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CGRFA-19/23/10.3

# **COMMISSION ON GENETIC RESOURCES** FOR FOOD AND AGRICULTURE

### Item 10.3 of the Provisional Agenda

**Nineteenth Regular Session** 

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## PREPARATION OF THE THIRD REPORT ON THE STATE OF THE WORLD'S ANIMAL GENETIC RESOURCES FOR FOOD AND AGRICULTURE

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#### I. INTRODUCTION

1. In 2007, FAO launched *The State of the World's Animal Genetic Resources for Food and Agriculture*<sup>1</sup> (First Report). The FAO Conference, at its Thirty-fourth Session in November 2007, welcomed the First Report as the first comprehensive worldwide assessment of the state of animal genetic resources.<sup>2</sup>

2. The Commission on Genetic Resources for Food and Agriculture (Commission), at its Fourteenth Regular Session, in April 2013, requested FAO to prepare *The Second Report on the State of the World's Animal Genetic Resources for Food and Agriculture* (Second Report), focusing on changes since the preparation of the First Report.<sup>3</sup> FAO presented the draft Second Report<sup>4</sup> to the Fifteenth Regular Session of the Commission, which welcomed it as a comprehensive, timely and high-quality document.<sup>5</sup> The finalized Second Report was published in 2015.<sup>6</sup>

3. The Strategic Plan for the Commission (2019–2027) currently foresees the presentation of *The Third Report on the State of the World's Animal Genetic Resources for Food and Agriculture* (Third Report) for the Commission's Twentieth Regular Session, in 2025.<sup>7</sup> However, it is proposed that the presentation of the Third Report be postponed to the Commission's Twenty-first Regular Session.<sup>8</sup>

4. It is suggested that, like the Second Report, the Third Report should provide an update of the preceding report in the series and thus serve as the basis for a review and possible updating of the Global Plan of Action for Animal Genetic Resources (Global Plan of Action).<sup>9</sup> The preparation of the Third Report would contribute to enhancing the technical capacity of countries and relevant stakeholders involved in the country-driven reporting process.

5. The present document proposes the timeline, scope, content and process for the preparation of the Third Report and identifies the required resources, taking into account recommendations made by the Intergovernmental Technical Working Group on Animal Genetic Resources for Food and Agriculture (Working Group) at its Twelfth Session.<sup>10</sup>

#### II. PROPOSED SCOPE AND CONTENT OF THE THIRD REPORT

6. As with the previous reports, the Third Report should be based on: reports from countries, regional focal points and networks, and international organizations; national breed-population data submitted through the Domestic Animal Diversity Information System (DAD-IS); and inputs from international experts in the management of animal genetic resources. The process of collecting information for the Third Report should be as efficient as possible and minimize the reporting obligations put on countries. It should focus on changes that have occurred since the preparation of the Second Report and identify gaps and needs that require particular attention, including in the review and implementation of the Global Plan of Action.

7. The Third Report will include a summary and assessment of the breed-population data contributing to the biennial FAO status and trends reports on animal genetic resources, describe changes that have occurred since 2015 in countries' capacities to manage their animal genetic

<sup>&</sup>lt;sup>1</sup> FAO. 2007. *The State of the World's Animal Genetic Resources for Food and Agriculture*, B. Rischkowsky & D. Pilling, eds. Rome. https://www.fao.org/publications/card/en/c/943d7f33-a655-4538-9537-35f552ba9db9/

<sup>&</sup>lt;sup>2</sup> C 2007/REP, paragraph 147 (Resolution 12/2007).

<sup>&</sup>lt;sup>3</sup> CGRFA-14/13/Report, paragraph 71.

<sup>&</sup>lt;sup>4</sup> CGRFA-15/15/Inf.17.1; CGRFA-15/15/Inf.17.2; CGRFA-15/15/Inf.17.3.

<sup>&</sup>lt;sup>5</sup> CGRFA-15/15/Report, paragraph 38.

<sup>&</sup>lt;sup>6</sup> FAO. 2015. *The Second Report on the State of the World's Animal Genetic Resources for Food and Agriculture*. B.D. Scherf & D. Pilling eds. FAO Commission on Genetic Resources for Food and Agriculture Assessments. Rome. https://doi.org/10.4060/I4787E

<sup>&</sup>lt;sup>7</sup> CGRFA-17/19/Report, *Appendix F*.

