

## UN Food Systems Summit+2 Stocktaking Moment

### SESSION REPORT

All session recordings will be available after the conclusion of the session. Please send the report of your session to Ms. Yota Nicolarea ([Panayota.Nicolarea@fao.org](mailto:Panayota.Nicolarea@fao.org)) and Mr. Thembani Malapela ([Thembani.Malapela@fao.org](mailto:Thembani.Malapela@fao.org)) by **Tuesday 1<sup>st</sup> August COB**

Type (click one):  HLS/PLENARY –  LEADERSHIP DIALOGUE –  SPECIAL EVENT

### *Science, Technology, and Innovation Roundtable with the Scientific*

### *Advisory Committee*

25 July 2023 16:00 - 17:30

Name of note-taker: Ludovica Nesbitt, Nicole De Paula

Organization/country: UN Food Systems Coordination Hub

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List of speakers, in all segments, and key messages

NAME AND TITLE OF SPEAKER	SEGMENT (opening, panel, closing, etc.)	KEY MESSAGES OR/AND RESPONSES TO QUESTIONS
1. Shakuntala Thilsted, SAC Chair	Opening	Recognized science, technology, and innovation as accelerators of change, emphasizing the significance of systems thinking in deploying integrated solutions, while simultaneously highlighting the necessity of building capacity to scale up appropriate technologies.
2. Qu Dongyu, DG FAO	Welcoming remarks	Stressed the importance of science and its role in shaping new public policies, calling for the avoidance of a silo approach. The FAO's scope extends beyond land-based agriculture, encompassing forestry, fisheries, and food systems transformation, aligning with the 2030 Agenda goals. He noted that utilizing all available sciences, including natural, human, and social sciences, becomes imperative. He closed saying that politically, the responsibility for food systems extends beyond the Ministry of Agriculture, necessitating closer collaboration among various ministries.

<p>3. Anna Maria Bernini,        Minister of University and        Research of Italy</p>	<p>Impact panel</p>	<p>Noted that innovation is vital for addressing global food challenges, adding that, despite excellent scientific discoveries, practical applications often falter, making dissemination essential. Indicated that Italy's research capabilities, including computing capacity, can help tackle climate and food challenges. Innovation combats waste and improves efficiency while respecting the environment. She highlighted that sustainability and technology can go together, with scientific diplomacy playing a pivotal role. Citizen involvement and effective communication enhance innovation's impact on our lives. She closed saying that government problems require attention to education and that collaboration and continuous training are key to reliable food systems.</p>
<p>4. Mariam Almheiri, Minister        of Climate Change and        Environment of UAE</p>	<p>Impact panel</p>	<p>She highlighted how science, technology, and innovation have been the key to the remarkable progress the UAE has achieved, particularly in its national food security strategy. With around 150 active companies focusing on food, the UAE harnesses technology to drive advancements and transformations. She noted how the desert is now a hub for innovation, with an emphasis on building an ecosystem for innovation through the Innovation oasis. She recommended calling the youth as the future's agri technologists, creating tools not only for traditional farming but also within urban landscapes. The crucial driver in the UAE is to foster innovation, and if finance can be integrated, it could lead to groundbreaking solutions. She closed stating that the UAE is open to sharing its innovations and experiences with the world, showcasing how different countries can collaborate to bring innovation to new heights.</p>
<p>5. Jennifer Lester Moffitt,        Under Secretary for        Marketing and Regulatory        Programs, USDA</p>	<p>Impact panel</p>	<p>She stressed climate-smart agriculture and forestry as crucial in addressing the challenges posed by climate change. She added that the availability of tools plays a pivotal role, and that's why academia and science are needed to identify and develop a solid set of tools for farmers to use. She gave an example from the USA illustrating how science and data can connect farmers and ranchers through USDA climate hubs that bring data directly to them. She underscored that stakeholders' involvement has been instrumental in driving the development of these tools. Internationally, she recalled that a climate hub was launched in May to further support this effort, ensuring there are critical tools bridging the divide.</p>

