

FOOD REGIME DYNAMICS / DINÁMICA DE LOS REGÍMENES ALIMENTARIOS

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Resumen

El concepto de "régimen alimentario" distingue los períodos sucesivos de hegemonía económica mundial global a través de las lentes del aprovisionamiento de alimentos a escala mundial. El régimen alimentario de finales del siglo XIX centrado en el imperio británico que abastecía a Europa con cereales y carne del Nuevo Mundo, fue seguido por el sistema centrado en Estados Unidos que abastecía con exportaciones de alimentos baratos a los países recién independizados del Tercer Mundo, subvencionando así el desarrollo de sus sectores industriales. Con el subsiguiente ascenso de las corporaciones multinacionales y la banca global, el régimen alimentario "corporativo" reorganizó la economía mundial en torno a las cadenas globales de suministro de alimentos que encarnan el principio de la "ventaja comparativa". Cada período se basó en los desarrollos económicos mundiales anteriores para establecer un sistema alimentario plenamente mundial. El momento actual está experimentando dos desarrollos significativos: (1) el ascenso de China como un participante sustancial en el sistema alimentario mundial a través de su "Food Silk Road Initiative", mediante la cual ha establecido su propio sistema de empresas estatales y rutas comerciales para convertirse en el mayor importador de alimentos del mundo; y (2) la reciente "captura corporativa" de las Naciones Unidas por parte del World Economic Forum (WEF) a través de la Cumbre del Sistema Alimentario de las Naciones Unidas de 2021. Este proceso se lleva a cabo mediante la sustitución del diálogo intergubernamental (multilateral) en el Comité de Seguridad Alimentaria Mundial de las Naciones Unidas por una gobernanza "multi-stakeholder", privilegiando las decisiones privadas en la intensificación de la agricultura industrial (y ahora digitalizada) en un proceso de "desterritorialización" de la agricultura. La reciente pandemia reveló la fragilidad de las cadenas de suministro globales, revelando (y mejorando) el saber hacer de los métodos agroecológicos, tanto en la regeneración de los procesos naturales para combatir la emergencia climática como en la garantía de la soberanía alimentaria territorial, encarnada en la vitalidad de los mercados agroalimentarios "anidados".

Palabras clave: *regímenes alimentarios, régimen alimentario corporativo, soberanía alimentaria, agroecología.*

Abstract

The 'food regime' concept distinguishes successive periods of global world-economic hegemony through the lens of food provisioning on a world scale. The late-nineteenth century British-centered food empire, provisioning Europe with grains and meat from the New World, was followed by the US-centered system of provisioning newly emergent Third World countries with cheap food exports to subsidize their development of national industrial sectors. With the subsequent rise of multi-national corporations and global banking, the 'corporate' food regime reorganized the world-economy around global food supply chains embodying the principle of 'comparative advantage.' Each period built on previous world-economic developments to establish a fully global food system. The current moment is undergoing two significant developments: (1) the rise of China as a substantial participant in the world food system via its Food Silk Road Initiative, by which it has established its own system of state-owned enterprises and trade routes to become the world's largest food importer; and (2) the recent 'corporate capture' of the United Nations by the World Economic Forum (WEF) via the 2021 UN Food System Summit. This was organized around replacing intergovernmental (multilateral) dialogue in the UN's Committee on World Food Security with 'multi-stakeholder' governance, privileging private decisions in intensifying industrial (and now digitized) agriculture in a process of 'de-territorialization' of farming. The recent pandemic revealed the fragility of global supply chains, disclosing (and enhancing) the wisdom of agro-ecological farming methods -- in both replenishing natural processes to combat climate emergency, and securing territorial food sovereignty, embodied in the vitality of robust nested food markets.

Keywords: *food regimes, corporate food regime, food sovereignty, agroecology.*

INTRODUCTION

The 'food regime' is a construct designed to frame hegemonic geo-political conjunctures in the evolving structures of food provisioning on a world scale (Friedmann and McMichael, 1989). These conjunctural periods trace the historic restructuring of the classical imperial age -- with Britain outsourcing temperate food production, grains and meat, to 'New World frontiers,' where settler states formed national economies integrating domestic agriculture and manufacturing sectors; followed by post-WWII decolonization and Cold War tensions, with the United States subsidizing strategic Third World states with cheap food aid to underwrite domestic industrialization and with green revolution technologies; prefiguring the era of neoliberal globalization where indebted southern states were compelled to develop specialty food exporting to the world economy as capitalist agro-industrialization spread, and agro-exporting proliferated under the dictates of trade and foreign investment liberalization associated with the formation of the World Trade Organization (WTO) in the mid-1990s. In this brief characterization, geo-politics were governed successively by the tensions of imperialism, national developmentalism, and deepening de-territorialization of the neoliberal era as global food supply chains crossed national boundaries, generating food export and import dependencies, generating a world-wide 'food sovereignty' movement to protect the rights of domestic farming systems (McMichael, 2013a).

