



Seventy-eighth session
Agenda item 18
Sustainable development

Resolution adopted by the General Assembly on 19 December 2023

[on the report of the Second Committee (A/78/461, para. 53)]

78/144. Agricultural technology for sustainable development

The General Assembly,

Recalling its resolution [76/200](#) of 17 December 2021,

Reaffirming its resolution [70/1](#) of 25 September 2015, entitled “Transforming our world: the 2030 Agenda for Sustainable Development”, in which it adopted a comprehensive, far-reaching and people-centred set of universal and transformative Sustainable Development Goals and targets, its commitment to working tirelessly for the full implementation of the Agenda by 2030, its recognition that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development, and its commitment to achieving sustainable development in its three dimensions – economic, social and environmental – in a balanced and integrated manner, and to building upon the achievements of the Millennium Development Goals and seeking to address their unfinished business,

Reaffirming also its resolution [69/313](#) of 27 July 2015 on the Addis Ababa Action Agenda of the Third International Conference on Financing for Development, which is an integral part of the 2030 Agenda for Sustainable Development, supports and complements it, helps to contextualize its means of implementation targets with concrete policies and actions, and reaffirms the strong political commitment to address the challenge of financing and creating an enabling environment at all levels for sustainable development in the spirit of global partnership and solidarity,

Expressing concern about the high level of global hunger, which affected between 691 million and 783 million people in 2022,

Recognizing that sustainable, affordable and context-specific agricultural technology has a beneficial impact on and an important role in the successful implementation of the goals and targets of the 2030 Agenda, and in that regard taking note with appreciation of the report of the Secretary-General on progress towards the



Sustainable Development Goals,¹ the *Global Sustainable Development Report* and the Secretary-General's strategy on new technologies,

Recognizing also that the agriculture sector is inextricably linked with the entire food system and that agricultural technologies, innovations and digitalization can be enablers of efforts to make agrifood systems more efficient, inclusive, equitable, resilient and sustainable and add value throughout the agrifood system by improving the sustainability of production, harvesting, storage, transport, trade, processing, transformation, retail, loss and waste reduction and recycling, as well as interactions among these processes, and that it is necessary to identify and analyse opportunities, risks and trade-offs associated with technologies and to ensure the availability, accessibility and affordability of relevant technologies for small-scale producers, family farmers and all actors of the agrifood system,

Recalling the Rome Declaration on Nutrition, adopted at the Second International Conference on Nutrition,² the United Nations Decade of Action on Nutrition (2016–2025)³ and the United Nations Decade on Ecosystem Restoration (2021–2030),⁴ taking note of the Nutrition for Growth Summit held in Tokyo in 2021, and looking forward to the Nutrition for Growth Summit to be held in Paris,

Recalling also the United Nations Decade of Family Farming (2019–2028),⁵ noting the report on its implementation,⁶ and that sustainable agricultural technology, digitalization, as well as technological, social, economic and institutional innovations, build on the knowledge, capacities and a science base to respond to the needs and realities of smallholder and family farmers, in particular women and youth and Indigenous Peoples in rural areas, and in that regard highlighting the importance of innovation-driven development and support to entrepreneurship and innovation that embraces both traditional good practices and innovations, secures access for family farmers to sustainable, affordable and context-specific innovations, technologies and connectivity, and leverages the potential for innovation among young family farmers, and welcoming new sustainable agricultural technologies and approaches that can increase productivity and food safety and resilience, contributing to their transition from subsistence farming to innovative, commercial production and helping them to increase in a sustainable manner their own food security and nutrition, generate marketable surpluses and add value to their production,

Taking note with appreciation of the United Nations Food Systems Summit +2 Stocktaking Moment, convened by the Secretary-General from 24 to 26 July 2023 and hosted by the Government of Italy at the Food and Agriculture Organization of the United Nations in collaboration with the United Nations system in Rome,

Stressing the need to design sustainable agrifood systems that conserve the natural resource base and enhance the provision of ecosystem services, while increasing productivity, and that respond to the challenges posed by, inter alia, climate change, the depletion and scarcity of natural resources, urbanization and globalization, and recognizing that agricultural technology, innovation and digitalization can contribute to food security and nutrition and help to build resilience,

Recognizing the need to further enhance the linkages and synergies between agricultural technology and sustainable agricultural practices, including agroecological and other innovative approaches, resource use efficiency, including sustainable use

¹ [A/78/80-E/2023/64](#).

