



منظمة الأغذية  
والزراعة  
للأمم المتحدة

联合国  
粮食及  
农业组织

Food  
and  
Agriculture  
Organization  
of  
the  
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Organisation  
des  
Nations  
Unies  
pour  
l'alimentation  
et  
l'agriculture

Продовольственная и  
сельскохозяйственная  
организация  
Объединенных  
Наций

Organización  
de las  
Naciones  
Unidas  
para la  
Agricultura  
y la  
Alimentación

## Item 5.1 of the Provisional Agenda

### COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

#### Twelfth Regular Session

Rome, 19-23 October 2009

### FOLLOW-UP TO THE INTERNATIONAL TECHNICAL CONFERENCE ON ANIMAL GENETIC RESOURCES FOR FOOD AND AGRICULTURE

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## I. INTRODUCTION

1. In September 2007, the Food and Agriculture Organization of the United Nations (FAO) held the International Technical Conference on Animal Genetic Resources for Food and Agriculture (International Technical Conference) in Interlaken, Switzerland. The International Technical Conference, hosted by the Government of Switzerland, welcomed *The State of the World's Animal Genetic Resources for Food and Agriculture (State of the World)* and adopted the *Global Plan of Action for Animal Genetic Resources (Global Plan of Action)* and the *Interlaken Declaration on Animal Genetic Resources (Interlaken Declaration)*. Subsequently, the FAO Conference, at its Thirty-fourth Session, welcomed the *State of the World* and endorsed the *Global Plan of Action*.<sup>1</sup>

2. The *Global Plan of Action* contains four Strategic Priority Areas: 1) Characterization, inventory and monitoring of trends and associated risks; 2) Sustainable use and development; 3) Conservation; and 4) Policies, institutions and capacity building. The *Interlaken Declaration* commits countries and organizations to implement the *Global Plan of Action*.

3. The *Global Plan of Action* calls for the provision of technical assistance, especially to developing countries and countries with economies in transition, to help them implement the provisions of the *Global Plan of Action*. The *Interlaken Declaration* recognizes that national governments have the main responsibility for implementation of the *Global Plan of Action* and acknowledges the essential role of FAO in supporting country-driven efforts.

4. This document provides an overview of the activities, partnerships and projects undertaken by FAO in support of the implementation of the *Global Plan of Action* since the Eleventh Regular Session of the Commission on Genetic Resources for Food and Agriculture (the Commission) and the International Technical Conference. The information presented is organized according to the Strategic Priority Areas of the *Global Plan of Action*. More detailed information is provided for activities undertaken between January and August 2009; and for the period November 2006 to December 2008, in the document *Detailed report on FAO activities in the follow-up to the International Technical Conference on Animal Genetic Resources*.<sup>2</sup>

## II. REPORTING ON THE OUTCOMES OF THE INTERNATIONAL TECHNICAL CONFERENCE

### Conferences and Meetings

5. Following the recommendations of the International Technical Conference,<sup>3</sup> representatives of the Government of Switzerland and FAO reported on the outcomes of the International Technical Conference at several intergovernmental conferences and meetings and other events.

6. The *Global Plan of Action* was endorsed by the One Hundred and Thirty-third Session of the FAO Council<sup>4</sup> and the Thirty-fourth Session of the FAO Conference,<sup>5</sup> through Resolution 12/2007. The FAO Conference requested the Commission "to oversee and assess the

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<sup>1</sup> CGRFA/WG-AnGR-5/09/Inf. 9

<sup>2</sup> CGRFA/WG-AnGR-5/09/Inf. 2.

<sup>3</sup> ITC-AnGR/07/REP, paragraph 26

[http://www.fao.org/ag/AGAinfo/programmes/en/genetics/documents/Interlaken/Final\\_Report\\_en.pdf](http://www.fao.org/ag/AGAinfo/programmes/en/genetics/documents/Interlaken/Final_Report_en.pdf)

<sup>4</sup> CL 133/INF/8, <ftp://ftp.fao.org/docrep/fao/meeting/012/k1014e.pdf>, CL 133/INF/9, <ftp://ftp.fao.org/docrep/fao/meeting/012/k1073e.pdf>, CL 133/REP, <ftp://ftp.fao.org/docrep/fao/meeting/012/k0667e.pdf>, paragraphs 54–58.

<sup>5</sup> CGRFA/WG-AnGR-5/09/Inf. 9.

implementation of the Global Plan of Action, and to report back at the 2009 session of the FAO Conference on steps taken as a follow up to the Interlaken Conference" (Resolution 12/2007, para. 2). In addition, the Conference recognized the important role of small-scale livestock keepers, particularly in developing countries, as custodians of most of the world's animal genetic resources for food and agriculture in the use, development and conservation of livestock resources. It requested the Commission on Genetic Resources for Food and Agriculture to address this issue in its report to the 2009 session of the FAO Conference. The Subsidiary Body on Scientific, Technical and Technological Advice of the Convention on Biological Diversity at its thirteenth meeting<sup>6</sup> and the Conference of the Parties to the Convention on Biological Diversity at its ninth meeting welcomed the *Global Plan of Action* as the internationally agreed framework that contains the strategic priorities for the sustainable use, development and conservation of animal genetic resources for food and agriculture, and provisions for implementation and financing.<sup>7</sup>

