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y la
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Item 5 of the Provisional Agenda

COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

INTERGOVERNMENTAL TECHNICAL WORKING GROUP ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Fourth Session

Rome, 15-17 July 2009

FOLLOW-UP TO OTHER RECOMMENDATIONS REGARDING PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

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I. INTRODUCTION

1. At its Eleventh Session, the Commission requested its Working Group on plant genetic resources to focus, at its Fourth Session, on the review of the first draft of the updated report on the *State of the World's Plant Genetic Resources for Food and Agriculture* and to consider the elements of a plan for updating the Global Plan of Action. At the same Session, the Commission encouraged follow-up activities in relation to:

- 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 (Global Plan of Action)*;
- the monitoring of the implementation of the *Global Plan of Action* and the World Information and Early Warning System on Plant Genetic Resources for Food and Agriculture (WIEWS); and,
- the sustainable use of plant genetic resources for food and agriculture through strengthening capacity building in plant breeding and seed system development.¹

2. The aim of this document is to follow up on recommendations made by the Commission at its last Session in the areas mentioned above, by giving a summary of the on-going work and progress made since the last Session of the Commission. Guidance is sought on their further development noting that these areas of work, among others, are reflected in the *Draft strategic plan 2010-2017 for the implementation of the multi-year programme of work of the commission on genetic resources for food and agriculture (CGRFA/WG-PGR-4/09/Inf.4)*.

II. FACILITATING MECHANISM FOR THE GLOBAL PLAN OF ACTION

3. At the Eleventh Regular Session, the Commission requested the Secretariat to report on progress with the Facilitating Mechanism for the implementation of the Global Plan of Action (Facilitating Mechanism) at its next Session, and also invited to report on these activities to the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture (the Treaty), for its consideration in the context of the Funding Strategy.²

4. In *Resolution 1/2006*, the Governing Body of the Treaty already requested the Commission to support the development of the Funding Strategy, in the context of its work in relation to the supporting components of the Treaty, including the Global Plan of Action and its Facilitating Mechanism³. It further decided that information on the mandates, policies, eligibility criteria and procedures of funding bodies will be collected and maintained by the Secretariat of the International Treaty and made available to Contracting Parties through the website of the Treaty, and that the Facilitating Mechanism could complement this activity by collecting and providing information on relevant available funds from the Parties.⁴ Information about the Facilitating Mechanism was also presented to the Governing Body of the Treaty at its Second Session in 2007⁵ and to its Third Session in 2009.⁶

¹ CGRFA-11/07/Report, Paragraph 30-34, and 37.

² CGRFA-11/07/Report, Paragraph 30.

³ IT/GB/-1/06/Report, Para 17

⁴ IT/GB-1/06/Report, Appendix F, Paragraph 13

⁵ IT/GB-2/07/Report, Para 78

⁶ IT/GB-3/09/Inf. 7, paragraph 9-12

5. In line with the objective, operational principles, activities and operational structure of the Facilitating Mechanism supported by the Commission at its Tenth Regular Session, FAO together with Bioversity International and the Global Forum on Agricultural Research (GFAR) published the Facilitating Mechanism's portal in English in June 2007. The portal represents a facilitated access point to information on sources and availability of financial, technical and information resources on subjects related to the 20 priority activity areas of the *Global Plan of Action*.

6. In its first release, several datasets were published and searchable, among these, one with about 200 donor profiles, each of them including summaries regarding donor institutions (including bilateral and multilateral donors, development finance institutions, public and private foundations, etc.), the particular donor funding programme, the scope of funding of the respective programme (target subjects, target countries, target groups), the type of funding provided, and information about eligibility and application process.

7. Since the last report to the Commission,⁷ activities have progressed mainly toward the further implementation of information servicing through its web-based portal by enriching existing content and by widening the range of potential beneficiaries. In this regard, French and Spanish versions have been added to the portal, and the number of searchable funding opportunities has been increased by 357 percent to a total of 714 funding programmes. Information can be retrieved either by specifying one or more of the search criteria indicated in paragraph 6 above, or by a text search through the Facilitating Mechanism's portal.⁸

8. The portal also provides other information relevant to the implementation of the *Global Plan of Action*, including codes of conduct and guidelines, key documents in the field of plant genetic resources, searchable databases on 307 networks and institutions, 41 germplasm information systems, more than 5,500 national projects on plant genetic resources, and a database on information sources. The portal also maintains a highlight section that provides news about recent publications, forthcoming congresses, exhibitions, and other events.