² World Health Organization, document EB136/8, annex I.

³ See resolution [70/259](#).

⁴ See resolution [73/284](#).

⁵ See resolution [72/239](#).

⁶ [A/78/233](#).

of existing domestic agricultural resources acknowledging diversity in circumstance, circular economy, recycling, optimizing external inputs, integration, crop rotation and diversification, no-tillage, soil health monitoring, agroforestry and regenerative agricultural practices, by effectively combining safe use and appropriate technologies, including biotechnologies, with traditional and Indigenous knowledge, in order to design sustainable farming systems that strengthen the interactions between plants, animals, humans and the environment for food security and nutrition as well as promote the realization of the right to adequate food, enhance productivity, increase adaptive capacity and reduce greenhouse gas emissions, improve nutrition, conserve the natural resource base and attain more sustainable and innovative agrifood systems,

Noting with concern the findings contained in the synthesis report of the Intergovernmental Panel on Climate Change sixth assessment report,

Reaffirming the Paris Agreement⁷ and its early entry into force, encouraging all its parties to fully implement the Agreement, and parties to the United Nations Framework Convention on Climate Change⁸ that have not yet done so to deposit their instruments of ratification, acceptance, approval or accession, where appropriate, as soon as possible,

Seriously concerned about the findings of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, and stressing the urgent need to step up efforts to prevent the loss of biological diversity and the degradation of land and soil and promote efforts for their conservation and their sustainable use,

Welcoming the adoption on 19 December 2022 of the Kunming-Montreal Global Biodiversity Framework, at the fifteenth meeting of the Conference of the Parties to the Convention on Biological Diversity,

Recalling the adoption of the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns by the United Nations Conference on Sustainable Development in 2012,⁹

Taking note with appreciation of the United Nations Conference on the Midterm Comprehensive Review of the Implementation of the Objectives of the International Decade for Action, “Water for Sustainable Development”, 2018–2028, held in New York from 22 to 24 March 2023, and the Sustainable Development Goals Summit held in New York on 18 and 19 September 2023, noting the twenty-seventh session of the Conference of the Parties to the United Nations Framework Convention on Climate Change, held in Sharm el-Sheikh, Egypt, from 6 to 20 November 2022, and the adoption of its decision on the Sharm el-Sheikh joint work on the implementation of climate action on agriculture and food security, and looking forward to the twenty-eighth session of the Conference of the Parties, to be held in Dubai, United Arab Emirates, from 30 November to 12 December 2023,

Recalling the United Nations strategic plan for forests 2017–2030,¹⁰ taking note of the Glasgow Leaders’ Declaration on Forests and Land Use, and acknowledging that forests and trees outside forests provide essential ecosystem services, such as timber, food, fuel, fodder, non-wood products and shelter, as well as soil and water conservation and clean air, and that forests and trees outside forests contribute substantially to climate change mitigation and adaptation and to the conservation of

⁷ Adopted under the UNFCCC in [FCCC/CP/2015/10/Add.1](#), decision 1/CP.21.

⁸ United Nations, *Treaty Series*, vol. 1771, No. 30822.

⁹ [A/CONF.216/5](#), annex.

¹⁰ See resolution [71/285](#).

biodiversity, prevent land degradation and desertification and reduce the risk of floods, landslides and avalanches, droughts, dust and sand storms and other disasters,

Taking note with appreciation of the activities of the Technology Bank for the Least Developed Countries since its operationalization, and encouraging continued support to the Bank,

Recognizing the rapid evolution in science and technological innovation and digitalization, and that the development and open access to mega data and information will bring about profound changes in agricultural research, agricultural extension and rural development,

Stressing the importance of rapid technological change in ensuring food security by 2030, and encouraging the adoption of the most advanced and appropriate information technology in agriculture systems, and calling for enhanced international cooperation to facilitate access and promote investment in research, technology and infrastructure,

