

Food and Agriculture Organization of the United Nations

## THE ACTION PLAN **2022–2025**

for the implementation of the FAO Science and Innovation Strategy

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## CONTENTS

Acronyms	iv
BACKGROUND	1
SYNERGIES WITH OTHER FAO STRATEGIC DOCUMENTS	1
REPORTING	2
OUTCOMES, OUTPUTS, AND KEY AREAS OF WORK	2
REFERENCES	11
ANNEX 1: RELEVANT SDG TARGETS	12
ANNEX 2: FAO PROGRAMME PRIORITY AREAS (PPAS)	14

## **ACRONYMS**

- AIS Agricultural Innovation System
- **ATIO** Agrifood Systems Technologies and Innovations Outlook
- **EAS** extension and advisory services
- FFS Farmer Field School
- **LMICs** low- and middle-income countries
- MSMEs micro-, small- and medium-sized enterprises
- **PPAs** Programme Priority Areas
- **RBAs** Rome-based Agencies
- **SDGs** Sustainable Development Goals
- SPI science-policy interface
- **SSTC** South-South and Triangular Cooperation

### BACKGROUND

The FAO Science and Innovation Strategy is a tool to support the delivery of the FAO Strategic Framework 2022–2031 and hence the 2030 Agenda for Sustainable Development. The Action Plan 2022–2025 for the implementation of the FAO Science and Innovation Strategy provides a common framework for FAO action at the country, sub-regional, regional and global levels while working towards the overall goal of the Strategy:

Members harness science and innovation to realize context-specific and systemic solutions for MORE efficient, inclusive, resilient and sustainable agrifood systems for better production, better nutrition, a better environment, and a better life, leaving no one behind, in support of the 2030 Agenda for Sustainable Development (FAO 2022).<sup>1,2</sup>

The Action Plan is a living document covering four years (2022–2025) and will be updated as needed to reflect new needs, opportunities and challenges. It was developed through an inclusive and transparent consultative process, drawing on inputs from all relevant FAO streams and the Regional, Sub-regional and Country Offices, as well as guidance and feedback from Members.

## SYNERGIES WITH OTHER FAO STRATEGIC DOCUMENTS

The FAO Science and Innovation Strategy will be implemented in a coordinated manner and as an integral part of the Programme of Work for improved effectiveness and impact. This implies developing actions that are in full synergy with FAO's relevant strategic documents. The Strategy aligns with the following FAO strategies in particular: the FAO Strategy on Climate Change, the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors and the Strategy for Private Sector Engagement.

The FAO Strategy on Climate Change and the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors emphasize the importance of science and innovation. The Science and Innovation Strategy strengthens these strategies through its Pillar 1 and Pillar 2, but also focuses on FAO's capacities to support science and innovation through Pillar 3.

Synergies with the Strategy for Private Sector Engagement are two-fold. FAO will engage with private sector knowledge and innovations and harness them to achieve the four betters. At the same time, innovative funding and financing – for example through public-private partnerships – is needed to ensure that low- and middle-income countries (LMICs) do not fall behind on harnessing

<sup>&</sup>lt;sup>1</sup> FAO Science and Innovation Strategy

<sup>&</sup>lt;sup>2</sup> The FAO Science and Innovation Strategy defines the agrifood system as covering the journey of food from farm to table – including when it is grown, fished, harvested, processed, packaged, transported, distributed, traded, bought, prepared, eaten and disposed of. It also encompasses non-food products that also constitute livelihoods and all of the people as well as the activities, investments and choices that play a part in getting us these food and agricultural products. In the FAO Constitution, the term "agriculture" and its derivatives include fisheries, marine products, forestry and primary forestry products, as well as livestock.

science and innovation, further exacerbating existing divides. This is captured in the Strategy's enabler on innovative funding and financing.