This essay focuses on current tensions and restructuring of the global, or corporate, food regime, where instead of markets serving nationalist states in the Cold War era, states now serve markets, with a 'capital logic' displacing the previous 'territorial logic' (Arrighi, 1990).

FOOD REGIME CONTRADICTIONS

At the end of 2018, the Inter-Academy Partnership (involving 130 national academies of science and medicine) reported on what they identified as a 'broken global food system,'¹ given rising public health failures and obesity rates, and ecosystem degradation. While Covid-19 and the war in Ukraine have exposed the vulnerability of the globalized food system and its food import dependencies, they also have revealed what the food regime's hegemonic 'global food system' discourse invisibilizes -- that is, local and/or domestic food systems.

As we know, about a fifth of food is traded across borders, while there are multitudes of local/nested food systems. What has been breaking for some time is the integrity of local and regional food-producing cultures many of which nevertheless still feed the majority world,² even as they are devalued, unsubsidized and under continual pressure. Over a quarter-century ago at the 1996 World Food Summit the international peasant organization, La Vía Campesina (LVC), made this point in politicizing corporate rhetoric feeding the world a neoliberal vision of 'food security,' organized by transnational firms via western global breadbaskets. An alternative, 'food sovereignty,' was precisely what LVC and allies across the agrarian and NGO world identified as threatened by this trans-national 'system.' Their intervention warned of the inherent damage to farm systems embedded in diverse landscapes in North and South, from standardized agricultural technologies imposed over lands, and globalists proclaiming a discourse of progress and plenty.

Such technologies dispossess by accumulation – undermining and devaluing cultural practices and knowledges that contribute to local food security, livelihood rights, and resilient polycultures. Agro-technologies consummate a world-historical narrative of development built on racism and abyssal thinking: where what is made visible is at the expense of what is rendered invisible: indigenous peoples, migrant farm labor, or peasant and family farming.

However, at this crisis moment, the consequences of 'progress' in food dumping, agro-exporting, and seed commercialization in undermining local agri-food integrity are now firmly on the radar. Some states and public discourses are revaluing short supply chains and local provisioning as export restrictions have jeopardized the international trade in 'food from nowhere.' Reclaiming 'sovereignty' under these circumstances may be a step towards substantive revaluation of 'foods from somewhere,' as democratic, ecological, and public health projects. Meanwhile, multilateral cooperation to address immediate deficits across a grossly unequal world is imperiled by problematic nationalist politics, reflecting an international leadership vacuum (McMichael, 2023).

One alternative crisis perspective is that the global food system "is not broken...It is working precisely as a capitalist food system is supposed to work: it expands constantly, concentrating wealth in a few, powerful monopolies, while transferring all the social and environmental costs onto society" (Holt-Giménez, 2019, p. 29). And this power complex recently stood behind an overt attempt to capture global governance of the international food system via the World Economic Forum (WEF)³ partnering with the United Nations to stage a Food System Summit (UNFSS) in 2021, with the President of the Alliance for a Green Revolution in Africa (AGRA), Dr. Agnes Kalibata, as Special Envoy (Canfield, Anderson, & McMichael 2021). The UNFSS accorded substantial involvement to a Scientific Group tasked with "ensuring that the science underpinning the 2021 summit [was] robust, broad and independent." Led by academic scientists, rather than frontline

¹ <https://www.theguardian.com/environment/2018/nov/28/global-food-system-is-broken-say-worlds-science-academies>

² '80% of the world's food reaches those who consume it not through formal value chains and retail networks, but through territorially rooted markets' (McKeon, 2018, p.2). See also: <https://www.csm4cfs.org/connecting-smallholders-markets-analytical-guide/>

³ The self-identified NGO for the largest transnational corporations. See <https://davosclass.tni.org/>

farmer practitioners, this elite group's premise was that only such scientists can address "the more global, dynamic and complex food systems become." Recognizing that "food is a contentious topic" – as in biotechnology vs. agroecology -- the Scientific Group aimed to "offer a scientific basis to this diversity of perspectives" (von Braun et. al., 2021, pp.18, 19, 30), thereby devaluing diverse landscape knowledges of local farmers.

CORPORATE POWER AT WORK

Such an unholy alliance attests to the current configuring of power and global governance. Here the principle of multilateralism, reframed in mid-1990s WTO rules to require states to reduce domestic farm protections in the name of liberalization, was seriously compromised by empowering transnational agribusiness. Over the last quarter century, despite resistance from a few states and a transnational peasant coalition, national food systems have been dismantled by cheap global food exports and trading, involving the incorporation of sub-national producing regions into a multiplex world market, with a 'capital logic' "introduced in the management of populations and the administration of special spaces" -- expressing and realizing "the territoriality of global capitalism" (Ong, 2006, pp. 3, 7).