Recognizing the need to mobilize and scale up financing for science, technology and innovation, especially in developing countries, in support of the Sustainable Development Goals, particularly Goal 2,

Recognizing also that a systems approach to agricultural innovation is essential to ensure that innovations, including technologies and effective approaches, are evidence-based, are aligned towards common objectives, promote collaboration, address problems relevant to farmers, and offer incentives to, and the means to accelerate adoption by, smallholder and family farmers, and that it is essential to enable interactions and knowledge flows among the different stakeholders in agricultural innovation systems, including farmers' organizations, national agricultural research systems, extension and advisory services, governments, international organizations, the private sector and civil society,

Recalling the report of the Secretary-General entitled "Road map for digital cooperation", presented on 11 June 2020,¹¹

Noting the creation of the Secretary-General's Scientific Advisory Board for Independent Advice on Breakthroughs in Science and Technology,

Stressing the need to support and strengthen information systems and statistical systems for better disaggregated data collection, including sex-disaggregated data, processing and interoperability, which will be key in monitoring progress in the adoption of sustainable agricultural technologies and their impact on improving food security, nutrition and sustainable agriculture, and noting the Committee on World Food Security policy recommendations on strengthening collection and use of food security and nutrition data and related analysis tools to improve decision-making in support of the progressive realization of the right to adequate food in the context of national food security, adopted in October 2023,

Emphasizing that participatory research, in conjunction with effective, pluralistic and demand-driven extension and rural advisory services, is critical in order to ensure that agricultural technologies respond to the demands and needs of all farmers, including women, smallholder and family farmers, especially in supporting more efficient, inclusive, equitable, resilient and sustainable agrifood systems that can deliver nutritious food,

Recalling the Sendai Declaration and the Sendai Framework for Disaster Risk Reduction 2015–2030, adopted at the Third United Nations World Conference on

¹¹ [A/74/821](#).

Disaster Risk Reduction,¹² and the convening of the high-level meeting of the General Assembly on the midterm review of the implementation of the Sendai Framework for Disaster Risk Reduction 2015–2030, at United Nations Headquarters in New York on 18 and 19 May 2023,

Recalling also the Buenos Aires outcome document of the second High-level United Nations Conference on South-South Cooperation, held in Buenos Aires in March 2019,¹³

Recalling further all relevant strategies and programmes of action for the least developed countries, landlocked developing countries and small island developing States, including the Doha Programme of Action for Least Developed Countries,¹⁴ the Vienna Programme of Action for Landlocked Developing Countries for the Decade 2014–2024¹⁵ and the SIDS Accelerated Modalities of Action (SAMOA) Pathway,¹⁶ recalling the Fifth United Nations Conference on the Least Developed Countries, held in Doha, looking forward to the convening of the third United Nations Conference on Landlocked Developing Countries, in Kigali in June 2024, and the fourth United Nations Conference on Small Island Developing States, in Antigua and Barbuda in May 2024, reaffirming the importance of supporting Agenda 2063 of the African Union and the programme of the New Partnership for Africa's Development,¹⁷ and recognizing the major challenge to the achievement of durable peace and sustainable development in countries in conflict and post-conflict situations,

Noting with great concern the severe negative impact on human health, safety and well-being caused by the coronavirus disease (COVID-19) pandemic, as well as the severe disruption to societies and economies and the devastating impact on lives and livelihoods, and that the poorest and most vulnerable are the hardest hit by the pandemic, reaffirming the ambition to get back on track to achieve the Sustainable Development Goals by designing and implementing sustainable and inclusive recovery strategies to accelerate progress towards the full implementation of the 2030 Agenda for Sustainable Development and to help to reduce the risk of and build resilience to future shocks, crises and pandemics, including by strengthening health systems and achieving universal health coverage, and recognizing that equitable and timely access for all to safe, quality, effective and affordable COVID-19 vaccines, therapeutics and diagnostics are an essential part of a global response based on unity, solidarity, renewed multilateral cooperation and the principle of leaving no one behind,

