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## **A Framework for Examining Justice in Food System Transformations Research**

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### **Author contributions:**

*All authors contributed to the ideas presented in the manuscript. SW wrote the manuscript. All authors contributed to redrafting and editing of the manuscript.*

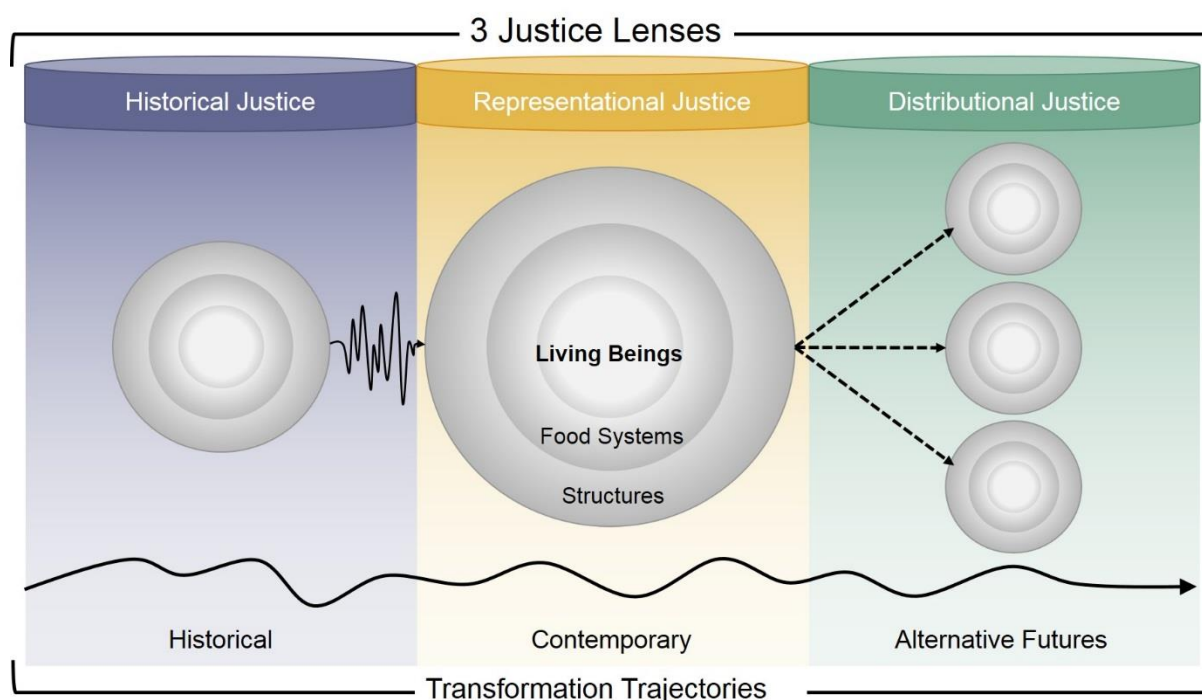
**Global interest and investment in food system transformation should be accompanied by critical analysis of its justice implications. These represent complex subjects for research and challenging ethical responsibilities for researchers. Multiple forms of injustice, and the potential role that research might play in exacerbating these, are key considerations for those engaging with food system transformation and justice, as both subjects and ethics of research.**

Transformation has become the rallying cry of global sustainability initiatives. Governments, NGOs and private sector agendas have quickly institutionalized the, albeit inconsistent, language of transformation and roadmaps have been outlined in a wide variety of food system settings. Notably, the stated vision of the 2021 UN Food Systems Summit is to “awaken the world to the fact that we must work together to transform the way the world produces, consumes and thinks about food” (<https://www.un.org/en/food-systems-summit/vision-principles>). Parallel to this, however, has emerged a critical response to transformation that warns of its latent risks. Blythe et al. [1] argue among others, that transformation discourse pays insufficient attention to social differentiation, politics and power. Experience suggests that, even with the best intentions, deliberate transformation may be brought about through exclusionary processes with inequitable outcomes [2] [3]. As such, there is an imperative, on the part of these institutions and the research community, to pay attention to the social justice implications, and emancipatory forms, of transformation.

Analysing food system justice means tracing the history, outcomes and processes of transformation across diverse, but interconnected, sites and scales, and engaging with the multiple perspectives and priorities of diverse and dispersed stakeholders. In the context of food system transformation, researchers have significant agency. They actively interpret and tell the story of food system transformation and often enter this role intentionally, as activists, seeking to further a transformative agenda, expose and redress injustices, or both. A research agenda for food system transformation and justice requires both conceptual clarity about justice and food system transformation as subjects of study, and ethical praxis about how to be just and transformative in approach.

### **Food System Transformation and Justice as Subjects of Research**

We conceive of transformation as fundamental changes in circumstance occurring to, for and by people within agriculture and food systems. These systems are themselves nested within broader economic, political and institutional structures [4]. The drivers of transformation operate across these levels and can originate both internally (e.g. through changed consumer behaviours, new technologies, or local governance initiatives) and externally (e.g. by changing climates, markets or political regimes). The effects play out over time as systems evolve; the historical interplay of internal and external drivers manifests in contemporary agriculture and food systems and a multitude of imagined alternative futures.



