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Alimentación y la Agricultura

منظمة  
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للأمم المتحدة

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# COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

## Item 4.1 of the Provisional Agenda

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

#### Eighth Session

Rome, 26-28 November 2014

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

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*Annex 1: Overview countries' statuses with respect to the nomination of National Coordinators for the Management of Animal Genetic Resources (NC), submission of Country Reports (CR) contributing to the Second Report and updating of national breed population data in DAD-IS since March 2007 (DAD-IS)*

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## I. Introduction

1. The Commission on Genetic Resources for Food and Agriculture (Commission), at its Fourteenth Regular Session, welcomed progress made in the implementation of the Global Plan of Action for Animal Genetic Resources (Global Plan of Action)<sup>1</sup> and requested FAO to continue to support country implementation of the Global Plan of Action.<sup>2</sup>
2. The present document reports on FAO's activities since the Commission's Fourteenth 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>3</sup>

## II. Status of implementation of the Global Plan of Action

3. The Commission, at its Fourteenth Regular Session, agreed to the use of specific process and resources indicators and related targets to monitor the implementation and impact of the Global Plan of Action.<sup>4</sup> Countries, regions and international organizations reported on the implementation of the Global Plan of Action since its adoption as part of the reporting process for *The Second Report on the State of the World's Animal Genetic Resources for Food and Agriculture* (Second Report). The process indicators are set out in detail in the document *Synthesis progress report on the implementation of the Global Plan of Action for Animal Genetic Resources – 2014* (Synthesis Report).<sup>5</sup> In addition, countries reported on the status of their national breed populations via the Domestic Animal Diversity Information System (DAD-IS).
4. This section provides a brief summary of the information on the implementation of the Global Plan of Action provided in the country reports and in the reports from regions and international organizations, as well as information on the status of breed populations as recorded in DAD-IS. It also provides some evidence of the policy impact of the Global Plan of Action at country and regional levels.

### A. Reports from countries, regions and international organizations on the implementation of the Global Plan of Action

5. In response to FAO's invitation to countries, regional focal points and networks, and international organizations, 129 country reports, 4 regional progress reports and 15 reports from international organizations were received, reflecting a high level of interest in the implementation process. A detailed analysis of these reports is provided in the Synthesis Report.
6. The analysis of the impact of the Global Plan of Action at country level reveals significant improvements since 2007. Many countries have continued to develop and improve the management of their animal genetic resources.
7. As national strategies and action plans for animal genetic resources become more established, national management activities have been strengthened. The need to intensify efforts to maintain this progress is indicated by the fact that in the 2012 and 2014 Synthesis Reports,<sup>6</sup> many countries reported the need for specific improvements to animal genetic resources management. The degree of implementation of the Global Plan of Action varies substantially both within and across regions. Implementation is generally at a high level in Europe and the Caucasus and North America, at a medium level in Asia, and at a low level in other regions. Some caution is, however, needed in interpreting the regional figures, due to the uneven coverage of reporting. Individual countries from all developing regions have reached high levels of implementation in some aspects of the Global Plan of

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<sup>1</sup> CGRFA-14/13/Report, paragraph 58.

<sup>2</sup> CGRFA-14/13/Report, paragraph 64.

<sup>3</sup> CGRFA/WG-AnGR-8/14/Inf.3.

<sup>4</sup> CGRFA-14/13/Report, paragraph 28.

<sup>5</sup> CGRFA/WG-AnGR-8/14/Inf.5.

<sup>6</sup> CGRFA-14/13/Inf.15; CGRFA/WG-AnGR-7/12/Inf.3

Action. Likewise, some countries from developed regions have reached only low levels of implementation for some strategic priorities. For the world as a whole, conservation (Strategic Priority Area 3) has a lower indicator score than the other three strategic priority areas. In all regions, the indicators for the state of collaboration and for the state of funding show a lower level of implementation than those for the strategic priority areas themselves. Financial constraints are also the most frequently mentioned obstacles to the implementation of the Global Plan of Action.

