

1- We, the G2O Ministers of Agriculture, highlight our countries' central role in the global food system, representing about 60 percent of all agricultural land and about 80 percent of world trade in agricultural products. We acknowledge that this entails the great responsibility to actively contribute to enhance global food security and improve nutrition by increasing agricultural productivity and incomes, while fostering the sustainable management of natural resources. We recall the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs) as a milestone towards global sustainable development and a valuable framework for collective action. We are aware that the fight against the scourge of hunger and malnutrition in all its forms can only be addressed collaboratively, by sharing our views and experiences on the matter, coordinating actions and joining efforts of all national and international actors. Therefore, we will also cooperate with other relevant G20 work streams. In this context, we commit to work together in the following subjects.

2- We, the G2O Agriculture Ministers, while strengthening adaptive capacity of food systems, agree that agriculture contributes to addressing global challenges such as a changing climate. In that regard, we recall the respective commitments taken by the leaders at the G2O meeting in Hamburg:

"We take note of the decision of the United States of America to withdraw from the Paris Agreement. The United States of America announced it will immediately cease the implementation of its current nationally-determined contribution and affirms its strong commitment to an approach that lowers emissions while supporting economic growth and improving energy security needs. The United States of America states it will endeavour to work closely with other countries to help them access and use fossil fuels more cleanly and efficiently and help deploy renewable and other clean energy sources, given the importance of energy access and security in their nationally determined contributions.

The Leaders of the other G2O members state that the Paris Agreement is irreversible. We reiterate the importance of fulfilling the UNFCCC commitment by developed countries in providing means of implementation including financial resources to assist developing countries with respect to both mitigation and adaptation actions in line with Paris outcomes and note the OECD's report "Investing in Climate, Investing in Growth". We reaffirm our strong commitment to the Paris Agreement, moving swiftly towards its full implementation in accordance with the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances."

I - SUSTAINABLE FOOD FUTURE

3- We are concerned that, after many years of decline, global hunger increased in 2016 and now affects 815 million of the world population, and that about 2 billion people suffer from micronutrient-deficiencies. We are committed to work collaboratively



toward our goals of ending hunger and promoting sustainable agriculture, to achieve a sustainable food future in which all people, at all times, have access to sufficient, safe and nutritious food for an active and healthy life, in line with the 2030 Agenda and its Sustainable Development Goals. We are aware of the significant challenges that must be addressed to attain food security for a global population that is expected to reach 8.5 billion by 2030, as laid out in the G20 Food Security and Nutrition Framework and in the Global Strategic Framework for Food Security and Nutrition of the Committee on World Food Security.

4- We note that hunger and malnutrition have multiple causes, and that many of these challenges transcend national borders. We also note that the development of sustainable food systems contributes to tackling challenges like the displacement of people. A sustainable, integrated and inclusive future for food systems requires our concerted efforts and can only be achieved on the basis of collaboration among governments, international organizations, farmers' community, civil society, the various stakeholders in the food supply chain and the educational and research communities.

We are committed to strengthening the international mechanisms we have created to jointly and collaboratively achieve the goal of a world free of hunger and malnutrition in all its forms, address the challenges of food security and nutrition and take into consideration the Voluntary Guidelines to support the Progressive Realization of the Right to Adequate Food in the context of national food security and the relevant work of the Committee on World Food Security.

5- We acknowledge that family farmers, smallholders, women and young people living in rural areas are important actors in the fight against food insecurity and malnutrition in all its forms. To achieve integrated, inclusive and equitable development, and to better protect disadvantaged and vulnerable population groups, we need to take targeted measures, in order to: (i) improve opportunities to diversify agri-food production and increase productivity, production, incomes and employment in a sustainable manner; (ii) improve their integration into related value chains and transparent and efficient markets; (iii) ensure and promote the safety and quality of food in line with internationally agreed standards; (iv) enhance regenerative, sustainable land, soil and water management and the sustainable use of biodiversity (v) improve adaptation to changing environmental conditions, such as increasingly frequent and intense extreme weather events, and promote resilience; (vi) strengthen the infrastructure needed for urban-rural integrated development and agricultural connectivity; (vii) provide quality education and create enabling environments to improve employment; (viii) strengthen access to the financial system, risk management instruments and output markets; (ix) encourage the development of and access to a range of new research and technologies that increase agricultural productivity and sustainability, especially those that enhance opportunities for the rural youth.

