24th Session of the Committee of Experts on Public Administration

Written inputs by Food and Agriculture Organization of United Nations (FAO)

Agenda Item 3: Governance and institutional perspectives on advancing sustainable, inclusive, science and evidence-based solutions for Sustainable Development Goals

Advancing science- and evidence-informed solutions to public policymaking

Realizing more efficient, inclusive, resilient and sustainable agrifood systems is necessary to accelerate progress across most Sustainable Development Goals (SDGs) and targets, and is a major pathway to achieving the social, economic and environmental dimensions of sustainability.

A wide range of approaches, technologies and practices exist that can contribute to transforming agrifood systems to nourish people, nurture the planet, ensure decent work and economic growth, advance equitable livelihoods and well-being and build resilient ecosystems. Science and innovation underpin them all. Data are critical for ensuring food security and nutrition, and essential to drive programmes and policies, to track progress towards the SDGs, to detect time trends, and to course correct in this historical moment of multiple interconnected crises. Understanding how to use data, analytical evidence and multistakeholder processes is key to transforming agrifood systems towards greater sustainability and inclusiveness.

Science and innovation can be a powerful engine to transform agrifood systems and end hunger and malnutrition when accompanied by strong institutions, good governance, political will, enabling regulatory frameworks, and effective measures to promote equity among agrifood system actors (FAO, 2022).

National ownership of data systems and continuous partnership of international organizations with countries are key to ensure usefulness of data for inclusive and equitable policy decisions. Sustainability of data can only be assured by strengthening national capacities and identifying financing mechanisms at the country-level. Effective communication of sector-specific data across systems and to policymakers is vital for informed decision-making (CFS 51, 2023).

In an increasingly fragmented world, science diplomacy is viewed as a viable means of resolving multilateral problems and fostering collaboration on global commons, making use of the universal language of science to keep lines of communication open and build policy convergence across nations (FAO, 2024).

As the UN specialized agency for food and agriculture, FAO is called upon to be a driving force for facilitating solutions to agrifood system challenges through science and innovation. The Organization is taking major steps to rise to the challenge of harnessing the transformative potential of science and innovation. FAO regional and country offices are moving forward with tailored and globally coordinated programmes, such as under the framework of the Hand-in-Hand Initiative and its Geospatial Platform, Digital Villages Initiative, and the Global Action on Green Development of Special Agricultural Products: One Country One Priority Product. FAO is also collaborating with other UN agencies on the elaboration of ethical issues raised by new technologies and innovations[1].

[1] FAO contributed to the development of the Recommendation on the ethics of artificial intelligence, adopted by the General Conference of UNESCO in 2021. https://unesdoc.unesco.org/ark:/48223/pf0000380455

Due to its unique position as a facilitator of intergovernmental processes, FAO provides a neutral platform and scientific analysis for exchange between countries and serves as an authoritative source of guidance through its indispensable work on norms and standards, regulatory frameworks, guidelines, codes of conduct and other standard setting instruments. FAO also synthesizes scientific knowledge and presents it to policy makers. It provides evidence and analysis, including on benefits, risks, trade-offs and potential for adaptation to different contexts, thus empowering Members to decide their development pathways. These functions underpin FAO's role of providing global public goods for agrifood systems[2]. One example is the Agricultural Market Information System (AMIS) that brings together the principal trading countries of agricultural commodities and assesses global food supplies, and provides a platform to coordinate policy action in times of market uncertainty.

Strengthening institutional capacities and cross-sectoral coordination for the translation of evidence into actionable policies

Evidence-informed decision-making has the potential to improve the effectiveness, efficiency and equity of the decisions that are made, while also enhancing accountability and transparency. Yet integration of science and evidence into effective agrifood systems decision-making processes remains a significant challenge (Nature, 2022). A narrow view of what counts as evidence favors specific expertise over others, and a wide range of evidence remains undocumented, unpublished and overlooked, leading to bias.

