

Fourth Meeting of G20 Agricultural Chief Scientists Izmir, 27-29 July 2015

Communiqué

The fourth Meeting of G20 Agricultural Chief Scientists (MACS) was held in Izmir, Turkey on 27-29 July 2015, chaired by Turkey as G20 Presidentⁱ.

Infrastructure investment and investment to increase agricultural productivity, enhancing human capital in smallholder agriculture (especially that of youth and women), reducing food loss and waste (FLW), and mainstreaming food security and nutrition in other G20 tracks are consistent with and support the G20 Food Security and Nutrition (FSN) Framework, clearly contribute to the achievement of more sustainable food systems, are all global concerns, and are in harmony with Turkey's G20 priorities of inclusion, investment, and implementation.

G20 Agriculture Ministers remarked in the 2015 Ministerial Communiqué that MACS has an important role to play in promoting international collaboration to identify global research priorities, such as jointly addressing climate change and food security, efficient use of natural resources, and improving soil fertility, and in facilitating collaboration between public and private sector organizations in the key areas most likely to drive sustainable productivity gains. MACS considered these needs and proposed ways to support the G20 agenda on agriculture and food security issues, with a particular focus on supporting transition towards sustainable agricultural and food systems.

MACS welcomed the efforts of Australia, the United States of America (USA) and the United Kingdom (UK) in taking forward the G20 2014 MACS outcomes, the G20 MACS White Paper on Metrics of Sustainable Agricultural Productivity, and Mapping G20 MACS priorities to facilitate research alignment or collaboration and reduce gaps, overlaps or needless competition, respectively, and the Report on Improved Agricultural Productivity through enhanced collaboration and information sharing among G20 countries. MACS also appreciated the progress of the Wheat Initiative which launched in 2011.

In order to ensure continuity of MACS' work, delegates emphasized the importance of information sharing and the exchange of experiences and good practices to maximize synergies between G20 Agricultural Chief Scientists and other organizations/initiatives. MACS noted that its efforts can bring significant spillover benefits to other countries from investments and capabilities within the G20.

MACS emphasized the importance of the G20 troika process for strengthening collaboration and maintaining continuity for MACS.

Agricultural Research, Innovation and Investment

MACS recognized the impressive state of Turkish agriculture and the complementary research and development system to support agricultural innovation.



- MACS acknowledged the needs for high quality research and for mechanisms to apply this to different states of agricultural development, in particular the potential benefits of better engaging women and youth.
- MACS recognized the importance of social and economic sciences and their necessary interaction with agricultural science and technology for the delivery of successful action to tackle global challenges.
- In discussing national research priorities, MACS noted significant similarities in priorities across countries, such as pest and disease management, new technologies, novel and integrated systems, resilience to climate change, land, soil and water management, and data sciences.
- MACS agreed to continue the efforts of the Working Group on Metrics of Sustainable Agricultural Productivity. To support the promotion of international collaboration in key areas likely to drive sustainable productivity gains and reduce losses, MACS agreed to build on the findings of the G20 MACS Research Priority Mapping Exercise by establishing a working group led by UK of interested countries focusing on animal diseases, in particular high priority vaccines. The Working Group will explore the alignment of research priorities and collaboration with the aim of reducing gaps and avoiding duplication with due consideration to other existing efforts e.g., by FAO/WHO/OIE and STAR-IDAZ.

Agricultural Research Related to Food Loss and Waste (FLW)

- An important theme of the fourth MACS was FLW, a global problem of enormous economic, environmental and societal significance. MACS brought to attention that the three pillars of agricultural sustainability "economy, environment and society" need to be considered.
- MACS received information on a major Turkish initiative to reduce FLW, and FAO provided an update on its process to establish a platform for sharing information and experiences in measuring and reducing FLW as tasked by the G20 Agriculture Ministers.
- MACS emphasized the importance of science and technology, pre- and post-harvest and throughout the food value chain, to reduce FLW including the control of plant and animal diseases, enhanced storage technologies, innovative packaging solutions, prolonged shelf life, creation of value added byproducts, and improved management practices.
- To support FAO, IFPRI, and other relevant international organizations in their efforts to develop a platform related to FLW, MACS agreed to share information and experiences relating to agricultural science and technology, in measuring and reducing FLW. MACS emphasized the value of having a common definitional and measurement framework as noted by Agriculture Ministers.



MACS agreed that a subset of members, led by Germany and in consultation with FAO and IFPRI, would conduct a preliminary mapping of their existing science and technology activities related to FLW, so as to contribute to enhanced information sharing and global coordination.

¹ Participants included delegations from G20 countries and G20 guests (Australia, Canada, China, European Union, France, Germany, Italy, Japan, Russia, Spain, United Kingdom, United States of America), International Organisations (International Center for Agricultural Research in the Dry Areas[CGIAR], International Centre for Advanced Mediterranean Agronomic Studies[CIHEAM],Food and Agriculture Organization of the UN [FAO], Global Forum on Agricultural Research [GFAR], International Center for Agricultural Research in the Dry Areas[ICARDA], Organisation for Economic Cooperation and Development [OECD], and The Wheat Initiative).