**Figure 1: A conceptual framework for applying justice lenses to the study of food system transformation.** The framework highlights three justice lenses – historical, representational, and distributinal – that can be adopted when thinking across the temporal dimensions of food system transformation. Food systems undergoing transformation, as well as the political and socio-economic structures that they exist within, and the people that operate within them, have histories and imagined futures. These three justice lenses differently focus our attention on: 1) the ways in which historical injustices are reproduced, exacerbated or redressed with transformation (historical justice); 2) the extent to which different individuals, perspectives and knowledge systems are represented within the visioning and governance of transformative change (representational justice); and 3) how the outcomes of transformation, its benefits and risks, are distributed. *Produced by the authors for this paper.*

The trajectory of transformation does not begin from a static baseline, nor does it end in a steady state at a single point in time. A long and contested history of ideas, philosophies, knowledge sharing, and intervention represent a complex legacy that continues to shape ever-changing food systems. The contemporary Alliance for a Green Revolution in Africa, for example, reflects a technology transfer model, impact-at-scale agenda and set of philanthropic donors that have a clear continuity with the history of international ‘green revolution’ agricultural research and development in the 1960s and 1970s in South and Southeast Asia, itself embedded in a longer colonial history of agricultural research for development. Although the technologies of this contemporary green revolution differ from those of its predecessor, issues of elite capture of benefits and the marginalisation of alternative knowledges are arguably being reproduced through them [5] [6].

Acknowledgement of those that went before - the individuals from previous generations that envisaged and/or drove change, that contested regimes, or that were marginalised and oppressed - is important. Adopting a historical justice lens turns our attention to how deep-seated inequalities experienced over time both inform the contemporary state and often become replicated and reinforced through future trajectories. Groups such as the African Alliance for Sovereignty and the Civil Society Mechanism of the Committee on World Food Security have documented their concerns

about the extent to which a colonial history is replicated in corporate influences over the UN Food Systems Summit (<http://www.csm4cfs.org/letter-csm-coordination-committee-cfs-chair/>), and the space given to traditional food cultures and knowledges within the Summit's processes (<https://afsafrica.org/>).

People, systems and structures may all represent transformation leverage points [7], from community-based governance to social movements, to donor-driven research and development efforts to multilateral agencies. However, there is potential that the interests that emerge in different spaces and at different levels are in conflict. A representational justice lens turns our attention away from the outcomes of governance to its processes, towards the voices that do or do not speak into it [8]. From a less anthropocentric viewpoint, it might cause us to think too about how the non-humans within our food systems are represented. From a Rawlsian perspective, a governance process that affords a voice and platform to different people and perspectives offers the potential for social learning and the building of empathy for others. However, in deliberative processes the power of arguments and ideas can be subordinate to, or co-opted by, the power of elites, patriarchy and wealth, (and perhaps by definition, to anthropocentrism) at macro- and micro-scales. Consistent with some of the critical voices around the UN Food Systems Summit, Newell and Taylor [9] argue that there is a macro-level regime complex of powerful institutions that have coalesced around the technological promise of 'climate smart' agricultural transformation, with implications for what solutions are promoted and who benefits from them. Tschakert et al. [10] point out the potential for the micro-politics that exists within a context, to be masked within emancipatory transformations. They demonstrate that individuals empowered as representatives and agents of change for a community (potentially in a context of resistance to, or conflict with, government), can simultaneously enact an oppressive elitism in other contexts (e.g. the household). A representational justice lens is therefore one that is attentive to power.

From a distributional justice perspective, we can conceive of the outcomes of transformation in terms of both food system benefits and risks. These may be manifest not only in the distribution of access to and security of food, but also nutrition, waste, energy, land, income, employment, ecosystem services and more. Although these benefits or risks are likely to be more or less accessible to those of different geography, race, ethnic group, gender, age and more, it is important to recognise the intersectionality and multifaceted nature of identity within the stakes that individuals hold. There is, of course, a fundamental rights-based dimension to distributional justice (as there is to representational and historical justice too). Under international law, all individuals have an inalienable right to access food and to be free from hunger (as they do to having recognition and voice) in the present. It is equally important to recognise that imagined trajectories of transformation potentially become realities for future generations. Neither those of the past, nor those of the future, are able to speak directly into the governance of imagined transformations, or lay claim to their rights. The potential for the diversity of contexts and the intersectional identities of individuals to be overlooked within the impact-at-scale ambitions of agricultural transformation represents one of its greatest risks from a distributional justice perspective.

Observing food system transformation through multiple justice lenses – those that draw attention to its historical, representational and distributional dimensions – can help to expose otherwise hidden injustices across multifaceted and cross-scalar food system transformations.