The partial embedding of national territory in food regime circuits of resources and value expresses the accommodation of states to market rule, as the key regulatory dimension of the corporate food regime. Not only does this accommodation, via 'comparative advantage' world market positioning, intensify inter-state competition at the expense of collaborative relations, but also the 2021 UNFSS format revealed a deeper override of multilateral governance (McMichael, 2021; Fakhri, 2022).

The WEF threat to UN public authority represents a culmination of the so-called 'shock doctrine,' where political-economic elites intervene during crises to prevent "organic moments when progressive policies emerge."⁴ In this event, hundreds of civil society organizations warned that the WEF has "emerged as the key space for decision makers and corporate leaders to roll out initiatives around global public goods – water, food and climate... seeking to shape the future of a wide range of services."⁵ And members of the International Panel of Experts on Sustainable Food Systems (IPES-Food) expressed: "concerns that the real goal of the Summit was to manufacture a new consensus, to put business-led solutions back in the driving seat," shifting food systems governance away from the UN Committee on World Food Security (CFS). IPES-Food proposed turning the summit into an inclusive World Food Congress, recenter food systems governance on the UN/CFS, feature agroecology and food sovereignty, and produce a UN Framework Convention.⁶

In terms of food regime restructuring, the WEF/UN alliance represents a response to the fracturing of multilateralism – in the rise of regional and bilateral FTAs and nationalisms (provoked by the politically inflammable combination of austerity politics and anti-immigrant politics). This provided the opportunity for the WEF to claim the end of multilateralism, with only the transnational corporate sector in position to provide stable global food governance.

As above, states are already compromised by 'market rule,' which is the point of the corporate food regime nomenclature. The difference is that any semblance of intergovernmental regulation in the public interest may well be overridden by explicit corporate hegemony, where corporations act as "trustees of society" (Schwab, 2019). In relation to this claim, WEF Executive Chair Klaus Schwab's proposal to replace 'shareholder capitalism' with 'stakeholder capitalism,' via selective 'inclusion' of substantially unequal shareholders in the UNFSS, was a bid to legitimize private-corporate authority in global food governance at the expense of public multilateralism. This manoeuvre is undergoing heightening resistance by civil society

⁴ https://www.vice.com/en_us/article/5dmqyk/naomi-klein-interview-on-coronavirus-and-disaster-capitalism-shock-doctrine

⁵ <https://www.iatp.org/blog/202003/world-economic-forum-and-corporate-takeover-global-governance-our-food-systems>

⁶ <https://www.newsbreak.com/news/00TrWLJe/op-ed-the-2021-food-systems-summit-has-started-on-the-wrong-foot-but-it-could-still-be-transformational>

organizations, especially those positioned in the Civil Society and Indigenous Peoples' Mechanism (CSIPM) of the UN Committee on World Food Security (CFS),⁷ as well as the International Planning Committee for Food Sovereignty.⁸

In one sense, then, the politics of the corporate food regime are now made explicit: in this structure not only do states actively mediate world market relations to attract and support transnational agribusiness, but also TNCs would no longer be subject to multilateral scrutiny via the CFS and grassroots monitoring by the CSM. This represents an attempt to render food corporations⁹ as synonymous with the public interest.

At another level, a parallel food regime transitioning is evident in China's deepening involvement in the world food economy, on its own terms. These include, in particular, its sponsorship of state-owned transnational enterprises, and, related, its participation in 'agro-security mercantilism,' representing a variant of the rise of 'multi-polarity'-- as repudiation of the western-centered multilateral regime (McMichael, 2013b, 2020; Belesky & Lawrence, 2019).

THE CURRENT JUNCTURE

At present, the central tension in the food regime plays out between the principles of 'food from somewhere' and 'food from nowhere' -- animated, respectively, by socio-ecological protection, or private profiteering claiming global food chain 'efficiencies.' Recently, the EAT-Lancet Commission on Healthy Diets from Sustainable Food Systems summary report noted: 'Global food production threatens climate stability and ecosystem resilience and constitutes the single largest driver of environmental degradation and transgression of planetary boundaries' (Eat-Lancet, 2019). At the same time, much 'food from nowhere' provides processed meals and artificial food snacks assembled via global sourcing of multi-sited ingredients, including nutraceuticals, functional foods, and now 'food as software' (Mann, 2021, pp.68-69).¹⁰ The current food regime is anchored in bifurcated class diets,¹¹ where governments subsidize low-cost foods as a hedge against social unrest.¹² Here, "low prices of ultra-processed foods encourage overconsumption...[and] democratize eating in fast-food and other restaurants where portions are large, and more calories are consumed" (Nestle, 2022).