8. Regional progress reports on the state of implementation of the Global Plan of Action present a mixed picture. Several regions of the world do not yet have a Regional Focal Point or regional network. Activities are most advanced in Europe, the region with the longest-established Regional Focal Point, where a range of activities are reported across all the strategic priority areas of the Global Plan of Action. A more limited range of activities is reported by the Regional Focal Point for Latin America and the Caribbean and the Animal Genetic Resources Network – Southwest Pacific. The Asian Animal Genetic Resources Network, launched only in 2013, has established regional priorities for action.

9. A small number of international organizations continue to make important contributions to the implementation of the Global Plan of Action, often via innovative, efficient and participatory programmes and projects. The activities of these organizations span the four strategic priority areas of the Global Plan of Action.

10. Overall, despite the significant and ongoing impact of the Global Plan of Action, the task of improving the management of the world's animal genetic resources remains far from complete. Insufficient financial resources, low levels of collaboration among countries, inadequate policies and legal frameworks, and weak institutional and human capacity for planning in the livestock sector impact on progress. Decision-makers are encouraged to use the country-level indicators as a means of identifying strategic priorities that particularly require action.

## **B. Reporting on breed populations**

11. The Global Focal Point prepared and published the document, *Status and trends report of animal genetic resources – 2014*.<sup>7</sup> This report, like previous reports in the series, is based on national breed data provided via DAD-IS by National Coordinators for the Management of Animal Genetic Resources (National Coordinators) (see Annex 1).

12. Twenty-seven countries updated their national data in 2013 and 53 in 2014. In addition, 17 countries have set up national nodes as partners in the EFABIS network and can update their data via these nodes. As of August 2014, 96 (out of 173) National Coordinators have updated national data since DAD-IS:3 was launched in 2007.

13. In line with the Commission's request at its Fourteenth Session,<sup>8</sup> a cut-off point of ten years has been introduced into the calculation of trends in risk status and diversity: any breed for which no population data have been reported for ten years is now considered to be of unknown risk status. Trends presented in the status and trends report were calculated on the basis of the most up-to-date current and historical data available in DAD-IS as of 18 June 2014.

14. Data quality in DAD-IS has improved. Since 2012, the percentage of avian national breed populations for which any population data are available (including those for which no updates have been provided during the last ten years) has increased from 48 percent to 56 percent, while in the case of mammals there has been an increase from 57 percent to 60 percent.

15. A total of 1 458 breeds (17 percent) 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>9</sup>

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

<sup>8</sup> CGRFA-14/13/Report, paragraph 29.

<sup>9</sup> CGRFA/WG-AnGR-8/14/Inf.4.

16. The Commission invited countries to provide information on how their breeds recorded in DAD-IS should be assigned to the categories “exotic” and “locally adapted” for the purpose of calculating the resource indicators.<sup>10</sup> To date, National Coordinators have made this information available for 2,356 out of 14,869 national breed populations.

17. The current state of data availability and updating means that it is not possible to draw reliable conclusions regarding global trends in diversity as represented by the proportion of the total population accounted for by locally adapted breeds. If future status and trends reports are to provide more meaningful inputs to decision-making in animal genetic resources management, there is an urgent need for National Coordinators to (i) provide data on the sizes of their national breed populations on a regular and more frequent basis, including any available historical population data and (ii) classify all their national breed populations into adaptedness categories (locally adapted or exotic). Furthermore, given that cross-bred animals represent a significant proportion of domestic animals in many countries, options for defining cross-bred populations and capturing the size of national cross-bred populations in DAD-IS need to be investigated, so as to enable a more realistic estimation of the proportion of the total population accounted for by locally adapted breeds to be presented.

18. DAD-IS is crucial for the monitoring of the implementation of the Global Plan of Action. It also serves as a clearing-house mechanism for animal genetic resources, recognized by the Convention on Biological Diversity (CBD). Further information is provided in the document *Maintenance and development of the Domestic Animal Diversity Information System DAD-IS*.<sup>11</sup> A module that enables the georeferencing of the distribution of national breed populations and the description of their production environments has been developed for DAD-IS.

