



Rethinking the Alternatives: Food Sovereignty as a Prerequisite for Sustainable Food Security

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Abstract

The concept of food sovereignty is primarily taken as an alternative to the prevailing neo-liberal food security model. However, the approach has hitherto not received adequate attention from policy makers. This could be because the discourse is marked by controversies and contradictions, particularly regarding its ability to address the challenges of feeding a rapidly growing global population. In response to these criticisms, this paper argues that the principles of food sovereignty, such as democratic and transparent food systems, agroecology, and local market prioritization, should be fundamental pillars for achieving sustainable food security. It acknowledges that neither food sovereignty nor food security models alone can guarantee long-term food security, thus advocating for a blended approach that integrates these perspectives into a complex and interconnected system. This paper makes three significant contributions to the existing literature. Firstly, it emphasizes that food sovereignty should be seen as an integral component of transforming food systems towards sustainability, rather than a complete departure from neo-liberal food systems. Secondly, it highlights the importance of adopting a multi-scalar approach, where decisions and policies for transforming food systems are context-specific and tailored to local circumstances. Lastly, the paper recognizes the necessity of institutional transformations that involve nation-states, social movements, and civil society organizations as key actors in the process of food system transformation. By reframing the discussion on food sovereignty and its relationship with food security, this paper provides insights into how these concepts can be mutually reinforcing, leading to more sustainable and equitable food systems.

Keywords Sustainable food systems · Sustainable development · Activism · Food security · Multi-scalar · Social movements

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Introduction

Food insecurity remains a pressing issue, particularly in the Global South (Berry 2019; FAO et al. 2022). Even in places where the food needs are relatively well met (especially in the Global North), there are concerns about the environmental costs associated with food provisioning and dietary health problems such as obesity and cardiovascular diseases (Béné et al. 2019). The United Nations, under Sustainable Development Goal 2, calls for increased efforts to "end hunger, achieve food security and improved nutrition, and promote sustainable agriculture" (Fanzo 2019). As reflected in this goal, efforts to end hunger transcend mere availability and access to food to encompass food quality (nutritional value) and various aspects of sustainability (Béné et al. 2019). It also highlights the complex interplay between the social, cultural, ecological, and economic dimensions of food (von Braun et al. 2023). The literature indicates that the current strategies to end global hunger and malnutrition are thwarted by various mutually reinforcing social, cultural, environmental, political, and economic dilemmas (Berry 2019).

These dilemmas are intertwined with the prevailing neoliberal orthodoxy that forms the foundation of current interventions for food security, which is inherently committed to a productivist stance (Dixon 2014; Ward et al. 2008). The neoliberal model for food security is closely associated with the modernisation project, that sought to transform traditional peasant farming methods into modern ones (Van der Ploeg 2018a, b), and agribusiness which commodifies and transforms agriculture into an entrepreneurial endeavour (McKay and Veltmeyer 2021; McMichael 2012a, 2014). The latter are anchored on the adoption of modern technologies and free market principles, with the aim of maximizing labor and land productivity and establishing market-oriented food supply, respectively (Borlaug and Dowsell 2003; Fouilleux et al. 2017; Raman 2017). Proponents of the neoliberal approach assert that free market trading is fundamental for ensuring food availability, particularly for the rapidly growing non-farming populations (Bernstein 2014), market access for the producers (Burnett and Murphy 2014) and for reducing poverty among rural populations in developing nations (Schanbacher 2010). In doing so, the model follows a productivist and developmentalist perspective, which focuses on enhancing food availability and access (Fouilleux et al. 2017; Roche and Argent 2015). While the approach is commended for its role in feeding the growing global population through ensuring an adequate supply of food calories, exemplified by the impact of the Green Revolution in Latin America during the early twentieth century (Borlaug and Dowsell 2003), it is important to consider the tradeoffs involved in such endeavours. As highlighted by Altieri (2009, p. 1), for example, "the Green Revolution, despite enhancing crop production, proved to be unsustainable, resulting in environmental damage, significant loss of biodiversity and traditional knowledge, favoring wealthier farmers, and plunging many poor farmers into deeper debt". Furthermore, even in instances where the model appears successful, evidence suggests that such success relies heavily on substantial government subsidies (Stone 2022, 2019), which are often lacking in many developing countries where the model is being attempted. Critics have posited that the neoliberal food security model puts focus on quantity and profit maximisation at the expense of other critical dimensions of food security, such as health, equality, culture, and nature (Ioris 2020; Sonnino et al. 2014), and thus, precludes its sustainable development commitments (Béné et al. 2019; Sonnino et al. 2014; Weis 2010). This is manifest in numerous studies that have linked them with tremendous environmental damage (Altieri 2009; Brookes and Barfoot 2018; Mencher 2013; Patel 2009), socio-economic problems, such as land grabbing and marginalisation of smallholder agriculture (McMichael 2012a; Mencher 2013). Hence, there are calls

to consider alternatives (Patel 2009), which translate into practical solutions such as alternative food networks (AFNs) (Michel-Villarreal et al. 2018) and other grassroots social innovations (Maye and Duncan 2017; Walsh-Dilley et al. 2016). Central to these calls is the need to remodel the food systems to reflect broader social relations and values such as equity, democracy, sustainability, and resilience (Ioris 2020; Michel-Villarreal et al. 2018; von Braun et al. 2023). In response, food sovereignty has gained traction in academic and policy discourse as an alternative approach with the potential to meet the world's food needs sustainably (McKay 2020; Patel 2009).

