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**Submissions from entities in the United Nations system, international
organizations and other stakeholders on their efforts in 2021 to
implement the outcomes of the WSIS**

Submission by

Food and Agriculture Organization

This submission was prepared as an input to the report of the UN Secretary-General on "Progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society at the regional and international levels" (to the 25th session of the CSTD), in response to the request by the Economic and Social Council, in its resolution 2006/46, to the UN Secretary-General to inform the Commission on Science and Technology for Development on the implementation of the outcomes of the WSIS as part of his annual reporting to the Commission.

DISCLAIMER: The views presented here are the contributors' and do not necessarily reflect the views and position of the United Nations or the United Nations Conference on Trade and Development.

Report¹ on activities facilitated, implemented and/or coordinated by the Food and Agriculture of the United Nations (FAO) with regard to the action line(s) and main themes of WSIS outcomes

Part 1: Summary

The Food and Agriculture Organization of the United Nations (FAO) continues to advance innovation and digitalization as drivers of transformation of the agri-food systems towards elimination of hunger, reducing poverty and ushering a better future for all. To support members, FAO has rolled out programs and initiatives to transform the agri-food systems and achieve agenda 2030, such as the [Hand-in-Hand Initiative](#), the *International Platform for Digital Food and Agriculture* and *FAO's 1,000 Digital Villages Initiative*. In addition, FAO has aligned its Strategic Framework (2022-2031)² with the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs) and linked these to the four betters (*better production, better nutrition, better environment and better life*), leaving no one behind.

As the COVID-19 pandemic continued affecting in 2020 and 2021, the food systems are threatened and disrupted further risking derailing the progress to the achievement the SDGs. To address the ongoing COVID-19 pandemic and other major challenges affecting agri-food system transformation, FAO has pushed forward the digitalization programme more strongly and advanced initiatives and activities to address the major gaps such as lack of affordable internet connectivity; lack of digital skills for youth and women in agriculture; to strengthen digitally enabled agri-food system support services including research and extension systems; to develop stronger agricultural sectoral policies for enabling digital agricultural transformation; and to enhance opportunities for public - private partnerships and investments for digitalization in developing countries.

The Organization continued to advance activities related to the WSIS in line with the [UN Res. A/70/125](#) , [Res. A/70/1](#) and as reaffirmed by the [ECOSOC Res. 2021/12](#). Hence, in 2021 FAO participated in the WSIS Forum process, which included (1) *Open Consultation Process*, (2) *Special Tracks*, (3) *High-Level Tracks*, (4) *Best Practices* and (5) *WSIS Prizes*; the FAO Director General, QU Dongyu officiated in the WSIS Forum 2021 opening ceremony³; and the FAO Hand-in-Hand Initiative was nominated for WSIS prizes under the Action Line C3 Access to information and knowledge.

In 2021, FAO mainstreamed digitalization in its programmatic interventions and activities as a follow-up to the Governing Bodies meetings and Regional Conferences in 2019 and 2020. FAO's flagship programmes, such as, FAO's *COVID-19 Response and Recovery Programme*, the *Hand-in-Hand Initiative*, the *International Platform for Digital Food and Agriculture* and *FAO's 1,000 Digital Villages Initiative*, have been a beacon for digital transformation in agriculture. The establishment of the Office of Innovation and the Chief Scientist have pitched science and technology, digital agriculture and ICTs high on agenda. FAO

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² FAO Strategic Framework. <https://www.fao.org/strategic-framework/en>

³ FAO. "Digitalization is the way of the new life and the new economy"
<https://www.fao.org/news/story/en/item/1400816/icode/>

is in the process of developing the 'FAO Science and Innovation Strategy' to provide guidance, coherence and alignment for impact at country level through better use of science and innovation.

