









## Agriculture Day

### Sunday, 25 November 2018

Rio Conventions Pavilion CBD COP 14, Sharm El-Sheikh, Egypt

# Agriculture and Biodiversity: walking hand-in-hand toward a sustainable world

### Co-organizers

CBD, FAO, Mexican Government

### **Partners**

GIZ, Rare, IUCN, Conservation International

### **Focal points**

Monica Kobayashi (CBD) Irene Hoffmann/Maryam Rahmanian (FAO)

### Output

Report to support the preparations for the Post-2020 Biodiversity Framework



### **Description**

The conservation and sustainable use of biodiversity by the agricultural sectors has been addressed under the Convention on Biological Diversity since 1996. Themes such as the conservation and sustainable use of pollinators, soil biodiversity and biodiversity for food and nutrition took form as International Initiatives, and the Food and Agriculture Organization of the United Nations (FAO) has been leading and facilitating the implementation of many related decisions. During this long journey, many other partners have joined and contributed significantly to the conservation and sustainable use of biodiversity.

This year is the Convention's 25<sup>th</sup> anniversary. It is time to celebrate and share the achievements with all stakeholders. However, it is also a great opportunity to remind participants about the urgent need to accelerate the transformation of the way we produce and consume food and other agricultural commodities. These transformations are key to achieve many international agreements.

Despite all efforts, every year large areas of forested land are being lost and many other ecosystems have been degraded. Unfortunately, the majority of crop and livestock production systems are, unfortunately, still contributing to negative environmental externalities, and agriculture remains the most significant driver of global biodiversity loss.

With world population expected to exceed 9 billion by 2050 and current patterns of consumption and production adding pressure to already scarce and overused natural resources, meeting the world's demand for food will require innovative, cost-effective and inclusive measures. Climate change, desertification and natural disasters are additional threats to agriculture and food systems in many regions of the world; and there is no time left to avoid dramatic changes in all sectors.

The long-term sustainability of agriculture and food systems depends on the ecological functions and services provided by biodiversity, most importantly food security and nutrition. Key regulating and supporting benefits include soil conservation, water cycling, pollination, pest and diseases regulation, carbon sequestration and storage, microclimate regulation, nutrient conversion, nitrogen fixation and habitat protection. Genetic resources for food and agriculture are key components to ensure nutritional diversity, as well as a continued production at lower costs.

Tackling food security and nutrition, poverty eradication and biodiversity conservation in the face of climate change and other threats requires a better understanding and coherent actions, across agricultural sectors, to mutually support the global objectives.

Many options to improve farming's ecological footprint are known and many of them are knowledge intensive but can generate additional environmental social and economic advantages. Farmers, fishers and forest users, need more than a set of technical solutions. They need an integral vision that supports them along the way: to conserve or restore degraded habitats, improve production in a sustainable and efficient way, and getting better returns for their products. Higher productivity, within sustainability limits, means more land for conservation and less pressure on remaining natural habitats.

The Agriculture Day will bring the perspectives of different stakeholders to illustrate why, how and who are championing solutions to protect biodiversity, while increasing productivity and improving livelihoods.



### **Key Objectives**

- 1. To celebrate the 25 years of the Convention on Biological Diversity and its role in mainstreaming biodiversity and ecosystem services into agriculture, taking the lessons learned as an input to discuss the future steps;
- To provide a forum for countries, academic, indigenous peoples and local communities, organizations and businesses to showcase applications of integrated land use planning and management, and measures involving diverse stakeholders to ensure equitable and environmentally sound approaches to achieve food security, sustainable agriculture and biodiversity conservation;
- To present effective and replicable methodologies, techniques, technologies and practices that promote sustainability, with a view to upscale those sustainable approaches to accelerate biodiversity conservation, sustainable use of biodiversity resources and equitable participation in productive landscapes;
- 4. To highlight regional and global initiatives that support countries in the design, planning, implementation and monitoring of socio-economic-ecological solutions and their contribution to the Aichi Biodiversity Targets and related targets associated with the achievement of the Sustainable Development Goals.