<sup>&</sup>lt;sup>8</sup> CGRFA-19/23/12, Annex 1.

<sup>&</sup>lt;sup>9</sup> FAO. 2007. *Global Plan of Action for Animal Genetic Resources and the Interlaken Declaration*. Rome. https://www.fao.org/3/a1404e/a1404e.pdf

<sup>&</sup>lt;sup>10</sup> CGRFA-19/23/10.1, paragraphs 19–25.

resources and in their progress in implementing the Global Plan of Action, and describe significant gains in scientific knowledge since 2015.

8. It is proposed that the general structure of the First and Second Reports be maintained, with the Third Report focusing on areas that require particular attention and highlighting emerging issues. This focus will require some cautious modifications. A draft outline of the Third Report is given in Table 1. The presentation of certain topics could, for example, appear in parts or sections of the Third Report other than those in which they appeared in the previous reports. In particular, livestock sector trends as drivers of change in the state of livestock diversity could be discussed in Part 1 of the Third Report, rather than presented in a separate part of the document as they were in the Second Report. The discussion of the state of the art, also a separate part of the Second Report, could be incorporated into Part 2 of the Third Report to complement discussion on the state of national capacities and emphasize only the most recent developments, including gene editing and other emerging technologies. The involvement of women, youth, indigenous communities and non-governmental organizations (NGOs) in the management of animal genetic resources should be highlighted, where relevant, as well as any economic impacts of the Global Plan of Action reported by countries.

# TABLE 1. Draft outline of *The Third Report on the State of the World's Animal Genetic Resources* for Food and Agriculture

#### Part 1. The state of livestock diversity

- Status and trends of animal genetic resources
- Drivers of change in the livestock sector and impacts on animal genetic resources
- Conclusions

#### Part 2. The state of capacities in animal genetic resources management

- Institutions and stakeholders
- State of science and technology
- Characterization, inventory and monitoring
- Breeding programmes
- Conservation programmes
- Legal and policy frameworks
- Conclusions

#### Part 3. Special topics in animal genetic resources management (provisional)

- Vulnerability of animal genetic resources in the face of climate change and the role of genetic diversity in adaptation and resilience
- Establishment and scaling-up of breeding programmes in challenging environments
- Genomic measures of genetic variation and the future use of the breed concept in the formation of new breeds

#### Part 4. Needs and challenges in animal genetic resources management

- Characterization and monitoring
- Sustainable use and development
- Conservation
- Policies, institutions and capacity building
- Conclusions

9. Part 4 would build upon the other sections and deal with needs and challenges in animal genetic resources management. Discussion would be organized according to the strategic priority areas of the Global Plan of Action. The Secretariat would invite Members of the Working Group to contribute to the development of this section.

10. It is proposed that FAO initiate, subject to the availability of the necessary extra-budgetary funds (monetary or in-kind), the preparation of studies on "special topics" regarding new and emerging issues and issues related to the implementation of the Global Plan of Action that require particular and immediate attention. These studies would be similar to the "thematic studies"

undertaken in conjunction with the preparation of the First and Second Reports, but their results would directly constitute Part 3 of the Third Report rather than be presented in stand-alone publications. The number of special topics included would depend on the amount of extra-budgetary resources made available, including both monetary and in-kind contributions.

#### III. TIMELINE FOR THE PREPARATION OF THE THIRD REPORT

11. The Strategic Plan for the Commission on Genetic Resources for Food and Agriculture (2019–2027) currently foresees the presentation of the Third Report for the Commission's Twentieth Regular Session in 2025.<sup>11</sup> However, the COVID-19 pandemic resulted in shifts in the schedule of Commission sessions, which reduces the time available for completion of the Third Report. The pandemic led to the postponement of the Eighteenth and Nineteenth Regular Sessions, with both sessions taking place after the biennial FAO Conference. The Twentieth Regular Session, in contrast, is planned to be held prior to the FAO Conference, in early 2025. These adjustments reduce the time available between the Nineteenth and Twentieth Regular Sessions for completion of the Third Report.

12. In light of the compressed schedule of the Commission's forthcoming sessions, the Commission may wish to request that the Third Report be presented to the Commission's Twenty-first Regular Session rather than its Twentieth Regular Session.<sup>12</sup> Figure 1 shows a draft timeline for the preparation of the Third Report if it is presented at the Twenty-first Regular Session of the Commission.

