G20 Argentina 2018

7th Meeting of Agricultural Chief Scientists (MACS)

Communiqué

1. The 7th Meeting of the G20 Agricultural Chief Scientists (MACS)1 , chaired by Argentina as the host country, represented by the National Agricultural Technology Institute (INTA), was convened in San Salvador de Jujuy from 28th to 30th, May 2018. During the Meeting the delegates discussed how to support G20 Agriculture Ministers and ways to strengthen synergy and cooperation of G20 members and international organizations in three scientific fields: genome editing, sustainable soils management and climate change, impacts and opportunities to enhance resilience as a criterion of healthy agricultural systems.
2. We recognize that the MACS stock take report prepared by Germany and submitted to the first meeting of the G20 agriculture deputies covers outcomes of 2017 MACS. We acknowledge the importance of continuing to take stock of the activities emanating from the G20 MACS.
3. We support continuing the collaborative work on the reduction of food losses and waste (FLW) conducted by Germany in 2017. For this purpose Argentina, with the support of Germany, will host a FLW workshop in October 2018 at Buenos Aires in order to tackle identified regional FLW challenges in Latin American and Caribbean countries.
4. We heard presentations from IICA and TAP on their efforts to support countries to develop their capacities for agricultural innovation.

[1] Participants included representatives from the following countries: Argentina, Australia, Brazil, Canada, China, European Union, France, Germany, Italy, Japan, Russian Federation, Saudi Arabia, Turkey, United Kingdom and United States of America, guest countries (The Netherlands) and international organizations (FAO, IFAD, GRA and IICA).

5. To achieve sustainable food systems, healthy soils play a key role. We emphasize that the efforts should be focused on sustainable management of soils, through those best management agricultural practices suitable to each region with aim of increasing agricultural productivity growth at a global level.

6. Acknowledging the potential of sustainable soil management to achieve food security against the background of changing climate conditions and a growing world population, we support the working group jointly led by France and Russia in order to reinforce global cooperation on three initial priorities: (a) harmonized sampling, analysis and accessibility of soil related data, (b) soil organic carbon management and (c) microbial soil biodiversity. The activities of this working group will be evaluated against the GRCP principles at next MACS in 2019. This comprises the active collaboration with existing global and national initiatives on soil matters, for example the Global Soil Partnership (GSP).

7. We note that genome editing could impact many of the issues highlighted in ministerial declarations and in some of the previous communiques such as sustainable food future, food security, climate change, food loss and waste, healthy soils and antimicrobial resistance, among others.

8. There is substantial investment already in many of the G20 countries on genome editing research. There is significant potential from technologies such as increasing the scale, scope and speed of the production of novel traits. We underline the importance of developing genome editing based on sound research, risk assessments, previous experience, foresight, socio-economic studies, and early participation of consumers and other stakeholders in public sector research. We discussed the importance of systemic and interdisciplinary approaches applied to meet global food system challenges.

9. We recognize the increasing importance of gene banks and in situ conservation for agricultural productivity, adaptation to climate change, greater resilience and sustainability. There is a need to promote awareness and commitment from national, regional and local governments to maintain and support conservation and phenotypic and genotypic characterization of genetic resources. We recognize that this added value will be expressed by using genetic resources for breeding purposes to tackle the challenges of sustainable food and nutritional security. We noted the development in

harnessing genetic diversity since the MACS 2014. We support a working group jointly convened by United Kingdom and other partners to build on and develop the work of existing global genetic diversity initiatives through enhanced international collaboration.

10. We support "agroecosystem living labs" (ALL) approaches that integrate the social and natural sciences and involve farmers early and throughout the co-development of practical and effective ways to build resilience, improve environmental performance and achieve sustainable intensification of agricultural production. Therefore, we recommend that G20 Agriculture Ministers support these interdisciplinary approaches which involve farmers, scientists and other interested stakeholders, in the co-design, monitoring and evaluation of new and existing agricultural practices and technologies on working landscapes to ensure their early adoption. We also support the establishment of a working group jointly led by Canada and the United States to advance utilization of ALL and welcome participation by G20 members.

11. We recognize the need to increase global cooperation on transboundary issues such as the mobility of pests and diseases, and the adaptation of cropping and livestock systems to climate change and climate variability. To achieve advances there is a need to standardize data collection methods, to support the coordination of different national efforts and to identify key areas for capacity building. We recognize the role of the International Plant Protection Convention (IPPC) and World Organization for Animal Health (OIE).

12. We recognize the need to follow up the agricultural technology sharing (ATS).

13. Finally, we acknowledge that Argentina maintains and updates during its presidency the MACS-G20 Website, established by Germany in 2017.