7. The *Global Plan of Action* was welcomed by the Second Session of the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture<sup>8</sup> and the Seventh Session of the UN Permanent Forum on Indigenous Issues.<sup>9</sup> The Government of Switzerland and FAO presented reports on the outcomes of the International Technical Conference to the Sixteenth Session of the UN Commission for Sustainable Development,<sup>10</sup> and to the 2008 meeting of the Alpine Convention.<sup>11</sup>

8. The *Global Plan of Action* has been supported by the Consultative Group on International Agricultural Research. The *Global Plan of Action* was also presented at several scientific and technical conferences and bodies, as noted in the document, *Detailed report on FAO activities in the follow-up to the International Technical Conference on Animal Genetic Resources for Food and Agriculture*.<sup>12</sup>

9. In addition to the *State of the World*, FAO produced an "in brief" version and a flyer which are available in six languages. The International Technical Conference requested FAO to widely distribute these publications in printed and electronic formats.<sup>13</sup> It highlighted the importance of translating the State of the World into all official FAO languages and urged donors to make resources available for this.

10. The Government of China undertook translation of the *State of the World* into Chinese, Arabic<sup>14</sup> and French<sup>15</sup> versions of the *State of the World* have been prepared with funding from the United States of America, Norway and FAO. The Arabic version of the *State of the World* was prepared in collaboration with the International Center for Agricultural Research in the Dry Areas (ICARDA). An offer by the All-Russian Research Institute for Animal Husbandry (Russian Federation) to prepare a Russian version, which includes a significant in-kind contribution, has been accepted. Translation into Spanish will be funded by FAO, and layout and printing will be financed by the Government of Spain.

<sup>6</sup> UNEP/CBD/SBSTTA/13/2, <http://www.cbd.int/doc/meetings/cop/cop-09/official/cop-09-03-en.doc>

<sup>7</sup> UNEP/CBD/COP9/L.34, <http://www.cbd.int/decisions/cop9/?m=COP-09&id=11644&lg=0>

<sup>8</sup> IT/GB-2/07/Report, <ftp://ftp.fao.org/ag/agp/planttreaty/gb2/gb2repe.pdf>, paragraph 16–18.

<sup>9</sup> Permanent Forum on Indigenous Issues, Report on the Seventh Session, (21 April–2 May 2008), Economic and Social Council, paragraph 85,

<http://daccessdds.un.org/doc/UNDOC/GEN/N08/338/82/PDF/N0833882.pdf?OpenElement>

<sup>10</sup> [http://www.un.org/esa/sustdev/csd/csd16/statements/swiss\\_6may\\_agriculture.pdf](http://www.un.org/esa/sustdev/csd/csd16/statements/swiss_6may_agriculture.pdf)

<sup>11</sup> [http://www.alpenkonvention.org/page7\\_fr](http://www.alpenkonvention.org/page7_fr)

<sup>12</sup> CGRFA/WG-AnGR-5/09/Inf. 2

<sup>13</sup> ITC-AnGR/07/REP, paragraph

<sup>14</sup> <http://www.fao.org/docrep/011/a1250a/a1250a00.htm>

<sup>15</sup> <http://www.fao.org/docrep/011/a1250f/a1250f00.htm>

11. The *Global Plan of Action* and the *Interlaken Declaration* have been published in hard copy and made available electronically in the FAO document repository<sup>16</sup> in the six official FAO languages. All currently available language versions of the *State of the World* and its “in brief” version have also been made available electronically.

12. Several National Coordinators for the Management of Animal Genetic Resources (National Coordinators) have prepared national language versions of the *State of the World* “in brief”, the *Global Plan of Action* and the *Interlaken Declaration*, as well as of other information products under local-language agreements with FAO. By July 2009, Danish, German, Japanese, Norwegian and Polish publications were available.<sup>17 18</sup> Further information products are in preparation in Bahasa Indonesia, Czech, Greek, Hindi, Korean, Portuguese, Romanian and Thai.

13. FAO has prepared and widely distributed a number of communication products to raise awareness of animal genetic resources issues and the outcomes of the International Technical Conference<sup>19</sup>. These products have been made available to a number of international conferences and meetings. National Coordinators from various countries, as well as subregional organizations, have requested materials for workshops and seminars.

### III. FAO SUPPORT FOR NATIONAL IMPLEMENTATION OF THE *GLOBAL PLAN OF ACTION*

14. The *Global Plan of Action* notes the essential role of FAO in supporting country-driven efforts to implement the *Global Plan of Action*, in particular, in facilitating global and regional collaboration and networks, supporting the convening of intergovernmental meetings, maintaining and further developing the Domestic Animal Diversity Information System (DAD-IS), developing communications products, providing technical guidelines and assistance, coordinating training programmes, promoting the transfer of technologies relating to sustainable use, development and conservation of animal genetic resources, and coordinating preparation of global status and trends reports on animal genetic resources.<sup>20</sup>

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

15. FAO, with support from the Government of Germany, conducted studies in Cambodia, Egypt and Uganda that described smallholder poultry production systems and characterized local poultry populations phenotypically and genetically. A meeting of international poultry characterization experts was held in Rome in June 2009 to discuss the findings.