The way food sovereignty transforms the current food systems is manifold and mutually reinforcing. For instance, it is presented as a policy tool (Fairbairn 2010), an approach to political economy with the potential to dislodge the hegemonic, neoliberal-entrenched approach to food security (McMichael 2014; Trauger 2013; Wald and Hill 2016; Wittman 2011), and/or a movement against the corporatisation of food systems (Burnett and Murphy 2014; Fairbairn 2010). The red thread throughout these debates is the juxtaposition of food sovereignty with the concept of food security as opposing and rivalrous (Jarosz 2014). Just like the food security approach, these debates have also invited some critics who are sceptical about the food sovereignty project who often question the capability of the coveted vision of smallholder, agroecological models for food production to feed the world's growing population (Bernstein 2014; Edelman et al. 2014). Other criticisms highlight contradictions within food sovereignty itself, such as potential restrictions on consumer and producers' freedom of choice (Agarwal 2014); lack of a straightforward programme for the development of formidable food systems; differentiations within the peasantry and its capacity to cater for the food needs of non-farming populations (Bernstein 2014). These criticisms are valid; however, they hinge on how food sovereignty has been broadly interpreted—as an alternative to the neoliberal food security model (Patel 2009; Schanbacher 2010).

Despite the latter being a widespread view, some scholars posit that the concepts are indivisible and relational (Clapp 2014; Jarosz 2014). The latter follows an argument that food sovereignty instead describes the path to genuine food security (Edelman et al. 2014; Patel 2009). This paper intends to expound on the latter perspective by buttressing the idea that food sovereignty needs to be seen as a prerequisite for sustainable food security—something that does not call for a complete overhaul of the current food systems but for the transformation of the system to address inequality, democracy, and sustainability aspects. Although some scholarships address this idea, our conviction is that food sovereignty's contribution to sustainability needs to be strongly emphasised. Many studies, mostly those advocating for food sovereignty, contend that sustainability is largely overlooked in the neoliberal food security model (Béné et al. 2019). Conversely, food sovereignty demonstrates a commitment to the sustainability of food systems and alternative practices, such as agroecology and localised food networks, which have great potential for achieving sustainable food security. By sustainable food security, we mean "the long-term capacity of the food system to provide an adequate quantity of nutritious food [and] its ability to respond to the environmental and socio-economic challenges that threaten its resilience and to minimise its impacts on human and environmental health"(Sonnino et al. 2014, p. 174). The literature shows that achieving sustainable food security necessitates rethinking, redesigning and reorienting the configuration of the existing food systems (Rosset 2013; Sonnino et al. 2014) to integrate "a wide range of aspects, including the quality, quantity, availability and origin of food, the identity of producers and the nature of agriculture" (Van der Ploeg 2014, p. 1000). Therefore, we posit that scholars and activists need to turn their attention to understanding how food sovereignty contributes to building sustainable food

systems. In light of this, Clapp (2014, p. 210) asserts that food security and food sovereignty together are valuable concepts that can "help us understand, debate, and formulate policies to address the most pressing issues of hunger and inequality in the global food system". In this context, both food sovereignty and food security discourses can focus on harnessing the internal strengths that each discourse offers to address the hunger problem. This partly responds to the weaknesses of food sovereignty pointed out by Henry Bernstein—that is, its failure to move forward from its "thesis and antithesis, towards a synthesis that yields a programme of 'transformation'" (Bernstein 2014, p. 1057).

Henceforth, we discuss the possible ways the food sovereignty ideology helps shape our analysis of and should shape policymakers in the national and international arena's decisions concerning food system transformations. Furthermore, we reflect on the possible adjustments necessary for such transformations to happen smoothly. To this end, the paper makes three claims: 1) It argues that food sovereignty should not be seen as an alternative to neoliberal food systems but as something integral to transforming food systems to prioritise sustainability; 2) that this task can only be adequately fulfilled if a multi-scalar approach is adopted, where decisions and policies for transforming food systems become context-specific; 3) recognises the need for institutional changes to consider nation-state, social movements and civil society organisations as essential actors in food system transformation.

Contrasting Food Security and Food Sovereignty

According to the Food and Agriculture Organisation (FAO), "Food security exists when all people at all times have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO 2008, p. 1). This widely adopted definition encompasses four dimensions of food security, all of which must be achieved simultaneously, namely accessibility, utilisation, availability, and stability (FAO 2008). This definition was recently widened to incorporate the aspects of agency and sustainability (Clapp et al. 2022)—which we argue would be an arduous task to implement under the neoliberal food regime, in which profit takes precedence (McMichael 2012b). The current efforts to combat global hunger primarily follow a neoliberal path that emphasises increasing production and productivity (Jarosz 2014; Laforge et al. 2021) and distributing food through market transactions (Sonnino et al. 2014). The approach focuses on ensuring availability (i.e., production, distribution, and exchange). However, accessibility (i.e., affordability, allocation, and preference), stability, and utilisation aspects are still largely questionable (Sonnino et al. 2014). Moreover, the literature indicates that food availability under the 'corporate food regime' (McMichael 2009b) is marred with global inequalities—where food availability and access to food are not evenly saturated worldwide (Patel 2012). Moreover, regarding the utilisation aspect of food, the literature has invariably linked the corporate-led food regime to adverse health outcomes such as cardiovascular diseases and obesity (Patel 2012). Corporate-driven food interventions often undermine the ability of smallholders, most notably in low-income countries, to participate on favorable terms in food production (Bryceson 2002; Hazell et al. 2010; McMichael 2012a, 2014; Roger 2014). This is a consequence of the influx of cheap food from the subsidy-laden West and land grabs by agri-food capitalists (McMichael 2015). This further worsens food insecurity as smallholder farmers are relied on to feed a significant proportion of the global population (Béné et al. 2019; Sonnino et al. 2014). This has