Recognizing that the COVID-19 pandemic and mitigation measures taken in response exposed both strengths and vulnerabilities in agrifood systems, the latter of which caused disruptions to both livelihoods and food supply chains, increased the volatility of food prices and constrained access to food, and that sustainable agricultural technologies, alongside other forms of innovation, can contribute to efficient, inclusive, equitable, resilient and sustainable agrifood systems, which promote healthy diets and improved nutrition,

Stressing the crucial and equal role of women in the agricultural sector and their contribution to enhancing agricultural and rural development, improving food security and nutrition and eradicating rural poverty, and underlining the fact that meaningful progress in agricultural and agricultural technology development necessitates, inter alia, closing the gender gap, introducing appropriate gender-

¹² Resolution [69/283](#), annexes I and II.

¹³ Resolution [73/291](#), annex.

¹⁴ Resolution [76/258](#), annex.

¹⁵ Resolution [69/137](#), annex I.

¹⁶ Resolution [69/15](#), annex.

¹⁷ [A/57/304](#), annex.

responsive interventions at all stages in agricultural innovation processes, including at the policy level, and ensuring that women have equal access to agricultural technologies, related services and inputs and all necessary productive resources, including tenure rights and access to land, fisheries and forests, as well as to affordable education and training, social services, social protection, health care, health services and financial services, and full, equal and meaningful access to and participation in local, regional and international markets,

Recognizing that young people play a significant role in supporting sustainable economic growth and that agricultural technology, innovation and digitalization have an essential role to play in facilitating access to agricultural skills for young women and men, improving the livelihoods of youth, creating quality and decent jobs and contributing to the prohibition and elimination of the worst forms of child labour, strengthening progress towards achieving the realization of the Sustainable Development Goals,

Acknowledging the role and work of civil society, the private sector and academia in furthering progress in developing countries and promoting sustainable agriculture and management practices, including through the use of appropriate agricultural technology, digitalization and the training of smallholder and family farmers, in particular rural women and Indigenous Peoples, and that multi-stakeholder partnerships can contribute to the financing of food security and nutrition as well as sustainable development by mobilizing additional resources through advocacy and innovative funding mechanisms and facilitating the coordinated and targeted use of existing resources, aligning them more effectively with global and national public priorities,

1. *Takes note* of the report of the Secretary-General;¹⁸
2. *Calls upon* Member States to include sustainable agricultural development as an integral part of their national policies and strategies, acknowledges the positive impact of international development cooperation, including North-South, triangular and South-South cooperation, as a complement to, not a substitute for, North-South cooperation, and urges the relevant bodies of the United Nations system to include elements of agricultural technology, innovation, research and extension in efforts to realize the 2030 Agenda for Sustainable Development,¹⁹ with a focus on the research and development of technology that is affordable, durable and sustainable and that can be easily used by and disseminated to smallholder and family farmers, in particular rural women, young and ageing farmers;
3. *Underlines* the importance of supporting sustainable agriculture including agroecology and other innovative approaches and advancing research in improving and diversifying crop varieties and seed systems, as well as supporting the establishment of sustainable and resilient agricultural systems, sustainable management practices and the use of new and existing technologies, such as conservation agriculture, integrated soil fertility management, integrated farming systems, animal disease prevention and control and integrated pest management, precision agriculture, irrigation, livestock husbandry and biotechnologies, in order to make agriculture more sustainable and productive, make food more nutritious and, in particular, make crops and farm animals more resistant to diseases, including drug-resistant infections, considering international standards in this regard, pests and environmental stresses, including the impacts of climate change, drought and extreme rainfall events, in accordance with national regulations and relevant international agreements;

¹⁸ [A/78/228](#).

¹⁹ Resolution [70/1](#).