6- We recognize that agricultural development, investment and trade, as well as the use of improved technologies, have been essential drivers of human progress in recent



decades and of the improvement in the living conditions of millions of people around the world. As a result, we highlight the importance of both encouraging the use of innovative agricultural practices and technologies that improve the productivity and sustainability of agriculture, as well as efficiently bringing such innovations to farmers and the global marketplace. This would contribute to provide farmers around the world, especially the rural youth, with greater access to the full range of tools and technologies available, while creating quality employment opportunities. We are ready to actively engage in the International Year of Plant Health (IYPH) to address collectively the new challenges of agriculture.

7- We recognize that the increasing frequency and intensity of extreme weather events and their impacts on agriculture call for an integrated approach to risk management. Such approach requires supporting national and international efforts to prepare and respond to extreme events, as well as risk reduction and transfer, especially for the most vulnerable. Strengthening the capacities to manage risk makes the agricultural sector more resilient, dynamic, attractive for responsible investment and capable of adopting innovations. Therefore, we encourage collaboration among countries, international organizations, civil societies, the educational and research communities and the private sector to strengthen risk management, facilitate adaptation to a changing environment and provide efficient and effective responses to reduce the impacts of extreme weather on agriculture. In this regard, we acknowledge the contribution brought by the G-20-initiated Platform for Agricultural Risk Management (PARM) to the agenda of promoting holistic approaches to risk assessment and risk management in the agriculture sector and we encourage the G20 Agricultural Chief Scientists (MACS) to give scientific contribution for improving the available risk assessments and management tools for possible further decisions.

8- We believe that the challenges of achieving food security and nutrition and promoting sustainable agriculture in a changing climate and biosphere, can and must be addressed jointly and collaboratively. We will promote sustainable agriculture and the fight against climate change through collaborative partnerships, encouraging interdisciplinary approaches and involving farmers in the co-development and evaluation of sustainable agriculture systems, to accelerate the adoption of new technologies and management practices, and to revitalize sustainable traditional farming systems. In this regard we welcome the May 2018 communique of MACS, and in particular their support for Agroecosystem Living Labs which work in close collaboration with farmers and other stakeholders. With the right policies, investments and technologies, agriculture can provide solutions to the challenges posed by climate change while increasing production and productivity in a sustainable manner and thus contribute to the achievement of a sustainable food future. This is enhanced by coherent policy frameworks that create enabling environments for sustainable agriculture and entrepreneurship at all levels, benefiting especially family farmers, women and youth. In particular, we underline the importance of improving land tenure security and integrated water management, technical training and the adoption of innovative and sustainable agricultural practices, involving farmers in the co-development and evaluation of sustainable agriculture systems. We note the



progress made on the G2O-initiated analytical framework for improving agricultural productivity and sustainability, and call on members and OECD, FAO, IFAD, IFPRI/CGIAR and other international organizations to disseminate lessons learnt beyond the G2O. We further note the contribution that South-South and Triangular Cooperation can bring to advancing this agenda beyond the G2O. In this regard, we welcome Argentina's proposal to contribute to the Development Working Group's G2O Initiative on Rural Youth Employment to promote rural youth employment in agriculture.

II -HEALTHY SOILS TO SUPPORT THE ROLE OF AGRICULTURE IN SUSTAINABLE HUMAN DEVELOPMENT

9- As good stewards of the resource we stand by our responsibility to protect soils, water and biodiversity against degradation, loss and pollution. Therefore, we recall our last year's commitments taken under German G20 presidency. We acknowledge that healthy soils are an essential non-renewable part of our planet's natural resources and have a key role in food production, reduction of impacts of frequent and extreme weather events, and deliver essential ecosystem services. Their sustainable management and use is crucial for the contribution of agriculture to sustainable development, in all its dimensions. These essential soil functions are being seriously threatened by degradation in several regions.