9. During 2007-2009, activities were funded exclusively through FAO Regular Programme budget, which amounted to US \$260,000, as no extra budgetary resources have been made available in this period. The activities focused mainly on information services and awareness-raising. In order to provide other services, including the development of project proposals with the assistance and coordination of the Facilitating Mechanism, as requested by the Working Group at its previous session⁹, adequate additional funds will need to be secured.

III. NATIONAL INFORMATION SHARING MECHANISMS ESTABLISHED THROUGH THE WORLD INFORMATION AND EARLY WARNING SYSTEM ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE (WIEWS)

10. The Commission, at its Eleventh Session, expressed appreciation for the progress made in applying the new approach for monitoring the implementation of the *Global Plan of Action*.¹⁰ The approach is a participatory, country-driven and capacity-building process that is based on agreed indicators. The Commission recommended the further implementation of the new monitoring approach as one of the elements to be addressed under the cooperation mechanism between the Commission and the Governing Body of the International Treaty on Plant Genetic

⁷ CGRFA-11/07/11 Follow up to recommendations of the Commission on Genetic Resources for Food and Agriculture regarding plant genetic resources for food and agriculture, Para. 7-13

⁸ www.globalplanofaction.org

⁹ CGRFA/WG-PGR-3/05/REPORT, Para. 12

¹⁰ CGRFA-11/07/Report, Para 31

Resources for Food and Agriculture.¹¹ The Commission also stated that the World Information and Early Warning System on Plant Genetic Resources for Food and Agriculture (WIEWS) should be further developed in the context of developing the Global Information System on Plant Genetic Resources for Food and Agriculture in the International Treaty.¹²

11. At present, as a result of the efforts to apply the new monitoring approach, 64 countries have established,¹³ or are in the final steps to establish¹⁴ their National Information Sharing Mechanism (NISM). Sixty-one of which have prepared a country report as the national contribution for the preparation of the second report on the *State of the World's Plant Genetic Resources for Food and Agriculture*.¹⁵ Over 1,000 national stakeholders (mainly governmental institutions and research centres, and from civil society organizations and the private sector) from the 59 countries have so far completed the participatory monitoring process, and actively contributed to the NISM's establishment in their respective countries. Through a series of national workshops, stakeholders discussed and documented their involvement in the implementation of the 20 Priority Activity Areas of the *Global Plan of Action*, and were trained in the use of the NISM information system developed by FAO. A total of 879 national stakeholders directly contributed data to their respective mechanisms. Table 1 below provides figures of the volume of some key data accessible under the NISM databases grouped by region.

12. Technical assistance has been provided by FAO and Bioversity International to countries in undertaking the new monitoring approach. National expertise from more than 15 countries shared their direct experience by helping about 25 neighbouring countries in the establishment of their NISM. Financial support for technical assistance activities was provided through the FAO Regular Programme for about US \$485,000 and with extra-budgetary resources provided by the Governments of Canada, Italy, Japan, the Netherlands, Norway and Spain, totally for about US \$2,053,000 since 2003.¹⁶ In most countries, this support only partially covered the costs for the NISM's establishment, with the national coordinating and participating institutions providing financial and in-kind resources.

¹¹ CGRFA-11/07/Report, Para 27

¹² CGRFA-11/07/Report, Para 37

¹³ Fifty nine countries have finalized: Algeria; Argentina; Armenia; Azerbaijan; Bangladesh; Benin; Bolivia; Burkina Faso; Cameroon; Chile; Congo, Rep. of; Congo, Dem. Rep. of; Costa Rica; Cuba; Czech Republic; Dominican Republic; Ecuador; Egypt; El Salvador; Ethiopia; Fiji; Georgia; Ghana; Guatemala; Guinea; India; Jamaica; Jordan; Kazakhstan; Kenya; Kyrgyzstan; Lao PDR; Lebanon; Malawi; Malaysia; Mali; Nicaragua; Niger; Nigeria; Oman; Pakistan; Papua New Guinea; Paraguay; Peru; Philippines; Portugal; Senegal; Sri Lanka; Tajikistan; Tanzania; Thailand; Togo; Turkey; Uganda; Uruguay; Uzbekistan; Venezuela, Rep. Bol. of; Vietnam; Zambia.