also been voiced in high-profile publications by major international development agencies, such as the report UN "Wake up before it is too late" (UNCTAD 2013) and the report "Agriculture at a Crossroads" (IAASTD 2009) initiated by the World Bank and FAO.

The neoliberal food security model has hitherto failed to eradicate the hunger problem, albeit with some commendable progress. The proportion of the global population grappling with food insecurities and vulnerabilities is still unacceptably high. It was approximated that 2 billion people were food insecure in 2021 (FAO et al. 2022). Although the number increased by 350 million compared to 2019 (pre-pandemic) (Roush 2023), the number of hungry people before the pandemic was still very high at 678 million (FAO et al. 2022). Moreover, FAO et al. (2022) further indicates that this number is disproportionately distributed, with the majority residing in Africa and Asia.

As a result, commentators have consistently called for new ways to promote the sustainability and equality of food security—with food sovereignty proposed as an alternative framework with the potential to address the challenges inherent in the current food and agricultural systems (Patel 2009). Food sovereignty exists when all "peoples have a right to healthy and culturally appropriate food produced in an ecologically sound manner, and their right to determine their own food and agricultural systems" (Mann 2014, p. 3; Sélingué, 2007). The concept, with its roots in the work of the transnational movement, La Via Campesina (Rosset 2003), has been described as an emancipatory and redemptive path to sustainable food security (Martínez-Torres and Rosset 2010; Patel 2009). Many scholars see it as a recourse for counteracting the rise of 'harms' from industrial agriculture, combating the domination of the food system by wealthy corporations and preventing the increasing shift to (unhealthy) processed and imported foods (Carlile et al. 2021). In contrast to the food security approach, which is currently underpinned by globalisation, de-peasantisation, corporatisation and large-scale industrial agriculture, food sovereignty calls for the localisation of food systems, re-peasantisation and small-scale farming hinged on agroecological practices (Altieri 2009; Blom et al. 2022). It is concerned with the recognition of the role of differentiated peasant populations, not only in feeding themselves but also contributing to global food supply and protection of the environment, and hence calls shift from corporate controlled food systems to local food systems (Douwe van der Ploeg 2010).

Food Sovereignty as a Spatial Phenomenon

Food sovereignty proponents call for localised food systems where consumers and producers play a leading role in determining the type of food they eat and its production modes (Blom et al. 2022; Patel 2009; Rosset 2013). They argue that localised food systems can potentially promote (all dimensions) sustainability in food systems (Wald and Hill 2016). The concept of local is mainly used in the food systems politics and discourses in a 'spatial' sense (Hinrichs 2003; Keith and Pile 2004) in which it denotes a specific social or geographical space (Wald and Hill 2016). For instance, it is mainly used to contrast 'nationalisation' and 'globalisation' (Schanbacher 2010). In this view, the term 'local' connotes something fixed (Wald and Hill 2016). However, some scholars claim that local is dynamic, mutable and produced and reproduced (Smith 1992a; Wald and Hill 2016), temporal and relational nature (Massey 1993, 2004; Rossano 2022). Hence, even though the food sovereignty discourse advocates for localised food systems (usually in terms) of national structures as ideal for building food systems, our

view is not to advocate for a specific scale but a multi-scalar approach—in which food systems are viewed as context-specific. It has been chiefly argued that the neoliberal food security model has failed to solve hunger due to its negation of the significance of cultural diversity, human relations, and ecologies (Schanbacher 2010) inherent in different geographical spaces. Nevertheless, per the food sovereignty discourse, a multi-scalar perspective rooted in the 'spatialisation' of food systems plays a vital role in analysing food systems and their implementation in various ways (Wald and Hill 2016).

First, a multi-scalar approach helps identify the responsibility bearers for the governance, implementation, and regulation of food systems. In other words, space (in this case, a localised space) is a crucial factor in determining the scope, location and constellation of actors that influence how food sovereignty is experienced, who guarantees it, who threatens it and where it is experienced (Brenner 1999; Trauger 2013). This calls for recognition of spatial delimitations such as, among other things, "territorial states, regions, cities and localities" (Brenner 1999, p. 44), which are usually interlocked with power relations (Mencher 2013; Wald and Hill 2016).

Second, as some scholars note, sovereignty is not monolithic but appears in multiple competing and contested forms (Iles and de Wit 2018; Schiavoni 2018). Schiavoni (2018) contends that there are tensions between sovereignties embedded in different geographical scales. Therefore, a multi-scalar approach is vital for recognising the pluralities immanent in geographies and institutions (Iles and de Wit 2018; Schiavoni 2018). The implication is that in advocating for food sovereignty, one needs to define whose sovereignty, where it exists, and who threatens it (Trauger 2013).