10- We are aware that soil and riverbanks degradation and loss of fertile agricultural land, increase our societies' vulnerability, and these are expected to continue to increase in several regions. Sustainable land management, including forest and wetlands, is an important measure to undertake in crop production, soil conservation, fertility and restoration and the regulation of nutrients and quality and quantity of water in order to maintain and restore biodiversity and to enhance resilience to extreme weather events, as well as to mitigate the emission of greenhouse gases, including through carbon sequestration. We appreciate the information contained in the background paper provided by FAO, OECD, IFAD, IFPRI, the World Bank and WTO upon a special request of the Argentine Presidency. We invite G20 members to embark on a voluntary basis on country specific or regional strategies for sustainable crop management that reconcile the objectives of increasing productivity with the protection of soils, water and biodiversity as well as with improving the resilience against climate stress and to share experiences and best practices in this regard.

11- We emphasize the importance of developing and enhancing actions at different levels, including appropriate frameworks, to stimulate national policies to promote soil health, soil carbon sequestration, degraded soil restoration and use of soils in a sustainable manner. These actions should be based on science and empirical evidence and should be oriented to produce food and fiber in order to increase the efficiency of nutrient cycling and applied inputs, to maintain and raise soil fertility and to improve water use efficiency. All of these should be promoted by instruments and policies to encourage soil and land sustainable management, responsible investments for sustainable agricultural production and fostering innovative solutions. The



implementation of the above-mentioned actions should be guided as appropriate by the Voluntary Guidelines for Sustainable Soil Management adopted by FAO Council in 2016. We note the contribution of efforts such as the Global Soil Partnership and the 4 Per Mille Initiative: Soils for Food Security and Climate.

12- We undertake to continue the strengthening of institutions that promote soil health, in multiple dimensions and approaches, and coordinate actions and initiatives among them. We highlight the importance of enhancing the quantity and quality of soil data and information and support the sharing of knowledge and technology to measure, restore, rejuvenate and maintain soil health. Sustainable soil management would be supported by individual countries voluntarily striving to better harmonize data within a common framework and improve information systems for a continuous monitoring of soils. Important global initiatives, such as the Global Soil Partnership, the Global Soil Information System (GLOSIS) and the Global Soil Map provide essential fora and frameworks for information harmonization. In this regard we commend the work done to reinforce global cooperation on soil by the G20 Agricultural Chief Scientists (MACS) in their last meeting in Jujuy and invite them to continue cooperating with such global initiatives.

13- We recognize that some segments of the bioeconomy have an impact on land, soils and associated biological processes. However, the bioeconomy based on the responsible use of natural resources and the conversion of agricultural waste streams into value added products, has the potential to significantly contribute to achieving food security and, furthermore, it can be effectively used to develop rural spaces and economies, and to meet ambitious environmental goals. Therefore, we underline the importance of the development of the bioeconomy for the effective implementation of production systems that ensure sustainable soil use. In this context we recall the importance of sustainable management of forests. The exchange of experiences on policy measures and knowledge on new technologies contributes to the creation and diversification of conditions that promote the development of sustainable production systems and strengthen rural and urban economies.

14- We acknowledge that land-use management, and secure land tenure, are valuable tools for sustainable soil management. Loss of agricultural land, including soil sealing, due to urban expansion, and infrastructure development, which is often carried out at the expense of fertile agricultural soil, can be a threat to potential agricultural production, and its associated ecosystem services. We encourage an open discussion of this topic, promoting consensus, to facilitate the sustainable use of territory's potential, as a basis for the establishment and progress of our society.

III - INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTs)

15- We reaffirm that the rapid and constant growth of ICTs and their applications in agriculture contribute to agricultural productivity and profitability, food security and nutrition and to promote sustainable agriculture. We concur on the need to continue G20 discussions, as initiated by the Chinese Presidency and carried forward by the



German Presidency, on their potential opportunities and impacts, particularly on women and small and family holders, addressing scientific and technological issues, as well as institutional, commercial and trade-related aspects. It will also be necessary to further explore the possibilities for establishing ICT cooperation mechanisms. We acknowledge that ICTs development and use in the agricultural sector have an important role for its attractiveness, especially for rural youth.

16- We note that the current flood of data, information and communication suggests the need to balance the Big Data and Smart Analytics approaches, as well as the promotion of skilled farmers and professionals capable of interpreting data streams. Real benefits will need the development and dissemination of smarter decision support systems, and a robust interaction with R&D systems and communities. They will also require building a confident climate to enable farmers and stakeholders to share data, making the benefits from digitalization as inclusive as possible.