¹⁴ Five countries are in the process to finalize: Angola; Côte d'Ivoire; Morocco; Mozambique; Yemen.

¹⁵ Please see CGRFA/WG-PGR-4/09/1 : Preparation of the second *State of the World's Plant Genetic Resources for Food and Agriculture*

¹⁶ This budget figure covers only costs for the establishment of NISMs and does not include costs for the preparation and publication of country reports.

Table 1. Number of projects related to the *Global Plan of Action*, cultivars and publications for which detailed information can be accessed from the NISM databases under WIEWS.

Region ¹⁷	Number of			Source (number of countries)
	Projects ¹⁸	Cultivars	Publications	
Africa	2,023	10,383	2,083	18
America	4,083	15,339	6,378	15
Asia and Pacific	4,714	19,108	8,490	10
Europe	674	3,930	1,148	4
Near East and North Africa	1,534	9,108	3,756	12
Total	13,028	57,868	21,855	59

13. Web access to all established mechanisms is provided through WIEWS. Access is presently also provided through the web server of the national coordinating organization in a few countries. In view of the rapid growth in the number of countries' establishing mechanisms, and in light of the volume of information stored under their databases, a thorough restructuring of the global monitoring information system stored under WIEWS began in January 2009. The information system has been improved in terms of data query and delivery efficiency, and has been fully operational since June 2009.

14. FAO is continuing to update and improve the tools used by countries for applying the new monitoring approach. The latest version was been released in June, 2009 and operates in 20 languages,¹⁹ as does the web version under WIEWS.

15. To date, eight countries out of the 27 that had established the mechanism by March 2007, have either undertaken a second iteration of the data gathering process, or have partially updated their database. Seven countries from South and South East Asia are planning to update their information in the next two years with support being provided from a Japanese funded regional project. This project, which began operation in March, 2009, will also support the application of the new monitoring approach in six additional countries in Asia.

16. The application of the monitoring approach to all countries as it was recommended by the Commission will require additional extra-budgetary resources to achieve global coverage. Support for strengthening existing mechanisms in selected countries may also be required in the future. The updating of the rolling *Global Plan of Action*, planned for the Twelfth Regular Session of the Commission, as discussed in the document Process for updating the *Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture*²⁰ may also require revision of the indicators and reporting format for monitoring the implementation of the Plan, which are at the base of the applied monitoring approach.

¹⁷ Country grouping by region as per Appendix 1 of the State of the World's PGRFA (1998).

¹⁸ For details on contents please see CGRFA-10/04/Inf.5 pages. 92-94 and 96.

¹⁹ Arabic; Armenian; Azeri; Chinese; Czech; English; French; Georgian; German; Italian; Lao; Malay; Norwegian; Portuguese; Russian; Slovak; Spanish; Thai; Turkish; and Vietnamese.

²⁰ (CGRFA/WG-PGR-4/09/2)

IV. STRENGTHENING CAPACITY IN PLANT BREEDING AND FOR SEED SYSTEM DEVELOPMENT

Plant Breeding Capacity Building

17. At its last session, the Commission expressed appreciation for the progress made in capacity building for plant breeding, and confirmed the importance of strengthening capacity in plant breeding, including through a participatory approach, and strengthening capacities in biotechnologies as well as in seed systems, and initiatives such as the Global Partnership Initiative for Plant Breeding Capacity Building (GIPB).²¹

18. The Commission also requested a paper providing options to strengthen plant breeding in developing countries, identifying new opportunities for effective partnerships between the public and the private sector, with the involvement of the Centres of the Consultative Group on International Agricultural Research (CGIAR). *The Draft strategic plan 2010-2017 for the implementation of the multi-year programme of work of the Commission on genetic resources for food and agriculture*²² includes provision for the Working Group on plant genetic resources to provide recommendations, at its next Session, on future work for plant breeding, seed systems and crops essential for food security, including the options paper to strengthen plant breeding.

