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The road to inclusiveness

Food systems do not serve everyone. Beyond a moral imperative, inclusiveness is a condition for systemic resilience — and requires a broadened research approach.

Systems are as strong as their weakest component. People facing poverty, conflict, gender marginalization or other situations of vulnerability have their fundamental right to a healthy and nutritious diet curtailed, and also constrain the capacity of food systems to respond to others' demands. Food systems would be more productive and resilient if everyone had adequate conditions to live and produce — making use of natural resources in a sustainable and efficient way, reducing expenditures on food aid and emergency capabilities, bringing in diversity, spreading risks and contributing to a more dynamic food trade.

Efforts to ensure inclusiveness in all its forms, such as access to products and markets, participation in decision-making processes, and engagement in policy design and investments, are therefore urgent. Strategies have been implemented at the local and global levels, in line with the United Nations 2030 Agenda's principle to "leave no one behind"[1] — including social protection programmes, education, farmer training, technological diffusion and better connection of smallholders to supply chains. Yet, marginalization and inequality remain striking even when it comes to something as elementary as food; between 702 and 828 million people faced hunger in 2021 (ref. [2]), financing is unevenly distributed, participation in international food trade is unequal, corporate concentration is growing[3], and important negotiation forums such as COP27 had only limited participation of smallholders and indigenous peoples[4].

Mechanisms of exclusion also exist in research and scientific practice. Despite commendable efforts to improve inclusion and ethics, such as TRUST's Global Code of Conduct for Research in Resource-Poor Settings[5] and the San Code of Research Ethics[6], the Global South remains under-represented in research in terms of authorship and geographic focus[7]. The selection of research topics is largely determined by the availability of funds and the relevance of specific research questions to the funders. In some cases, concern has been expressed as to whether certain technological developments may reinforce power asymmetries in food systems[8]. The very paradigm of science is also to be questioned, as it often leaves little room for traditional knowledge systems[9].

In this issue of *Nature Food*, three papers touch on important aspects of this discussion. Jennifer Clapp and colleagues propose a set of principles for legitimate food systems science–policy–society interfaces. Spanning accessibility, transparency and participation, the so-called I-TrACE principles should be adopted by the Scientific Advisory Committee of the 'Coordination Hub' of United Nations bodies, launched in 2022 in the context of the United Nations Food Systems Summit to facilitate the implementation of national pathways for food systems transformation. Gernot Laganda writes on responses to loss and damage and humanitarian food assistance — underscoring the need for greater, faster and better-targeted investments to alleviate crises, both preventively and in the event of food systems breakdowns. Finally, Saad Khan and colleagues present a technology — a plant biomass-based hybrid seed wrapping for yams — that is affordable, uses locally abundant materials, and can help mitigate yield and post-harvest losses among smallholder farmers in sub-Saharan Africa[10].

Science still reflects — and potentially reinforces — inequality and exclusion patterns. To break this cycle, we urgently need more research, expert narratives and broader perspectives that are in line with inclusiveness principles, attuned to mitigation and adaptation requirements, and able to offer solutions to issues faced by those at the margin of food systems.

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