16. FAO, through financial support from the Government of Australia and in cooperation with the International Livestock Research Institute (ILRI), is supporting the Secretariat of the Pacific Community to undertake characterization of local pig and chicken breeds of four countries in the Southwest Pacific.<sup>21</sup>

17. The FAO/International Atomic Energy Agency Joint Division for Nuclear Techniques in Food and Agriculture (AGE), with the participation of ILRI, continues to support phenotypic and

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<sup>16</sup> <http://www.fao.org/docrep/010/a1404e/a1404e00.htm>

<sup>17</sup> <http://www.fao.org/docrep/010/a1260e/a1260e00.htm>

<sup>18</sup> <http://www.fao.org/docrep/010/a1250e/a1250e00.htm>

<sup>19</sup> *Global Plan of Action* – 9000 copies; *State of the World* full report – 3000 copies; *State of the World* on CD – 8200 copies; *State of the World* – in brief – 8000 copies; *State of the World* brochure – 7000 copies; brochure with fact sheets – 2000 copies.

<sup>20</sup> *Global Plan of Action for Animal Genetic Resources*, paragraphs 22–23, Strategic Priority 14, paragraphs 58–61. <ftp://ftp.fao.org/docrep/fao/010/a1404e/a1404e00.pdf>

<sup>21</sup> Fiji, Samoa, Tonga and Niue

genetic characterization of sheep and goat breeds in eight Asian and Near Eastern countries.<sup>22</sup> AGE is also supporting National Technical Cooperation projects involving characterization of animal genetic resources in five countries.<sup>23</sup>

18. To facilitate global analysis of breed diversity through molecular genetic characterization, FAO continued to promote the international use of standard microsatellite marker sets for different animal species. This was done in partnership with the joint International Society of Animal Genetics (ISAG)-FAO Advisory Group on Animal Genetic Diversity and with support from the project “A Global View of Livestock Biodiversity and Conservation (GLOBALDIV)” funded by the European Commission.

19. The technical guidelines developed for molecular characterization are being revised in collaboration with the ISAG/FAO Advisory Group. To complement the guidelines developed for molecular characterization, FAO has initiated the preparation of guidelines for phenotypic characterization. A preliminary draft, in Spanish, has been developed with support from the Government of Spain.

### **Status and trends reports on animal genetic resources**

20. The *Global Plan of Action* recommends that the Commission “regularly receive from countries status and trends reports on national animal genetic resources and factors influencing change, in order to review progress and further develop country-based early-warning and response systems for animal genetic resources”.<sup>24</sup> The International Technical Conference recommended that FAO continue updating global status and trends data and support developing countries in this area of work.<sup>25</sup> The Commission, at its Eleventh Regular Session, requested that its Intergovernmental Technical Working Group on Animal Genetics Resources for Food and Agriculture (the Working Group) recommend the form and content of future status and trends reports on animal genetic resources, and options for responding to the identification of breeds at risk.

21. The Working Group at its fifth session recommended that the Commission request FAO to prepare status and trends synthesis reports to be made available to the Commission at each of its regular sessions. The reports should be based on up-to-date data and information provided by countries via DAD-IS, and should follow the structure of the document *Status and trends report on animal genetic resources – 2008*<sup>26</sup> that had been prepared by FAO for consideration by the Working Group. The reports will provide a synthesis of the state of reporting of breed-related information to the Global Databank for Animal Genetic Resources, the state of breed diversity, current breed risk status, trends in breed categorization (local, regional transboundary, international transboundary), and trends in breed risk status. The Working Group stressed the need for regular updating of national data and information on animal genetic resources, and the importance of providing financial and technical support for developing countries to assist them in updating their data and information.

### **Development of country-based early warning and response systems for animal genetic resources**

22. The *Global Plan of Action* calls for the establishment or strengthening of early-warning systems. FAO therefore prepared the document, *Development of country-based early warning and response systems for animal genetic resources*,<sup>27</sup> which was presented to the Working Group

<sup>22</sup> Bangladesh, China, Indonesia, Iran (Islamic Republic of), Pakistan, Saudi Arabia, Sri Lanka, Viet Nam.

<sup>23</sup> Burkina Faso, Morocco, Peru, Sri Lanka, Zambia.

<sup>24</sup> *Global Plan of Action for Animal Genetic Resources*, paragraph 53.

<sup>25</sup> ITC-AnGR/07/REP, paragraph 20.

<sup>26</sup> CGRFA/WG-AnGR-5/09/Inf. 7.

<sup>27</sup> CGRFA/WG-AnGR-5/09/4.

at its fifth session. The Working Group noted its appreciation of the work undertaken by FAO in preparing options for country-based early warning and response systems and made several recommendations to the Commission. Guidelines to assist with national breed surveying and monitoring are currently being developed in collaboration with the Roslin Institute, University of Edinburgh, United Kingdom. A first draft has been developed by a group of international experts with regionally balanced experience, and will be further developed based on the outcomes of an e-conference to be held later this year.

23. The national breed population data reported to DAD-IS provides the basis for an “early warning tool” that can be accessed by any user of the system. The tool shows both the national and the global risk status for all breed populations for which the necessary data have been reported. The tool also indicates the trend of the breed population. Its timeliness, however, it depends upon the frequency with which national data are updated in DAD-IS.