Third, food sovereignty is rooted in the work of rural agrarian movements, in which agency and advocacy are critical in agitating policy changes (Patel 2009). Hence, recognising that food sovereignty is relational, contested and multi-layered is crucial for constituents of movements to target specific centres of power, repertoires for contesting that power and policy changes to propose or contest and at what level (Shattuck et al. 2018). This follows the idea that the "right to act" can and must contest spaces of sovereignty across scales and other boundaries" (Shattuck et al. 2015, p. 430) and should target a specific centre of power (Walsh-Dilley et al. 2016). For instance, while some activists may be interested in macro-structural and institutional changes at the international level, others may target micro reforms changes at the local level. Politics of scale play a central role in shaping environmental debates that emanate from the desire of various stakeholders such as "states, supranational agencies and grassroots environmental movements around the world to negotiate access to and protection of ecological resources" (Mulvaney 2010, p. 329).

A multi-scalar approach is essential for shaping our interpretation of the role of food systems and policy environment and ensuring that food security interventions are place and context specific. Here, sustainable food security can be cultivated through a system acknowledging contested nature, dynamism and multidimensionality, fluidity, and diversity of spatial sovereignties. Scholars of agrarian change, such as Byres (1986), warn against the danger of applying a single program to implement agricultural development. In his analysis of agrarian transitions, Byres observes that agrarian transitions to capitalism in different countries followed varying paths. One critical insight from Byres' understanding is that the transformation of current food systems must follow multiple approaches tailored to the unique conditions of different places. Thus, rather than following a single (globalised) model, the interventions, policies, and programmes should be context-specific, and any pathway should be amenable to contextual variations.

Food Security Through the Lens of the Multi-Scalar Perspective

The concept of scale has been used to refer to different phenomena such as 'size' (Gibson et al. 2000; Sayre and Di Vittorio 2009), 'space' (Brenner 1999) and 'relationality' (Sayre 2017). Moreover, Smith (1992b) views scale as socially constructed and dynamic and, therefore, as something that cannot be treated as a given (Wald and Hill 2016). All these conceptualisations are essential in studying complex phenomena such as food systems. According to Gibson et al. (2000, p. 218), a scalar view is helpful for: "identifying patterns and problems, explaining observed patterns, generalising statements made at one level of a scale and applied to another, and optimising a process or function". In this sense, treating food systems as something with spatial interpretations that are sometimes temporal (Gibson et al. 2000) in our analysis of food systems helps us avoid tendentious generalisations regarding the potency of food systems alternatives. In other words, it is a call to refrain from a single global food system in which the world is treated as devoid of social, cultural, political, and economic differences. For instance, embracing a relational nature of scale enables us to identify 'spatial and temporal relationships between processes at different levels and the processes that link elements within levels' (Jonas 1994; Sayre 2009; Schiavoni 2018). Hence, the concept of scale is an essential tool for analysing food systems, not to mention assessing what needs to be done to make them more sustainable.

While most of the debate currently dwells on large-scale versus small-scale agriculture as conflictual (in Alexander Chayanov and Karl Kautsky's sense) who make cases for small-scale and large-scale agriculture, respectively (Banaji 1976), we maintain that neither approach can exclusively guarantee sustainable food security. We see the role of small, medium, or large-scale agriculture as symbiotically enmeshed, as opposed to the conventional industrial model that takes an 'expand or vanish' approach. Academic scholarship has indicated that while large-scale commercial agriculture may help feed the urban non-farming population with staple food, small and medium scales are critical for feeding the rural poor, facilitating rural development, providing employment, and retaining diversity in landscapes and diets (Galli et al. 2020; Johns and Eyzaguirre 2006).

Furthermore, a multi-scalar perspective provides a framework for activists, scholars, and policy analysts interested in transforming food systems to acknowledge and comprehend the inherent diversity, complexity, ambiguity, and fluidity present within the food and agriculture political economy (Hinrichs 2003). The approach allows for an examination of the interplay of processes occurring at various social and spatial scales, including the household, society, nation, region, and the global level (Cash et al. 2006; Wald and Hill 2016). Therefore, when considering the potential of food sovereignty as a means to achieve sustainable food security, it is essential to recognise that sovereignty operates within the confines of spatial logic which must be clearly defined (Trauger 2013). Hence, interventions aimed at ensuring food security should be context-specific and tailored to address the realities of specific locations across different scales. In this regard, any system built on the foundation of food sovereignty must emphasize the roles and actions of various actors at the societal, national, and global levels, to effectively attain sustainability in food systems (Wald and Hill 2016).

Adopting a territorial-based multi-scalar approach brings attention to the significance and agency of various/multiple actors, such as smallholder farmers, indigenous communities, food gatherers, large-scale producers, and consumers, who operate within the boundaries defined by these territories (Cistulli et al. 2014). This perspective acknowledges the complex interactions between these different scales and actors therein (Cistulli et al. 2014;

Wald and Hill 2016). Achieving sustainable food security necessitates an approach that engages and mobilises all willing, capable, and relevant actors at different scales (global, regional, and national), fostering synergies among them (Wald and Hill 2016). This stands in contrast to the processes of global corporate consolidation, facilitated by political, cultural, and economic globalisation (Scholte 2005), which are antithetical to such an inclusive approach.

A Global Food System?