The Action Plan links through several of its key areas of work to other FAO strategic documents that provide opportunities for ensuring that no one is left behind in line with the priorities of the Strategy: the Vision and Strategy for FAO's Work in Nutrition, the FAO Policy on Gender Equality, the FAO Rural Youth Action Plan, the Global Action Plan of the UN Decade of Family Farming and the FAO Policy on Indigenous and Tribal Peoples.

## REPORTING

Reporting on the implementation of the Strategy will take place in line with the established corporate reporting processes for the FAO Strategic Framework 2022–2031 and is therefore aligned with delivery of the 2030 Agenda for Sustainable Development. Reports will be provided every two years as part of the regular Programme Implementation Report for the Strategic Framework 2022–2031. The first report will be available in the first quarter of 2024 and subsequently, every two years after that. In addition, as stated in the Strategy, a mid-term review will be considered by the FAO Council 5 years after endorsement of the Strategy, in 2027.

## **OUTCOMES, OUTPUTS, AND KEY AREAS OF WORK**

The Action Plan follows the structure of the Strategy with 3 pillars, 9 outcomes and 2 enablers (transformative partnerships and innovative funding and financing). It links the Strategy's outcomes and enablers to relevant Sustainable Development Goal (SDG) targets and Programme Priority Areas (PPAs).<sup>3</sup> Under each of the outcomes and the enablers, the Action Plan introduces several outputs, which are achieved through key areas of work, reflecting FAO's priorities for supporting Members to harness science and innovation. The Strategy's guiding principles are inter-linked and guide all of the Organization's science and innovation-related work in line with the 2030 Agenda for Sustainable Development.

A number of PPAs were selected to link to each outcome. They are to be considered as indicative and do not represent an exhaustive list of all relevant PPAs since science and innovation have cross-sectoral relevance across the Organization's programme of work. Innovation and technology make up two of the four accelerators of the FAO Strategic Framework 2022–2031 (technology, innovation, data, and complements [governance, human capital, and institutions]), and science underpins all four accelerators. As such, science and innovation are integrated throughout the 20 PPAs, the accelerators, and cross-cutting themes. In particular, outcomes 1.1 and 2.1 are highly relevant to all PPAs.

<sup>&</sup>lt;sup>3</sup> Relevant Sustainable Development Goal (SDG) targets are listed in Annex 1 and Programme Priority Areas (PPAs) are listed in Annex 2.

### MATRIX OF OUTCOMES, OUTPUTS AND KEY AREAS OF WORK OF THE SCIENCE AND INNOVATION STRATEGY

#### PILLAR 1: STRENGTHENING SCIENCE AND EVIDENCE-BASED DECISION-MAKING

**Outcome 1.1:** Agrifood systems knowledge and evidence enhanced.

**PPAs** (indicative list)

BP3, BP5, BN1, BN2, BN5, BE1, BE2, BE3, BL1, BL3, BL4, BL5

Contribution to SDG targets: Enhancing agrifood systems knowledge and evidence lays the foundations for achieving the core of FAO's mandate: ending hunger (2.1) and malnutrition (2.2); increasing agricultural productivity and incomes of small-scale food producers (2.3); and ensuring sustainable food production systems (2.4).

**Output 1.1.1:** Strengthened and innovative provision of data, statistics, information and capacity support for monitoring a range of issues related to agrifood systems.<sup>4</sup>

#### Key areas of work:

- a) Provide global public goods (including digital public goods<sup>5</sup>) such as data/statistics/information platforms and knowledge products at global, regional, sub-regional and national levels, avoiding duplication of efforts, including in synergy with the Strategy on Climate Change, Strategy for Private Sector Engagement, Strategy on Mainstreaming Biodiversity across Agricultural Sectors, and the Vision and Strategy for FAO's Work in Nutrition.
- b) Develop and strengthen geospatial platforms and mapping at global, regional, sub-regional and national levels.
- c) Support capacities of governments in the collection, management and use of data/statistics for strengthened monitoring systems.