24. The Working Group recommended that the Commission request countries to investigate and report on the underlying causes of animal genetic erosion. A Background Study Paper entitled *Threats to animal genetic resources – their relevance, importance and opportunities to decrease their impact*,<sup>28</sup> which identifies major threats faced by livestock breeds and describes their dynamics, has been prepared. Economic and market-driven threats, inadequate livestock-sector policies, poor conservation strategies, inadequate institutional capacity to manage AnGR and loss of labour force are the five major threats identified. The importance of the various threats varies by geographic region. Breeds are usually subject to more than one threat. The paper is based on questionnaires conducted in 2005 and 2009, an e-mail conference conducted on the Domestic Animal Diversity Network (DAD-Net) and information on specific breeds provided by National Coordinators. Based on this work, a classification of threats has been developed for incorporation into DAD-IS.

25. FAO provided National Coordinators with training in the use of DAD-IS at regional workshops held in Chile, Ethiopia, Lithuania and Brazil and at the Global National Coordinator Workshop held prior to the fifth session of the Working Group. An updated DAD-IS manual<sup>29</sup> has been made available, and is currently being translated into French and Spanish. Technical support with updating national databases in DAD-IS has been provided to the National Coordinators of Africa, the Near East and Asia and the Pacific.

26. FAO is a partner in the Farm Animal Biodiversity Information System Network (FABIS-net) which is funded by the European Commission, and which supports the establishment of national information systems. At present, 16 countries<sup>30</sup> have established national information systems within FABIS-net. FAO is responsible for a work package that aims to base FABIS-net on georeferences, and is implementing a module that allows detailed description of the production environments of each breed. An expert meeting was held in May 2008 to further develop and specify a system to describe production environments.<sup>31</sup> The new module is currently being developed and will be launched for data entry early in 2010. It will support georeferenced descriptions of breeds’ distributions and production environments. Textual descriptions of the distribution of breeds have been georeferenced. This provides a basis for National Coordinators to update breed distribution data and provides new opportunities for data analysis.

27. FAO is contributing to the Global Environment Facility (GEF)-funded 2010 Biodiversity Indicators Partnership Project, a cross-sectoral project which includes a component on animal genetic resources. The project will contribute to the development of guidelines for surveying and

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<sup>28</sup> Background Study Paper No 50;

<sup>29</sup> [http://www.fao.org/Ag/againfo/programmes/en/genetics/documents/DAD-IS\\_Manual\\_Jan092.pdf](http://www.fao.org/Ag/againfo/programmes/en/genetics/documents/DAD-IS_Manual_Jan092.pdf)

<sup>30</sup> Austria, Cyprus, Estonia, Finland, Georgia, Greece, Hungary, Iceland, Ireland, Italy, Netherlands, Poland, Slovakia, Slovenia, Switzerland, United Kingdom.

<sup>31</sup> Report of the FAO/WAAP Workshop on Production Environment Descriptors for Animal Genetic Resources, <http://dad.fao.org/cgi-bin/getblob.cgi?sid=-1,593>

monitoring, and tools and methodology for developing and testing the headline indicator “trends in genetic diversity of domesticated animals, cultivated plants, and fish species of major socioeconomic importance”. An expert meeting is planned for late 2009 to define indicators based on data available in DAD-IS and to identify potential further data needs. Parties to the Convention on Biological Diversity have requested the project to provide input on animal genetic resources for the next issue of *Global Biodiversity Outlook*,<sup>32</sup> which will be launched on 22 May 2010.

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

28. In response to the demand for technical assistance to ensure the better use, development and conservation of animal genetic resources, FAO has further invested in providing technical assistance to countries, directly and through cooperation with other organizations. Technical Cooperation Projects (TCP) in Mongolia, Myanmar and Nepal targeted genetic improvement of dairy cattle through the establishment of pedigree- and performance-recording schemes, rehabilitation of, and support to, the artificial insemination services and improved animal feeding.

29. The AGE supported Regional TCPs on cattle breeding in Asia and Africa. Technical support for the management of animal genetic resources, with emphasis on sustainable utilization of local breeds was provided to 22 African and 13 Asian countries. In addition, the AGE is supporting national TCPs involving sustainable use of animal genetic resources in 12 countries.

30. FAO is contributing to the GEF-funded project on “Development and Application of Decision Support Tools to Conserve and Sustainably Use Genetic Diversity in Indigenous Livestock and Wild Relatives”, which commenced recently. The project involves promoting the sustainable use of animal genetic resources in Bangladesh, Pakistan, Sri Lanka and Viet Nam.

### **Guidelines for animal breeding strategies**

31. FAO, with funding from the Government of Norway, continued the development of guidelines on breeding strategies for the sustainable management of animal genetic resources. The guidelines are intended for use by policy-makers and organizations involved in livestock development. They will help interested countries to specify objectives and priorities, identify the conditions necessary for the sustainable development of animal genetic resources, benefit from experiences with breed development in other countries with similar conditions, and find practical guidance on how to initiate or improve breeding programmes. The guidelines were discussed and validated in six workshops held in France, India, Kenya, the United Republic of Tanzania, Peru and Italy. In total, 120 scientists, technicians and policy-makers from all regions contributed to the process.