<p>6. Barbara Burlingame, Co-Chair, SAC</p>	<p>Roundtable with the SAC</p>	<p>Stress on the importance of studying past summits and initiatives in science and innovation over the last 70 years to understand what has worked and what hasn't. Despite solid thematic convergences, competition between sectors can arise. The United Nations' priority is to transform food systems within global limits, necessitating compromises. The Scientific Advisory Committee (SAC) will mobilize science and innovation for transformation while respecting the traditional knowledge of Indigenous populations. The concept of "living science" is introduced, although not clearly defined. The Science &amp; Policy interface must prioritize sustainable development as its central focus.</p>
<p>7. Hilal Elver, Co-Chair, SAC</p>	<p>Roundtable with the SAC</p>	<p>Underscored the significance of involving all stakeholders in decision-making processes to achieve transformative food systems, despite the difficulties it may entail. She advocated for equal recognition of both scientific (peer-reviewed) and traditional knowledge. Furthermore, she stressed the legal obligation of governments to uphold international human rights standards, especially regarding the right to food, as it is not an option but a fundamental requirement.</p>
<p>8. Jean-Francois Soussana, Co-Chair, SAC</p>	<p>Roundtable with the SAC</p>	<p>He highlighted that, to address the challenges of climate change, biodiversity erosion, and inequalities, stepping up interdisciplinary research is essential. A systemic approach is needed to answer three key questions. Firstly, understanding our status in transforming food systems under the 2030 Agenda requires interdisciplinary and dynamic systemic analysis at different scales. Secondly, integrated simulation models exist for envisioned transformations, but they need to account for uncertainty and adapt to local contexts while supporting policies without being overly prescriptive. Thirdly, achieving our goals requires mobilizing knowledge and technologies through monitoring, foresight, nature-based solutions, and social innovations. Scaling up options like reducing food waste, soil restoration, and agro-ecology, including low-cost solutions, is vital. Promoting "living labs" and co-constructing solutions will facilitate research appropriation. Additionally, investing in international partnerships will help build capacity for a comprehensive approach.</p>

9. Shenggen Fan, Co-Chair, SAC	Roundtable with the SAC	To achieve their ultimate objectives, governments must formulate an agrifood system strategy. A critical component is establishing a knowledge platform that the private sector can utilize as well. To drive innovation, it is essential to bridge traditional knowledge with modern advancements. Recognizing the significance of our dietary choices for both individuals and the environment, food consumption becomes a key focus. The Scientific Advisory Committee (SAC) plays a pivotal role in supporting countries at the national level and fostering collaboration with diverse stakeholders to promote transformative change.
10. Ibrahima Hathie, UN Global Sustainable Development Report Group	Roundtable with the SAC	The report maintains the structure of six entry points, including food systems, as proposed in the previous GSDR 2019 report. It also retains the levers of science, technology, and innovation while adding the capacity-building lever. To accelerate change, the report suggests a reflective and actionable framework, drawing inspiration from past successes like the green revolution. Moving beyond niche innovations, strategic scaling is emphasized. Inclusive, open-minded, and socially robust science is crucial in driving these transformations. Research should address negative collateral effects by explaining complex dynamics and promoting positive synergies among sustainable development objectives, leading to realistic and actionable solutions.

### Interventions from the floor

SPEAKER	QUESTION OR KEY POINT OF INTERVENTION
1. Ismahane Elouafi, Chief Scientist, FAO	The focus must be on implementing and evaluating national trajectories. A concrete and pragmatic yet non-simplistic system of indicators is also needed. Additionally, the cooperation with CGIAR has been highly appreciated as it expanded the SAC's reach beyond limitations, making it a network of networks.

2. SAC members (Ruben Echeverria, Rattan Lal, Mohammed Hassan, Kaosar Afsana)	Other SAC members' comments encompassed diverse aspects of food systems transformation. They emphasized the significance of soils, animal, and plant microbiota, along with the mobilization of Indigenous knowledge, distinguishing between empirical and real science. The importance of science appropriation by communities and the social dimension of innovation were also highlighted. Simplified and inclusive simulation models enabling impactful results were discussed, as well as collaboration with SAC/HLPE. While the national level is essential, its analysis must consider the global context.
3. Mexico Representative	Sometimes there is a gap between politics and scientific knowledge.
4. Kenya Representative	There seems to be a continuation of siloed thinking. Big divide between scientific community and what must be done in practice.

### Overall summary, conclusions and recommended actions (max 250 words)

The session emphasized the interconnectedness and dynamic exchanges characterizing current food systems, urging for flexibility and new knowledge for systemic solutions. Integrating science, technology, and innovation can offer diverse benefits, addressing health concerns for people, animals, plants, and the environment. Strengthening the capacity of low-and-middle-income countries to develop and scale up appropriate technologies, in tandem with technology transfer, was recognized as vital.

The session stressed the urgency of operationalizing systems thinking and knowledge-based decision-making in food systems policies. Enhancing science communication and strengthening science-policy-society interfaces, particularly in the Global South, was deemed necessary for advancing research and development.

The dialogue succeeded in bridging gaps between actors and disciplines, encouraging systemic risk assessments and addressing implementation gaps. The value of multiple disciplines and ways of knowing, particularly transdisciplinary approaches, was highlighted as essential for meaningful and long-term transformations. Three important takeaway messages were shared:

- Science, technology and innovation are powerful accelerators of agri-food systems transformation, consolidating multi-disciplinary sciences into integrated, coherent, and actionable national pathways to benefit multiple actors, from policy makers to farmers and youth, leaving no one behind
- Science, technology and innovation approaches must bridge nature-positive solutions, traditional and Indigenous knowledge, with modern innovations such as data, bioinformatics, genomics, and A.I., in responding to the democratization of agri-food sciences for all
- Science, technology and innovation approaches must build on and strengthen past and existing efforts, while embracing new avenues for food systems transformation, which are inclusive, equitable, and just.