**Output 1.1.2:** Strengthened provision of, and capacity support for, rigorous analysis, studies, assessments, modelling, and foresight on a range of issues related to agrifood systems.

- a) Conduct science- and evidence-based studies, analysis and assessments at global, regional, sub-regional and national levels on a range of issues related to agrifood systems.
- b) Conduct strategic foresight exercises to explore alternative future scenarios related to sustainable agrifood systems with a view to achieving food security.
- c) Develop and promote tools, models and methodologies to inform assessment, monitoring, early warning, evaluation, planning and forecasting efforts.
- d) Support policy-makers and other agrifood systems actors to develop science- and evidence-based and contextspecific policies, strategies and plans.

<sup>&</sup>lt;sup>4</sup> The FAO Science and Innovation Strategy recognizes that data is an integral part of science- and evidence-based decision-making. FAO's strategic priorities on data are articulated in the plan for the modernization of FAO statistics and the proposal for improved governance of FAO statistical activities. The FAO Science and Innovation Strategy complements these initiatives and will be implemented in strict compliance with the FAO policies on protection of data and intellectual property rights.

<sup>&</sup>lt;sup>5</sup> The UN SG's Roadmap for Digital Cooperation (UN 2020, p. 35) defines digital public goods as follows: "They can be defined as open-source software, open data, open artificial intelligence models, open standards and open content that adhere to privacy and other applicable international and domestic laws, standards and best practices and do no harm." https://www.un.org/en/content/ digital-cooperation-roadmap/assets/pdf/Roadmap\_for\_Digital\_Cooperation\_EN.pdf

**Output 1.1.3:** Sharing of knowledge, science, evidence and experiences on issues related to agrifood systems enhanced through multi-stakeholder platforms, networks, and facilitation mechanisms.

#### Key areas of work:

- a) Establish and promote global and regional FAO knowledge hubs/platforms, avoiding duplication.
- b) Convene events and spaces for dialogue, exchange and sharing on science and innovation, including the annual Science and Innovation Forum.
- c) Establish, support and participate in regionally balanced global/regional networks/working groups to exchange scientific and technical expertise.
- d) Promote exchange of knowledge and expertise to strengthen local and traditional agrifood systems, especially those produced by local producers and Indigenous Peoples, leaving no one behind.

<b>Outcome 1.2:</b> Science-policy interfaces for agrifood systems strengthened.	<b>PPAs</b> (indicative list) BP3, BN3, BE3
Contribution to SDG targets: Strengthening science-policy interfaces (SPIs) for a contributes directly to ensuring responsive, inclusive, participatory and represer (16.7) and enhancing policy coherence for sustainable development (17.14), as windirectly to realizing sustainable agrifood systems.	ntative decision-making
<b>Output 1.2.1:</b> FAO's contribution to SPIs strengthened at national, regional and g organized dialogue between scientists, policymakers and other relevant knowled into account power asymmetries in support of inclusive science- and evidence-bagreater policy coherence, shared ownership and collective action.	ge holders, while taking
<ul> <li>Key areas of work:</li> <li>a) Enhance science and evidence-based dialogue between scientists, policy-makers and other relevant knowledge holders on issues related to agrifood systems.</li> <li>b) Facilitate the development of guidance for strengthening science-policy interfaces andbetter science- and evidence-based policy processes in the agrifood systems sector.</li> </ul>	
<b>Outcome 1.3:</b> Research for development strengthened.	<b>PPAs</b> (indicative list) BP4, BE1, BL2

Contribution to SDG targets: Strengthening research for development contributes directly to increased investment in order to enhance agricultural productive capacity in developing countries, including through agricultural research and extension services, (2.a). It is closely linked to enhancing scientific research and encouraging innovation (9.5), supporting domestic technology development, research and innovation in developing countries (9.b), and expanding scholarships available to developing countries (4.b). Promoting participatory approaches to research contributes to empowering and promoting the social, economic and political inclusion of all (10.2). One specific area of research in relation to agrifood systems highlighted in the 2030 Agenda is marine technology (14.a).

