>9</sup> in-brief and brochure versions of the Second Report have been prepared and published in all official languages of FAO. The publications have been distributed widely.

4. The Commission called upon governments and donors to make available the financial resources necessary to translate the Second Report.<sup>10</sup> The Chinese government has supported the preparation of a Chinese version of the Second Report. Versions of the Second Report in the other official FAO languages will be prepared pending the availability of financial resources.

## III. REPORTING AND AWARENESS-RAISING ON THE GLOBAL PLAN OF ACTION FOR ANIMAL GENETIC RESOURCES

5. FAO continued to distribute printed versions of the Global Plan of Action and related products and guidelines.

6. The publication catalogue<sup>11</sup> including all publications and information products related to the implementation of the Global Plan of Action has been updated and continues to be distributed at events to encourage requests for these products. The updated catalogue is among the documents made available for this meeting of the Working Group under "other documents".

## IV. FAO SUPPORT TO THE IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION FOR ANIMAL GENETIC RESOURCES

7. FAO continued to assist countries in the implementation of all strategic priority areas of the Global Plan of Action, by providing institutional and technical support, facilitating research and building capacity. This section provides some examples of FAO's activities in the four strategic priority areas and some cross-cutting areas. More detailed information is provided in the document,

---

<sup>1</sup> [www.fao.org/docrep/010/a1404e/a1404e00.htm](http://www.fao.org/docrep/010/a1404e/a1404e00.htm).

<sup>2</sup> CGRFA-15/15/Report, paragraph 39.

<sup>3</sup> CGRFA-15/15/9, paragraph 12.

<sup>4</sup> CGRFA/WG-AnGR-9/16/Inf.2.

<sup>5</sup> CGRFA-15/15/Inf.17.1.

<sup>6</sup> CGRFA-15/15/10.

<sup>7</sup> CGRFA-15/15/Report, paragraph 38.

<sup>8</sup> <http://www.fao.org/3/a-i4787e.pdf>.

<sup>9</sup> CGRFA-15/15/Report, paragraph 37.

<sup>10</sup> CGRFA-15/15/Report, paragraph 39.

<sup>11</sup> [http://www.fao.org/Ag/AGInfo/programmes/documents/genetics/AnimalGeneticResources\\_Publications\\_catalogue.pdf](http://www.fao.org/Ag/AGInfo/programmes/documents/genetics/AnimalGeneticResources_Publications_catalogue.pdf)

*Detailed FAO progress report on the implementation of the Global Plan of Action for Animal Genetic Resources.*<sup>12</sup>

### **Strategic Priority Area 1. Characterization, inventory and monitoring of trends and risks**

8. Taking advantage of strategic partnerships, FAO continued to support countries in the characterization, inventory and monitoring of animal genetic resources; in the standardization of methods to undertake these tasks; and in the dissemination of results and related information. The FAO/ International Atomic Energy Agency (IAEA) Joint Division on Nuclear Techniques in Food and Agriculture (AGE) provided capacity building through both training courses and individual fellowships. During the reporting period, FAO and AGE contributed through cooperative projects with external partners to the molecular and phenotypic characterization of a total of more than 120 breeds.

9. In 2009, the Commission requested FAO to make status and trends reports on animal genetic resources available to the Commission at each of its regular sessions.<sup>13</sup> In response FAO prepared, for review by the Working Group, the document, *Status report of animal genetic resources – 2016*.<sup>14</sup> The status report is based on information provided by National Coordinators for the Management of Animal Genetic Resources (National Coordinators) to FAO's Domestic Animal Diversity Information System (DAD-IS). Currently, 177 countries have a National Coordinator for the Management of Animal Genetic Resources (National Coordinator). As of February 2016, 98 National Coordinators had updated national data since 2007, when the current version of DAD-IS (DAD-IS:3) was launched.

10. At its Fourteenth Regular Session,<sup>15</sup> the Commission invited countries to assign their breeds recorded in DAD-IS to the categories "exotic" or "locally adapted" for the purpose of calculating the resource indicators.<sup>16</sup> To date, National Coordinators have made this information available for 4 352 out of 14 915 national breed populations.