19. Under the framework of GIPB, FAO has continued to assess national plant breeding and associated biotechnology capacity worldwide. Today, there is information available on more than 80 countries²³, and surveys were used to develop country reports for 49 countries. GIPB is carrying-out regional consultations using both electronic means and face-to face meetings, with the aim of designing regional strategies for strengthening plant breeding capacity. The results of consultations in Latin America and Caribbean and South-Eastern and Southern Asia are now available²⁴. Consultations involving other regions are currently being planned.

20. With Regular Programme and extra-budgetary resources, and in collaboration with the CGIAR, national programmes and partners, activities are being conducted to support the priority activities of the *Global Plan of Action* and implementation of Article 6 of the International Treaty²⁵. Four training courses have been organised in the South-Eastern and Southern Asia and Latin America and Caribbean regions, including a course on participatory breeding methods, application of biotechnology tools, pre-breeding activities and breeding programmes. Publications on biotechnology tools²⁶ and participatory plant breeding have been prepared.²⁷ In coordination with the Global Crop Diversity Trust and the CGIAR's Generation Challenge Programme, GIPB is supporting a number of projects through a competitive grant system. In 2009 six projects in pre-breeding and an in-depth review of stable rust resistance in major crops were supported.

21. The GIPB website receives about 2,500 visits a month, and GIPB updates are circulated through a distribution list of more than 6,000 users. During the period a range of multi-lingual materials have been produced with a focus on getting partners and policy-makers familiar with

²¹ CGRFA-11/07/Report, Para 33.

²² CGRFA/WG-PGR-04/5

²³ Plant Breeding Surveys available at <http://km.fao.org/gipb/pbbc>

²⁴ http://km.fao.org/gipb/index.php?option=com_content&task=view&id=380&Itemid=271

²⁵ IT/GB-3/09/16 Implementation of Article 6

²⁶ "Markes-assisted selection: current status and future perspectives in crops, livestock, forestry and fish". 2007. FAO. Editors Guimaraes, E.P.; Ruane, J.; Sherf, B.D; Sonnino, A.; and Dargie, J.D. and "Biotechnology tools for conservation and use of plants: a school play for senior students". 2007. FAO.

²⁷ "Plant breeding and farmers participation. Editors Ceccarelli, S.; Guimaraes, E.P.; and Weltzien, E. in press

GIPB as a global partnership platform.²⁸ Since extra-budgetary resources are required to sustain and expand the activities, a comprehensive business plan for GIPB has been developed through a consultative process involving more than 200 scientists, research administrators, policy-makers and other stakeholders.²⁹

Strengthening seed system

22. At its last Session, the Commission encouraged FAO to continue its work to strengthen seed systems, at national, regional and global levels and recommended a gap analysis be prepared considering in a balanced way both the formal and informal seed sectors, as well as the relationship between breeding and seed systems.³⁰ *The Draft strategic plan 2010-2017 for the implementation of the multi-year programme of work of the Commission on genetic resources for food and agriculture*³¹ includes provision for the Working Group on plant genetic resources to provide recommendations, at its next Session, on future work for plant breeding, seed systems and crops essential for food security, including review of the gap analysis.

23. Strengthening national seed systems is recognised as an important activity to contribute to achieving the sustainable use of plant genetic resources for food and agriculture, and bring direct benefits to the livelihoods of agricultural communities. Many developing countries' farmers do not currently benefit fully from improved quality seed due to a combination of factors, such as, weak seed production and distribution systems, poor seed quality assurance systems, lack of access to and credit for inputs, and inadequate seed policies. The pressure from the soaring food prices in 2007-2008 period, and impacts from climate change have created additional challenges. A document highlighting the impact of these changes on seed system was presented to the Committee on Agriculture in 2009.³²

24. FAO is collaborating with a number of regional seed associations in Africa and Asia, and regional economic communities to bring together public institutions and private companies to strengthen seed systems. A strategic approach is required that will ensure: linkage among the formal and the farmer-saved seed sector; develop local seed enterprises; revitalize and strengthen the public seed sector; strengthen seed policies and legislation at national and regional levels; and improve national and regional information systems for seed security and linkages among them.

