

Review

Reconnecting with Nature through Good Governance: Inclusive Policy across Scales

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Abstract: We are disconnected from nature, surpassing planetary boundaries at a time when our climate and social crises converge. Even prior to the emergence of COVID-19, the United Nations and its member states were already off track to achieve the Sustainable Development Goals (SDGs) and fulfil climate commitments made under the Paris Agreement. While agricultural expansion and intensification have supported increases in food production, this model has also fostered an unsustainable industry of overproduction, waste, and the consumption of larger quantities of carbon-intensive and ultra-processed foods. By addressing the tension that exists between our current food system and all that is exploited by it, different scales of governance can serve as spaces of transformation towards more equitable, sustainable outcomes. This review looks at how good governance can reconnect people with nature through inclusive structures across scales. Using four examples that focus on place-based and rights-based approaches—such as inclusive multilateralism, agroecology, and co-governance—the author hopes to highlight the ways that policy processes are already supporting healthy communities and resilient ecosystems.



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1. Introduction

The world is in desperate need of transformation. The COVID-19 pandemic has exacerbated and brought to light much of the structural inequity that already existed. Inequities were enlarged [1] and the number of individuals in poverty is expected to rise [2]. While some countries were structurally prevented from borrowing to address the impacts of the pandemic [3], others were able to launch large-scale social programming responses. Food systems, the focus of this review, have also experienced uneven impacts. It is expected that import-dependent countries may be vulnerable to food price increases due to a multitude of pandemic-related factors, including supply chain disruption and currency depreciation [4].

At the same time, locally led initiatives have emerged in response to urgent and pressing food access challenges at the community scale [5,6]. Local and global policy arenas are not substitutes, but rather interconnected complements and powerful tools for reform. As we move forward through the COVID-19 crisis, the world continues to face a host of collective systemic crises: declining biodiversity [7], the continued surpassing of our planetary boundaries [8], and growing economic inequality [9]. To meet this critical moment in our shared histories, a reorientation is required of our policy environments to prioritize and protect the rights of both individuals and nature across all scales of governance.

Public governance can be a way of reconnecting people with nature rather than commodifying it. This review paper shows that good governance is possible, and that inclusivity and accountability are the preconditions for equitable outcomes. To situate the importance of good governance and the need for change, this paper outlines the ongoing challenges within the current globalized food system (Section 2), the contested landscape

across food systems governance (Section 3), and examples in the successful implementation of multi-scalar inclusive governance. Focused on four different examples, this review then explores how multi-scalar solutions create policy pathways that support the pursuit of more equitable, resilient food systems. By focusing on global (the ‘most affected’ model of the Committee on World Food Security), national (the integrated approaches found within the UNESCO Biosphere Reserve system in Canada), sub-national (the commitment to Zero-Budget Natural Farming (ZBNF) in Andhra Pradesh, India), and local (the growing role of food policy councils and local food systems strategies), this review helps tease out the shared and unique conditions for success across scales and explores why each scale within public governance matters for a better, more sustainable future.

The first and foremost condition of success is good governance, meaning that processes are inclusive, accountable, and place-based. Each of the examples highlights the importance and need for centering inclusivity and a place-based approach that builds agency for those most affected by the food systems governance model under consideration. By increasing the agency of people most connected to the local ecosystems and environments, good governance creates space for nature to thrive.

2. The Race to Zero: Ailing Food Governance in a Globalized Economy

Our industrial food systems are failing both communities and natural environments [10]. In 2020, 2.37 billion people—or roughly one in every three individuals—could not access adequate food for a healthy, nutritious diet [11]. Additionally, even with enough calories produced to feed the current population [12], there remains an alarming trend of increasing food insecurity [11]. Our food systems are also fueling the devastation from climate change. Despite the strong link between food systems and carbon emissions, global industrial agricultural—and the broader agri-food industry—remains one of the largest contributors to the world’s greenhouse gas (GHG) emissions, accounting for roughly 31 percent of total GHGs [13]. Agricultural production remains largely outside of nearly all carbon pricing mechanisms—the leading tool within carbon regulatory schemes—and, until recently, a majority of the policy focus has been on adaptation rather than systemic mitigation. To further exacerbate these policy challenges, a significant tool currently used within food policy comprises agricultural subsidies. Intimately tied to questions of trade, these agricultural subsidies can contribute to the encouragement of production decisions that are harmful to human health and the environment [14,15]. The IPCC special report entitled *Climate Change and Land: Summary for Policy Makers* [16], notes: “Expansion of areas under agriculture and forestry, including commercial production, and enhanced agriculture and forestry productivity have supported consumption and food availability for a growing population (*high confidence*). With large regional variation, these changes have contributed to increasing net GHG emissions (*very high confidence*), loss of natural ecosystems (e.g., forests, savannahs, natural grasslands and wetlands) and declining biodiversity (*high confidence*)” (p. 7).