13. Postponing by one Session the presentation of the Third Report would allow Commission Members and FAO to spread the workload, leaving more time for country reporting and the preparation and review of the report. It would also allow the Working Group to consider the preparation of the Third Report at its Thirteenth and Fourteenth Sessions. The Working Group could, in particular, consider at its next session a new version of the *Synthesis progress report on the implementation of the Global Plan of Action for Animal Genetic Resources* (Synthesis Report), which is due at the Twentieth Regular Session of the Commission, and reflect on the major results and inferences to subsequently be highlighted in the Third Report. Assuming resources allow their preparation, one or more of the studies on special topics in animal genetic resources management may also be sufficiently complete prior to the next session of the Working Group to allow them to be reviewed.

#### IV. PREPARATORY PROCESS

14. The content of the Third Report will originate from three different types of sources: (i) data from DAD-IS will inform the presentation of the state of livestock diversity; (ii) reports from countries, regional networks and international organizations will provide information about the state of capacities in animal genetic resources management; and (iii) international experts will contribute to the analysis of the state of the art and address special topics. Information about drivers of change and needs and challenges will be obtained both from the international experts and from the country reports as well as through direct engagement with Working Group Members.

15. The preparation of the Third Report will take into consideration the need to keep country reporting requirements manageable. FAO will not request countries to provide any data that they provide, or have provided, to FAO as part of other reporting processes, including via DAD-IS. Countries will be requested to provide a limited amount of information through an electronic questionnaire, which is simpler than the preparation of a full narrative report as was required for the First Report. The questionnaire, as contained in the document *Country report questionnaire supporting the preparation of The Third Report on the State of the World's Animal Genetic Resources for Food and Agriculture*,<sup>13</sup> is based on the questionnaire used for the Second Report,<sup>14</sup> with some

<sup>&</sup>lt;sup>11</sup> CGRFA-17/19/Report, Appendix F.

<sup>&</sup>lt;sup>12</sup> CGRFA-19/23/12, Appendix I, Annex 1.

<sup>&</sup>lt;sup>13</sup> CGRFA-19/23/10.3/Inf.1.

<sup>14</sup> https://www.fao.org/3/i4787e/i4787e01.htm

new questions added and others modified or removed.<sup>15</sup> It reflects inputs from the Working Group and the Working Group Bureau and responses to a survey of all National Coordinators for the Management of Animal Genetic Resources (NCs-AnGR).

16. The Third Report will also rely on information related to animal genetic resources and climate change gathered through the questionnaire on genetic resources for food and agriculture and climate change developed at the Commission's request.<sup>16</sup> The questionnaire is contained in the document *Climate change and genetic resources for food and agriculture*.<sup>17</sup>

17. These sources and the ways in which they will be used will enable FAO to manage, analyse and present data in a resource- and time-efficient manner. The electronic format of the questionnaire allows responses to be automatically uploaded into a database, facilitating the management and analysis of the data. Re-utilization of large parts of the previous questionnaires will also decrease the need for capacity building on reporting, as many countries will have retained some institutional memory from the previous round of reporting. Nevertheless, some capacity building will be provided. From a statistical standpoint, the repetition of questions across the Second Report, Third Report and Synthesis Report questionnaires will increase the validity of the comparison of country responses across reporting cycles and hence facilitate the assessment of progress in the national implementation of the Global Plan of Action.

18. The NCs-AnGR and national advisory committees<sup>18</sup> will be responsible for national data collection and reporting to FAO. Therefore, prior to the initiation of the process, FAO will invite Members of the Commission to confirm the existing NC-AnGR or to nominate a new one. Countries will also be encouraged to nominate an Alternate NC-AnGR to assist in the process. Countries should consult and involve relevant national stakeholders, especially women, youth, indigenous communities and NGOs, involved in the management of animal genetic resources, in the preparation of their reports. FAO will support the process by organizing regional and subregional capacity-development workshops. It is proposed that the discussion network DAD-Net be used for regular communication with stakeholders on the reporting process and to encourage exchange of information among countries and regions.

19. As shown in Figure 1, the proposed preparatory process provides several opportunities for Commission Members to review the information and data and the draft content of the Third Report. Initially, a Synthesis Report, which will contribute to the section on the state of capacities for animal genetic resources management in Part 2 of the Third Report, will be presented at the Thirteenth Session of the Working Group and the Twentieth Regular Session of the Commission. The proposed process includes a step immediately following the Twentieth Regular Session that will allow countries to provide a brief update of their already submitted country questionnaire before the finalization of the Third Report. In February 2026, FAO intends to start publishing draft elements of the Third Report on the FAO website for review. Finally, draft versions of the Working Group, allowing for the presentation of a nearly final version to the Twenty-first Regular Session of the Commission.