### C. Policy impact

19. Since its adoption in 2007, the Global Plan of Action has become a key instrument in the sustainable use, development and conservation of animal genetic resources at global, regional and national levels. In Africa, the African Union Interafrican Bureau for Animal Resources (AU-IBAR)<sup>12</sup> and the Economic Community of West African States have developed strategies and programmes on evaluation and harmonization of the management of genetic resources and facilitation of the development of regional centres of excellence and genetic value addition to local breeds, as well as on capacity-building.

20. The country reports prepared for the Second Report<sup>13</sup> indicate that over 60 percent of reporting countries have established a national advisory committee for animal genetic resources. Over 40 percent of reporting countries indicate that strong coordination exists between their National Focal Points for Animal Genetic Resources and other stakeholders in the sector.

21. Approximately 25 percent of reporting countries indicate that they have completed the preparation of a national strategy and action plan for animal genetic resources. Some of these strategies and action plans have been endorsed by the respective governments; others have been agreed by stakeholders but not endorsed by the government. Some countries have already updated or are in the process of updating previously developed strategies and action plans. Another 25 percent of countries are in the process of preparing their strategies and action plans. Only about 10 percent of all reporting countries indicate that they have no plans to develop a national strategy and action plan if they have not already done so, although about 30 percent have not yet identified the necessary funding. Over 20 percent of reporting countries indicate that their national policies and legal frameworks for animal genetic resources are comprehensive and up to date.

22. Mainstreaming of animal genetic resources management into other sector policies has also improved. In over 60 percent of reporting countries, animal genetic resources are addressed in the

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<sup>10</sup> CGRFA-14/13/Report, paragraph 32.

<sup>11</sup> CGRFA/WG-AnGR-8/14/Inf.7

<sup>12</sup> <http://www.au-ibar.org/component/jdownloads/finish/77/1931>.

<sup>13</sup> CGRFA/WG-AnGR-8/14/Inf.5

national livestock-sector strategy, plan or policy. Moreover, an analysis of the 174 National Biodiversity Strategies and Action Plans available on the CBD website in April 2014 revealed widespread coverage of animal genetic resources issues. The instruments could be roughly grouped into the following three categories: animal genetic resources-focused actions mentioned (69 percent); animal genetic resources explicitly included in the scope of the plan, but no animal genetic resources-focused activities mentioned (13 percent); and no mention of animal genetic resources (18 percent).

### **III. FAO support to the strategic priority areas of the Global Plan of Action**

23. FAO concentrates its support to the implementation of the Global Plan of Action on areas of strategic importance, such as the development of technical guidelines to support countries in their implementation activities. This section provides some examples of FAO's activities in the four strategic priority areas of the Global Plan of Action and some cross-cutting areas. 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>14</sup>

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

24. FAO, in collaboration with partners, continued to build capacity and pursue the standardization of methods for inventory, monitoring and characterization of animal genetic resources. The genetic and phenotypic characterization of livestock breeds received support through various projects. Capacity-building workshops on characterization, inventory and monitoring were held in Austria and Morocco, the former of which was organized by the Joint FAO/International Atomic Energy Agency (IAEA) Division of Nuclear Techniques in Food and Agriculture (AGE). AGE is also supporting several national or regional projects and has undertaken research on the application of nuclear-related technologies in characterization. In response to ongoing demand, FAO continues to distribute technical guidelines.

25. The Commission, at its Fourteenth Session, urged countries to collect and insert data into the production environment descriptor module of DAD-IS or EFABIS-net.<sup>15</sup> With the support of Sweden, Brazil and Kenya collected data on the production environments of breeds of various species, while Egypt, Madagascar, Mali and United Republic of Tanzania collected data for goat breeds only.

26. In response to requests by the Commission,<sup>16</sup> DAD-IS has been maintained and further developed with co-funding from the Governments of Sweden and Switzerland. FAO incorporated the new breed classification system into DAD-IS, as requested by the Commission at its Fourteenth Regular Session,<sup>17</sup> allowing the entry of data related to the classification of breeds as locally adapted or exotic.

