





The Montpellier statement:

Feed, Care, Protect: Intelligence to accelerate food systems' transformation at local and global levels

On March 8th, 2022, the University of Montpellier, the High-Level Panel of Experts on Food Security and Nutrition (HLPE) of the United Nations Committee on World Food Security (CFS) and CGIAR, with the support of Montpellier Méditerranée Métropole, co-organized a special event entitled "Feed-Care-Protect: intelligence to accelerate food systems transformation at local and global levels".

The organization of this event originated in a simple observation. Despite the global scientific and political consensus around the need for radical transformations in our food systems to better match global health, environmental and socio-economic challenges reaffirmed during the recent United Nations Food Systems Summit¹, despite the growing existential threats that climate change, environmental degradation and economic disparities are placing on food security; and despite the considerable available scientific evidence on what to do and how to do it, food systems transformation is still not happening either with the necessary speed, scale, or impact.

To unlock the needed transformations, we must address the following questions: how can science and policy, knowledge and action better inform and interact with each other? How can existing evidence better contribute to policy design and generate impactful changes now and in the future? Clearly, the academic communities must radically change the way they operate if we want to significantly accelerate the transformation of global food systems.

First, we must remember that policymakers process information received from many categories of actors with different needs, perspectives, power and interests. In that respect, food systems are especially complex since they have to meet basic needs and rights and generate income for every participant in the value chain. Inevitably, some interests do conflict. Scientific input is but one amongst many in decision-making processes, along with empirical information, management of trade-offs and distributional impacts,

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¹ Held during the UN General Assembly in New-York on 23 September 2021.

political priorities and agendas, power structures and societal acceptability. We need to acknowledge that scientists and policymakers do not speak the same language. Policy questions are fundamentally different from scientific ones and focus generally on the "what's next", the "how to", and on the distributional impacts of a given policy over space, time, and social groups. Scientists and policymakers are not motivated by the same priorities and do not work within the same timeframes. Policymakers must respond quickly to the demands and needs of their citizens, considering election cycles; researchers are curiosity-driven and work over longer timeframes. Scientists often complain that available evidence and scientific alerts are not properly considered in decision-making but policymakers have no time to digest and navigate the incredible and sometimes controversial amounts of evidence available on complex issues, affecting many sectors and involving many scientific disciplines. Scientists on the other hand, often struggle to summarize and synthesize information, including relevant uncertainties, in a way that is easily usable in decision-making.

Scientists should be able to better share their knowledge and the corresponding limits of that knowledge, the results of their research and the corresponding uncertainties in plain language, so that, informed by science, policymakers can frame and identify priorities. Uncertainty drives research (hypothesis testing) but can be used as an excuse for political inaction. Thus, clearer communication around scientific certainty (e.g. climate change is human driven), versus valid uncertainty is fundamental. Finally, we should not forget that, at the end of the day, it is neither the scientists, nor the policymakers alone who are transforming the society and the planet, but citizens and their movements, communities and civil society organizations, and private companies.

For science to increase its impact and effective influence on policymaking, we must also better understand power dynamics as well as physical, political and economic processes; identify and overcome the obstacles of power, interests, culture and communication between science, policy and society. The clash of interests that leads to blockages should itself be a topic for science. Understanding the nature of problems or lock-ins should enable for policymakers to better understand the origins of trade-offs and barriers, and thus navigate and negotiate solutions. This supposes to move away from the traditional paradigm of linear knowledge and technology transfer, avoid the 'scientisation' of agenda for political expediency and adopt a more iterative and interactive learning model, where knowledge and action, science and policy engage in permanent dialogue and where context-specific options, co-constructed with local actors, replace uniform "silver-bullet" solutions imposed from the outside. We should take advantage of the increasing number of scientists motivated by the positive societal impact of their work and of the large science community which, increasingly, embraces research co-designed with relevant stakeholders. In such a model, science looks at addressing context-specific societal needs aligned with policy questions, at integrating input from various scientific disciplines and from different sources of knowledge, at being stakeholder³ and demand-driven rather than researcher and supply-oriented.

² Who will benefit and who will bear the costs? Who will be the losers and the winners? How to compensate the losses, in particular for the most vulnerable populations?

³ e.g. local actors and communities, private sector, civil society, policymakers, policy influencers (e.g. journalists or NGOs), national governments.

We need to create the conditions for continuous and interactive dialogue, across sectors and scales (from local to global), between scientists, policymakers, and society at large in vibrant Science-Policy-Society Interfaces (SPSIs), able to adopt forward-looking perspectives and bridge local and global processes and actions. For that, each community will have to go beyond its conventional role. Policymakers need to look beyond daily urgencies and crisis mode reaction and dig into long-term perspectives; they should put forward explicit demands to science. As science does not have the monopoly of knowledge, citizens should participate in knowledge co-generation, while scientists may be involved in institutional arrangements in order to share knowledge and its characteristics and to monitor innovation and its consequences.