**Output 1.3.1**: Public investment in research promoted, including for sustainability science, interdisciplinarity and transdisciplinarity to address systemic challenges in a holistic manner.

#### Key areas of work:

a) Assemble, analyse and communicate evidence base for promoting public investment in agrifood systems research, including in sustainability science, interdisciplinarity and transdisciplinarity, at national, sub-regional, regional and global levels.

**Output 1.3.2:** Cooperation with, and capacities of, global, regional, national and local research organizations (both formal and informal) supported to harness collective impact and comparative advantages.

#### Key areas of work:

- a) Collaborate with research institutions, networks and researchers at national, regional and international levels to contribute to developing shared research agendas and help Member countries to shape their national research agenda and strategies, in line with global priorities.
- b) Strengthen capacities of national agricultural research institutions.

**Output 1.3.3:** Demand-driven, participatory approaches promoted throughout the entire research cycle, with the inclusion of the knowledge of Indigenous Peoples and small-scale producers.<sup>6</sup>

- a) Strengthen participatory processes of knowledge co-creation (including through cycles of action and research) and knowledge-sharing.
- b) Support local and participatory research for developing public policies on family farming and provide training and capacity development for family farmers' organizations to foster their capacity on innovation practices (Global Action Plan of the UN Decade on Family Farming, Output 1.1.A and Output 4.2.2).
- c) Implement the Joint Work Programme of FAO with Indigenous Peoples to operationalize the FAO Policy on Indigenous and Tribal Peoples and its work on traditional knowledge and climate change.

<sup>&</sup>lt;sup>6</sup> The FAO Science and Innovation Strategy recognizes the importance of protecting the knowledge of Indigenous Peoples and smallscale producers, and respecting the importance of Free Prior and Informed Consent of Indigenous Peoples, as applicable.

#### PILLAR 2: SUPPORTING INNOVATION AND TECHNOLOGY AT REGIONAL AND COUNTRY LEVEL

#### **PPAs** (indicative list)

**Outcome 2.1:** Access to, and use of, inclusive, affordable and contextspecific innovations and technologies aiming at achieving sustainable agrifood systems by small-scale producers, family farmers and other agrifood systems actors enhanced.<sup>7</sup>

BP1, BP2, BP4, BP5, BN4, BE1, BE2, BE3, BE4, BL1, BL2, BL3, BL4, BL5, BL6

Contribution to SDG targets: Enhancing access to, and use of, inclusive, affordable and context-specific innovations and technologies aiming at achieving sustainable agrifood systems can contribute to numerous SDG targets throughout the entire agrifood systems: agriculture (2.3, 2.4 and 2.5), more sustainable patterns of consumption and production (12.a), global food loss and waste (12.3), fisheries (14.2), resilience and adaptive capacity to climate change (13.1) and biodiversity and ecosystems (15.5 and 15.9).

Innovation can also contribute to SDG targets that are related to broader development goals, such as decent jobs (4.4), reduction of the proportion of youth not in employment, education or training (8.6), promotion of the empowerment of women (5.b), contribution to income growth of the bottom 40 per cent of the population (10.1), higher levels of economic productivity through diversification, technological upgrading and innovation (8.2), access to information and communications technology (9.c) and inclusion (10.2).

Such efforts can be supported by ensuring that all men and women, particularly the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership, and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services including microfinance (1.4).

**Output 2.1.1:** Equitable access to, and use of, inclusive, affordable and context-specific innovations (including social, policy, financial and institutional) and technologies aiming at achieving sustainable agrifood systems enhanced, with a focus on adapting innovations and technologies to local needs through participatory, needs-driven and problem-focused approaches that respond to needs of small-scale producers and other under-represented groups.