27. In collaboration with FAO's Chief Statistician, options for linking of DAD-IS into FAO-STAT are being explored; they are presented in document, *Maintenance and development of the Domestic Animal Diversity Information System DAD-IS*<sup>18</sup>. The options for long-term maintenance and development of DAD-IS could be realized most efficiently in a phased approach as this would allow flexible refinement and reorientation when new requirements (e.g. requests of the Commission) or technologies emerge. A first phase would focus on modifying DAD-IS by improving the user friendliness of reports, developing new reports and linking DAD-IS to FAOSTAT to allow creation of reports combining data on animal genetic resources with manifold other data related to countries' food and agriculture data. This phase would not touch the core structure of DAD-IS and EFABIS. A second phase should include improving of user friendliness for data entry (eventually automatically controlled data entry) and modernizing in a stepwise approach parts of the backend. A third phase could focus on

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<sup>14</sup> CGRFA-WG-AnGR/8/14/Inf.3.

<sup>15</sup> CGRFA-14/13/Report, paragraph 59.

<sup>16</sup> CGRFA-14/13/Report, paragraph 31.

<sup>17</sup> CGRFA-14/13/Report, paragraph 31.

<sup>18</sup> CGRFA/WG-AnGR-8/14/Inf.7

the complete recentralization of the data base and providing specific portals tailored for regions and countries.

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

28. The Commission requested FAO to continue its activities and to maintain and strengthen its work in providing technical assistance to countries and regions<sup>19</sup>. FAO supported various research and development projects and capacity-building activities related to the sustainable use and development of animal genetic resources, in cooperation with other stakeholders, including breeding-industry organizations, universities, research institutes and non-governmental organizations.

29. Two particular topics targeted by FAO's capacity-building and technical assistance work are animal identification and traceability and the interaction between animal genetic resources and climate change. Support related to these topics has included training workshops, expert meetings, projects and research.

30. Several countries have received support through Technical Cooperation Projects (TCP), administered by FAO and AGE, focusing on a range of issues, including livestock development, animal identification and traceability, breed improvement and reproductive technologies.

31. FAO has continued its work in support of small-scale livestock keepers. Specifically, with the extra-budgetary support of Germany, FAO will establish a pastoralist knowledge hub to improve the capacity of pastoralist livestock keepers and facilitate communication among them. With the financial and technical assistance of the United States of America, FAO has provided training in the establishment of community-based breeding programmes.

### *Draft guidelines on animal identification, traceability and performance recording*

32. At its Fourteenth Regular Session, the Commission requested that FAO continue developing the technical guidelines on animal identification, traceability and health and performance recording.<sup>20</sup>

33. Animal identification and recording serve multiple purposes in a country's livestock sector. The identification of animals is the basis for authentication and prevention of animal theft, provision of subsidy payments and insurance schemes, and operation of artificial insemination and pedigree certification schemes. The growth in importance of animal identification and recording in recent years can be attributed to its roles in animal traceability and health and in performance recording. Animal traceability is the basis for food safety and quality control. It facilitates disease prevention and control, and is becoming an important requisite for export and certification. Animal health recording is an essential tool in the prevention and control of diseases and for improving veterinary health management systems. It enables the assessment of the health status of animal populations, which is a prerequisite for planning any surveillance and control strategy and for the application of zoning or compartmentalization policies. Performance recording also serves a variety of purposes. The data collected through performance recording help to build a knowledge base in areas such as baseline animal performance, best production practices in different environments, best breeding strategies and monetary valuation of breeding stock. An integrated multipurpose approach, combining animal identification, traceability and health and performance recording, would therefore constitute a powerful tool for livestock development and for addressing global demands for food security and poverty alleviation. However, for this tool to be effective, appropriate public and private policy, legal and institutional frameworks are required. The document *Draft guidelines for the development of integrated multipurpose animal recording system*,<sup>21</sup> which is available for review by the Working Group, provides guidance on how to translate this approach into an integrated multipurpose animal recording system, and describes the step-by-step process that needs to be followed in order to develop and implement such a system.

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<sup>19</sup> CGRFA-14/13/Report, paragraph 58.

<sup>20</sup> CGRFA-14/13/Report, paragraph 60.