The success of the IPCC⁴ over the past decades has led to the multiplication of transdisciplinary high-level expert panels or commissions, at national, regional and global levels, each panel focusing on one particular pressing challenge, such as: biodiversity loss (for IPBES), food security and nutrition (for the CFS-HLPE), or One-Health (for the OH-HELP). Each panel is framed by its specific values, normative approaches and objectives, and is oriented towards a specific policy-making theme with the aim to present knowledge and to achieve objectives by the most effective means possible. Each of them comes with its own history, its own political legitimacy and mandate, its own concepts and metrics, its own expertise and scientific community, its own agenda, decision processes and working modalities. These specificities and characteristics structure each panel and enable its work but, at the same time, can make it more difficult for the different panels to collaborate, even if each of them is aware of the existence and value of the others.

Recent crises, such as the financial and food price crises (2007-2008), the COVID-19 pandemic, the conflict in Ukraine and now the extreme weather of the northern hemisphere summer of 2022 and its combined geopolitical influence on global food security, are raising awareness about the tight and complex links existing across sectors (synergies, trade-offs and feedback loops), across time and space scales, across ecosystems and across development goals. These tight interconnections have been recognized at the global level with the adoption of the 2030 Agenda for Sustainable Development. Food systems, in particular, have been repeatedly identified not only as a matter of concern for food security and nutrition, but also a powerful entry-point and lever to achieve most if not all of the 17 Sustainable Development Goals. We cannot design and implement sustainable food systems without addressing interconnected agriculture, food, climate change, biodiversity, health and equity challenges ('Feed, Protect and Care') in an integrated way.

Such interconnections call for stronger collaborations, dialogues and formal information exchanges among the various thematic expert panels. Just like individual neurons are connected to create human intelligence, we must connect thousands of researchers to generate and strengthen the collective intelligence we need to address today's complex challenges. This means creating the space for experts

⁴ High-level panels acronyms referred to in this paragraph stand for:

IPCC: Intergovernmental Panel on Climate Change;

[•] IPBES: Intergovernmental Platform on Biodiversity and Ecosystem Services:

CFS-HLPE: High-Level Panel of Experts on Food Security and Nutrition of the UN Committee on World Food Security:

OH-HELP: One-Health High-Level Expert Panel.

to work together to develop common understandings, concepts, language, analysis to address complex food systems challenges. Researchers will have to go beyond their own specialized scientific community and learn how to adopt a holistic and transdisciplinary perspective, breaking silos and bridging experiences from many countries, institutions, networks and scientific disciplines (natural and social, fundamental and applied sciences). SPSI dialogues can play a decisive role if they are able to dovetail divergent views, to make the difference between risks, doubts and uncertainties and to overcome polarized debates and break sectoral silos.

To be clear, we are not suggesting the creation of a new institution but we are calling for a flexible mechanism bridging the different panels, a space where existing SPSIs could interact freely and safely, confront their expertise and collaborate effectively pursuing a common ambition. This collaborative space could take the form of a platform where all existing SPSIs and relevant stakeholders could work together, across different scales and communities, to develop a shared understanding of today's challenges and a common vision for the needed food systems transformations. This collaborative platform would create interfacing spaces for knowledge generation, capacity building, enabling conditions for SPSIs at all scales, etc. Several activities can be envisaged to strengthen the dialogue, collaboration and "crossfertilization" among SPSIs, including joint reports, joint meetings, joint working groups and task forces on common issues, same contributing experts working across several panels. Creating this space for collective intelligence will require us to focus on communication, coordination, cooperation and capacity-building.

Such a collaborative space could in particular contribute to the following objectives and functions:

- Generating comprehensive, accessible and actionable knowledge for higher societal impact by connecting various thematic expertise (models, analysis, data, and metrics), across sectors and scientific disciplines, to address the cross-cutting and interconnected challenges of climate change, biodiversity loss, land degradation, malnutrition, poverty and social justice;
- Forecasting and modelling alternative scenarios regarding food systems transformation by articulating different forms of knowledge (scientific, local and traditional, empirical information), and exploring and anticipating multiple possible futures to be discussed by policy-makers through foresight while embracing different contexts and scales⁵ to design, implement, and assess context-specific integrated and transformative pathways.
- Confronting different perspectives to move beyond obstacles, address trade-offs and barriers to change (including rights, responsibilities, power asymmetries, path dependency, conflicts of interest, risks and uncertainties), by facilitating networking, partnerships and better mutual understanding, based on principles of transparency, rigor and equity of the process, as well as on democracy, accountability and participation of all relevant stakeholders, particularly vulnerable and historically marginalized populations, such as women, youth, elderly or poor people, indigenous peoples, ethnic or religious minorities, smallholders and local communities;
- Creating and convening coalitions for change by strengthening cooperation across actors (academic institutions, governments and public agencies, private sector, and civil society

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⁵ i.e. thinking both global and local to act at different scales.

organizations) and sectors (agriculture, environment, energy, health, land-use planning, education, etc.) and supporting capacity-building at all scales.

Building upon the momentum created by the 8 March Special Event and in order to amplify this collective endeavor, we suggest to organize two milestone events in the coming months:

- a special event, during the next CFS Plenary session in Rome, in October 2022, to advance the conversation on the food systems transformations amongst the various panels;
- a three-day inclusive international interface dialogue, that could be held in Montpellier in 2023, to make further progress, agree on a common vision, milestones and roadmap, fully mobilizing the panels and the whole science, policy, society ecosystem.

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