25. In Central Asia, in collaboration with the Central Asian Economic Community (ECO), FAO is facilitating the establishment of a new regional seed association, the ECO Seed Association (ECOSA). In Africa, a continent-wide African Seed and Biotechnology Programme (ASBP), established with the African Union in 2007, provides a strategic framework for the development of the African seed sector. At the sub-regional level, there are a number of on-going projects³³ for the harmonization of seed rules and regulations and to develop a comprehensive seed sector development strategy that links conservation and plant breeding with seed sector players. Projects are completed or under way in West Africa, Central Africa, East Africa, and

²⁸ <http://km.fao.org/gipb/>

²⁹ The GIPB Business Plan http://km.fao.org/gipb/images/pdf_files/GIPBBusinessPlan_2009_2013.pdf.

³⁰ CGRFA-11/07/Report, Paragraph 34.

³¹ CGRFA/WG-PGR-04/5

³² COAG 2009/Inf 7, *Seed Security for Food Security in the Light of Climate Change and Soaring Food Prices: Challenges and Opportunities*

³³ Harmonized seed rules and regulations in ECOWAS countries in West Africa adopted by heads of States in May 2008; Harmonized seed rules and regulations adopted by SADC; Harmonized seed rules and regulations under development in CEMAC countries in Central Africa and in COMESA countries; Seed rules and regulations harmonization completed for ECO region in Central Asia; Sub regional seed sector development strategic program developed for CEMAC in 2008

Southern Africa and in Central Asia. Other projects³⁴ are being implemented for improved seed policies and legislation, or revision of seed policies and seed legislations.

26. In 2007-08, rapidly increasing international food prices led to a global food-security crisis, resulting in FAO launching the Initiative on Soaring Food Prices (ISFP), with the immediate aim of rapidly increasing food production during the 2008 and 2009 agricultural seasons. This was to be achieved mainly by supporting direct access to inputs for smallholders. Within this framework, FAO has prepared project proposals for more than US \$200 million³⁵ aimed at the expeditious growth of production and distribution of good quality seeds of the major food crops in over 100 countries in order to boost crop productivity, and thereby overcome the negative effects of high food prices.

27. In an effort to enhance the synergy of the public-private partnership among the seed sectors of developed and developing countries, a new global initiative termed “Seed Alliance Without Boundaries (SAWIB)” has been started in 2009. The main objective is to create a forum to bring together stakeholders from the private and public sectors of developed and developing seed and food industries to facilitate transfer of technological and entrepreneurial skills for sustainable seed production and distribution; and to build linkage between the formal seed sector with farmers. In 2009, SAWIB facilitated representatives from 10 local seed companies from Afghanistan, Iraq and Uzbekistan to visit advanced seed industries in India with the aim to develop strong business linkages and further enable technology and knowledge transfer among the companies.

V. GUIDANCE SOUGHT FROM THE WORKING GROUP

28. The Working Group may wish to:

Facilitating Mechanism

- (i) Recommend that the Commission recognize the need for extra-budgetary resources to further advance the operation of the Facilitating Mechanism and encourage donor countries and agencies to make additional funds available in order to fully operationalize the Facilitating Mechanism;
- (ii) Provide further advice on the role of the Facilitating Mechanism in support of the cooperation mechanism between the Commission and the Governing Body of the International Treaty, in order to mutually benefit from existing information services, including the database on funding programmes contained in the Facilitating Mechanism;

Application of the new Monitoring Approach

- (iii) Recommend that the Commission recognize the need for extra-budgetary resources needed to undertake the application of the new monitoring approach in the maximum number of countries, and to strengthen established National Information Sharing Mechanisms;
- (iv) Provide further advice regarding the role of the new monitoring approach in support of the collaborative mechanism between the Commission and the Governing Body of the International Treaty;
- (v) Consider the need for the revision of indicators and reporting format for monitoring the implementation of the rolling *Global Plan of Action* in light of updating the *Global Plan of Action*

Strengthening capacity in Plant Breeding and for Seed System development

³⁴ National seed policy and legislations developed and implemented in Cote d’Ivoire, Sierra Leone, The Gambia, Congo DRC and Burkina Faso. New projects are underway in Cameroon, Togo and Benin

³⁵ Projects under implementation through Technical Cooperation and through the EU Food Facility of the ISFP secretariat <http://www.fao.org/isfp/isfp-home/en/>

(vi) Reaffirm the importance further work in the areas of plant breeding and seed systems capacity building, and urge FAO to continue training and other capacity building and donors to support this work;

(vii) Reaffirm the need for further international collaboration in plant breeding capacity, and seed systems development including supporting the implementation of Article 6 of the International Treaty.