32. The document, *Draft guidelines for establishing animal breeding strategies in low- and medium-input production system*<sup>33</sup> was presented to the fifth session of the Working Group, which invited FAO to receive further comments from members of the Working Group by 1 April 2009, and to revise the guidelines based on the advice received. It further invited FAO to make the revised guidelines available to the Commission. The breeding guidelines were revised based on comments received from Finland, and are available as information document, *Breeding strategies for sustainable management of animal genetic resources – draft guidelines (revised version)*.<sup>34</sup>

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<sup>32</sup> COP9 decision IX/10, <http://www.cbd.int/decisions/?m=COP-09&id=11653&lg=0>

<sup>33</sup> CGRFA/WG-AnGR-5/09/Inf. 5.

<sup>34</sup> CGRFA-12/09/Inf. 11

33. FAO, through its membership on the board of the International Committee for Animal Recording (ICAR), is responsible for establishing the ICAR Task Force for Animal Identification and Performance Recording in Developing Countries. A background paper has been prepared which will be used for updating the guidelines on implementing animal identification and recording in developing countries.

34. Animal recording is not widely practised in most countries in the Near East and North Africa. To raise awareness and share regional experiences in animal identification, traceability and performance recording, FAO and ICARDA organized a workshop on 2–4 March 2009 in Aleppo (Syrian Arab Republic), with participants from eleven countries<sup>35</sup> attending the workshop.

35. There is evidence that some livestock breeds indigenous to environments where they face intense disease challenges are more resistant to disease than are other breeds. Most reports of disease resistance in specific breeds have, however, not been subject to scientific investigation. FAO and the French National Institute for Agricultural Research organized an expert meeting<sup>36</sup> on 22–23 June 2009 in Paris (France) to discuss animal genetic resources and resistance and tolerance to diseases, with special focus on parasitic diseases in ruminants.

36. FAO also widely distributed three publications on various aspects of sustainable use of animal genetic resources.<sup>37 38 39</sup>

### Strategic Priority Area 3: Conservation

37. FAO is providing technical advice to a conservation project entitled “*In-situ* conservation of endemic ruminant livestock in West Africa”, which is jointly financed by the GEF and the African Development Bank, in four West African countries (Gambia, Guinea, Mali and Senegal).

38. FAO has initiated the development of a new set of guidelines on the conservation of animal genetic resources. DAD-Net was used to survey potential users to determine their needs for technical support in the field of cryoconservation, and to determine the overall content of the new guidelines. A workshop to review cryoconservation methods and further develop the guidelines was held 22–24 January 2009 in Rome. Five experts prepared the draft manual. A cryoconservation training workshop was held in Tunisia 21–23 April 2009, with the co-sponsorship from the United States Department of Agriculture and with administrative assistance provided by ICARDA. The workshop was attended by 25 participants from 17 countries<sup>40</sup> as well as approximately 10 participants from the host country. The draft guidelines were used as a reference manual, and a questionnaire was distributed to obtain feedback on the contents of the guidelines.

39. As an activity of the GLOBALDIV project, FAO has supervised the preparation of a review article on the state of the art in methods to prioritize breeds for conservation programmes and contributed to a review paper on the evaluation of genetic diversity in livestock breeds. FAO

<sup>35</sup> Algeria, Egypt, Jordan, the Libyan Arab Jamahiriya, Mauritania, Morocco, Oman, Saudi Arabia, Sudan, Tunisia and Yemen.

<sup>36</sup> Australia, Brazil, Burkina Faso, Ethiopia, France, Germany, Kenya, the Netherlands, New Zealand and the United States of America

<sup>37</sup> *Marker-assisted selection – current status and future perspectives in crops, livestock, forestry and fish*  
<http://www.fao.org/docrep/010/a1120e/a1120e00.htm>

<sup>38</sup> *People and animals – traditional livestock keepers: guardians of domestic animal diversity*  
<ftp://ftp.fao.org/docrep/fao/010/a1057e/a1057e.pdf>

<sup>39</sup> *Application of radioimmunoassay in improving the reproductive management of smallholder dairy cattle. Results from an IAEA regional technical cooperation project in Africa.* <http://www-naweb.iaea.org/nafa/aph/public/aph-tecdoc-1571.pdf>

<sup>40</sup> Algeria, Bangladesh, Botswana, Egypt, Ethiopia (2), Jordan, Kenya (2), Kyrgyzstan, the Libyan Arab Jamahiriya (3), Mauritania, Morocco, Senegal, South Africa (2), Sri Lanka, Uganda (2), Uzbekistan (2), Viet Nam.

delivered a conference paper and contributed to a *GLOBALDIV Newsletter* editorial on the conservation of poultry genetic resources.

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

40. FAO continued to maintain DAD-Net as an informal forum to facilitate exchanges on animal genetic resources issues. DAD-Net has proven to be an effective means of sharing experiences, enabling participants to request information and facilitating informal discussions among individuals involved in various aspects of the management of animal genetic resources. A user survey was conducted in July 2008, to assess the performance of DAD-Net and to ensure the network continues to meet user needs.<sup>41</sup> Improvements are being made based on the feedback received.

41. FAO has invited countries that have not yet set up their National Focal Point for Animal Genetic Resources to nominate National Coordinators. As of July 2009, 151 countries have nominated their National Coordinator.