17- We emphasize the need to promote academic, scientific and technological activities, and foster interdisciplinary experience exchanges at institutions and cooperatives. This will improve the development of a new generation of ICT application in agriculture, considering the needs, opportunities and challenges of future farming and the bio-economy. Digitalization also opens opportunities for better management of soils and natural resources.

18- We support interdisciplinary collaboration and inter-institutional arrangements on innovation in agricultural ICTs, fostering discussions, knowledge and views exchange to enhance agricultural ICT application. In this regard, we note the work done by the Meeting of G2O Agricultural Chief Scientists (MACS) in their previous meetings. We also welcome the FAO and other organizations efforts on global mapping, foresight and discussions of ICT strategies.

IV - FOOD LOSS AND WASTE

19- We are convinced that reducing "food loss and waste" is a 'triple win': (i) increasing food security; (ii) alleviating pressure on climate, water and land resources; and (iii) improving income for farmers, agri-food businesses and the household economy.

20- We reaffirm that this issue requires a comprehensive food systems approach, covering all levels of the agri-food value chains, from production in the field, through harvest and postharvest, storage, transport, processing and distribution, and up to the consumer level; including prevention and awareness-raising, as a priority in policy development, in order to reach sustainable food systems.

21- We will increase efforts to engage with the private sector in making the investments and developing the technologies and best practices needed to enhance productivity, efficiency and sustainability in food value chains. We encourage the initiatives working to reduce food loss and waste, and in this context, we recognize the work done by charitable organizations, and further support the collaboration between FAO and United Nations Environment Programme.



22- We call to emphasize the role of the Technical Platform on the Measurement and Reduction of Food Loss and Waste launched under the Turkish G20 Presidency, and to take advantage on the activities and networks which have evolved further following the MACS-G20 Workshop on Food Loss and Waste held in Berlin on June 20-22, 2017.

We support the concept for an International Day of Awareness of Food Loss and Waste, as a special observance of United Nations, in order to generate knowledge, and to raise and promote international awareness and action on these issues. Therefore, we encourage FAO members to initiate the relevant process within FAO for submission to the UN Secretary General.

V - TRADE, INVESTMENT AND TRANSPARENCY OF AGRICULTURAL MARKETS

23- We recognize the importance of an open and transparent multilateral trading system, based on rules as agreed by WTO members, to achieve the objectives of a sustainable food future, job creation, hunger and poverty eradication, and inclusive economic growth, to promote sustainable agri-food supply chains and also to foster the responsible agricultural investment needed to increase productivity in the sector and thus address the growing demand for food.

24- Recognizing the important role of the WTO, we agree to continue the reform process of agricultural trade rules within the given mandate.

25- We are concerned about the increasing use of protectionist non-tariff measures, inconsistently with WTO rules. We affirm both our rights and obligations under the WTO agreements as well as our commitment to base our sanitary and phytosanitary measures and technical regulations on international standards, guidelines and recommendations set by relevant international organizations, or assessment of risk as appropriate to the circumstances, as well as to refrain from adopting unnecessary obstacles to international trade. In this context, we welcome and support the initiative launched by the World Organization for Animal Health (OIE) to develop an Observatory that monitors the implementation of its standards at a national or regional level in order to identify the difficulties and constraints of its Members and to propose solutions. We also welcome and support the International Plant Protection Convention (IPPC) decision on developing a globally harmonized Electronic Phytosanitary Certification Basis (ePhyto) as a concrete and efficient way of facilitating international trade.

26- We recognize the importance of responsible investment through the application of internationally accepted principles and good practices, including the Voluntary Guidelines for the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security and the Principles for Responsible Agricultural Investment adopted by the Committee on World Food Security (CFS) and the OECD-FAO Guidance for Responsible Agricultural Supply Chains among others, as appropriate for countries concerned, due to the contribution to economic and social development of farmers, particularly women smallholders and its potential multiplier effect in other sectors. We encourage consistent efforts by the private



sector and other stakeholders to engage in investment dialogue and welcome innovative cooperation modalities to promote responsible investment facilitation.

