THE COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE (CGRFA) SPECIAL EVENT: FOOD SECURITY AND GENETIC DIVERSITY: 16 JANUARY 2015

The Commission on Genetic Resources for Food and Agriculture (CGRFA) organized this event on Friday, 16 January 2015, ahead of its fifteenth session in Rome, Italy. Around 120 participants from government agencies, farmers, the private sector and civil society discussed the contribution of genetic diversity to meeting food security and nutrition objectives, and the global context for related policy making, including the ongoing negotiations of the post-2015 development agenda. They agreed on the need to promote awareness of the value of genetic diversity for food security, and explored implications for biodiversity conservation and sustainable use of genetic resources, which many said should be based on a multi-stakeholder approach that includes the participation of smallholders, small and medium enterprises (SMEs) and the scientific research community.

OPENING REMARKS

Moderator Kostas Stamoulis, Food and Agriculture Organization of the UN (FAO), welcomed participants and introduced the event.

Maria-Helena Semedo, FAO, said that while intensive agriculture has previously worked well, it has proven unsustainable. She stressed the need for a paradigm shift to ensure the continuing richness of genetic diversity as a key element in the biodiversity capacity to adapt and survive.

Stamoulis noted that 800 million people currently face food insecurity, and addressed the associated societal costs.

He stressed that food security and nutrition needs to be part of a broader development strategy, and listed challenges and opportunities for action.

SESSION 1: FOOD SECURITY AND NUTRITION IN A GLOBAL CONTEXT

Current status of genetic diversity and biodiversity considerations in the Sustainable Development Goals (SDGs): Jomo Kwame Sundaram, FAO, outlined the post-2015 negotiating process, the proposed 17 SDGs and 169 targets.

He said the process cannot feasibly monitor all of the currently proposed indicators, recalling that the Millennium Development Goals (MDGs) process had only been able to meaningfully monitor around half of its 40 indicators.

Sundaram expressed concern that discussions to take place at the Financing For Development (FFD) summit in Addis Ababa in July 2015 may focus solely on finance and neglect other elements of means of implementation (MOI), such as trade and technology.

He urged participants to sustain their efforts toward a sustainable development agenda that will include recognition of genetic resources as necessary to food security and nutrition.

Food security and nutrition in a multi-stakeholder framework: Amb. Gerda Verburg, the Netherlands, described the work of the Committee on World Food Security (CFS), which chairs. She addressed inclusiveness and scientific evidence as the two pillars of all CFS actions, drawing attention to CFS’ orientation toward investing in smallholders, as well as its Principles for Responsible Investment in Agriculture and Food Systems that refer explicitly to genetic resources. She concluded that while debate has often been polarized, it is essential to include all stakeholders in identifying problems, building trust and finding solutions.

Discussion: Participants highlighted the role of farmers in conserving and developing genetic resources, noting there are long-standing centers of indigenous diversity, such as in Mali for sorghum and millet. A participant expressed concern that new rules in Bangladesh restrict farmers from playing this role with regard to rice, wheat, potato and jute. Participants discussed Africa’s reliance on non-indigenous crops of wheat, maize and rice and the change in consumer tastes favoring these, despite the availability of many indigenous sources of carbohydrates.

SESSION 2: GENETIC RESOURCES AND FOOD SECURITY

CGRFA presentation: Linda Collette, on behalf of CGRFA Chair Amar Tahiri, presented an overview of the Commission’s work, addressing, inter alia: the State of the World Reports on Genetic Resources, Global Plans of Action, the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), and the preparation of the first State of the World’s Biodiversity for Food and Agriculture report.

She highlighted the CGRFA’s main challenges as: raising awareness of the value of genetic resources for food and agriculture (GRFA); promoting a two-way integration between GRFA and food security; promoting inter-sectoral dialogue; and fostering implementation of GRFA instruments supporting food security.

Convention on Biological Diversity (CBD) presentation: Braulio Dias, Executive Secretary, CBD, stressed that the CBD is “a sustainable development convention” that includes conservation, sustainable use, and benefit-sharing aims. Noting that rules on access and benefit-sharing (ABS) have been controversial, he highlighted the role of the Nagoya Protocol in providing capacity building for all countries to put legal and governance frameworks in place, while other protocols and processes deal with specific areas, such as intellectual property and genetic resources for vaccine development.

