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PROGRAMME COMMITTEE

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Update on the Science, Technology and Innovation Platform

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EXECUTIVE SUMMARY

- This document summarizes the recent progress in developing the Science, Technology, and Innovation (STI) Platform (hereby referred to throughout the text as the Science, Technology and Innovation Portal).
- The Science, Technology and Innovation (STI) Portal is a comprehensive multi-modular platform that facilitates collaboration among stakeholders, providing one stop-shop access to knowledge, networks, partnerships, and data on agrifood systems technologies and innovations. It supports the implementation of the FAO Science and Innovation Strategy.
- The STI Portal serves as a central hub for collaboration, data sharing, and decision-making, offering streamlined access to information and services tailored to stakeholders' needs.
- The prototype of the STI Portal was showcased at the FAO Science and Innovation Forum 2023, receiving positive feedback. The STI Portal includes modules such as the Digital Asset Explorer, Community of Practice Navigator, Learning Bootcamp, and ASTI (Agricultural Science and Technology Indicators). These modules offer streamlined access to information, networking opportunities, learning resources, and insights into agricultural research and development investments.
- The STI Portal's efficacy in promoting science, technology, and innovation in agrifood systems will rest on a culture of continued updating and improvement and due consideration to sustainability and communication.

GUIDANCE SOUGHT FROM THE PROGRAMME COMMITTEE

- The Programme Committee is invited to review the content of the document and provide guidance as deemed appropriate.

Draft Advice

The Committee:

- **appreciated the Science, Technology, and Innovation (STI) Portal's role in facilitating multisectoral and multistakeholder collaboration, providing increased and targeted access to information on innovations and technologies, and enabling the integration of evidence on science and technology in policymaking and agrifood investments;**
- **welcomed the support that the STI Portal will provide to the implementation of the FAO Science and Innovation Strategy and the achievement of its outcomes, thus contributing to the broader implementation of the FAO Strategic Framework 2022-31;**
- **acknowledged the positive feedback that the STI Portal has received when introduced at the FAO Science and Innovation Forum 2023;**
- **noted the importance of ensuring that the STI Portal is integrated with the other initiatives that are instrumental in shaping the FAO Global Innovation Model, including the Acceleration Zone, the Global Innovation Hubs, and the Incubator; and**
- **encouraged the continued improvement of the STI Portal's offer with the objective of responding to users' needs regarding major agrifood systems-related development challenges.**

I. Overview

1. The FAO Science and Innovation Strategy (the Strategy) is instrumental to supporting the delivery of the FAO Strategic Framework 2022-31. The Strategy's overarching goal is for Members to harness science and innovation to realize context-specific and systemic innovations for more efficient, inclusive, resilient, and sustainable agrifood systems. It rests on three interdependent pillars:

(i) strengthening science and evidence-based decision-making; (ii) supporting innovation and technology at the regional and country level; and (iii) serving Members better by reinforcing FAO's capacities. Its guiding principles mandate implementation approaches that are: (i) rights-based and people-centered; (ii) gender-equal; (iii) evidence-based; (iv) needs-driven; (v) sustainability-designed; (vi) risk-informed; and (vii) ethics-based. Complementing the three pillars are two cross-cutting enablers (transformative partnerships and innovative funding and financing).

2. FAO actively fosters connections between science, research and development at the national, regional, and global levels. This includes providing science- and evidence-based information to meet evolving needs. Moreover, FAO manages various global databases and knowledge portals, enhancing national and regional institutional capacities to gather, access, and disseminate pertinent information and data. These efforts aim to break down silos between disciplines and promote systemic approaches to addressing agrifood systems challenges effectively.

3. Implementation of the Strategy is expected to deliver nine outcomes, including, among others:

- a) enhanced access to and use of inclusive, affordable, and context-specific innovations and technologies by small-scale producers, family farmers, and other agrifood system actors to achieve sustainable agrifood systems;
- b) strengthened capacities of national agrifood innovation systems to prioritize, co-create, and scale appropriate innovations and technologies aiming at achieving sustainable agrifood systems; and
- c) enhanced FAO capacities to enable science and innovation.

4. This document summarizes the recent progress in developing the Science, Technology, and Innovation (STI) Platform (hereby referred to throughout the text as the Science, Technology and Innovation Portal). The Science, Technology, and Innovation (STI) Portal is instrumental in implementing the Strategy. It supports science and evidence-based decision-making in agrifood systems by offering a one-stop shop, interoperable, and open-access gateway to information and knowledge resources on agrifood system science and innovation from within and beyond FAO. It provides a single entry point for diverse stakeholders to access, co-develop, use, and benefit from science, technology, and innovation for interventions related to agrifood systems. It will be purpose-built to contribute to, and facilitate, the integration of technologies and innovations in FAO's programmatic interventions, accelerating impact while mitigating potential trade-offs. External users are expected to use the STI Portal to identify technologies and innovations that fit their needs and develop partnerships and collaborations for the development of programs and projects.

5. The STI Portal synergizes with the FAO Global Innovation Model¹ under development. The model fosters strategic investments on technologies and innovations by providing a range of services across FAO's offices, divisions and centres, including (i) foresight and horizon scanning; (ii) incubation of new ideas; (iii) application of innovation methodologies to human centric project design and solutions mapping; and (iv) scaling of impactful innovations. These services will be supported by the FAO incubator, the Acceleration Zone, and the Global Network of Innovation Hubs.