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Time	Programme				
09:30-10:00	Biodiversity for sustainable agriculture and food security and nutrition  To achieve the SDGs a transformation of the current agricultural and food systems is necessary, which includes production, processing, distribution and consumption of food.				
	Keynote / Biodiversity mainstreaming: from Cancun to Beijing By Hesiquio Benitez Diaz, Mexico				
	Facilitator and introduction: Monica Kobayashi, CBD				
	Panellists:				
	<ul> <li>Hamdallah Zedan, Egypt</li> <li>David Cooper, CBD</li> <li>Irene Hoffmann, FAO</li> </ul>				
	Q&A managed by the facilitator				
10:05-11:00	Soil in the nexus: UNCBD, UNFCCC, UNCCD				
	Soil is the key to achieve the objectives of the three UN conventions on biodiversity, climate change and land degradation. By halting and reversing soil and land degradation trends, soil biodiversity can be preserved or even enhanced, and the potential of soils to mitigate and adapt to climate change can be unleashed. Sustainable soil management should be implemented if to achieve the Sustainable Development Goals that are crosscutting to the objectives of the Rio Conventions.				
	Keynote / Soil and Biodiversity: role and importance in the nexus				
	By Kelly Ramirez (Netherlands Institute of Ecology)				
	Moderator: Ronald Vargas, Global Soil Partnership Secretariat, FAO				
	Panellists:				
	Edda Fernandez Luiselli, Government of Mexico				
	<ul><li>Karin Zaunberger, European Commission</li><li>Glenn Litsios, FOEN, Switzerland</li></ul>				
	N. Raghuram, Chair, International Nitrogen Initiative				
	Conclusions by the moderator				
11:05-12:00	Biodiversity for food and nutrition: challenges and opportunities				
	Why have our food systems come to rely on such a narrow range of plants of limited nutritional value? Today three plants (rice, maize and wheat) account for more than 50% of calories consumed while we continue to neglect the huge wealth of nutrient-rich biodiversity utilized by humanity at one time or another. The reasons for this situation are complex and challenging and require creative approaches to ensure greater integration of food biodiversity in our agriculture and food systems, and ultimately greater diversity on our plates and in our diets. Global conventions, treaties and other initiatives are increasingly aware of the nutritional value of food biodiversity and its potential to contribute to food system transformation and human health. The CBD in 2006 adopted the Framework for a <i>Cross-Cutting Initiative on Biodiversity for Food and Nutrition</i> and formally recognized the linkages between biodiversity, food and nutrition in 2014, and the need to enhance sustainable use of biodiversity to combat hunger and malnutrition.				

food and nutrition in 2014, and the need to enhance sustainable use of biodiversity to combat hunger and malnutrition. The FAO Commission at its 14th session in 2013, formally recognized nutrients and diets, as well as food, as ecosystem services to increase awareness of human nutrition as a concern for the environment and agriculture

sectors.

Based on their experiences the panellists in this session will discuss how they have improved the knowledge, appreciation, awareness and utilization of nutrient-rich food biodiversity, and the novel approaches used to mainstream biodiversity into production and consumption systems to improve diets and nutrition. They will also share their perspectives on the way forward for food biodiversity in meeting the challenges of malnutrition and environmental sustainability in the 2030 sustainable development context.

Facilitator and Introduction: Danny Hunter, Bioversity International

### Keynote: The State of Biodiversity for Food and Agriculture

By Secretariat, Commission on Genetic Resources for Food and Agriculture

### Panellists:

- Teresa Borelli, Bioversity International, Biodiversity for Food and Nutrition (BFN) Project
- Cristina Romanelli, CBD (tbc)
- Raja Sharma Rymbai, Indigenous Terra Madre Network of Slow Food
- Lusike Wasilwa, Kenya Agricultural & Livestock Research Organization
- Alvaro Toledo, International Treaty on Plant Genetic Resources for Food and Agriculture
- · William Dunbar, International Partnership for the Satoyama Initiative
- Yoji Natori, Conservation International Japan

Q&A managed by the facilitator

### 12:05-13:00

### The power of pollinators to transform the agricultural systems

In the broader context, pollinators can be considered an important link for agriculture, forestry, biodiversity, food security, habitat conservation, human health and nutrition. Pollinators can be a transformative biodiversity agent by fostering sustainable practices among agricultural sectors. Pollinator-friendly measures have the potential to increase productivity, can act as proxies for sustainability and contribute to achieve many global agreements.