Scholars and activists have linked food insecurity to systemic failures and/or imbalances associated with the existing global political and institutional frameworks that buttress the current globalised corporate food regime (LvC 2003; McMichael 2009a). Due to the global asymmetric variations inherent in the world system (Wallerstein 2004), a single global food system is not ideal (Mann 2014), as different countries not only have unequal capacities to produce food and/or to purchase it but also bear disproportional coping capacities with the environmental damage caused by the food system (Ericksen 2008). Moreover, it is argued that due to the International Monetary Fund (IMF) subsidy restrictions, a neoliberal-globalised food system has blatantly marginalised farmers in developing countries where subsidies remain prohibited and favoured those in developed countries where subsidies are allowed (McMichael 2009b). As a result, studies have pointed out that the food export/(dumping) from rich to developing countries has undermined the competitiveness of smallholder agriculture in developing countries and risks crowding them out of agriculture (Carlile et al. 2021; LvC 2003), despite their massive contribution to food production (FAO 2015).

The pursuit of food security through a neoliberal approach that emphasises "free trade" thus perpetuates the kind of measures that have enormously alleviated hunger (and even allowed for overconsumption and high levels of wastefulness) in the wealthy parts of the world (Patel 2012). Conversely, the situation in the poorest/peripheral countries continues deteriorating (Mann 2014; Patel 2012). Therefore, sustainable food security cannot be guaranteed in a globalised food system that opens the door to the concentration of power in corporations, food dumping and the exploitation of the rest of the world by industrialised countries.

We argue that a multi-scalar-based analysis would enable those seeking to regulate food systems to recognise differences in "class structures, trade networks, state structures, and geopolitical systems... [rather than viewing it as] a single, all-encompassing [food] system." (Skocpol 1977, p. 1087). In practice, this means moving away from a single system towards the coexistence of multiple food systems (Gaitán-Cremaschi et al. 2019). The configuration of these multiple food systems can be based on different scales where food production, trade or consumption occurs. A significant benefit of this is the recognition of the role of different actors of different categories (peasants, indigenous peoples, medium and large farmers, food gatherers, hunters and fisherfolk, etc.) in the food supply and utilization (LvC 2003). Sustainable food security requires recognising and honing different niches embedded at different scales (such as societies, nations, and regions) of operation and within and amongst actors to address food insecurity (Merino 2022; Trauger 2013). Scale-based food systems would also allow for co-creation and knowledge exchange and are amenable to applying decolonial approaches to tackling global hunger (Kamal et al. 2015). In other words, looking at food security as something implementable at different levels, in different ways, and with different groups of actors is essential. This will ensure

recognition of the role of all stakeholders and the creation of a regulatory and policy environment that allows them to contribute to the food supply and gives them the autonomy to determine how they do so. Contrary to some critics that view food sovereignty as advocating for smallholders in the Global South, we hold the view that; 1) food sovereignty is a necessity for all peoples around the world regardless of their geographical location; 2) that even though the food sovereignty movement has stressed the need for repeasantisation and small-scale agriculture—this demand is not tied to global south but as something that should be observed worldwide, as smallholder agriculture is ubiquitous around the world, albeit with a large concentration in the Global South.

Nation-State Structures, Localised Food Systems and Food Security

Although some scholars believe that food sovereignty is dynamic and takes place at different scales, which also applies to actors (von Braun et al. 2021), the national level is a practical starting point for discussion (Hamann 2020). Nation-states are positioned to formulate policies, support affordable prices, implement agricultural reforms, and provide strategic leadership for rural development (Fairbairn 2010; Hamann 2020). Restructuring food systems to prioritise food sovereignty inevitably requires policy reforms, which usually fall within the scope of state legislative authority (Hamann 2020). Indeed, some countries such as Venezuela, Mali, Bolivia, Ecuador, Nepal, and Senegal have activated this power to incorporate food sovereignty into their state laws (Thivet 2014; Wittman et al. 2010). Hence, viewing a single global system can make food security efforts problematic. As it stands today, for example, whether food security is attained depends on how well the 'fallible' and highly unequal international market functions and whether people can afford the food offered by the market.

Furthermore, a global food system makes organisation and mobilisation around food insecurity, governance, and implementation of food security initiatives problematic due to possible 'role ambiguity'. For example, when one arbitrarily fails to access food, holding a global corporation or investor accountable is impossible. In such cases, a multipolar view of food security that considers different niches and capabilities in food systems and recognises the inherent inequality in the globalised food system (Gaitán-Cremaschi et al. 2019) is called for.

Sovereignty for Sustainability: Overcoming the Limitations of Neoliberal Food Security

Having made a case for a multi-scalar approach to food security, how, from this perspective, does food sovereignty address the current shortcomings? Why might the principles of food sovereignty provide a foundation for sustainable food security as previously defined?

Safeguarding the sovereignty of a given space and the people in it goes in tandem with preserving systems, livelihoods, relationships, and histories with the land, which are essential to the community's health and sustainability (Kamal et al. 2015). Following this view, "food sovereignty values food cultivation as a means of maintaining sustainable ecosystems and promoting cultural integrity as opposed to a means of maximising and accumulating capital, resources and property" (Kamal et al. 2015, p. 564). The food sovereignty approach is thus driven by the goal of creating food systems that ensure the availability of and access to food, both now and in the future, in ways that contribute to the sustainability of cultural, social, and environmental resilience of food systems (Sonnino et al. 2014;

Wittman et al. 2010). From this viewpoint, sustainable food security can be ensured by restructuring food systems to consider two broad elements.