Beyond carbon emissions, there is a need to support Sustainable Development Goal (SDG) 12 (sustainable production and consumption patterns) through better aligning diets and food environments with nutritional requirements. Globally, over a billion tons of food is wasted annually [17]. While some of this waste is due to limited infrastructure, e.g., cold storage, waste happens across the entirety of the value chain—from farm fields to households [18]. The Commissioner of Environmental Cooperation estimates that more than 150 million tons of food—fit for human consumption—is wasted each year in North America. In addition, the report points to the greenhouse gas (GHG) emission implications of loss and waste, equating to 22.1 million hectares of cropland and 3.94 million tons of fertilizer used to create the wasted products [19]. In his recent book, *Eating Tomorrow*, Wise characterized the changes as the borrowing from tomorrow’s capacity of soils and environments for the wasting of food today [20].

In response to the shared global challenges facing food systems and nature, the Committee on World Food Security’s (CFS) recent High Level Panel of Experts (HLPE) report emphasizes that achieving food security goes far beyond levels of production. The

Food Security and Nutrition: Building a Global Narrative Towards 2030 report highlights the need to reconfigure food security to incorporate two additional dimensions: agency and sustainability [21]. The adoption of this updated definition would bring the concept into line with more recent interpretations of food security that center on the right to food as well as the realities of those individuals experiencing food insecurity directly. Agency refers to both the definition proposed by Sen (1985), which focused on the freedom of pursuit, and “the ability of people to take actions that help improve their own wellbeing, as well as their ability to engage in society in ways that influence the broader context included in their exercise of voice in shaping policies” [21] (p. 8). The authors from within the HLPE argue that agency and sustainability go hand in hand with the established four dimensions: access, availability, utilization, and stability. Sustainability is central to the ability to access food over the long term for current and future generations, while agency plays a central role in the right of each individual to determine how they interact with food systems. Without agency or sustainability, there is no true food security [22]. This updated concept is also much closer to the advocated move towards food sovereignty as a way to recognize the interconnected nature of food systems and the right of individuals, communities, and nations to chart their own food futures.

While the number of people experiencing food insecurity has grown substantially throughout the pandemic, statistics show that it has been on the rise since 2014 and is not experienced evenly [11]. Women and marginalized groups bear a disproportionate burden with rates 10 percent higher than their male counterparts [11]. The HLPE report also notes that deep transformation is required for food systems to support the achievement of SDG 2 (zero hunger) [21]. This urgent call comes at a time when the IPCC reports, with high confidence, that humans are unequivocally affecting the world’s climate [23]. There is no question that more individuals are expected to be pushed into poverty due to climate displacement and disruptions [23], concentrated largely within regions already impacted by historical traumas such as (neo)colonialism, exploitative trade practices, and uneven development. It is estimated that small-holders—defined by a recent FAO study as those with farms under 2 hectares—feed roughly one-third of the world [24]. They have only contributed a minor amount to the aggregate carbon output, but will be the most affected by the changing climate [25].

In addition to small-holders, Indigenous communities and other marginalized individuals are some of the most food insecure. In what is now commonly known as Canada, where the author is located, 4.4 million individuals—or 12.7 percent of Canadians—experience food insecurity [26]. Black and Indigenous households experience the most severe levels of food insecurity with rates above 28 percent [26]. This equates to roughly a rate 3.5 times higher than white households [27]. Writing of his experience on a mission to Canada, former Special Rapporteur on the Right to Food, Olivier de Schutter, highlighted the impacts and consequences on food security from climate change in relation to Indigenous communities and access to traditional food systems [28]. Nearly 10 years later, communities across Canada—part of the area known to many Indigenous nations as Turtle Island, which encompasses the region of North America [29]—continue to struggle with the growing and potential effects of climate change [30], as well as the impacts of settler economic systems, environmental disruption, and other pressures, on accessing traditional foods [31].