The event will explore the conservation and sustainable use of pollinators and potential implementation pathways for the updated plan of action 2018-2030. The partners of this side event will include the Coalition of the Willing on Pollinators as well as partner members and representatives from implementing countries from the first International Pollinators Initiative. The hope is to bring clarity and energy to the updated plan of action and how other countries can join the Coalition of the Willing and the International Pollinators Initiative 2.0.

Facilitator and Introduction: Irene Hoffmann, FAO

### Panellists:

- Hien Ngo, IPBES Understanding the buzz about pollinators, pollination and food production IPBES evidence explained
- Stefanie Christmann, ICARDA Enabling conditions for creating a Multilateral Environmental Agreement for pollinator protection
- Ruth Spencer, GEF/SGP Antigua Using local knowledge to support Pollinators and build resilience to Climate Change
- Daniela Guarás, UNEP-WCMC Catalysing corporate engagement and action to prevent wild pollinator decline
- Carlos Tonelli, Brazilian Institute of Environment and Renewable Resources IBAMA Protection of wild pollinators
- Christiane Paulus, German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
   Pollinators and beyond Germany's Action Programme for Insect Protection

Q&A managed by the facilitator

13:00-13:20

### **LUNCH NETWORKING**

### 13:25-14:25

#### Feeding the planet and protecting biodiversity: can we choose both outcomes?

The objective of this session is to discuss how agriculture and environment policies and practices can better support each other towards biodiversity-positive outcomes, whilst ensuring food and nutrition security.

Agriculture is intrinsically linked to biodiversity. Farmers, herders and other agricultural households have been instrumental in transforming the world. They have created and maintained biodiverse landscapes in many parts of the world. They have also bred and maintained a diversity of animals and plants that are crucial for human nutrition and food security. At the same time, however, traditional agriculture has become less sustainable in the face of population increase, climate change, and other drivers.

Since the second half of last century, the progressive adoption of intensive agriculture, where most aspects of production are driven by technological and agrochemical interventions has resulted in important productivity gains which in turn slowed the expansion of cropland into natural areas, including forests. However, there have been significant unintended negative environmental consequences of intensive agriculture. Chief amongst these are the degradation and loss of biodiversity – both in terms of crop genetic diversity, farm-level biodiversity and at the level of the ecosystems. In many countries, national agriculture priorities and investments focus almost exclusively on increasing production with limited regard for environmental (and therefore biodiversity) tradeoffs. At the same time, national environmental priorities struggle to address agricultural and food security concerns although they are clearly the two faces of the same coin.

The 2030 Agenda for sustainable development calls for much more effective integration between sectors, goals and stakeholder activities, acknowledging the need for policy dialogues that address trade-offs and craft workable solutions. Governments, civil society, consumers and the private sector, including the farmers, together can work out mechanisms that lead to the adoption of 'biodiversity-friendly' practices. This requires harmonized policies and strategies, investment and incentive mechanisms that promote such practices and catalyse environment and agriculture working in synergy, leading to overall better biodiversity and agriculture outcomes.

The objective of this session is to discuss examples of how agricultural and environment policies can better support each other towards more biodiversity-friendly agriculture, and how different stakeholders, including the private sector, can promote and implement responsible and biodiversity-friendly practices and the mechanisms to achieve this.