The first element is the socio-economic and cultural aspects. The literature has largely neglected social sustainability in agriculture (Janker and Mann 2020), yet research shows that socio-economic and cultural dimensions of sustainability are essential for boosting food security's equal (economic and physical) access, utilisation, and stability aspects (Sonnino et al. 2014). Moreover, it has the potential to promote sustainable and equitable access to and use of productive resources such as land, water, and credit through initiatives such as land reforms and the protection of seed rights such as the right to exchange, save and multiply seeds (Carlile et al. 2021). Along this line, food sovereignty resists laws and policies that promote the appropriation of food and agriculture knowledge and intellectual property and aims to protect farmers' knowledge and their right to land and genetic resources (Felicien et al. 2020) alongside condemning food dumping and inappropriate food aid (Carlile et al. 2021; LvC 2003). The food sovereignty movement contends that the latter practices harm smallholder agriculture's social and economic resilience (De Schutter 2011) and genetic and agro-diversity (Jefferson and Adhikari 2019). De Schutter (2011) posits that destroying small-scale agriculture—which feeds a significant portion of the population, especially in the global south (Gomez y Paloma et al. 2020; McMichael 2014), will exacerbate rather than solve hunger problems. Here, the food sovereignty movement, through advocating for localised food systems and reduced food dumping—coupled with promoting knowledge sharing between farmers and access to local resources aims to consolidate the position of smallholder agriculture as a critical pillar of food security. A considerable portion of mostly smallholder farmers in developing countries relies on the agricultural sector to feed themselves and to generate an income (Schanbacher 2010)—meaning that undermining smallholder agriculture inevitably exacerbates food insecurity and deprives people of their primary source of livelihood (LvC 2003). In this case, any model that marginalises smallholder farmers and subtly crowds them out of agriculture to pave the way for large-scale capitalistic agricultural food production does more harm than good (Prosekov and Ivanova 2018).

Sustainable food security requires a system that empowers rural people to grow food for themselves and their communities, enhanced through strategies such as extension services, financial deepening in microfinance and credit access, and agricultural subsidies where appropriate (LvC 2003). For instance, under conditions in which small-scale producers (including, notably, women farmers) are provided with an enabling environment through policies and practices that guarantee them secure access to tangible productive resources (Jarosz 2014; Schutter 2014). This would improve the capacity of the rural poor to produce food for consumption and help address other critical social aspects such as poverty reduction and gender equality.

The second element concerns planetary and human health (Patel 2009). Environmental degradation and perilousness to human health are inherent in the current approach to food security (Brookes and Barfoot 2018; Fanzo 2019). In response, as reflected in the most recent definition of food sovereignty, there is a call for "the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture system" (Mann 2014, p. 3; Sélingué, 2007). From this perspective, sustainable food security requires food systems that safeguard human and environmental health by prioritising practices that conserve biodiversity and ecosystems (Patel 2009) while ensuring good food quality (Alberdi et al. 2020). The food sovereignty movement emphasises locally based food systems as key for food systems sustainability. This does not mean that trade cannot occur, but rather that

agricultural practices ought to be adapted to the specific agroecological setting and that locally produced food is favoured when possible (Burnett and Murphy 2014). For example, locally adapted seed varieties contribute to agroecosystems' diversity and resilience and lower carbon emissions from transport due to shorter distances between production and consumption (Alberdi et al. 2020). The current neoliberal model of food security, however, promotes market-based solutions on the distribution side and industrialisation on the supply side (Sonnino et al. 2014; Wittman 2011), which, according to many studies, is inevitably associated with far-reaching risks to the environment and human health (Brookes and Barfoot 2018). In addition, the corporate food regime is associated with ultra-food processing (often) laden with high sugar and fat quantities (Carlile et al. 2021; Howard 2021), all of which are associated with adverse human health impacts (Monteiro 2009). A growing body of research highlights the potential of the food sovereignty approach to ameliorate the situation through promoting practices such as agroecology that conserve biodiversity by reducing the reliance on synthetic inputs such as inorganic fertilisers, chemical pesticides and genetically modified organisms (Shroff and Cortés, 2020). For instance, the literature maintains that agroecological practices promote natural soil regeneration and nature-based disease and pest control methods, that culminate in reduced reliance on ecologically damaging petrochemicals (Schanbacher 2010; Wittman 2011).

It is, therefore, apparent from the two elements above that sustainable food security can prevail in a system that adopts a perspective that captures both qualitative and quantitative aspects (Rosin 2013), i.e., as a condition that includes not only access to sufficient food but also system resilience and efficiency of resource use (Panchasara et al. 2021; Yasmeen et al. 2022). However, such a system requires a multi-scalar lens as it enables us; firstly, to cater for political, cultural, ecological, and economic diversity and nuances inherent in "different scales: global, regional, national and local, [urban, rural... which emanate from] "traditions, cultures, economic structures and ecologies of locations" (von Braun et al. 2021, p. 748). Secondly, recognising food systems' spatial embeddedness prevents the exclusion of essential actors, as found within current neoliberal food security, which excludes smallholder farmers in favour of large-scale practices (Douwe van der Ploeg 2010; Van der Ploeg 2013, 2014). Lastly, this view recognises local food systems' potential and autonomy (at least for the most part). Prioritising local food markets is essential for sustainable food security as it minimises the carbon footprint tied to the importation of commodities that can as well be locally produced (Li et al. 2022). Nonetheless, we acknowledge that such fundamental food system changes cannot occur without considering systemic transformations.