- a) Promote adoption of good practices and innovative solutions (technological, financial, policy, legislative, social and institutional) for food security and nutrition, increasing the incomes of small-scale producers, climate resilience, adaptation and mitigation at country and local levels and improve the sharing and uptake of knowledge, technologies and good practices to mainstream biodiversity (in line with the FAO Strategy on Climate Change and the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors).
- b) Promote context-specific social, policy, institutional, organizational and governance innovations at national, subregional, regional and global levels (e.g. for healthy diets, FAO's Green Cities Initiative, One Health, food safety and fisheries).
- c) Promote innovation, sustainable and inclusive business models and capacity development for value chains, in particular micro-, small- and medium-sized enterprises (MSMEs).
- d) Support countries in the uptake of relevant digital technologies across agrifood systems, including through raising awareness and capacity support.

According to the FAO Science and Innovation Strategy, FAO will support innovations that have been shown to enhance sustainability by respecting its social, economic, and environmental dimensions. Application of FAO's Framework for Environmental and Social Management to all programmes and projects executed directly by FAO or by FAO's Implementing Partners is an important mechanism to ensure that innovations introduced by FAO contribute to inclusive, resilient and sustainable development, and that any potential risks are managed.

Output 2.1.2: Promising technologies, innovations and interventions scaled up and out.

#### Key areas of work:

a) Collect and disseminate analysis and documentation of experiences of promising technologies/interventions.

**Output 2.1.3:** Updated information on the full range of innovations and their impacts analyzed and disseminated.

#### Key areas of work:

- a) Create global public goods to disseminate updated information about science and innovation at global, regional, sub-regional and national level, including new knowledge products, such as the Agrifood Systems Technologies and Innovations Outlook (ATIO), platforms and issues papers, which seek to address potential benefits and risks of innovations and discuss contentious issues.
- b) Develop catalogues and studies on adaptability, feasibility and impacts of innovations at country and regional levels.

**Output 2.1.4:** Reduce inequalities and promote inclusion by promoting innovations for women, youth and family farmers.

#### Key areas of work:

- a) Promote institutional and social innovations and technologies, including digital technologies, promoting gender equality and women's economic, political and social empowerment, taking into account their specific needs and priorities (in alignment with the FAO Policy on Gender Equality).
- b) Strengthen rural youth capacities for the use of innovative approaches and technologies in food and agriculture and support youth entrepreneurship, including through digital innovations (in alignment with the FAO Rural Youth Action Plan).
- c) Put in place innovative economic opportunities and market solutions promoting services and goods of multifunctional family farming, embedded and built on resources provided by the local context (in alignment with the Global Action Plan of the UN Decade of Family Farming).

<b>Outcome 2.2:</b> Capacities of national agrifood innovation systems to prioritize,	PPAs (indicative list)
co-create, and scale innovations and technologies aiming at achieving	
sustainable agrifood systems strengthened.	BP1, BP4

Contribution to SDG targets: Strengthened capacities of national agrifood innovation systems is an outcome of increasing investments to enhance agricultural productive capacity (2.a).

**Output 2.2.1:** Capacities of agrifood innovation systems strengthened to support innovation processes for sustainable agrifood systems.

#### Key areas of work:

 a) Promote, coordinate and strengthen capacities of agrifood innovation systems and multistakeholder innovation approaches, such as innovation platforms, living labs, communities of practice, innovation hubs and hackathons at national, sub-regional and regional levels. **Output 2.2.2:** Coordinated and pluralistic extension and advisory services promoted, including support for farmer-to-farmer<sup>8</sup> knowledge sharing.

#### Key areas of work:

- a) Create tools and programs to strengthen extension and advisory services (EAS) in the Member countries, including promotion of digital capabilities, institutional and social innovations, and accelerated knowledge sharing.
- b) Promote rural services for youth and agripreneurs (Pillar 4 of FAO Rural Youth Action Plan).
- c) Improve agricultural extension and advisory services by providing innovative services and trainings through Farmer Field Schools (FFS) at national and sub-regional level and extend global outreach and support through the Global Farmer Field School Platform.
- d) Promote farmer-to-farmer knowledge sharing and integration of local know-how in adapting, adopting and scaling promising technologies and innovations.