<sup>&</sup>lt;sup>15</sup> CGRFA-19/23/10.3/Inf.1.

<sup>&</sup>lt;sup>16</sup> CGRFA-18/21/Report, paragraph 19.

<sup>&</sup>lt;sup>17</sup> CGRFA-19/23/3.

<sup>&</sup>lt;sup>18</sup> FAO. 2011. Developing the institutional framework for the management of animal genetic resources. FAO Animal Production and Health Guidelines. No. 6. Rome. https://www.fao.org/publications/card/en/c/054fcb55-a353-5127-a4d9-6dfce197e16f/



Figure 1 Draft timeline for the preparation of The Third Report on the State of the World's Animal Genetic Resources for Food and Agriculture

#### V. REQUIRED RESOURCES

20. Adequate financial and human resources are necessary to ensure the preparation of the Third Report. It is proposed that costs be partially covered by funds provided under FAO's Regular Programme Budget and partially by extra-budgetary funds, as indicated in Table 2. The main areas for funding include:

- appointment of a coordinator who will oversee the process, as outlined in this document, and ensure regular two-way communication with NCs-AnGR and other stakeholders;
- establishment of a dedicated team within FAO that will support the preparation of questionnaires, compilation and analysis of data and information, presentation of results, preparation of draft and final chapters of the Third Report, and coordination of the studies on special topics; and
- preparation of the studies on special topics.

21. FAO Regular Programme will cover approximately two-thirds of the required resources, including staff, as follows: 2 months of Chief (Animal Production and Genetics Branch); 24 months of three Animal Production Officers; and 7 months of support staff. In order to enable the immediate implementation of the preparation process, including hiring of additional staff, USD 700 000 are required.

22. Table 2 provides cost estimates for the tasks that must be undertaken in order to prepare and publish the Third Report. The Government of Germany has already provided a contribution to the portion of the budget that must be covered by extra-budgetary funds.

# TABLE 2. Proposed core activities and budget for developing the preparation process, preparing and publishing the Third Report – January 2023 to December 2027<sup>19</sup> (amounts in USD 1 000s)

	Regular Programme <sup>20</sup>	Extra- budgetary	Total
Mobilizing funding and overseeing the entire process	64	0	64
Capacity building, reporting and communication	45	27	72
Data analysis	55	6	61
Updating of the "state of livestock diversity" sections	58	31	89
Updating of the "state of capacities" sections	58	31	89
Preparation and publishing of the draft of the Third Report	32	52	84
Preparation of the Third Report for the Working Group	24	13	37
Preparation of the Third Report for Commission	16	13	29
Publishing of the Third Report and FAO-language versions of its in-brief version	34	0	34
Launch the Third Report (communication strategy)	36	0	36
Preparation of studies on special topics (contingent on funding)	29	76	105
Total	451	249	700

<sup>&</sup>lt;sup>19</sup> It is assumed that the Twenty-first Regular Session of the Commission will take place in early 2027.

<sup>&</sup>lt;sup>20</sup> Estimated Regular Programme contribution to the preparation process and the Third Report, covering mainly salaries for Professional and General Service Staff.

#### VI. GUIDANCE SOUGHT

- 23. The Commission may wish to:
  - review and revise, as appropriate, the proposed outline, process, questionnaire and timeline for the preparation of the Third Report;
  - invite countries to initiate the collection of information and data for the completion of their country report questionnaires;
  - request the Secretariat to invite countries, by 1 September 2023, to complete the questionnaire;
  - invite countries to submit their completed questionnaires for the preparation of the Third Report by 30 June 2024;
  - request the Secretariat to invite regional networks on animal genetic resources and relevant international organizations to contribute to the preparation of the Third Report;
  - recommend that FAO invite Members and relevant international organizations to support and contribute to the implementation of the Global Plan of Action and to provide in a timely manner the relevant information required for the preparation of the Third Report; and
  - recommend that the Commission and FAO invite Members and relevant international mechanisms, funds and bodies to give immediate and due priority and attention to the effective allocation of predictable and agreed resources for the preparation of the Third Report.