<sup>21</sup> CGRFA/WG-AnGR-8/14/Inf.6.

34. The guidelines on animal identification and recording are a complex and sensitive document, due to the multiplicity of related international agreements and standards. They are also multidisciplinary, and their preparation has required contributions from several international experts, as well as from several FAO units at headquarters and in decentralized offices. The preparation of the guidelines began with an expert meeting, held in Italy in October 2011, at which the outline of the document was discussed. This outline was later used to structure a regional workshop in Latin America.<sup>22</sup> However, due to heavy workload and competing priorities, the preparation of the guidelines was delayed. A second expert meeting was held in June 2013 to review the draft, which was further discussed and evaluated at a third expert meeting, held in Italy in June 2014. The preparation of the guidelines capitalized on lessons learned from several related FAO projects (e.g. in Burundi, India, Kyrgyzstan, Swaziland and the United Republic of Tanzania).

### C. Strategic Priority Area 3: Conservation

35. At its Fourteenth Regular Session, the Commission endorsed the guidelines, *In vivo conservation of animal genetic resources*.<sup>23</sup> These guidelines have been published and widely distributed.<sup>24</sup>

36. Through technical cooperation projects, FAO has provided countries with technical support on the conservation of animal genetic resources.

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

37. FAO and its partners contributed to the development and/or implementation of nine global projects and 27 regional or national projects involving more than 40 countries. Over the past two years, FAO organized, with partners, 25 capacity-building activities with an average of ten countries participating.

38. FAO has cooperated with various stakeholders, including national governments and intergovernmental organizations, to provide technical support to the preparation of country reports for the Second Report.

39. FAO has provided support to various countries in the development of policy related to the management of animal genetic resources, including national strategies and action plans and national laws and legislation.

40. FAO has collaborated with National Coordinators and other regional stakeholders to establish Regional and Subregional Focal Points or networks in Asia, the Central Asia subregion, the Near East, and Africa. FAO continued its collaboration with the Regional Focal Points for Europe and for Latin America and the Caribbean. In Africa, FAO collaborated with the African Union Interafrican Bureau for Animal Resources (AU-IBAR) in the establishment of Subregional Focal Points in North, East and Southern Africa and the partitioning of the Sub-Regional Focal Point for West and Central Africa into two independent entities. These new African focal points are hosted by regional economic communities or their associated agricultural research bodies.

41. FAO contributed to a range of cross-cutting initiatives related to biodiversity, biotechnology and nutrition, including scientific papers on the interactions between animal genetic resources and climate change and other environmental issues, as well as on sustainable diets and voluntary standards in the livestock sector. The fifty-fourth volume of the journal *Animal Genetic Resources* was published in 2014.

42. FAO collaborated with the World Intellectual Property Organization in the preparation of a patent landscape report for animal genetic resources.<sup>25</sup>

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<sup>22</sup> [http://www.icar.org/Documents/technical\\_series/tec\\_series\\_15\\_Santiago\\_Chile.pdf](http://www.icar.org/Documents/technical_series/tec_series_15_Santiago_Chile.pdf).

<sup>23</sup> CGRFA-14/13/Report, paragraph 60.

<sup>24</sup> <http://www.fao.org/docrep/018/i3327e.pdf>.

<sup>25</sup> WIPO 2014. Patent Landscape Report on Animal Genetic Resources. WIPO Publication No. 947/3E, [http://www.wipo.int/patentscope/en/programs/patent\\_landscapes/reports/animal\\_genetic\\_resources.html](http://www.wipo.int/patentscope/en/programs/patent_landscapes/reports/animal_genetic_resources.html).

43. 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. As of August 2014, 2,500 persons, from more than 185 countries, were subscribed to the network. Over the last two years of operation, more than 1,800 messages have been exchanged. Both the number of subscribers and the number of messages exchanged have increased substantially over this period. DAD-Net continues to be an effective means of sharing experiences. It enables participants to request information and facilitates informal discussions among individuals involved in the management of animal genetic resources, in particular individuals from countries where such means do not otherwise exist. The transfer of DAD-Net Africa to AU-IBAR is being initiated.