6. The STI Portal is the result of a cross collaboration of several FAO units: Chief Scientist; Office of Innovation (OIN); Digital FAO and Agro-informatics Division (CSI); Office of Communications (OCC); and the Joint FAO/WHO Centre (Codex Food Standards and One Health) (CJW). Its design has been led by the Chief Scientist, in collaboration with OIN, and guided by a

¹ [PC 137/8](#)

broad group of FAO technical units, Regional and Country Offices. Financial support from the Bill & Melinda Gates Foundation is acknowledged.

II. Main elements of the STI Portal

7. The STI Portal will offer users four complementary modules:
 - a) The **Digital Asset Explorer** enables quick access to a repository of almost 500 STI-related information sources, catering to various informational needs. Tailored for sharing and presenting STI solutions to stakeholders beyond FAO, it offers a basic search feature with the option to filter resources by categories such as science, technology, and innovation impacts, projects, programmes, and policies, stakeholder types, capacity development for STI, and investment opportunities.
 - b) The **Community of Practice (Network) Navigator** provides a snapshot of the stakeholder landscape for any agrifood context. The Network Action Guide feature offers an interactive graphical representation of network structures and highlights key stakeholders across various domains, making it easier to navigate and understand network relationships. The Partner Finder feature provides access to various interventions, networks, organizations, and expert sources, thus assisting users in understanding the collaborative environment and collecting essential information about agrifood professionals, their organizations, and the networks to which they belong. It will enhance agility, facilitating collaboration for interested individuals and organizations with FAO and other stakeholders. The Word Cloud feature represents data visually.
 - c) The **Learning Bootcamp** provides the most relevant learning sources and tools, fitting users' preferred learning styles. It enables addressing knowledge and skill gaps and contributing to building capacities in the STI domain. Users may leverage the Learning Bootcamp to share solutions that have been collaboratively designed and developed.
 - d) The **Agricultural Science and Technology Indicators (ASTI)** database will enable users to assess the levels, trends, and composition of investments in agricultural R&D at the country, regional, and global level, and support advocacy and resource mobilization efforts. It provides critical information for planning and programming STI investments, including those directed to enhance the capacity of National Agricultural Research Systems in Low- and Middle-Income countries. This module's development is being made possible through a data transfer agreement between FAO and the International Food Policy Research Institute (IFPRI).
8. A Digital Asset Use and Management Dashboard will provide a comprehensive overview of FAO's digital Science, Technology, and Innovation (STI) assets, facilitating adaptive management strategies to maximize their utility and impact.

III. Status and progress

9. The prototype of the STI Portal was showcased at the FAO Science and Innovation Forum 2023 (SIF 2023) through dedicated sessions. Interactive engagement with participants allowed the solicitation of valuable feedback. These sessions also facilitated the registration of interested stakeholders, indicating a promising level of interest and engagement. In its latest version, the STI Portal offers an array of features, including: 13 dynamic interfaces; five pages; six interactive filters; six scorecards; two geographical maps; seven graphs; and a network map.
10. The addition of a Climate Action Catalyzer module is under consideration. It would enable the tailoring and integration of information from different modules to create specialized thematic products focused on specific topics related to climate change.
11. The STI Developers' Compass will be introduced to enable the integration of new and updated STI solutions into FAO's existing digital ecosystem, ensuring seamless compatibility and functionality.

12. The ASTI module will be gradually expanded to become the Agrifood Systems Technologies and Innovations Outlook (ATIO) database, encompassing additional data on STI investments and inputs and trends in emerging and mature technologies. This expansion reflects the commitment to unifying diverse initiatives under a cohesive framework.

13. The evolution of the STI Portal will see the integration of several advanced features, including crowdsourced data collection and artificial intelligence-driven data quality control and classification mechanisms. This holistic approach signifies a concerted effort to harness the power of technology and collaboration in advancing STI for sustainable development.

IV. Next steps

14. The STI Portal will operate under a culture of continuous improvement, where feedback and data insights drive iterative agile development cycles. Following the launch of the STI Portal, the following next steps are envisaged:

- a) continue with the development and enhancement of the STI Portal along the lines indicated above, ensuring its effectiveness and relevance in addressing evolving user needs;
- b) establish collaborative mechanisms through data sharing and other forms of agreements with an array of partners to facilitate the implementation of STI Portal modules and maximize the STI Portal's offer. This will include collaborations among relevant FAO units – building on existing collaboration among FAO technical divisions and field offices – and external institutions and partners. Application Programming Interfaces (APIs) will be used to integrate features of the STI Portal into the broader FAO digital ecosystem and the digital ecosystems of relevant partners (e.g. International Fund for Agricultural Development (IFAD); World Food Programme (WFP); CGIAR System; and governments);
- c) prepare a scaling up, sustainability, and resource mobilization plan detailing the STI Portal operationalization, maintenance, and updating activities and related costs;
- d) develop a knowledge and communication strategy to disseminate information effectively and ensure stakeholders remain informed and engaged with the initiative's progress;
- e) establish a system of key performance indicators for measuring the effectiveness and impact of the STI Portal which are aligned with its objectives and that may include user engagement, reach, satisfaction rates, and impact indicators, as well as for using analytic tools and feedback surveys to monitor the STI Portal performance; and
- f) set up a regular reporting mechanism to analyse collected data and derive actionable insights. Reports will inform decision-making processes, guide iterative improvements to the STI Portal, and ensure transparency *vis-à-vis* partners and other stakeholders.