42. FAO contributed to various courses for researchers from developing countries organized by partner organizations (International Centre for Advanced Mediterranean Agronomic Studies, the European Master in Animal Breeding and Genetics, the GLOBALDIV project, ILRI and the Swedish Agricultural University). The AGE held two training courses related to sustainable use of animal genetic resources in Africa with participants from 19 countries.<sup>42</sup>

43. FAO collaborated with the Farm Animal Breeding Technology Platform of the European Commission regarding priorities for supporting research on the management of animal genetic resources in Europe. The feedback on research priorities will be used by the European Commission to assist in reviewing research proposals.

44. As part of its ongoing interaction with the private sector, FAO organized, on 3 June 2009, a joint meeting with the European Forum for Farm Animal Breeders (EFFAB), an umbrella organization of the European breeding industry. The meeting allowed participants to identify issues of common interest; a Memorandum of Understanding between FAO and EFFAB is being developed. FAO also hosted the “industry days” of two European research programmes (EADGENE and SABRE).

#### **Preparation of national strategies and action plans**

45. Preparation and implementation of a National Strategy and Action Plan for Animal Genetic Resources (National Strategy and Action Plan) will provide the most effective means to translate the *Global Plan of Action* into a programme for implementation at country level. A National Strategy and Action Plan and the process for its preparation can provide a means to engage diverse interests within the livestock sector and coordinate the available human and financial resources to optimize utilization and conservation of animal genetic resources. It can enhance understanding among policy-makers and the general public of the importance of animal genetic resources, the multiple roles and values of livestock, and the need to maintain the genetic diversity that will enable adaptation to changing conditions.

46. FAO prepared the document, *Draft guidelines to assist the preparation of national strategies and action plans for animal genetic resources for food and agriculture*,<sup>43</sup> which was presented to the Working Group at its fifth session. The Working Group recommended that the Commission welcome these guidelines, and requested FAO to finalize and publish them. An

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<sup>41</sup> <http://dad.fao.org/cgi-bin/getblob.cgi?sid=-1,525>

<sup>42</sup> CGRFA/WG-AnGR-5/09/Inf. 2, paragraph 31.

<sup>43</sup> CGRFA/WG-AnGR-5/09/Inf. 6.

edited version of the guidelines is available in the document, *Preparation of national strategies and action plans for animal genetic resources – guidelines (edited version)*.<sup>44</sup>

47. FAO supported animal genetic resources policy and strategy development through a TCP in Albania and TCP-Facilities in Armenia and Burundi.

48. FAO held regional workshops in Chile and Brazil involving National Coordinators from Latin America and the Caribbean in order to discuss the establishment of a Regional Focal Point. Brazil (EMBRAPA) has been chosen to provide the Regional Focal Point for Latin America and the Caribbean. FAO also contributed to annual meetings and training workshops convened by the European Regional Focal Point and organized regional workshops in Africa and Asia. Efforts to set-up further Regional Focal Points have continued. FAO, with funding by the Government of Australia, supported the establishment of a regional network in the Southwest Pacific. Particular emphasis is currently being given to the establishment of a Regional Focal Point for Central Asia. FAO is developing guidelines on the institutional framework for the implementation of the *Global Plan of Action*, based upon experience gained from the operation of current national and regional focal points.

49. Representatives of FAO attended as speakers at a number of scientific conferences and meetings addressing animal genetic resources as part of efforts to raise awareness of the importance of their proper management.<sup>45</sup>

#### **The roles of small-scale livestock keepers as custodians of animal genetic resources**

50. Small-scale livestock keepers, including smallholder farmers and pastoralists, contribute greatly to food security and rural development, particularly in developing countries. This contribution is recognized and supported by a number of international bodies and international agreements. The FAO Conference, at its Thirty-fourth Session, recognized the important role of small-scale livestock keepers, particularly in developing countries, as custodians of most of the world's animal genetic resources for food and agriculture and in the use, development and conservation of livestock resources. The Conference requested the Commission "to address this issue in its report to the 2009 Session of the FAO Conference."<sup>46</sup> In response, FAO presented the working document, *The roles of small-scale livestock keepers as custodians of animal genetic resources*,<sup>47</sup> and the information document *Contributions of smallholder farmers and pastoralists to the development, use and conservation of animal genetic resources*<sup>48</sup> to the fifth session of the Working Group. These documents provided an overview of the roles and contributions of small-scale livestock keepers including smallholder farmers and pastoralists, and drew attention to Strategic Priorities within the *Global Plan of Action* that require particular attention to be given to the contributions of small-scale livestock keepers.

51. The Working Group stressed the importance of capacity building and institutional support to address the particular needs of small-scale livestock production systems, while ensuring respect for the knowledge, innovations and practices of indigenous and local communities, and the application of relevant national legislation and international agreements. It requested a period of two months to further consider the documents. Comments were received from Germany. In response to the recommendations of the Working Group, the information document, *The roles of small-scale livestock keepers in the development, use and conservation of livestock resources*<sup>49</sup> has been prepared, which outlines the ways in which small-scale livestock keepers serve as

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<sup>44</sup> CGRFA-12/09/Inf. 10.

<sup>45</sup> CGRFA/WG-AnGR-5/09/Inf. 2, Annex 4.

<sup>46</sup> CGRFA/WG-AnGR-5/09/Inf. 9

<sup>47</sup> CGRFA/WG-AnGR-5/09/5.

<sup>48</sup> CGRFA/WG-AnGR-5/09/Inf. 4.

<sup>49</sup> CGRFA-12/09/Inf. 12.

custodians of animal genetic resources and summarizes the guidance requested and received from the Working Group.