Institutional Change and the Role of Social Movements

Institutional, political, and organisational changes must shift towards socially, economically, and ecologically sustainable food systems (von Braun et al. 2021). International institutions such as FAO, the International Fund for Agricultural Development (IFAD), the World Food Programme (WFP) and the World Bank have played central roles in supporting global food security initiatives for decades by providing policy guidance and financial and technical support (Holt Giménez and Shattuck 2011). However, despite the tremendous progress made regarding meeting the food needs of the exponentially growing global population (Farsund et al. 2015), this progress is unevenly distributed on geopolitical level, and is coupled with severe environmental and social-cultural problems, as noted earlier (Jarosz 2014; Tripathi and Kaini 2023).

The literature links these challenges to the agricultural development pathway that current global institutions follow, in particular, their adherence to neoliberal economic principles such as privatisation, deregulation of markets and prioritisation of profit (Collier 2008; Jarosz 2014; Schanbacher 2010) that, in turn jeopardise other social dimensions such as food culture, human health, rural livelihoods, especially in the global south. The current 'corporate food regime' is modelled on agribusiness, where a handful of powerful corporations exercise an extraordinary degree of control over all nodes of the food chain (McMichael 2014). This food regime has been criticised for fueling deepening global inequalities between North and South (Jarosz 2014; Martínez-Torres and Rosset 2010; Tittone 2013), food price volatility and unsustainability (Collier 2008; Rosset 2008; Shuquan 2018). As a result, there are increasing calls for transforming the neoliberal global food system to ensure a sustainable and equitable food supply (Holt-Giménez et al. 2012; Tripathi and Kaini 2023; Van der Ploeg 2014).

However, the conundrum associated with these calls is whether the current neoliberal-oriented institutions mentioned above can be relied on to provide a conducive environment for the conditions needed to transform the current system along the principles of food sovereignty and commitment to sustainability. In light of this, many scholars and activists have consistently stressed that fundamental changes in policy and regulation, as well as in practice, are needed to help the principles and values of food sovereignty take root (Altieri and Nicholls 2008; Gliessman et al. 2019; Morgan and Murdoch 2000)—most notably the call for agriculture to be rescinded from the World Trade Organisation's Uruguay Round Agreement (Burnett and Murphy 2014; Dupraz and Postolle 2013). Altieri (2010), for example, notes that "...ecological change in agriculture cannot be promoted without comparable changes in the social, political, cultural and economic arenas that conform [sic] and determine agriculture"...[and accompanied by]... "significant structural changes in addition to technological innovation and farmer-to-farmer solidarity" (Altieri 2010, p. 128).

Other studies have argued for the recognition of new actors, such as the nation-state and civil society currently subtly sidelined by neoliberal orthodoxy, as critical in the reformation of the current global food system, especially in the transition phase (Altieri 2010; Dale 2021; Newell 2008). For instance, it is stated that civil society can make alternative proposals to improve agricultural policies, while the state will ultimately be responsible for integrating these proposals into its policies (Dale 2021). Moreover, Dale (2021, p. 142) notes that the state "has an important role to play in shifting the food system towards more climate-friendly production practices", especially in reducing dependence on imported (usually processed) food and cases of dumping, as these have negative implications for the sustainability of the system. However, this would mean not downplaying the role of other market-based actors but is a call for synergetic cooperation between the state, civil society movements and market-based solutions, where necessary (Bernstein 2014; Iles and Montenegro 2013).

The Role of Activism in Transforming Food Systems

The literature indicates that transforming food systems would be "impossible without social movements that create the political will among decision-makers to dismantle and transform the institutions and regulations that hold back sustainable agricultural development"...(Altieri 2010, p. 128). Although resistance against politically influential and economically powerful agri-food corporations is a challenging task, the threat the current food system poses to people's livelihoods and the looming loss of control over their food system continue to invoke

resistance from social movements around the world (Mencher 2013; Newell 2008). These movements envision food systems that recognise both environmental and social sustainability and view food not only as a commodity but as something laden with sociocultural values and meanings (Elahi et al. 2019; Mencher 2013). Furthermore, some social movements—notably La Via Campesina—advocate for food systems undergirded by food sovereignty principles right from food production, processing, distribution, retailing and consumption. In this way, they envision food systems that recognise the need to decouple food security measures from ecological damage and the perpetuation of global inequalities—all of which can be achieved by promoting agrarian reforms and coordinating with the farming communities that implement them (Rosset et al. 2006; Schanbacher 2010).

Agrarian social movements have proven their commitment to promoting sustainable food security by advocating for food sovereignty. Indeed, the dynamic concept of food sovereignty brings together a constellation of organisations, activists, and scholars (also known as the food sovereignty movement) committed to promoting food sovereignty (Ayres and Bosia 2011; Holt-Giménez 2009; Visser et al. 2015). As social movements usually emerge in response to perceived social injustices (McCarthy and Zald 1977; Scott and Marshall 2009), their central role in transforming food systems would be to pressure policymakers to formulate policies and interventions that are more inclusive and sustainable. Around the world, social movements are advocating for food sovereignty as an emancipatory tool that can improve the lives of smallholder farmers severely marginalised by conventional agricultural development (Altieri and Nicholls 2008; Iles and de Wit 2015; Jarosz 2014). In this context, social movement organisations are essential for providing mobilisation structures and resources (McCarthy and Zald 1977) and putting pressure on the existing polity to consider transformative social changes (Tarrow 2008). As Roman-Alcalá (2013) argues, movements have the potential to liberate peasant agriculture and reclaim local control over natural resources that are critical for food security and livelihoods. Such efforts reaffirm the significance of so-called 'non-reformist reforms' (Belliveau et al. 2021) that are not in and of themselves transforming the food system but transformative steps through a slow shift in power relations and the claiming of material resources.