4. *Recognizes* the important role of family farming and smallholder farming in adapting and developing sustainable, affordable and context-specific innovations and technologies while helping to preserve and promote traditional products, and in contributing to global food security, poverty eradication and sustainability, as well as job creation, and in ending chronic child malnutrition, and in this regard calls upon Member States, academia, the private sector and other relevant stakeholders to adapt agricultural technologies to the needs of small- and medium-scale family farmers and combine them with credit access for sustainable production and significant investment in rural infrastructure as well as the training and education of those who would most benefit from them;

5. *Also recognizes* that strengthening urban-rural linkages can improve both rural and urban food security and nutrition, and in this regard highlights the need for integrated urban and rural agricultural land planning, improved rural-urban transportation links, food processing and packaging technology and cold chain development to reduce food loss, and for effective trade links across the urban-rural continuum, which will contribute to ensuring that small-scale farmers and fishers are linked to local, subnational, national, regional and global value chains and markets;

6. *Requests* relevant United Nations organizations, including the Food and Agriculture Organization of the United Nations, the International Fund for Agricultural Development and the United Nations Conference on Trade and Development, to promote, support and facilitate the exchange of experience among Member States through, inter alia, recommendations and other public goods related to ways to promote sustainable agriculture and increase the productivity and adaptive capacity of agriculture and the use of a broad range of agricultural technologies that support more efficient, inclusive, resilient and sustainable agrifood systems, build long-term fertility, healthy and resilient agroecosystems and secure livelihoods and have a positive impact on the entire value chain, including technology for post-harvest crop storage, processing, handling and transportation, including in pressing environmental circumstances;

7. *Stresses* the importance of indicators that can be used to formulate targeted policies towards the development and adoption of, access to and use of agricultural technology and to measure their impact on the Sustainable Development Goals, and in this regard encourages Member States, in cooperation with all relevant stakeholders, to continue to contribute to the ongoing work of the Statistical Commission on the global indicator framework;

8. *Notes* the need to analyse the potential impacts of agricultural technologies before their implementation, to ensure that agrifood systems are more inclusive, equitable, efficient, resilient and sustainable that can deliver nutritious food, and that fostering synergies between government departments, research institutions, national and international organizations, alliances and coalitions can accelerate the development and adoption of technologies;

9. *Also notes* that the development of and access to new technologies should be combined with the preservation and promotion of traditional knowledge, where relevant, to attract Indigenous Peoples and local communities and enable young people to be drivers of more efficient, inclusive, equitable, resilient and sustainable agrifood systems, that investments are needed to improve inclusive digital literacy and build the digital competencies of young rural people, and that relevant and effective policy frameworks and incentives, regulatory measures and economic and legal instruments should be promoted to ensure equity and inclusion in the development of and access to technologies;

10. *Stresses* the urgent need to enhance adaptive capacity, strengthen resilience and reduce vulnerability to climate change, and urges Member States to

continue to engage in adaptation planning processes and the implementation of mitigation actions;

11. *Also stresses* the need to significantly reduce pre-harvest, post-harvest and other food losses and waste throughout the food supply chain through, inter alia, improved production planning, the promotion of resource-efficient production and processing practices, improved processing, preservation and packing technologies, improved transportation and logistics management and enhanced household and business awareness of food losses and waste prevention, to help all actors in the value chain to enjoy greater benefits and to contribute to environmental protection;

12. *Recognizes* that energy-efficient agrifood systems represent a key component in transitioning to sustainable food and agriculture;

13. *Underlines* the importance of the sustainable use and management of water resources to increase and contribute to agricultural productivity, calls upon stakeholders to promote integrated water resources management in agriculture and adapt agricultural systems to improve their overall water efficiency and water productivity, and their resilience to water stresses, inter alia, by developing and implementing adaptive water and agricultural strategies and action plans based on a comprehensive approach to the long-term availability and variability of all water sources, reducing water scarcity risks through integrated water resources management options, designing and implementing agricultural and landscape management practices that increase the resilience of agricultural systems to water stress and reduce pollution, making rain-fed agriculture systems a more reliable option, investing in an enabling environment and mobilizing the full set of tools available to them, and calls for further efforts to develop and strengthen irrigation facilities and water-saving technology, which can also enhance resilience to the current and projected adverse impacts of climate change;