#### IV. FINANCING THE IMPLEMENTATION OF THE *GLOBAL PLAN OF ACTION*

52. The *Global Plan of Action* describes the essential role of the FAO in supporting country-driven efforts to implement the *Global Plan of Action*, in particular to facilitate global and regional collaboration and networks and mobilize donor resources for animal genetic resources.<sup>50</sup> The *Global Plan of Action* recommends that FAO ensure adequate regular programme support for the implementation of the *Global Plan of Action*<sup>51</sup> and pursue within relevant international mechanisms, funds and bodies, means by which they might contribute to the implementation of the *Global Plan of Action*.<sup>52</sup>

##### **Modalities for evaluating progress in the implementation of the *Global Plan of Action***

53. The International Technical Conference requested the Commission to oversee the implementation of the *Global Plan of Action* within the context of the Commission's Multi-Year Programme of Work.<sup>53</sup> The FAO Conference at its Thirty-fourth Session, requested the Commission to oversee and assess the implementation of the *Global Plan of Action* and to report to the 2009 session of the FAO Conference on steps taken as follow-up to the Interlaken Conference. The *Global Plan of Action* notes that the Commission should agree on the modalities for the presentation of progress reports, as well as the criteria and parameters for the evaluation of progress in the implementation of the *Global Plan of Action*. To this end, FAO prepared the document, *Evaluating progress in the implementation of the Global Plan of Action for Animal Genetic Resources*,<sup>54</sup> which stresses the need for using a common format for preparing Country Progress Reports to enable FAO to prepare global Synthesis Progress Reports. The document was presented to the Working group at its fifth session, and the Working Group has made recommendations in this regard.

54. The Working Group reviewed a draft questionnaire prepared by FAO, and agreed to provide comments on it by 1 April 2009, in order for FAO to make the questionnaire available to the Commission as an information document. The questionnaire incorporates comments received by Finland, Germany, Sweden and Turkey, is available as document, *Questionnaire to support preparation of Country Progress Reports on the implementation of the Global Plan of Action*.<sup>55</sup>

55. FAO continued to provide information on funding sources and grants through the DAD-Net list server. Linkages between DAD-IS, as the information portal on animal genetic resources, and the Facilitating Mechanism for the Implementation of the *Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture (FM-PGRFA)*<sup>56</sup> have been established in order to make the updated donor database of the FM-PGRFA directly accessible to National Coordinators.

56. FAO, in 2008, established a Programme Entity 2BA03 "Support to the Global Plan of Action for Animal Genetic Resources" entirely devoted to the *Global Plan of Action*. In its Medium Term Plan 2010-13 and Programme of Work and Budget 2010-11, animal genetic resources-related activities are found under Organizational Result B3 – *Better management of natural resources, including animal genetic resources, in livestock production* of Strategic

<sup>50</sup> *Global Plan of Action for Animal Genetic Resources*, paragraphs 58–61.

<sup>51</sup> *Global Plan of Action for Animal Genetic Resources*, paragraph 65.

<sup>52</sup> *Global Plan of Action for Animal Genetic Resources*, paragraph 66.

<sup>53</sup> ITC-AnGR/07/REP paragraph 25.

<sup>54</sup> CGRFA/WG-AnGR-5/09/3.1.

<sup>55</sup> CGRFA-12/09/Inf. 9.

<sup>56</sup> <http://www.globalplanofaction.org/>

Objective B – *Increased sustainable livestock production*.<sup>57</sup> The biennial programme and budget planning cycle of the Programme of Work and Budget (PWB) and the Commission’s ten-year planning within the Multi-Year Programme of Work, provide a flexible and predictable framework to facilitate the implementation of the *Global Plan of Action*.

57. The *Global Plan of Action* recommends the establishment of an FAO Trust Account.<sup>58</sup> Some donors now provide programme funds to strengthen the synergies that exist between normative and operational activities and between global and country-level programmes to better assist Members in meeting the Millennium Development Goals. Such programme funds are fully integrated with the major programmes defined in FAO’s PWB for the 2008-09 biennium and approved by the Thirty-fourth Session of the FAO Conference, with particular emphasis on multidisciplinary initiatives. In FAO’s new Strategic Framework, the animal genetic resources programme is also covered by the Impact Focus Area on *Global standard setting and implementation into national policies and legislation* (IFA-SNL).<sup>59</sup>

58. Trust funds for genetic resources have been established under the Strategic Partnership for Rural Development between Sweden and FAO, and under the FAO-Norway Partnership Cooperation Agreement. The funds under these programme cooperation agreements have helped FAO to provide catalytic funds for special activities at all levels. FAO is also associated with several European Commission-funded projects that provide stipends for developing-country participants and support the generation and dissemination of knowledge. FAO has been involved in the development of national Technical Cooperation Projects and Technical Cooperation Projects-Facilities that may lead to larger investment projects. FAO is currently preparing a multi-donor trust fund programme to facilitate implementation of the *Global Plan of Action*.