11. Since 2014, the percentage of avian and mammalian breeds for which population data are available has improved slightly, from 56 to 57 percent, and from 60 to 61 percent, respectively. The risk status remained essentially unchanged from 2014 to 2016; 17 percent of 8 822 breeds are currently classified as being at risk; 18 percent are classified as not at risk; 58 percent have unknown risk status and 7 percent are reported to be extinct.<sup>17</sup> Trends in the development of breed populations cannot be reported to this session of the Working Group due to unexpected delays in the revision of DAD-IS.

12. FAO continued during the reporting period to maintain against all odds DAD-IS and, with extra-budgetary funding from the Government of Germany, develop a new prototype of DAD-IS. However, as part of the full implementation of its Revised Strategic Framework, FAO initiated in 2015 the centralization of major information management activities, including DAD-IS, in its Information Technology Division which, in the future, will therefore be fully responsible for the further development and maintenance of the DAD-IS infrastructure. Although this development aims to increase the long-term sustainability of DAD-IS and other information systems, it has caused in the short term delays in the implementation of the DAD-IS project. The revision of DAD-IS will be completed during the current biennium.

13. FAO continued to contribute to the 2010 Biodiversity Indicators Partnership (BIP),<sup>18</sup> in particular with potential indicators on biodiversity for the Sustainable Development Goals,<sup>19</sup> specifically under Target 2.5 of Goal 2: "End hunger, achieve food security and improved nutrition

---

<sup>12</sup> CGRFA/WG-AnGR-9/16/Inf.2.

<sup>13</sup> CGRFA-12/09/Report, paragraph 39.

<sup>14</sup> CGRFA/WG-AnGR-7/12/Inf.4.

<sup>15</sup> CGRFA-14/13/Report, paragraph 31.

<sup>16</sup> CGRFA-14/13/Report, paragraph 32.

<sup>17</sup> CGRFA/WG-AnGR-8/14/Inf.4.

<sup>18</sup> <http://www.bipindicators.net/about>.

<sup>19</sup> <http://www.un.org/sustainabledevelopment/sustainable-development-goals>.

and promote sustainable agriculture.<sup>20</sup> Final decisions on the targets and indicators, which under the current proposal would include the monitoring of breeds both *in situ* and *ex situ*, will be made in late 2016. If approved, the proposed indicators will imply the need for countries to update information on their programmes for locally adapted breeds on an annual basis. FAO furthermore contributed to the relevant chapter of the Global Biodiversity Outlook 4.

### **Strategic Priority Area 2. Sustainable use and development**

14. The Commission, at its Fifteenth Regular Session called upon countries to continue implementing the Global Plan of Action in order to contribute to global food security and sustainable rural development.<sup>21</sup> In response, FAO further invested in providing assistance in these fields, both directly and through cooperation with other organizations.

15. In response to the Commission's request,<sup>22</sup> in 2016 FAO finalized the *Guidelines for the Development of Integrated Multipurpose Animal Recording Systems*,<sup>23</sup> endorsed by the Commission at its last session. FAO has collaborated with various partners to provide assistance to more than 35 countries in the implementation of such systems through projects, training workshops, expert meetings and stakeholder consultations.

16. Particular topics receiving emphasis in FAO's technical support, capacity building and research included during the reporting period climate change, community-based breeding programmes, sustainable crossbreeding and development of livestock market chains for smallholders.

17. Several countries received support through Technical Cooperation Projects (TCP), administered by FAO and AGE. The projects address various issues of priority to each country, including livestock development, animal identification and traceability, genetic improvement and application of reproductive technologies.

18. FAO continued its work in support of small-scale livestock keepers. Specifically, with the extra-budgetary support received from the Government of Germany, FAO established the Pastoralist Knowledge Hub.<sup>24</sup> The objectives of the Pastoralist Knowledge Hub are to facilitate communication among pastoralist livestock keepers, to empower them by improving their representation in policy-making processes and to gather and share information on factors influencing their livelihoods. Seven regional pastoralist networks have been established or strengthened across the world.

### **Strategic Priority Area 3. Conservation**

19. Through TCPs, FAO provided countries with technical support on the conservation of animal genetic resources. FAO, along with collaborators in Europe and several African and South American countries, was successful in obtaining a research grant that aims to improve the management and *ex situ* conservation programmes for animal genetic resources and increase the utilization of germplasm stored in gene banks. Relevant activities funded by the European Commission under the project, "IMAGE - Innovative Management of Animal Genetic Resources", will continue until 2020.