## **Transformation and Justice as Ethics of Research**

Research within the transformative space does not take place simply as passive and objective observation, monitoring and evaluation [11]. Action-researchers play a multifaceted role in advocating for and promoting transformative change. Empowering marginalised voices through participatory research, developing and promoting new agricultural technologies, or conducting social change experiments, for example, all put researchers at the centre of change processes. Whether intentional or not, there is thus potential for the research process itself to redress or exacerbate historical, representational and distributional injustices – and with that comes a responsibility on the part of researchers to reflect on their roles in this.

To capture the temporal nature of transformation and justice, and the complex intersectionalities that shape individuals' experiences of, and positions within transformative spaces, research on transformation and justice must necessarily be grounded, case-study based and longitudinal. This may involve, but is not limited to, deeply ethnographic, place-based research. Such approaches are important in understanding the lived experiences and cross-generational stories of transformation that are revealed slowly, through sustained engagement and built trust between researchers and participants. Creating the space and means for participants to tell their stories, in their own words, requires creative tools and techniques [12], including drawing on the arts and on visual means of communication [13], as well as a willingness on the part of the researcher to give over control of the research process and its outcomes [14]. This approach should be founded on strong intersectionality [15] that recognises the individual nature of experiences and knowledges, and an openness to diverse (non-western) epistemologies and expressions of knowledge and ways of knowing. Cammock et al. [16], for example, explain how following a Talanoa 'action cycle' methodology helped to centralise Fijian knowledge systems and understandings of research within their work on youth and entrepreneurship in the fruit and vegetable sector. This can be a significant act of emancipatory transformation in itself, particularly where it seeks to give a voice to those whose voice is otherwise (or has historically been) restricted.

Because of its cross-scale nature, food system transformation and justice research necessarily extends beyond single disciplines. Approaches such as integrated model-based assessment tools can offer a valuable counterpart to ethnographic work. They can provide both an analytical window into the range of futures envisaged from various perspectives, and an additional and alternative space for deliberation and stakeholder participation (including by decision and policy makers - participants who are also 'grounded' within the system, albeit often not locally). Within the GCRF-AFRICAP programme (a UK government supported programme supporting capacity building and policy advisory for agricultural and food-system resilience), for example, an integrated assessment framework has been developed for projecting future change in agricultural production, nutrition and food trade in Malawi, South Africa, Tanzania and Zambia, in a way that allows for stakeholders to engage with, interpret, deliberate over and iterate the parameters of those projections [17]. Within such efforts, care has to be paid to minimising epistemological biases and the potential for certain knowledges, perhaps those that conform most closely to the ways in which forums or research tools are framed, to be privileged over others.

Although research programmes that create inclusive spaces and mechanisms for giving a voice to multiple stakeholders have the potential to be transformative, it is important to recognize that the opportunities they give for change may vary. Some 'invited' spaces [11] may offer little chance of transformative change, compared with those that emerge on their own. It is possible, and in certain cases perhaps inevitable, that participation in transformative spaces (however they emerge) brings with it risks, including to personal safety and of social exclusion. This has been evident in the resistance

to and protests over the Indian government's new farm laws, for example. Transformation in itself is not risk free; attempts to make transformative spaces 'safe' for all those that participate (even for the researcher themselves) may act to undermine the transformative potential of action research. In response, Pereira et al. [11] pose the challenge of considering how to make spaces 'safe enough'. Any attempt to address this challenge clearly involves a normative judgement. Determining who should, and how to define metrics and assurances of safety, presents an ethical conundrum. Such dilemmas reflect the importance of early engagement and participation in the conception and design of action-research, reflecting on who has what roles, what visions of future transformation are held and are driving action, and at what cost they should be pursued.

The role played by the researcher is instrumental in determining who is invited to participate in the transformative space, setting the boundaries and rules of governance within this space, shaping the agendas and determining the metrics of justice. Transformative and just research must involve reflection on the way that the researcher influences the processes they are evaluating, as well as reflection on the part of those participating on the efficacy, inclusivity and risks of transformation. Structured ethical reflection frameworks [18] and social norms analysis tools [19] offer valuable approaches for reflexive research. It is equally important to be attentive to power within these methods, attentive to elitism amongst participants and perspectives, and attentive to the ways in which certain knowledges and evidences can also become privileged, including by the researcher themselves. It may be at the level of the micro-politics of a research project that injustices are inadvertently reproduced, or even that new unjust transformations are catalysed.

## **Conclusion**

As the transformation discourse grows, and increasingly finds its way into both mainstream language and counter-cultures of food system development, there is a growing imperative for all of those engaged in this process of transformation to be attentive to issues of justice. One of the biggest challenges of research in this area comes from the dynamic and dispersed nature of food systems transformation, which requires the researcher to be embedded across a range of temporal and spatial scales. This embeddedness inevitably makes the researcher an active, and often influential, participant within just transformations. That role brings with it – and arguably compels - the need for careful consideration of and commitment to the ethics of just and transformative research.

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