#### IV. Collaboration

44. The FAO Conference, at its Thirty-seventh Session, requested FAO to continue partnerships with other organizations in the implementation of the Global Plan of Action.<sup>26</sup> FAO has continued its interaction with regional bodies and regional economic communities, various scientific organizations, non-governmental organizations and the breeding industry. FAO's scientific contributions, including the organization of joint sessions at scientific conferences, have further increased awareness of the Global Plan of Action in the scientific community and beyond.

45. FAO has collaborated with a wide range of partners on cross-cutting issues such as climate change, value addition and identifying co-benefits of better animal genetic resources management. For example, animal identification, performance recording and traceability link animal breeding to the health sector, while improved grazing management links sustainable use and conservation of animal genetic resources to natural resources management and carbon sequestration.

#### V. Guidance sought

46. The Working Group is invited to review the *Draft guidelines for the development of integrated multipurpose animal recording systems* and recommend them for endorsement by the Commission.

47. The Working Group may further 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 Millennium Development Goals 1 and 7;
- 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;
- Request FAO to investigate the possibilities of including information on cross-bred animal populations in DAD-IS;
- Stress the need for countries to regularly update their national data in DAD-IS or FABIS-net 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;
- Stress the importance of DAD-IS as the international clearing house mechanism for animal genetic resources; and
- Invite donors to contribute ad hoc support to enable the maintenance of DAD-IS as the global clearing house mechanism for animal genetic resources.

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<sup>26</sup> C 2011/REP, paragraph 70.



*Annex 1: Overview of countries' statuses with respect to the nomination of National Coordinators for the Management of Animal Genetic Resources (NC), submission of country reports (CR) contributing to the Second Report and updating of national breed population data in DAD-IS since March 2007 (DAD-IS)*

- NC/CR/DAD-IS nominated/submitted/updated
- NC/CR/DAD-IS not nominated/submitted/updated

Country	NC	CR	DAD-IS
Afghanistan	○	○	○
Albania	●	●	●
Algeria	●	●	○
Andorra	○	○	○
Angola	●	○	○
Antigua and Barbuda	○	○	○
Argentina	●	●	●
Armenia	●	○	○
Australia	●	○	●
Austria	●	●	●
Azerbaijan	●	●	○
Bahamas	●	○	○
Bahrain	●	●	○
Bangladesh	●	●	○
Barbados	●	●	○
Belarus	●	○	○
Belgium	●	●	●
Belize	○	○	○
Benin	●	●	○
Bhutan	●	●	●
Bolivia (Plurinational State of)	●	●	●
Bosnia and Herzegovina	●	○	○
Botswana	●	●	●
Brazil	●	●	○
Brunei Darussalam	○	○	○
Bulgaria	●	●	●
Burkina Faso	●	●	○
Burundi	●	●	●
Cabo Verde	●	○	○
Cambodia	●	○	○
Cameroon	●	●	○
Canada	○	○	○
Central African Republic	●	○	○
Chad	●	○	○
Chile	●	●	●
China	●	●	●
Colombia	●	○	●
Comoros	●	●	○
Congo	●	○	○

Country	NC	CR	DAD-IS
Cook Islands	●	●	○
Costa Rica	●	●	○
Côte d'Ivoire	●	●	○
Croatia	●	●	●
Cuba	●	●	○
Cyprus	●	●	●
Czech Republic	●	●	●
Democratic People's Republic of Korea	●	○	○
Democratic Republic of the Congo	●	●	○
Denmark	●	○	○
Djibouti	●	●	○
Dominica	●	○	○
Dominican Republic	●	●	○
Ecuador	●	●	●
Egypt	●	●	○
El Salvador	●	○	○
Equatorial Guinea	●	●	○
Eritrea	●	●	○
Estonia	●	○	●
Ethiopia	●	●	○
Fiji	●	○	○
Finland	●	●	●
France	●	●	○
Gabon	●	●	○
Gambia	●	●	○
Georgia	●	○	○
Germany	●	●	●
Ghana	●	●	●
Greece	●	●	●
Grenada	○	○	○
Guatemala	●	●	●
Guinea	●	●	○
Guinea-Bissau	●	●	○
Guyana	○	○	○
Haiti	●	○	○
Honduras	●	○	○
Hungary	●	●	●
Iceland	●	●	●
India	●	●	●
Indonesia	●	●	●
Iran (Islamic Republic of)	●	●	○
Iraq	●	●	●
Ireland	●	●	●
Israel	●	●	○
Italy	●	●	●
Jamaica	●	●	●
Japan	●	●	●