Experiences worldwide show that smallholder farmers and other groups with a stake in food sovereignty can use grassroots movements to advocate for sustainable agricultural policies (Carlile et al. 2021), using various repertoires of collective action (McCarthy and Zald 1977). With the help of food sovereignty movements, food security efforts can move towards more democratic and inclusive practices (Carlile et al. 2021) and a way from undertakings that further concentrate power and control within agri-food corporations and the often-unsustainable outcomes (Altieri 2009; Howard 2021; Newell 2008). Therefore, efforts to achieve sustainable food security cannot afford to overlook the power of "local protest movements and other forms of rebellion" against the powerful and wealthy multinational corporations (Mencher 2013, p. 24) and the national governments that support them.

Implications for Food Ethics

While it is logical to perceive food sovereignty as presenting a more ethical argument for meeting food needs in a way that ensures "sustainable and healthy diets" (Fanzo 2019), we believe that both food security and food sovereignty encompass ethical contradictions. For instance, the food security model aims to increase food availability through enhanced production and efficient distribution, but it overlooks environmental and health considerations

and excludes some critical key stakeholders. On the other hand, the food sovereignty movement promotes practices that address these challenges, but it remains a matter of debate whether agroecological smallholder farming, although environmentally justified, can perform adequately in terms of productivity and provide sufficient food for non-farming urban populations (Bernstein 2014; Sanderson Bellamy and Ioris 2017). This is a crucial concern given rising levels of urban malnutrition, though it should be noted that this issue has been neglected also in food security policy and research (Tacoli 2019). Furthermore, this model also risks limiting freedom of choice in terms of “selecting how to produce and deciding between national and local food self-sufficiency, promoting specific crops, determining farming methods, strengthening family farming, achieving gender equality, and defining collective and individual rights, particularly regarding land ownership” (Agarwal 2014, p. 1247). Building upon our main argument and the purpose of this paper, we view the principles of food sovereignty and food security models as complementary in offsetting ethical trade-offs between sustainability, quality, and quantity. To this end, achieving sustainable food security requires incorporating elements from both food security and food sovereignty approaches, while establishing food and agricultural systems that minimise social, economic, cultural, and ecological harms. For instance, some studies argue that promoting equitable distribution and access, rather than increased food production, are the key factors in addressing hunger (Holt-Giménez et al. 2012; Patel 2012). In this regard, food sovereignty would advocate for policies that ensure ethical food distribution, such as reducing food dumping (McMichael 2005), to enable equal participation of smallholder food producers in food production. In practice, however, the pursuit of sustainable food security inevitably results in ethical dilemmas and tradeoffs, which place inclusive and democratic decision-making processes at all levels of society at the center of the challenge.

Concluding Remarks

This paper presents an argument for the need to reimagine the concept of food sovereignty from conceptualising it as an alternative to food security to view it as a necessary precondition for achieving sustainable food security. It is apparent from the literature that neither the food security nor the food sovereignty model can independently provide an adequate solution for addressing global food needs. We posit that harnessing the strengths of both models can result in a sustainable programme for addressing global hunger rather than being perceived as a competing pathway. The technical capacity of these concepts to contribute to meeting people’s food and nutrition needs should be emphasised, rather than focusing on their underpinning political projects. Together, food sovereignty and security form a complex, nuanced and symbiotically linked system that can respond to peoples’ food needs while preserving nature and societal values. For instance, the food security model emphasises productivity, technological innovation, functioning infrastructure, and markets, while the food sovereignty model emphasises power, control, and localisation, which are necessary prerequisites for developing robust and sustainable food systems. Challenges related to sustainability are complex and multi-layered and therefore require approaches that embrace diverse and interrelated solutions and concerted efforts through creating synergies between different actors. Here, food sovereignty serves as the foundation on which a sustainable food system is built, correcting historical and structural injustices.

In addition, the paper argues for a multi-scalar approach to analysing food systems. This can result in various concrete and context-specific efforts to develop and organise

local food systems and contribute to shifting power over food production and distribution into the hands of producers and consumers. It also allows local actors to use locally adapted technologies that fit their cultural, social, economic, and political conditions and to develop food systems governance tailored to their local needs and niches. In a symbiotic and synergistic manner, different local food systems could work together to eradicate global hunger and create a multidimensional, 'place-based' food security interventions (Sonnino et al. 2014). Moreover, several studies have commended social movements as a force to reckon with in influencing such policy outcomes. This goes in tandem with collective action to resist further corporate concentration and advocate for policies promoting people-focused rather than corporate-focused solutions. The discussion in this paper intends to stimulate interest in empirical research seeking to understand how food sovereignty coupled with rural social movement struggles can contribute to strengthening food systems and sustainable development.

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Declarations

Conflict of Interest The authors declare that they have no conflict of interest.

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