Current challenges affecting agrifood systems require agility and transparency to co-create and integrate knowledge and feed it into policy and practice. Consequently, it is necessary to establish/ strengthen the legitimacy of institutional structures, to improve networks among knowledge holders and policymakers, to build capacity in how to inform policy optimally with evidence, to facilitate building of coalitions of actors able to lead and support informed decision-making, and to institutionalize systematic, participatory and transparent processes (FAO 2024).

To be useful for policy purposes, knowledge from many sources must be combined in a coherent format that summarizes known and unknown aspects, while recognizing gaps and limitations (including areas of controversies). Government institutions should have adequate capacities and procedures to facilitate coordination and collaboration among relevant sectors, disciplines and social actors. While co-creation of knowledge adds complexity by needing both interdisciplinary and transdisciplinary approaches, it builds trust, and creates a strong basis for transformative changes, promoting equity and inclusive participation.

The contribution of knowledge to collective decision-making processes should extend beyond bringing critical issues on the policy agenda and shedding light on substantive and technical issues. It should be actionable and solution oriented, outlining how knowledge is intended to induce change and navigate trade-offs.

FAO has many methodologies and tools to support countries to operationalize governance principles and implement the pentagram of action to accelerate the achievement of SDGs.

- For example, FAO and WHO have designed an instrument for countries to assess national food control system using the Codex Alimentarius texts as the main benchmark. The assessment results in a semi quantitative measurement of performance of competent authorities at system level and delivers detailed recommendations for improvement. This tool allows countries to review their

[2] FAO provides a range of global public goods. For example, the Global Information and Early Warning System on Food and Agriculture (GIEWS) is the world's leading source of information on global food production, consumption and trade. It continuously monitors the food security situation in every country of the world and alerts the world to emerging food shortages.

system against the key competencies that need to be in place, identify areas for focus and prioritize these for action. It also provides a baseline, key to measure progress.

- More specifically, in relation to implementing the budgeting action (action 2 of the pentagram), FAO Monitoring and Analyzing Food and Agricultural Policies programme support governments with monitoring of budgeted and executed spendings in domestic and international agricultural and food policies (domestic resources, and ODA), alignment of the policy goals with the policy instruments and spending priorities, utilization of models to guide the optimization of public spending. Control of 'trade-offs' and unintended consequences to guarantee policy cohesion and avoid waste of public resources. Research from one of the background papers in The State of Food Security and Nutrition in the World 2024 helps build the case for optimizing budget allocations in six sub-Saharan African countries: Burkina Faso, Ethiopia, Ghana, Mozambique, Nigeria, and Uganda. The policy optimization modelling tool was used to build a scenario whereby public spending across different policy support measures in the crops and livestock sectors is optimized for the period 2025–2030 to maximize agrifood GDP, maximize off-farm jobs in rural areas, minimize the incidence of rural poverty, and minimize the cost of a least-cost healthy diet.

Digital capabilities as accelerators to achieve the SDGs

In agrifood systems, digital innovation holds unique capabilities to bridge the rural divide, unlock employment opportunities, increase the resilience of rural areas and empower youth and women to access information, technology and markets. FAO promotes the use and adoption of digital technologies to facilitate the transformation of agrifood systems and agribusinesses, as well as in advising on and promoting a policy agenda and policy investments to address the digital divide, making sure to leave no one behind. At the same time, concerns remain as to the use of artificial intelligence (AI) and its potential to guide policymaking and governance. The use of AI may be a game changer for the 3th action of the CEPA pentagram, but also a source of questions and challenges for many countries. What is needed are strong policies to guide the development and deployment of AI, including in agrifood systems governance

In 2023, employing foresight methodologies such as horizon scanning, scenario building, and strategic foresight, FAO assessed a selection of technologies and innovations, which potentially could be of paramount importance in addressing agrifood challenges until 2050, as well as the most important trends and drivers that will influence the emergence of agrifood technologies and innovations and their triggers of change, including some regional aspects. The resulting Global foresight synthesis report urges the improvement and repurposing of research and development programmes, policies, and investments within the realm of agrifood science, technology, and innovation. Beyond the confines of agrifood, the exploration extends to broader technological arenas, encompassing quantum physics, energy, materials, policy, market dynamics, and social innovations.