Reconnecting with nature means more than simply reducing carbon by applying new techniques or adopting additional technology. Narrowly focused solutions, such as Climate-Smart Agriculture (CSA) or Sustainable Intensification (SI), taken independently of more holistic reform, are only likely to embed the by-products of our broken globalized food system even further [32]. Through approaches such as agroecology, food systems, and the communities who depend on them, can thrive as part of nature rather than separate from it. By acknowledging carbon emissions as a symptom or by-product rather than an independent problem allows for more systemic solutions to emerge that incorporate biodiversity, climate, soil health, food insecurity, workers’ well-being, and other factors. Unlike the current trends globally, a systemic review of research from over twenty years

indicates that initiatives that take a systemic approach focused on the right to food and food sovereignty show a positive impact on food security and nutrition [33]. To aid in this endeavor, public policy provides an accessible tool funded by public resources with clear accountability and jurisdictions. It also plays an end-of-the-line role for governments in state-led decision-making forums, whether it is the United Nations or a local municipality. Public governance more generally—the rules, norms, and choices that govern public institutions—also play an important role in the rethinking of food systems. Pulled between past priorities and future needs, public governance plays a pivotal role in reconfiguring the center of power in decision making. Many recent Intergovernmental Organization (IGO) reports include calls for democratic institutional processes that value the knowledge of youth, Indigenous peoples, and local communities [11,21,34,35]. In addition, these reports highlight the importance of coordinated multi-scalar action to accomplish this transformational change.

3. Multistakeholder, Multilateral, and the Messy Middle

So why, in the context of such urgency, do food systems governance spaces remain deeply entrenched in the current global models of intensification? The answer is both complex and simple at the same time. To begin, not all global engagements are created equally. Decades of path-dependent policies and deep-rooted narratives build the foundations of our modern-day agricultural systems as well as many of our institutionalized understandings (e.g., productivism). Good governance needs to be supported by policy innovations that navigate the space between inclusion and accountability.

Good governance can be thought of as a set of clear rules of engagement that consider who holds power, how that has shaped past policies, and the ways of rebalancing these vested histories. Defined as “the practice of coordinating national policies in groups of three or more states, through ad hoc arrangements or by means of institutions”, multilateralism is by nature led by states [36]. Multistakeholderism, on the other hand, sees states as one player within a wide arena of influential actors [37]. While these definitions are considered unique governance arrangements, there is a spectrum of options that exist in implementation. Good governance can, and does, exist across this spectrum. However, the concentration of power and movements towards a more corporate-centered form of multistakeholder engagement, referred to in this review as hyper-multistakeholderism, can reinforce systemic lock-in effects. This form of governance leaves actors focused on symptom-based solutions that drive profits for larger companies who have the resources to invest versus solutions that may be derived through nature—such as agroecology—and provide less financial risk for the producer. The shift towards forms of hyper-multistakeholderism could jeopardize the effectiveness of governance institutions. Multilateralism or multistakeholderism, by their nature, are not necessarily good or bad frameworks. Rather, it is the implementation of these models in the absence of political context that becomes problematic. Without addressing power imbalances and the reorientation of agency throughout the policy process, changes are likely to be superficial, short-term, or in name only. While both incremental and systemic change are essential, the former tends to be far more powerful, generously funded, implemented, and researched than the latter [38,39].

3.1. Hyper-Multistakeholderism: The Case of the Governance Structures within the UNFSS

Outcomes and resources derived from multistakeholderism forums that do not recognize these imbalances can continue to reinforce old agricultural models that have negatively impacted biodiversity, climate, and community. A recent example is the United Nations Food Systems Summit of 2021 (the Summit) [40–42]. Called for by the Secretary General of the United Nations in 2019 [43] and delivered in the middle of a global health pandemic, the Summit generated significant attention from a broad audience. Meant to invigorate action towards the achievement of the SDGs, the Summit adopted new language towards global food policy, most significant of which was the ‘food systems’ lens [44].

While many were enthusiastic about the inclusion of the new language and the high profile of the event, there was concern about the Summit's leadership and the shift towards a form of hyper-multistakeholderism. Disrupting the accountability mechanism of the UN as a member state-based organization, the Summit centered on states as information takers rather than decision makers. As Canfield, Duncan, and Claeys note:

Whereas the multilateral framework through which global food governance has long located authority in the nation-state and hinged legitimacy on states' fulfillment of their duties and obligations under human rights, in blurring the boundaries between states, corporations, and civil society, the Summit reconstituted the terms through which authority and legitimacy are constituted in global food governance [45] (p. 5).