<b>Outcome 2.3:</b> National capacity to design, implement and evaluate strategies,	PPAs (indicative list)
policies and regulatory frameworks on science, technology and innovation	
strengthened.	BP1, BP5

Contribution to SDG targets: Strengthening national capacities on policies and regulatory frameworks on science, technology and innovation contributes to the promotion of development-oriented policies that support productive activities and innovation (8.3), support domestic technology development, research and innovation in developing countries (9.b), and enhance policy coherence for sustainable development (17.14).

**Output 2.3.1:** Guidance and capacity support provided to countries on national policies, regulatory framework, institutional arrangements, governance systems and strategies related to science, innovation and new technologies.

- a) Facilitate development of guidance at global level related to science, innovation and new technologies in agrifood systems.
- b) Support development of national policies, regulatory framework, institutional arrangements, governance systems and strategies related to science, innovation and new technologies.

<sup>&</sup>lt;sup>8</sup> FAO uses "farmer-to-farmer" as a generic term that also includes other producers, such as herders and fisherfolk.

#### PILLAR 3: SERVING MEMBERS BETTER BY REINFORCING FAO'S CAPACITIES

**Outcome 3.1:** Knowledge management and exchange of information and experiences enhanced.

**Output 3.1.1:** Knowledge management<sup>9</sup> enhanced to improve sharing of knowledge, learning and incorporating lessons.

#### Key areas of work:

a) Enhance capacities in knowledge management at global, regional and country level, building on corporate systems.

Outcome 3.2: Science communication improved.

**Output 3.2.1:** FAO's capacities in science communication<sup>10</sup> strengthened for increased public awareness and science and evidence-based dialogue, including through balanced discussion of contentious issues in science.

#### Key areas of work:

a) Develop coherent approach to, and promote, science communication across the Organization.

Outcome 3.3: FAO capacities to enable science and innovation enhanced across the Organization.

**Output 3.3.1:** FAO's capacities strengthened to increase the use of science and innovation across its programme of work, particularly at country level.

- Build capacities of FAO personnel at global, regional and, with special focus on the national level, to harness science and innovation, including through e-learning courses, seminar series, self-learning courses, corporate retreats, training sessions, and providing training and coaching on innovation-related methodologies, team facilitators, and networking opportunities.
- b) Enhancing relevant capacities of young professionals at FAO, including through the Young Professional Programme, the Youth Committee and the support group for interns, volunteers and fellows.
- c) Establish SDGs CapDev Platform to strengthen FAO's internal capacities to use systemic approaches to accelerate achievement of the SDGs.

<sup>&</sup>lt;sup>9</sup> The UN has offered the following definition of knowledge management as a starting point by individual organizations, as well as by the United Nations system as whole, in any process of internal reflection leading to the development of meaningful policies "the systematic processes, or range of practices, used by organizations to identify, capture, store, create, update, represent and distribute knowledge for use, awareness and learning across the organization" (UN Joint Inspection Unit 2016) Knowledge management in the United Nations System. Available at: https://www.unjiu.org/sites/www.unjiu.org/files/jiu\_document\_files/ products/en/reports-notes/JIU%20Products/JIU\_REP\_2016\_10\_English.pdf

<sup>&</sup>lt;sup>10</sup> Science communication describes a variety of practices that transmit scientific ideas, methods, knowledge and research to nonexpert audiences in an accessible, understandable or useful way. https://libguides.ncl.ac.uk/sciencecommunication

#### **ENABLERS**

#### A. TRANSFORMATIVE PARTNERSHIPS<sup>11</sup>

**Output A.1:** Transformative partnerships and multisectoral collaboration, including South-South and Triangular Cooperation (SSTC), to harness science and innovation reinvigorated, supported, and developed for leveraging knowledge and capacities, enhancing access, and harnessing investments.