14. *Calls upon* Member States, academia, the private sector and other stakeholders to harness science, technology and innovation, including co-innovation, by promoting coherent and integrated agricultural innovation systems through participatory research, demand-driven extension and rural advisory services and increased, responsible and inclusive public and private investment, building human capacity, encouraging entrepreneurship, creating an enabling economic and institutional environment and strengthening knowledge flows, in particular between scientists and farmers, taking into account local and traditional knowledge systems, in combination with new sources of knowledge;

15. *Invites* the United Nations system and all relevant stakeholders to consider ways to make available, on mutually agreed terms, data and information relating to agrifood systems, including meteorology, big data, the Internet of things, satellite imagery, early warning systems and other data-based technologies, that could help to build the resilience of smallholder and family farmers, optimize yields and support rural livelihoods;

16. *Recognizes* that weather forecasting and climate services and products allow farmers to better plan agricultural activities, optimize production, manage climate-related risks and integrate climate change adaptation into their decisions, and therefore encourages governments and meteorological agencies to improve the collection, dissemination and analysis of agrometeorological and agroclimatological data and information;

17. *Also recognizes* that advanced technologies, such as big data, the Internet of things, artificial intelligence and machine learning, distributed ledgers, remote sensing and geospatial analysis, have the potential to increase agricultural productivity, improve access to markets and efficiency of inputs, and ensure timely

communication for informed decision-making, while acknowledging that this should be examined carefully to maximize benefits and minimize downsides;

18. *Further recognizes* that sustainable agricultural mechanization can have potential drawbacks but could also help address shortages of labour, ease drudgery, increase incomes, enhance productivity and the timeliness of agricultural activities, promote efficient resource use, enable better market access and attract new investment and talent into agriculture, thereby creating better prospects for sustainable growth and support measures to mitigate climate- and weather-related hazards, and acknowledges that mechanization and digitalization can also create new and higher-paying jobs in agricultural value chains, making it more attractive for youth to stay in rural areas, and in this regard, welcomes the convening of the Global Conference on Sustainable Agricultural Mechanization, organized by the Food and Agriculture Organization, from 27 to 29 September 2023 in Rome;

19. *Recognizes* the important role of information and communications technology, as well as digitalization and e-agriculture, in achieving the Sustainable Development Goals and in improving agricultural productivity, practices and smallholder livelihoods, strengthening agricultural markets and institutions, improving agricultural extension and rural advisory services, empowering farmer communities, keeping farmers and rural entrepreneurs informed about agricultural innovations, weather conditions, input availability, financial services and market prices and connecting them with buyers, and stresses the need to ensure that women and youth and Indigenous Peoples have equitable access to information and communications technology, digitalization and e-agriculture, especially in rural areas, and to close digital divides within and between countries, as well as the gender digital divide, to accelerate the achievement of the Sustainable Development Goals;

20. *Underlines* the instrumental role of agricultural technology, agricultural research and innovation and technology transfer on mutually agreed terms and the sharing of knowledge and practices in furthering sustainable development and in achieving the Sustainable Development Goals, calls, therefore, upon Member States, and encourages relevant international bodies, to support sustainable agricultural research and development, emphasizes that research outputs should be appropriate to the needs of and accessible to end users, including governments, water managers, large-scale private sector enterprises and women, smallholder and family farmers, and in this regard calls for continued support to the international agricultural research system, including the research centres of CGIAR and other relevant international organizations and initiatives;

21. *Recognizes* that agricultural biotechnologies can be harnessed and scaled up to enhance the productivity of agrifood systems, notes with concern that national agricultural research systems in developing countries face barriers such as restricted access, limited funding and regulatory frameworks to use advanced biotechnologies, and in this regard reiterates the need to accelerate the transfer of environmentally sound technologies to developing countries on mutually agreed terms;

22. *Notes* that, according to World Bank estimates, at least 300 billion United States dollars in investments are needed annually to promote sustainable food systems and that many developing countries, particularly low-income countries, are grappling with multiple crises, including extreme weather disasters, constrained fiscal conditions, and escalating interest rates, making it challenging to finance emergency responses while simultaneously investing in sustainable food systems, and in this regard calls upon Member States to promote a concerted effort to jointly mobilize public and private capital, to achieve high-performing food systems;