The framework of the Summit provided private sector representation without adequate safeguards for conflicts of interest [45–50]. In objection, civil society from around the world raised their concerns to the Secretary General and the Summit Secretariat but never received a formal response [49]. Others who decided to engage in the Summit process retracted their involvement. Included in those who stepped down was the International Panel of Experts on Sustainable Food Systems (IPES). To cite the withdrawal letter [51]:

... the Summit's rules of engagement were determined by a small set of actors. The private sector, organizations serving the private sector (notably the World Economic Forum), and a handful of scientific experts kick-started the process and framed the agenda.

The Summit process circumvented more accepted United Nations governance norms, such as country-led processes, instead putting broad-based engagement in the driver's seat with little considerations of the political economy of the subject matter. The alignment and implementation of the Strategic Partnership Agreement of the United Nations and the World Economic Forum [52] cemented the early stages of the Summit without adequate consultation [45,47,53]. In addition, processes were guided by the 'all affected' principle rather than the more inclusive 'most affected' approach [45]. Throughout the process, there was a lack of resources provided for civil society participation. Even if members of marginalized communities sought to participate, not all engagement materials or discussions were delivered with translation services—essential for equitable participation across all official UN languages. Criticism of the Summit is wide ranging, but the implication of these governance shifts towards hyper-multistakeholderism are still yet to be fully known [45]. As Guttal notes [53]:

Using the language of participation and inclusivity, MSIs (multistakeholder initiatives) blur the lines between rights-holders (people), duty-bearers (states) and other stakeholders, while keeping intact power asymmetries and erasing mechanisms of legal accountability and justice. (p. 13)

3.2. Multilateralism and the Messy Middle: Innovative Processes with Accountability

By contrast, inclusive forms of multilateralism can leave member states, as governments across scales, as the end-of-the-line decision makers with clear through lines of accountability. This model ensures that the public—rather than shareholders—remain central to the ongoing legitimacy of food systems forum(s). By integrating concepts and processes that acknowledge power imbalances and create structural spaces of agency for those 'most affected' by food systems policy, inclusive multilateralism could create more resilient, transformative outcomes [53]. The critical messy middle, inclusive multilateralism as it is situated between multilateralism and multistakeholderism, could ensure adequate and fair representation without the delegation of accountability away from those who are ultimately held responsible. Inclusive multilateralism does not exclude private sector involvement; rather, it makes participation more transparent through clear rules of engagement and accountability structures. Such inclusive multilateralism will ensure that

those protecting essential ecosystems and defending nature are given fair representation in critical policy development processes.

While wading through the messiness, there are examples from different scales of governance that can provide insight into how to balance inclusion with accountability while creating more sustainable outcomes. Governance models that promote feedback loops can effectively integrate connectivity between the local and the global (or vice versa). In essence, inclusive multilateralism is, by nature, multi-scalar through local knowledge, regional networks, and transnational advocacy coalition networks. Examples include the role of La Via Campesina and food sovereignty networks in the 2009 reform of the Committee on World Food Security [45] or the emerging role for cities within global spaces, such as the Conference of the Parties for Climate Change [54], or adapting the Sustainable Development Goals according to localized contexts [55]. Cities have also taken part in leading efforts, such as the Glasgow Declaration [56,57]. In addition, collaborative networks—such as the C40—help band together local actors to advocate for space throughout international forums.

4. Bridging the Local and the Global: Multi-Scalar Pathways in Food Systems

Below are four examples from different scales that are reconnecting people and nature through inclusive, resilient food systems. Each of the examples, presented in Table 1, contributes on at least two levels—at their place of origin/implementation as well as at the global level and/or in the sub-jurisdictional areas that are included—to foster change.