Part 2: A brief review of the implementation of projects and activities in support of the WSIS Outcomes

In summary, FAO highlights the major achievements and obstacles since WSIS and in light of the 2030 Agenda for Sustainable Development.

a) Action Line C3: Access to Information and Knowledge

Related activities under this action line included-

- 2.1 **The hand-in-hand initiative (HIH)** – This is FAO's evidence-based, country-led and country-owned initiative to accelerate agricultural transformation and sustainable rural development to eradicate poverty (SDG 1) and end hunger and all forms of malnutrition (SDG2). Since its launch in October 2019, the HIH has seen about 45 countries expressing interest to participate in the HIH platform.
- 2.2 **International Platform for Digital Food and Agriculture** - The soon-to-be-launched Platform aims to provide an inclusive multi-stakeholder forum to promote digitalization of food, agriculture, livestock, fisheries and aquaculture, land use planning, and forestry sectors. Its main function is to facilitate the exchange of knowledge and experiences on best practices and policy approaches between stakeholders, including governments, agribusiness and the private sector, farmers, the civil and knowledge societies, and international organizations. The platform aligns with WSIS Action Lines C3 and C7.
- 2.3 **FAO's 1,000 Digital Villages Initiative** – FAO is rolling out this initiative where a digital village is a rural community in which digital solutions are used to support socio-economic activities targeting farmers and value chain actors individually and collectively so as to empower them and to improve their livelihoods. The three pillars of a digital village are (i) amplify farmer productivity, (ii) provide market support services; and (iii) transform the village holistically. More information [here](#).
- 2.4 **Technologies and practices for smallholder agricultural producers (TECA)** – the FAO platform gathers successful agricultural technologies and practices to facilitate knowledge exchange and help smallholder farmers in the field. TECA platform responds to the need for a systematic and user-friendly online archive of technologies, practices and innovations, including success stories and case studies on family farming. More information [here](#).
- 2.5 **TAPipedia** is an information sharing system, developed within the context of the G20 initiative Tropical Agriculture Platform, which Secretariat is hosted by FAO. It is designed to enhance knowledge exchange in support of Capacity Development for Agricultural Innovation Systems, including digital innovation. Offered in three UN languages, TAPipedia mainly targets researchers and practitioners in the field of development and cooperation and is a global information system for capacity development practices, innovation systems analysis, success stories, participatory and multi-stakeholder approaches, policy analysis and lesson learned in the context of agricultural innovation. More information [here](#).

b) Action line C4: Capacity building

2.6. **FAO Field Programme** – addresses the FAO member nations’ needs and demands for technical assistance and capacity building. During 2020-21, FAO field programme provided capacity development and built skills in the stakeholders of more than 20 countries on different aspects of the application of digital agriculture and ICTs, such as climate change resilience and disaster risk reduction, digital extension, aquaculture, crop and livestock production on a variety of technologies, ranging from mobile phone applications, online systems, blockchains and geospatial technologies.

c) Action Line C7: ICT Applications –E-Agriculture

Related activities under this action line included

- 2.7 **FAO continues to facilitate the yearly E-Agriculture Action Line C7 at WSIS 2021 Forum** - FAO facilitated the E-Agriculture Action Line C7 event in close collaboration with the International Telecommunication Union (ITU) and Zhejiang University. The event had 433 participants from all over the world and launched *The Digital Agriculture Report: Rural e-commerce development experience from China*.⁴
- 2.8 **Facilitation of the e-Agriculture Community of Practice** - FAO continues to facilitate the e-Agriculture CoP as a capacity development mechanism for its 19,300 members. Plans are in place to revamp the e-Agriculture Platform to allow for more functionalities such as members interaction, funding portal, collaboration features and open innovation. The global platform continues to offer news, events, capacity development activities, and to collect good and promising practices in digital agriculture. The mission of the e-Agriculture is to facilitate the discussion on the adoption and use of ICTs and digital innovations in agriculture, forestry, fisheries, natural resource management and rural development. <http://www.fao.org/e-agriculture/>
- 2.9 **Support the development of National E-Agriculture Strategies** - FAO continued to support the development of National E-Agriculture (or Digital Agriculture) Strategies in the following countries: Afghanistan, Albania, Armenia (finalized pending government sign-off), Benin (finalized pending government sign-off), Bhutan (completed), Bosnia and Herzegovina, Cambodia, Fiji, Indonesia, Kazakhstan, Kyrgyzstan, Moldova, Mongolia, Myanmar (on hold), Niger, Pakistan, Philippines, PNG, Rwanda, Sri Lanka, Tajikistan, Turkey, and Uzbekistan. FAO is currently exploring the means to improve a policy toolkit to support countries.
- 2.10 **E-Agriculture activities in Europe and Central Asia and the “Digital Excellence in Agriculture” contest for Europe and Central Asia** - In 2020 and 2021, at country level, FAO supported capacity needs assessments on digital agriculture and the development of national digital agriculture policy framework in Albania, Armenia, Bosnia and Herzegovina, Georgia, Moldova, Montenegro, Kazakhstan, Kosovo, Kyrgyzstan, Moldova, Serbia, Turkey, Ukraine and Uzbekistan. FAO and ITU launched the “Digital Excellence in Agriculture in Europe and Central Asia” contest to identify, highlight and celebrate good practices and innovative solutions that have proven successful in advancing the digital transformation of agriculture in the regions. The best practices contest