23. *Urges* Member States, relevant United Nations organizations and other stakeholders to strengthen efforts to improve the development of sustainable

agricultural technologies and their transfer and dissemination on mutually agreed terms to developing countries, especially the least developed countries, in particular at the bilateral and regional levels, and encourages international, regional and national efforts to strengthen capacity and foster the utilization of local know-how in developing countries, especially that of smallholder and family farmers, in particular rural women and youth, in order to enhance agricultural productivity and the nutritional quality of agricultural products, promote sustainable practices in pre-harvest and post-harvest agricultural activities and enhance food security and nutrition-related programmes and policies that take into consideration the specific needs of women, young children and youth, with particular attention to securing the prohibition and elimination of the worst forms of child labour, strengthening progress towards achieving the Sustainable Development Goals;

24. *Recognizes* that recovery efforts from the COVID-19 pandemic present an opportunity to promote sustainability and increase resilience of agriculture and food systems to the impact of the pandemic and future crises, including through the use of technology and innovation in all its forms, including digital services that can increase access to financial services for small-scale producers and family farmers, that are gender-responsive, including in rural areas, to address mobility restrictions and bank closures, agricultural extension services, weather and climate services, and online platforms that can enable producers to sell directly to consumers, leading to increased profits, improved supply chain efficiency, reduced wastage and better financial inclusion, leveraging artificial intelligence in supporting sustainable agriculture, which can help to improve the overall harvest quality and accuracy, and calls upon all relevant stakeholders to continue to develop policies, investments and partnerships that help to realize the potential of technologies to transform agriculture and food systems, while tackling the persistent digital divides, including the gender digital divide, in order to build back better and achieve the Sustainable Development Goals;

25. *Calls upon* Member States and relevant United Nations organizations and other stakeholders to mainstream gender perspectives into agricultural policies and projects and to focus on closing the gender gap by, inter alia, encouraging gender-balanced investments and innovation in small-scale agricultural production and distribution, and a gender-responsive value chain supported by integrated and multisectoral policies, in order to improve women's productive capacity and incomes, strengthen their resilience and achieve equitable access to all forms of financing, markets and networks, labour-saving technologies and agricultural technology information and know-how, equipment, decision-making forums and associated agricultural resources to ensure that agriculture, food security and nutrition-related programmes and policies take into consideration the specific needs of women and the barriers that women face in accessing agricultural inputs and resources;

26. *Encourages* Governments to develop and implement youth-focused agricultural development projects and programmes, including through training, education, financial inclusion services, including microcredit services, and capacity-building, including with regard to innovation, in association with the private sector, in order to stimulate the interest and the involvement of youth in sustainable agriculture;

27. *Remains concerned* that agricultural innovations and technologies often bypass ageing farmers, and in particular ageing women farmers, as many do not possess the financial resources or the skills to adopt new practices, and in this regard stresses the need to strengthen the capacity of ageing farmers through continued access to financial and infrastructure services and training for improved farming techniques and technologies;

28. *Acknowledges* that technological innovations can be supported by financial innovations and financial support, such as de-risking strategies and blended

finance options, and that blended finance mechanisms are new institutional models that link public and private financing and patient capital with equity investments and promote schemes that more effectively distribute investments to small-scale enterprises and producers;

29. *Encourages* Member States, civil society and public and private institutions to develop partnerships to support financial and market services, including training, capacity-building, infrastructure and extension and rural advisory services, and calls for further efforts by all stakeholders to include smallholder and family farmers, in particular rural women and youth, in planning and in taking decisions about making appropriate sustainable agricultural technologies and practices accessible and affordable to them, and strengthen the links between community-based initiatives and financial institutions, including through the promotion of financing tools that foster agricultural sustainability;

30. *Requests* the Secretary-General to submit to the General Assembly at its eightieth session, within existing resources, an action-oriented report that examines the current technological trends and key advances in agricultural technologies, provides illustrative examples of the transformative use of technologies at scale and includes recommendations that assist Member States in accelerating their efforts to implement the relevant goals and targets of the 2030 Agenda, and decides to include in the provisional agenda of its eightieth session the item entitled “Sustainable development”.

*49th plenary meeting
19 December 2023*