Table 1. Initiatives Across Scales.

| Scale | Initiative |
|----------|--------------------------------------|
| Global | The Committee on World Food Security |
| National | UNESCO Biosphere Sites |
| State | Zero Budget Natural Farming |
| Local | Food Policy Groups |

4.1. Committee on World Food Security: Principles of Engagement and Fractured Power

While the Summit has been the newly promoted forum of engagement for food systems, by direction of the United Nations General Assembly, global food governance has convened for years in Rome under the mandate of the Committee on World Food Security (CFS). Branding itself “the foremost inclusive international and intergovernmental platform for all stakeholders to work together to ensure food security and nutrition for all”, the CFS provides a unique model of global governance built on inclusive principles of participation that incorporates those most affected by food insecurity and food systems policy [58]. Beginning in 1974, the CFS has been an established space of debate on food security and nutrition, but reform in the wake of the 2008/09 food crises fundamentally reshaped the forum. The work by civil society networks to promote the right to food and food sovereignty translated into hard-won gains in the international fora through the introduction of the Civil Society Mechanism at the CFS [45,53,59]. By introducing the ‘most affected’ principle and resourcing—albeit not sufficiently enough [60]—the CFS has facilitated a way to create structured space for civil society to engage.

Through formal participation throughout the policy process and at meetings, the Civil Society and Indigenous Peoples Mechanism for the Committee on World Food Security (CSM) has made an important contribution to the global food policy space. Expanded in 2018 to represent their membership more appropriately, the civil society mechanism updated their name to include Indigenous Peoples as an important step in representation [61]. Whether it is defending the right to genetic diversity or the inclusion of traditional knowledge, the CSM has pushed for an integrated approach to food systems transformation that reconnects people to nature [62]. In their push to promote agroecology, the 2018 CSM report notes [63]:

While both environmental degradation and poor nutritional outcomes are results of the dominant industrial food system, the promotion of agroecology and the consumption of diverse diets of locally and agroecologically produced food, can lead to sustainable diets that realize the right to food through improved environmental and nutrition outcomes. (p. 39)

The CSM plays an important role within the development of CFS guidelines and policy products through their continued fight to center governance on a rights-based approach. The guidelines have been built as tools to be implemented at a variety of scales, including within local communities [64]. Through the inclusion of CSM, transnational advocacy networks have found a space to bring the local to the global, keep critical issues on the agenda and hold national governments to account. While there is much work to be completed in realizing the full inclusion of those most affected at the CFS, the CSM is an important mechanism that keeps issues impacting peasant farmers, fisherfolk, and the ecosystems they depend on central to global agendas.

4.2. UNESCO and Breaking a Fortress Model: Biodiversity through Collaboration—International to the National

Encouraged by the work of the Educational, Scientific, and Cultural Organization of the United Nations (UNESCO), the Biosphere program is a unique blend of international advocacy, enabling frameworks and resources through federal involvement, sub-jurisdictional support, and community leadership. Describing the difference between more traditional forms of conservation and the biosphere approach, the Canadian Biosphere Reserves Association [65] notes that:

Biosphere reserves, . . . , occur wherever an area has conservation value and the surrounding community has pledged to protect biodiversity, cultural heritage and uphold the principles of sustainable development.

As a unique partnership between community and nature, UNESCO Biosphere reserves are located across the world. In Canada, eighteen such partnerships exist across the country's diverse landscapes [66]. Located in different climactic regions of the country, biosphere governance reflects the community through "community-based and cross-representational" membership [67]. The goal for each of these arrangements is to act as a collaboration between nature and community. The considerations included within the planning incorporate: the social and economic needs of the population, the unique characteristics of each of the biosphere's ecosystems, and the cultural heritage of the region. Departing from the fortress model of conservation that separates humans from the environment, biospheres allow for the autonomy of a thriving community to protect, or even restore, parts of the surrounding ecosystem. Models that integrate higher levels of integration between food systems and nature can bolster greater aggregate biodiversity [67,68] and other co-benefits [68]. As Gavin et al. note:

Effective conservation partnerships are based on mutual respect for the rights, knowledge, practices, and responsibilities of stakeholders. (p. 6)

The UNESCO model fosters relationships, including the use of biospheres to support reconciliation efforts between Indigenous and non-Indigenous people. The UNESCO Biosphere framework allows for international advocacy to enable place-based preservation by encouraging work at the human–nature interface as a critical part of a thriving community.

4.3. Zero Budget Farming and the Potential of the Sub-Jurisdictions in Fostering Change

Emerging from the shadows of the Green Revolution, Zero Budget Natural Farming (ZBNF) has become popular in several Indian states and has even become institutionalized to some degree. In particular, ZBNF, also known as Natural Farming, has blossomed in the state of Andhra Pradesh. This approach to food systems was, in part, a response to the negative impact input-dependent farming was having on communities [69]. Ranjan and Sow note that [70]:

ZBNF reduces the need of taking loans for farming purpose as it completely depends on the use of internal or naturally available inputs.