### Facilitator and Introduction: Jeffrey Griffin, FAO Panellists:

- Edda Fernandez Luiselli, Government of Mexico
- Lusike Wasilwa, Kenya Agriculture & Livestock Research Organization
- J. S. Datuama Cammue, Liberia
- W. L. G. Samarasinghe, Sri Lanka, Plant Genetic Resources Center
- Sujata Arora, Ministry of Environment, Forest and Climate Change MoEFCC
- Yoko Watanabe, UNDP
- Marieta Sakalian, UN Environment
- Mark Zimsky, Global Environmental Facility GEF

### 14:30-16:00

### Agroecological approaches and biodiversity-friendly practices to increase productivity

Discussion topic: across many different production systems, agriculture is practised over a broad range of agroecological zones and cultural contexts, with a connection to the biodiversity and ecosystem services in a specific location. Biodiversity is an important element of Agroecology, as is the co-creation of knowledge. The cultural heritage and value of agriculture and food systems should not be underestimated. Ancient techniques, traditional knowledge and modern technology can complement the wise use of diversity for the scaling-up of Agroecology. Taken this into account, how could the CBD incorporate Agroecology as one of the approaches to be supported in order to enhance its work on agricultural biodiversity?

### Panellists:

- Georgina Catacora-Vargas, Government of Bolivia (Vice-Ministério de Medio Ambiente, Biodiversidad, Cambios Climáticos y de Gestión y Desarrollo Forestal)
- Jean Lanotte, Government of France (Ministère de l'agriculture et de l'alimentation)
- Nori Ignacio, Southeast Asia Regional Initiatives for Community Empowerment (SEARICE)
- Nele Mariën, Friends of the Earth International

Joji Carino, Forest Peoples Programme (FPP)

Moderation and presenting FAO Scaling up Agroecology Initiative:
Emile Frison (IPES-Food)

Closing Remarks: Emile Frison

### 16:00-16:15

### **COFEE BREAK NETWORKING**

#### 16:15-17.15

### Making the transition to sustainable agriculture: articulation of regulation and incentives at landscape level

For rural producers to adopt more sustainable practices the right incentives -economic, regulatory or a mix thereof-can help reach a new equilibrium with restored and productive landscapes, producing higher environmental benefits, on farm and beyond, with lower opportunity costs to rural producers; responding to CBD Decision XIII/3;32.

In order to be effective, better coordination and long-term programmes of these existing incentives into inclusive, integrated packages are needed to maximize the adoption of sustainable practices. Policies must be aligned, and institutions need to know each other well enough to cooperate, delegate and engage more, also with the private sector.

Based on their experience, panelists will discuss how better articulation of regulation and incentives can be achieved, including:

- what are the successful institutional coordination strategies across the agricultural sectors? And between them and the biodiversity and environment agencies?
- can programmes assisting rural producers in improving productivity and income, be made conditional on adoption on environmental safeguards? What are the examples of this?
- · can certification pilot a systemic transition to more sustainable value chains?

#### **Panellists**

- Sheila Wertz-Kanounnikoff, FAO
- Philip Dobie, ICRAF
- Jasmin Hundorf, GIZ-Mexico
- Ann-Kathrin Neureuther, Rare
- Justin Adam, Tropical Forest Alliance 2020 (tbc)

### Q&A - Recommendations / How better articulation of regulation and incentives can be achieved

### 17.20-17.30

### Conclusions: Jeff Griffin, FAO

### 17.30-18.30

### Special event: Launch of UN Environment publication "Mainstreaming Biodiversity in Production Landscapes"

This publication summarizes the outcomes, lessons learned, good practices and technical assistance provided to developing countries by UN Environment on mainstreaming conservation and sustainable use of agricultural biodiversity through a diverse portfolio of GEF-supported projects in over 36 countries.

Moderator: Marieta Sakalian, Senior Programme Management Officer, Coordinator Healthy and Productive Ecosystems Programme, UN Environment Panellists

- EF Secretariat
- FAO
- CBD Secretariat
- Bioversity International
- Department of Agriculture, Sri Lanka
- Indian Council of Agricultural Research, India
- Kenya Agricultural and Livestock Research Organization
- · Ministry of the Environment, Brazil
- Ministry of Agriculture and Forestry, Turkey