27- We recognize that regional and global agricultural and food value chains play an important role in increasing productivity, diversifying and adding value to farmer's production and generating income and decent employment, promoting development in a more equitable and inclusive manner. In this context, we recognize the importance to promote the dynamism of rural areas, through all possible tools, including for instance agri-tourism. We welcome the ongoing efforts by the G20 Labour and Employment Ministers to promote decent work and the formalization of jobs, aided by ongoing skills development. We reiterate that it is vital for farmers to be profitable and, along with consumers, to have access to national, regional and international markets. We, therefore, welcome the inclusion of the issue of agri-food global value chains in the agenda of the G20 Trade and Investment Working Group. We intend to consider their findings, including discussing how we, the G20 agriculture ministers, can better contribute to increase countries and farmers' participation in GVCs, in particular of small-holders, so they can benefit from food production and distribution networks.

28- We believe that better-functioning markets can contribute to reducing food price volatility and enhance food security. To promote transparency in global food markets, we confirm our commitment to strengthen the Agricultural Market Information System (AMIS), which should further evolve and also consider exploring the monitoring of food trade junctures that are important to international trade. We call for an active engagement of all G20 members to support this unique initiative, both by providing regular and reliable information and discussing options to provide adequate resources to the AMIS Secretariat.

29- We undertake to continue support for GEOGLAM's activities on enhancing national and global agricultural monitoring using earth observations. We recognize this as amongst the key mechanisms to promote transparent markets and food security.

30- We recognize that the MACS has an important role in providing science-based insights and contributions on emerging challenges and topics to support the G20 Agriculture Ministers in building a shared vision related to the evolution of the global agri-food system. It is also a common space to strengthen synergy and scientific cooperation of G20 members in key fields of agricultural science, technology and innovation as a contribution for the sustainability of the agriculture and food security.

VI - ANTIMICROBIAL RESISTANCE (AMR)

31- We emphasize the importance of combating AMR in a "One Health" approach promoting access to affordable and quality antimicrobials, vaccines and diagnostics, based on well-developed national action plans. We recollect the call of the G20 leaders at the 2017 Hamburg Summit to tackle the spread of AMR in humans, animals and the environment.



We will promote interdisciplinary and inter-sectoral approaches, as well as joint actions with the Ministries responsible for human health, animal health, environment and research in order to design national policies and help their implementation by the relevant stakeholders, mainly through "One Health-based" national action plans. Furthermore, we acknowledge the need:

(i) To foster awareness of AMR through dissemination activities and the inclusion in educational curricula for all relevant professions, from initial levels to degree programs.

(ii) To encourage public-private cooperation, supporting the scientific community for the research and development of new antimicrobials as well as new technologies (e.g. rapid diagnostics, vaccines and alternative treatments) that help prevent infection and reduce inappropriate antimicrobial use.

(iii) To promote good practices, preventive measures and health care in order to reduce the need for and optimize the use of antimicrobials in agriculture while striving to restrict it to therapeutic use alone. To foster the prudent and responsible use of antimicrobials, particularly those important for therapeutic use in humans, taking into account WHO's list of critically important antimicrobials for human health and national lists established on the basis of scientific risk assessments carried out taking into account chapter 6.10 of the OIE Terrestrial Animal Health Code. The prudent and responsible use of antimicrobials does not include their use for the promotion of growth in the absence of a risk analysis conducted in accordance with CAC / GL 77-2011.

(iv) To support multi-disciplinary approaches and ongoing implementation of Global Action Plan on Antimicrobial Resistance developed by the World Health Organization with the active contribution of the FAO and OIE in the spirit of One Health.

We call on FAO, OIE and WHO to collaborate to improve the prudent use of antimicrobials and on infection prevention to safeguard human and animal health (terrestrial and aquatic), our common food systems, and support scientific collaboration to address knowledge gaps regarding AMR in the environment, in cooperation with other institutions such as UNEP.

VII - STOCKTAKING

32- We welcome the first stocktaking exercise of the initiatives launched by the G20 Agriculture Ministers since the French Presidency (2011), adopted under the German Presidency. A summary statement of it is attached to this Declaration. We recognize the value of continuing to monitor the evolution of these initiatives to ensure their continuity, relevance and consistency.