With farmers experiencing below-average GDP and high levels of indebtedness in Andhra Pradesh, taking an agroecological approach to food systems allows participants to remove financial pressure from the purchase of external inputs while maximizing the use of local solutions and traditional knowledge. Veluguri et al. found that institutional opportunity and an influential advocate with access to resources were both key in the adoption of ZBNF as a state policy pathway [69]. In addition, early work on farmer field schools through the Food and Agriculture Organization of the United Nations (FAO) allowed for the advancement of farmer-to-farmer knowledge sharing and local resource management [69,71]. A marriage of enabling frameworks, community-led partnerships, well-positioned advocates, and farmer-to-farmer learning has contributed to the success of what is recognized by some as the largest agroecological initiative in the world [69]. Recent research also indicates that ZBNF may not face yield penalties to the same extent as those often associated with production method changes [72]. Agroecology is particularly adept at multiscale impacts since it is both a localized practice and a globalized political social movement. In addition, agroecological transitions have been shown to reconnect farmers with nature in a way that is powerful and regenerative [73]. Utilizing contributions from global and local efforts, ZBNF is projected to reach six million farmers and provide decent livelihoods, prosperous communities, and resilient environments to many more. In addition, the ZBNF model adheres to several of the key recommendations for food systems by the IPBES: promoting agroecological production, integrated landscapes, and the localization of economies [7].

4.4. Groundswell Networks: Food Policy Groups

Johns Hopkins Center for a Livable Future (the Center)'s Food Policy Networks project helps with both tracking and collaborating on food policy group work. Their database of food policy groups across North America allows for researchers and advocates alike to search for initiatives in their region. These networks center on social justice and action-based models. The Center [74] notes that:

Food policy groups share similar overall goals to make the food system more equitable, sustainable and resilient, but vary in their organizational structure, relationships with government and funding sources.

Food policy groups can be an example of multistakeholder governance that feeds into, or are part of, state decision-making processes. This model allows for accountability to remain within the public domain while incorporating the views and needs of the community. During COVID-19, food policy groups were able to advocate for those most impacted by the pandemic and activate local efforts to support access to food. A recent report by the Center found that over 75 percent of councils advocated for at least one change to improve food access [75]. The report also found that older councils were more likely to engage in policy advocacy versus policy groups that were less than two years old, with 84 percent of established councils engaging in policy advocacy at the "local, state, tribal, or federal related to food systems concerns due to COVID-19" [75] (p. 14).

Food policy groups support systems thinking, the inclusion of a wide range of actors, youth engagement, and feed through lived experiences from cities into global arenas, such as CFS and the Conference of the Parties on Climate Change (COP). The footprint of food policy groups is growing. In Canada, the establishment of a National Food Policy Council will provide advice to the Minister of Agriculture and Agri-Food Canada. European advocates have called a joint food policy council to support an integrated policy approach [76].

5. Shared Strengths and Opportunities

Each of the examples highlights the unique opportunity and successes that come from multi-scalar initiatives. While each effort exhibits unique qualities and contexts, the four examples also share several conditions of success.

By building out a dedicated role for civil society, the CFS gives voice to peasant farmers, fisherfolk, and Indigenous peoples all over the world [77]. Those represented by the CSM are working hard to feed communities while defending the land, ecosystems, and biodiversity we so badly depend on. Whenever possible, delegating the implementation and interpretation of policies to the most granular level—while ensuring the provision of adequate, predictable resources—can help promote community agency. In addition, implementing the right to food as central to all governance practices allows for the realization of our collective fundamental human rights. A rights-based approach moves governance institutions from a narrow axis centered on profit-driven food systems to one centered on people and nature. This can be seen in part through the interventions of the CSMs on the floor of the Plenary [78] of the CFS, as well as the long fight for the recognition of agroecology [79].

The recentering of priorities can lead to robust, resilient environments. UNESCO Biosphere Reserves create co-governance models that connect global institutions with local communities that are supported by the national and provincial governments. By putting co-habitation, rather than isolation, with nature as central to their biospheres model, UNESCO looks to foster sustainable ways to live within critical ecosystems. The farmers and institutions of Andhra Pradesh are also showing how rebuilding our connection with nature is implicit within farmer-led learning and the reduction of input-dependent farming. By creating enabling conditions, providing the right supports, and ensuring communities lead the transition, ZBNF is estimated to create benefits including: carbon emission reductions, bolstering the health of soil and water, empowering women, increasing biodiversity, and creating healthy environments [80].