20. FAO and partners also organized and contributed to several training workshops and expert meetings on conservation of animal genetic resources in different locations world-wide.

### **Strategic Priority Area 4. Policies, institutions and capacity-building**

21. FAO and its partners contributed to the development and/ or implementation of three global projects and 23 regional or national projects involving more than 40 countries. Over the past two years, FAO organized, with partners, six capacity-building activities with an average of six countries participating.

---

<sup>20</sup> <http://www.un.org/sustainabledevelopment/hunger/>.

<sup>21</sup> CGRFA-15/15/Report paragraph 39.

<sup>22</sup> CGRFA-15/15/Report paragraph 40.

<sup>23</sup> CGRFA-15/15/Inf.20.

<sup>24</sup> <http://www.fao.org/pastoralist-knowledge-hub/en>.

22. FAO provided and still provides support to various countries and regional bodies in the development of policies related to the management of animal genetic resources, including national strategies and action plans and national laws and legislation.
23. FAO continued to collaborate with National Coordinators and regional stakeholders to maintain and strengthen Regional and Sub-regional Focal Points or networks in Asia, the Central Asia sub-region, the Near East and Africa. FAO continued its collaboration with the Regional Focal Points for Europe and for Latin America and the Caribbean.
24. FAO also contributed to a range of cross-cutting initiatives related to biodiversity, biotechnology and nutrition, including through the preparation of scientific papers on the interactions between animal genetic resources and climate change, crossbreeding, genetic improvement of small breeds and various applications of genomics within and across breed populations. The 55<sup>th</sup>, 56<sup>th</sup> and 57<sup>th</sup> volumes of the journal *Animal Genetic Resources* have been published since the last meeting of the Commission. Due to funding problems, the journal is only available as an online version and will be ceased in 2017.
25. FAO continues to maintain DAD-Net and regional subgroups as an informal forum for the discussion of issues relevant to the management of animal genetic resources. Numbers of subscribers and messages continue to increase steadily. As of April 2016, more than 2 860 persons from more than 185 countries were subscribed to the network. In 2015, more than 1 000 messages were exchanged through DAD-Net. DAD-Net continues to be a unique and effective means of sharing experiences, disseminating information and facilitating informal discussions among individuals involved in the management of animal genetic resources.

## V. COLLABORATION

26. FAO continued its interaction with regional bodies and regional economic communities, various scientific organizations and non-governmental organizations. FAO maintains its recognized technical competence in the management of animal genetic resources through various contributions to scientific endeavours, including by undertaking research and development projects and publishing scientific publications. The preparation of the Second Report included the mobilization of contributions from more than 150 individuals who contributed through writing and reviewing the report.
27. The usefulness of research collaborations, regional networks and continuous exchange through DAD-Net was commended by the Evaluation of FAO's contribution to the conservation and sustainable use of genetic resources for food and agriculture.<sup>25</sup>

## VI. GUIDANCE SOUGHT

28. The Working Group may review the progress made in the implementation of the Global Plan of Action and wish to recommend that the Commission:
- Call upon countries to continue to implement the Global Plan of Action, in order to contribute to global food security and sustainable rural development, and in particular to help achieve the United Nations Sustainable Development Goals 2 and 15;
  - Request FAO to continue to support country implementation of the Global Plan of Action;
  - Encourage FAO and countries to collaborate with regional organizations, civil society and the private sector to improve the management of animal genetic resources;
  - Request FAO to continue to pursue partnerships and alliances with other international mechanisms and organizations to enhance the mobilization of financial resources for the implementation of the Global Plan of Action;
  - Stress the importance of DAD-IS as the international clearing house mechanism for animal genetic resources; and

---

<sup>25</sup> PC 119/5.

- 
- Stress the need for countries to regularly update their national data in DAD-IS or FABIS-net, including information on animal genetic resources both *in situ* and *ex situ*, and to provide information on breed classifications, in order to ensure that decisions on the implementation of the Global Plan of Action are informed by the most up-to-date data and information available.