⁴ <https://www.fao.org/publications/card/en/c/CB4960EN/>

attracted 200 submissions from 38 countries and FAO/ITU held a ceremony to award champions and recognize other best submissions⁵. (See the stocktaking report [here](#))

- 2.11 **E-Agriculture activities in Africa** – The FAO Regional Office for Africa has concluded a Digital Strategy for guiding investments in digital agriculture for the region. The strategy is guiding FAO offices in rolling out digitization projects.
- 2.12 **E-Agriculture activities in Asia-Pacific and Small and Islands States (SIDS)** – FAO Asia and Pacific piloted the FAO's 1,000 Digital Villages Initiative (see 2.3 above). The FAO Asia-Pacific region continues to support countries develop their national digital agriculture strategies (see 2.5 above). FAO recently launched the Small and Islands States (SIDS) Solution Platform to support the digitalization of these countries. The SIDS Solutions Platform aims to provide a space for SIDS to exchange knowledge, experiences, as well as solutions and innovations that may be replicated or scaled up. These solutions may be local/homegrown or developed elsewhere in areas with similar conditions. The platform can be consulted [here](#).
- 2.13 **FAO-ITU MOU and related activities in digital agriculture** – FAO and ITU have a cooperative agreement on digital agriculture activities. Through this framework the *Niger Smart SDG Village Initiative*, which has seen more than 20 villages earmarked for a roll-out in Niger. Two other countries are doing assessment studies in the Caribbean. FAO and ITU have also commissioned *The Status of Digital Agriculture in 47 Sub-Saharan Africa (in print)* as desk study, which will inform investments in digital agriculture in the region.
- 2.14 **FAO Digital Portfolio** – The FAO Digital Portfolio was released in May 2020 to scale digital technology adoption in the field to achieve greater digital impact. It originally comprised of 169 digital products that are used in support of FAO's delivery at global, regional, and country levels. The FDP allows FAO to take stock of various digital products - a combination of software, hardware and related services –that supports the digital IT in FAO global field delivery.

Part 3: Innovative projects and programmes implemented in fulfilment of WSIS Outcomes.

a) Innovative projects and programmes

This section identifies some projects which could be considered innovative (without endorsing them) within the framework of WSIS reporting and in supporting the achievement of WSIS actions.

- 3.1 **The Global Network of Digital Agriculture Innovation Hubs** will be a network of in-country innovation hubs established by Office of Innovation (OIN) in conjunction with country institutions to accelerate the development and uptake of digital innovations and support farmers and value chain actors, especially youth and women, to be more competitive. The programme seeks to support countries designing respective national digital agriculture innovation hub models meeting national agriculture, forestry, and fisheries priorities while involving local partners, including public-private partnerships.

⁵ FAO. Digital Excellence in Agriculture in Europe and Central Asia - Regional Contest. <https://www.fao.org/europe/resources/call-on-digital-excellence/en/>