On biodiversity and health, he highlighted the CBD’s partnership with the WHO on a joint State of the World assessment of the inter-linkages between biodiversity and human health, including nutrition. He stated that genetic diversity should be seen as “the best insurance” for food security.

Sectoral aspects: On plant genetic resources for food and agriculture (PGRFA), Stefano Diulgheroff, FAO, underscored that out of 7000 plant species used as food, only 150 have commercial importance. He recommended that ex situ collections should represent existing plant diversity to the largest extent possible, and PGRFA diversity should be maintained through direct on-farm utilization as well as breeding programmes.

On animal genetic resources, Irene Hoffmann, FAO, noted that while five domestic animals – cattle, pig, sheep, goat and chicken – present the highest commercial interest, many more...
contribute to food production worldwide. Hoffmann contrasted locally-adapted breeds to high-input introduced species, concluding that there is no simple answer to achieving stability over time in the livestock sector.

On forest genetic resources (FGR), Albert Nikiema, FAO, noted that over 1500 tree species are managed worldwide for food production, and that forests simultaneously enhance and protect ecosystems and landscapes. He highlighted that FGR are essential for the implementation of sustainable agriculture and thus, production options should include an FGR conservation dimension, taking into account their unique environmental services.

On aquatic genetic resources, Devin Bartley, FAO, presented trade-offs inherent in promoting aquaculture, including the reduced nutritional value of consuming farmed fish fillets instead of whole wild-caught fish, and the greater financial and environmental costs of aquaculture. He called for maintaining inland fisheries habitat to ensure genetic diversity and an economic safety net in hard times.

On genetic resources and nutrition, Ruth Charrondiere, FAO, recommended including nutritional objectives in agricultural production and breeding, mentioning indigenous and an economic safety net in hard times.

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### SESSION 2: NATIONAL PERSPECTIVES

**National perspectives:**
- **Amb. Mary Mubi, Zimbabwe:** presented the work of the food and nutrition cluster under ZIM Asset, a national economic plan jointly governed and presented the work of the food and nutrition cluster under ZIM Asset, a national economic plan jointly governed and implemented through a multi-stakeholder process. She noted recent interest in promoting indigenous crops as part of “food baskets” to ensure livelihoods, thus encouraging conservation through utilization.
- **Daniel Gad, World Farmers’ Organization, Ethiopia:** noted that Ethiopian farmers and SMEs, including women-owned SMEs, will benefit from the export of teff products, such as teff powder, mixes and baked goods. Silva noted that many traditional foods have sufficient vitamins and minerals, and do not require bio-fortification. He said genetic resource policies should link to related issues, such as deforestation and rural-urban youth migration.

### SESSION 3: SHARING EXPERIENCES

**National perspectives:**
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- **Daniel Gad, World Farmers’ Organization, Ethiopia:** highlighted current efforts in the on-farm conservation and development of teff, including a ban on seed exports so as to maintain control of this genetic resource.

### SESSION 4: THE WAY FORWARD

**Panelists:** Speakers Mubi, Verburg, Dias and Collette all highlighted the importance of introducing a clear, evidence-based narrative. Verburg highlighted the value of the multi-stakeholder approach. Mubi called for a balanced view of all the issues, including as many actors as possible. Dias called for further developing tools, guidelines, indicators, and nutrition content tables, engaging different sectors, stakeholders, processes and forums to better promote the genetic resources agenda. Collette underscored the complexity of the issues and called for an interdisciplinary approach that will help stakeholders better understand each other’s jargon.

**Discussion:** Participants discussed elements of a strong narrative on the value of genetic diversity in food security. Mubi encouraged working with those most directly affected. A participant said farming must be understood as being no longer “an isolated hermit’s mandate,” but rather an integrated business opportunity connected to a large network of participants. Stamoulis stressed the genetic diversity narrative should be enriched with evidence and stakeholder views.

### CLOSING REMARKS

Semedo summarized the discussion, noting the challenges of a growing world population and increased urbanization. She highlighted the importance of genetic resources for sustainable development, post-2015. She noted the awareness raising challenge and the need for partnerships between the agriculture sector and those involved in maintaining ecosystem services. She called for effective governance systems that will encourage agricultural diversification and promote shared responsibilities among government, farmers and industry.

Semedo closed the special event at 6.30 p.m., extending thanks to the organizers and all participants for their contributions.