#### Key areas of work:

- a) Strengthen transformative partnerships on science with research and higher education institutions and academies at national, regional and global levels.
- b) Develop SSTC platform for innovations in sustainable agrifood value chain development, including technologies, business models, territorial tools, policies and investments, working with international organizations, development agencies, research institutions, and stakeholders in public and private sectors.
- c) Strengthen transformative partnerships which have an important science and innovation component with a range of partners, including parliamentarians, municipalities, etc. at national, regional and global levels.
- d) Strengthen partnerships related to science and innovation with the private sector through synergies with the FAO Strategy for Private Sector Engagement.

**Output A.2:** Collaboration with relevant UN entities on science and innovation strengthened, including the Rome-based Agencies (RBAs).

#### Key areas of work:

a) Collaborate and coordinate with UN entities on a range of topics related to agrifood systems, with a science and innovation component, at global, regional and national levels.

#### **B. INNOVATIVE FUNDING AND FINANCING**

**Output B.1:** Initiatives and programmes identified to benefit from innovative funding and financing frameworks, including the voluntary sharing of knowledge and practices, research and technology transfer on mutually agreed terms.

- a) Support innovative funding and financing mechanisms for science and innovation, including through the Global Environment Facility and the Green Climate Fund and partnerships with private sector entities.<sup>12</sup>
- b) Support the voluntary sharing of knowledge and practices, research and technology transfer on mutually agreed terms and improve equitable access to research results and technologies on mutually agreed terms, such as through South-South and Triangular Cooperation.

<sup>&</sup>lt;sup>11</sup> The FAO Science and Innovation Strategy prioritizes partnerships with research organizations at national, regional and international level. It also recognizes the importance of partnerships with academic institutes, private sector, civil society organizations and UN entities.

<sup>&</sup>lt;sup>12</sup> As stated in the FAO Science and Innovation Strategy, FAO's updated Due Diligence Framework for Risk Assessment and Management for Engagements (FRAME) with non-state actors will be followed to avoid any potential conflicts of interest.

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## **ANNEX 1: RELEVANT SDG TARGETS**

- **1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.
- **2.1** By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.
- **2.2** By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.
- **2.3** By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.
- **2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.
- **2.a** Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries.
- **4.b** By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries.
- **4.4** By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.
- **5.b** Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.
- **8.2** Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour intensive sectors.
- **8.3** Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.
- **8.6** By 2020, substantially reduce the proportion of youth not in employment, education or training.

- **9.5** Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.
- **9.b** Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities.
- **9.c** Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020.
- **10.1** By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average.
- **10.2** By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.
- **12.a** Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production.
- **13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
- **14.2** By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.
- **14.a** Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries.
- **15.5** Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.
- **16.7** Ensure responsive, inclusive, participatory and representative decision- making at all levels.
- **17.14** Enhance policy coherence for sustainable development.

## ANNEX 2: FAO PROGRAMME PRIORITY AREAS (PPAS)

BP1:	Innovation for Sustainable Agriculture Production
BP2:	Blue Transformation
BP3:	One Health
BP4:	Small-Scale Producers' Equitable Access to Resources
BP5:	Digital Agriculture
BN1:	Healthy Diets for All
BN2:	Nutrition for the Most Vulnerable
BN3:	Safe Food for Everyone
BN4:	Reducing Food Loss and Waste
BN5:	Transparent Markets and Trade
BE1:	Climate Change Mitigating and Adapted Agri-Food Systems
BE2:	Bioeconomy for Sustainable Food and Agriculture
BE3:	Biodiversity and Ecosystem Services for Food and Agriculture
BE4:	Achieving Sustainable Urban Food Systems
BL1:	Gender Equality and Rural Women's Empowerment
BL2:	Inclusive Rural Transformation
BL3:	Agriculture and Food Emergencies
BL4:	Resilient Agri-food Systems
BL5:	Hand-in-Hand (HIH) Initiative
BL6:	Scaling up Investment

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