Building effective, legitimate and equitable science-policy interface(s). Example of agrifood systems transformation

Decision-making is often influenced by a range of structural and behavioral drivers and barriers, along with the involvement of numerous stakeholders who experience varying degrees of power asymmetries. Scientific findings may be limited by complexity, insufficient data, differences in values, uncertainties, competing views and contrasting results, and can be contested.

The significant differences in goals and incentives between scientific research and policymaking are often overlooked by both, posing challenges in their relationship, especially when dealing with contentious issues that can undermine trust among stakeholders. Policymakers may not inform scientists and other knowledge holders about their needs while scientists and other knowledge

holders may not actively engage in the policymaking process. Additionally, many obstacles may compromise their participation.

The science–policy interface (SPI) has been defined as "mechanisms for organized dialogue between scientists, policymakers and other relevant stakeholders in support of inclusive science-based policy making" and "characterized by relevance, legitimacy, transparency, inclusivity, and ongoing and effective dialogue through an appropriate institutional architecture" (FAO, 2022). An SPI goes beyond a simple linear transfer of knowledge, with scientists informing policy and policymakers acting on evidence; it is a dynamic ecosystem of processes, actors and organizational structures designed to facilitate the exchange of knowledge and integrate it with social values to address complex policy challenges (UN CEPA, 2021).

The governance structure of a multistakeholder mechanism facilitating science-policy interface and the stakeholder selection and inclusion process play an important role in ensuring a diversity of views and in balancing power relations among participants. Inclusiveness and broad representation in a given multi-stakeholder mechanism can be influenced by the timing and sequence of stakeholder inclusion (UNEP, FAO and UNDP. 2023). For instance, inclusiveness and representation is still an area of concern for the food policy council of Berlin, Germany (*Ernährungsrat Berlin*), even after years of operation and several attempts to engage marginalized groups. Those engaged in the process acknowledged the need to build a more diverse group during the initiative's inception. The collaboration began with primarily academic groups, which subsequently made it difficult to include other actors as the initiative evolved. This is a challenge recognized by food policy councils and collaborative processes in different geographic locations (RUAF and Hivos, 2019).

The process of gathering evidence for policy from multiple, and sometimes competing, perspectives is just as important, if not more so, than the final synthesized knowledge. The interactions among actors during this iterative process significantly influence their beliefs, values and behavior, ultimately strengthening trust in data and evidence, and determining the success of SPIs (Riousset, Flachsland and Kowarsch, 2017).

Example of science–policy interfaces related to food and nutrition in Brazil

Brazil offers one of the most successful examples of establishing an SPI that had an important impact in shaping public policies for agrifood systems, with a focus on food and nutrition sovereignty and security and the human right to food. The Brazilian example stresses the multidisciplinary nature of research needed for an effective SPI as well as the willingness of governments to seek to base their actions on evidence. The National Council for Food and Nutrition Security (CONSEA), the Brazilian Research Network on Food and Nutrition Sovereignty and Security (PENSSAN), and government demands of studies and research through specific public calls are the three main SPI mechanisms in the country. CONSEA, fully financed through public funds, was established as an outcome of social mobilization plus a governmental decision (Leão and Maluf, 2012) and serves as a space for social engagement with a composition of 2/3 civil society representatives and 1/3 government representatives from various ministries. It has helped in establishing dialogue between researchers, social actors, and public managers.

Positive outcomes of CONSEA's work include programmes for priority acquisition of food from family farming, reorientation of school meals, promotion of agroecology, reduction of agrochemical use, food and nutrition education, and addressing the needs of diverse communities

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