Country	NC	CR	DAD-IS
Jordan	●	●	●
Kazakhstan	●	●	○
Kenya	●	●	●
Kiribati	○	●	○
Kuwait	●	●	○
Kyrgyzstan	●	●	○
Lao People's Democratic Republic	●	○	○
Latvia	●	●	●
Lebanon	●	○	○
Lesotho	●	●	○
Liberia	●	●	○
Libya	●	○	○
Liechtenstein	○	○	○
Lithuania	●	●	○
Luxembourg	●	●	●
Madagascar	●	●	○
Malawi	●	●	●
Malaysia	●	●	●
Maldives	●	●	○
Mali	●	●	○
Malta	●	○	○
Marshall Islands	●	○	○
Mauritania	●	●	○
Mauritius	●	●	●
Mexico	●	●	●
Micronesia (Federated States of)	○	○	○
Monaco	○	○	○
Mongolia	●	●	●
Montenegro	●	●	●
Morocco	●	●	○
Mozambique	●	●	○
Myanmar	●	○	○
Namibia	●	●	●
Nauru	●	○	○
Nepal	●	●	○
Netherlands	●	●	●
New Zealand	●	●	○
Nicaragua	●	○	○
Niger	●	●	●
Nigeria	●	●	○
Niue	●	●	○
Norway	●	●	●
Oman	●	●	○
Pakistan	●	○	●
Palau	●	○	○
Palestine	○	○	○
Panama	○	○	○

Country	NC	CR	DAD-IS
Papua New Guinea	●	○	○
Paraguay	●	●	○
Peru	●	●	●
Philippines	●	●	○
Poland	●	●	●
Portugal	●	●	●
Qatar	●	○	○
Republic of Korea	●	●	●
Republic of Moldova	●	○	●
Romania	●	○	○
Russian Federation	●	●	○
Rwanda	●	●	●
Saint Kitts and Nevis	●	○	○
Saint Lucia	●	○	○
Saint Vincent and the Grenadines	●	●	○
Samoa	●	●	○
San Marino	○	○	○
Sao Tome and Principe	●	○	○
Saudi Arabia	●	○	○
Senegal	●	●	●
Serbia	●	●	●
Seychelles	●	○	○
Sierra Leone	●	●	○
Singapore	○	○	○
Slovakia	●	●	●
Slovenia	●	●	●
Solomon Islands	●	●	○
Somalia	●	○	○
South Africa	●	●	●
South Sudan	○	○	○
Spain	●	●	●
Sri Lanka	●	●	●
Sudan	●	●	○
Suriname	●	●	●
Swaziland	●	●	○
Sweden	●	●	●
Switzerland	●	●	●
Syrian Arab Republic	●	○	○
Tajikistan	●	●	○
Thailand	●	●	○
The Former Yugoslav Republic of Macedonia	●	○	○
Timor-Leste	●	●	○
Togo	●	●	●
Tonga	●	●	○
Trinidad and Tobago	○	●	○
Tunisia	●	○	○
Turkey	●	●	●

Country	NC	CR	DAD-IS
Turkmenistan	●	○	○
Tuvalu	○	○	○
Uganda	●	●	●
Ukraine	○	●	●
United Arab Emirates	○	○	○
United Kingdom	●	●	●
United Republic of Tanzania	●	●	●
United States of America	●	●	●
Uruguay	●	●	●
Uzbekistan	●	○	○
Vanuatu	●	○	○
Venezuela (Bolivarian Republic of)	○	○	○
Viet Nam	●	●	●
Yemen	●	○	○
Zambia	●	●	○
Zimbabwe	●	●	●