### **Towards a funding strategy for the implementation of the *Global Plan of Action***

59. The *Global Plan of Action* clearly notes that its implementation will require substantial and additional financial resources and long-term support for national, regional and international animal genetic resources programmes and activities, consistent with relevant international agreements.<sup>60</sup> It requests the Commission to develop a Funding Strategy for its implementation.<sup>61</sup> In response, consultations within FAO units and with other international organizations have been undertaken to explore funding strategies and funding mechanisms to assist in preparing a funding strategy for the *Global Plan of Action*. FAO developed and widely disseminated questionnaires to determine country needs, and donor priorities and programmes, which are presented in detail in the document, *Results of questionnaires on country needs and donor priorities to implement the Global Plan of Action for Animal Genetic Resources*.<sup>62</sup> Information on existing mechanisms is provided in the document, *Towards a funding strategy for the implementation of the Global Plan of Action for Animal Genetic Resources*.<sup>63</sup>

60. The document was presented to the Working Group, at its fifth session, which discussed the possible elements and content of a Funding Strategy and agreed on its main elements. FAO then prepared a draft Funding Strategy based on the main elements and suggested annex agreed upon by the Working Group<sup>64</sup> and distributed it to members of the Working Group for a review

<sup>57</sup> Draft Medium Term Plan 2010–13 and Programme of Work and Budget 2010–11, PC 102/3, FC 128/11 a Rev.1, [ftp://ftp.fao.org/docrep/fao/meeting/017/k5475e.pdf](http://ftp.fao.org/docrep/fao/meeting/017/k5475e.pdf)

<sup>58</sup> *Global Plan of Action for Animal Genetic Resources*, paragraph 68.

<sup>59</sup> Draft Medium Term Plan 2010–13 and Programme of Work and Budget 2010–11, PC 102/3, FC 128/11 a Rev.1, [ftp://ftp.fao.org/docrep/fao/meeting/017/k5475e.pdf](http://ftp.fao.org/docrep/fao/meeting/017/k5475e.pdf)

<sup>60</sup> *Global Plan of Action for Animal Genetic Resources*, paragraph 64.

<sup>61</sup> *Global Plan of Action for Animal Genetic Resources*, paragraph 54.

<sup>62</sup> CGRFA/WG-AnGR-5/06/Inf. 3.

<sup>63</sup> CGRFA/WG-AnGR-5/09/6.

<sup>64</sup> CGRFA/WG-AnGR-5/09/REP, appendix D

period of three months. Based on the comments received, FAO has prepared the document, *Draft funding strategy for the implementation of the Global Plan of Action for Animal Genetic Resources*<sup>65</sup> for consideration by the Commission.

## V. GUIDANCE SOUGHT

61. The Commission may wish to:
- i. endorse the Funding Strategy and request FAO to implement it, urging donors to enhance financial support for implementation of the *Global Plan of Action*;
  - ii. request FAO to continue providing regular programme funds and technical advice to support country implementation of the *Global Plan of Action*;
  - iii. request FAO to follow the structure contained in the document, *Format and content of future status and trends reports on animal genetic resources*,<sup>66</sup> in preparing synthesis status and trends reports for animal genetic resources, and stress the need for countries to regularly update their national data and information on animal genetic resources in DAD-IS;
  - iv. reaffirm the need for country-based early warning and response systems for animal genetic resources and encourage the development of such systems as an integral part of national strategies and action plans;
  - v. endorse the document *Breeding strategies for sustainable management of animal genetic resources – guidelines (revised version)*,<sup>67</sup> and encourage countries to make full use of these guidelines and request FAO to publish them and distribute them widely;
  - vi. endorse the document, *Preparation of national strategies and action plans for animal genetic resources – guidelines (edited version)*,<sup>68</sup> encourage countries to make full use of these guidelines, and request FAO to publish them and distribute them widely;
  - vii. agree to the timetable for assessing progress in the implementation of the *Global Plan of Action*, as recommended by the Working Group, and request its Members to prepare their first Country Progress Reports by 2011;
  - viii. endorse the Questionnaire to support preparation of Country Progress Reports on the implementation of the *Global Plan of Action*,<sup>69</sup> and request FAO to transform it into a tool for electronic data capturing and analysis in DAD-IS, to enable countries to report electronically and support the development of Synthesis Progress Report by FAO;

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<sup>65</sup> CGRFA-12/09/11.

<sup>66</sup> CGRFA/WG-AnGR-5/09/3.2.

<sup>67</sup> CGRFA-12/09/Inf. 11.

<sup>68</sup> CGRFA-12/09/Inf. 10.

<sup>69</sup> CGRFA-12/09/Inf. 9.

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- ix. request FAO to continue to pursue partnerships and alliances with other international mechanisms and organizations to enhance mobilization of financial resources for implementation of the *Global Plan of Action*;
  - x. request FAO to continue updating and further developing technical guidelines on the management of animal genetic resources, and to keep the DAD-IS user manual up to date;
  - xi. acknowledge the important contributions of small-scale livestock keepers as custodians of much of the world's animal genetic resources for food and agriculture, stressing the importance of addressing their particular needs and noting the need for countries to take into account the contributions of small-scale livestock keepers and ensure their full and effective participation in the implementation of the *Global Plan of Action*, in the preparation and implementation of National Strategies and Action Plans for Animal Genetic Resources; and
  - xii. request the Secretary to report back at the 2009 Session of the FAO Conference on steps taken as a follow up to the Interlaken Conference and to also address in this report the important role of small-scale livestock keepers, particularly in developing countries, as custodians of most of the world's animal genetic resources for food and agriculture in the use, development and conservation of livestock resources.