Finally, adequate resourcing of advocacy networks, such as food policy groups, is essential to sharing knowledge both upstream to global forums and downstream back to communities. Egal and Forster highlight the current gap in resourcing for connecting biodiversity, food systems, and the dense network of activity at the local level [81]. The authors point to the strengthening of rural–urban linkages as an important part of strengthened governance. An increased interest in multi-scalar bridging through concepts such as territorial governance could help build out the critical junctures and support accountability across governance scales. Blay-Palmer et al. argue that frameworks such as the City Region Food System can help build more resilient systems and respond to shocks [82]. There are often strong local or regional networks, but they do not always effectively connect with the global to impact governance outcomes. Local, regional, or even national efforts to promote transformational change are happening in communities across the world, but a lack of resources and attention on how these feed into the global continues to limit the role that these networks could play.

6. Discussion

Good governance in public policy is a precondition for transformation, but it is complemented by actions at the consumer [83], farmer [84], and network [85] level that build trust and shared values [86]. Multi-scalar initiatives, such as those highlighted in this review, help reconnect people with nature through inclusive multilateral frameworks that encourage co-governance and place-based learning. Resourcing and implementation are critical for the success of any initiative. In the different examples in Section 4, governments from across scales have come together to ensure that resources are available for those most affected. This review has shown that good governance can, and has, worked to create more equitable environments that reconnect people with nature. I argue that rights-based policy is not substitutable for other innovative solutions; rather, it is a necessary precursor. By making it the cornerstone of governance, the political context becomes a

central consideration rather than an afterthought. Reforming governance back towards public institutions allows for clear accountability. However, good governance extends beyond public policy and institutions. The lessons from the four examples provided can also support good governance as it relates to research through the inclusion of critical questions, such as: Whose knowledge has been included and who benefits from this work? Has the project included the views of those most impacted by this research? Is there a systemic challenge that needs to be named and considered? Does this work support more equitable outcomes? These questions are not divorced from the subjects of technology, efficiency, or economics; rather, they are central to them. By asking these questions, reflection is provided to pause the immediate need to respond and open space for evaluating the more systemic nature of the work across agricultural and food systems science.

7. Conclusions

Food insecurity and environmental degradation (e.g., of soils, atmosphere, and biological diversity) go hand in hand as the festering symptoms of an agricultural system that maximizes output over equity. As Bittman wrote in his recent book, *Animal, Vegetable, Junk: A History of Food, from Sustainable to Suicidal*, the policy of food systems is set with the output function calibrated to the command “of agriculture not food for people, but goods for market” [87] (p. 54).

We are disconnected from nature, surpassing planetary boundaries at a time when our climate and social crises converge. The global community is expected to fall short of achieving the SDGs by 2030 but, according to the State of the World Food Security report of 2021, there will be more individuals suffering from food insecurity than ever before. These stark realities converge with our climate crises, leaving food producers behind and eroding resilience in communities across the world. While the COVID-19 pandemic has shed a light on some of the issues within global food systems, many of the conditions (e.g., corporate concentration, limited access to resources, and eroding workplace safety) were present long before November 2019.

For place-based initiatives and multi-scalar initiatives to thrive, global governance institutions need to be enabling processes centered on people and nature through a rights-based approach. This can be achieved by prioritizing those most affected by food system policies. Inclusive multilateralism, as suggested by critical food scholars and advocates alike, can provide this framework, but to be successful, member states and the institutions who answer to them—such as the United Nations—need to be held to account. Within global public governance, the HLPE has tried to tackle these transformational questions across the work of several reports.

A reconfiguration that is built on the right to food approach and, as the HLPE argues, the addition of agency and sustainability is essential for creating equitable food systems that foster true food security. To implement this call, there is a need to move from ad hoc programming and pilot projects to systems centered at the heart of agriculture and food systems funding.

There is an urgent need to leverage existing resources and use regulations as well as governance processes to reconstitute power in a way that works for all. Integrated and expanding efforts, such as the four outlined in this paper, based on co-governance and place-based principles, will enable more communities to thrive and food systems to support the achievement of the SDGs. By localizing and democratizing governance across scales, we can use public governance and policy to reconnect people with nature to create a prosperous future for generations to come.

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