Under these circumstances, with the UN's 2030 Agenda centering on new Sustainable Development Goals serving as a "shared blueprint for peace and prosperity for people and the planet, now and into the future," the UNFSS claimed its rationale for the goal of 'food system transformation' in the Sustainable Development Goals (2030). At the same time, the WEF appears to be responding to the recommendation of the International Assessment of Agricultural Science and Technology for Development that "business as usual is no longer an option" -- in claiming to replace 'shareholder capitalism' with 'stakeholder capitalism,' in the interests of socio-environmental responsibility. However, IAASTD also underscored markets "cannot value social or environmental harm" (IAASTD, 2008, p.20). In this context, counter-hegemonic visions proliferate across regions experiencing food insecurities and/or agricultural precarity resulting from agro-chemicals and monocultures (including biodigitalization)¹³, prompting some governments and communities alike to strengthen territorial food systems and environmental security in this increasingly evident crisis. Transformation possibilities vary across space, but one likely pathway is outlined by IPES-Food experts:

⁷ https://www.foodsystems4people.org/wp-content/uploads/2023/05/EN_Analysis-report-2023_FS4P.pdf

⁸ See: file:///Users/pdm1/Desktop/Nyeleni_Newsletter_52.%202023.pdf

⁹ Thereby abetting financial and digital firms, increasingly involved, respectively, in land grabs, and virtual landscape grabs. See Canfield & Montenegro (2023): <https://globaldatajustice.org/gdj/2950/>

¹⁰ As Roberts noted: "Westerners don't buy food anymore. They buy processed meals assembled from ingredients or inputs" (2008, p.122)

¹¹ See Friedmann (2005).

¹² Cf., Patel & McMichael's account of food riots in 2008, resulting from severe food price inflation (2009).

¹³ See, eg: <https://globaldatajustice.org/gdj/2950/>

whether the starting point is industrial agriculture or subsistence-style farming... the agro-ecological alternative is high-tech and knowledge intensive – it requires complex synergies to be built and sustained between different crop varieties and species, and between different farming systems (mixed crop-livestock systems, for instance) ... [new evidence] shows the huge potential of these systems to succeed where industrial systems are failing – namely in reconciling concerns such as food security, environmental and livelihood resistance, nutritional adequacy, and social equity (De Schutter & Frison, 2017).

In order to retain ecological and landscape intimacy and restorative sustainability, large-scale agriculture will need to yield to territorially governed smaller-scale landscape farming practices. A recent CFS Report, *Connecting Smallholders to Markets*, underlined the point that the dominant (globalist) narrative routinely overlooks more localized market systems, where:

...the food concerned is produced, processed, and traded within these systems. These value adding processes can help to create employment and contribute to local, social, and economic development, when the benefits of value addition circulate within the local, national and regional systems... They perform multiple functions beyond commodity exchange, acting as a space for social interaction and exchange of knowledge. Despite their importance, these markets are often overlooked in data collection systems, which impacts negatively on the evidence base for informing public policies (CFS, 2017, p.2).

Recent proliferation of programs and policies instituting the principle of territorial food systems attests to the salience of protecting and deploying them to address food security and nutrition for citizens rather than exporting foods for relatively affluent consumers (Trauger, 2014; Schiavoni, 2017; Wittman and Blesh, 2017; Chappell, 2018). The move toward shortening supply chains is exemplified in the following kinds of public directives, prefiguring current pandemic-encouraged developments:

Across the Caribbean, food imports have become a budget-busting problem, prompting one of the world's most fertile regions to reclaim its agricultural past. But instead of turning to big agribusinesses, officials are recruiting everyone they can to combat the cost of imports, which have roughly doubled in price over the past decade. In Jamaica, Haiti, the Bahamas and elsewhere, local farm-to-table production is not a restaurant sales pitch: it is a government motto (Cave, 2013, p.6).

At the time of the 2008 'food crisis' extensive riots revealed "failure to provide (food) security undermines the very reason for existence of the political system" (Lagi, Bertrand, & Bar-Yam, 2011, p.2). This, of course, is the point of 'food sovereignty,' as it was coined as a term critiquing the surrender of territorial integrity and the assault on domestic farming market systems of liberalization of trade and land enclosure from foreign investment and agro-exporting to consumers with purchasing power.

These markets are those upon which the world majority (notably low-income consumers) depends, however tenuously. And the politics of these markets, and their local suppliers, will become even more significant as industrial food's fossil fuel dependence, in combination with food inflation and trade disruption, render global sourcing increasingly problematic.

THE CHINESE EFFECT

The Chinese model provides one compelling alternative to reliance on global food supply chains. China's pursuit of 'international self-reliance' (McMichael, 2020, 11), to which President XI refers as 'dual circulation,' involves offshore food supplies complementing a high domestic food sufficiency ratio (rice and wheat at 95%). This offers a model of stable food security, with possibly the last remaining relatively stable agrarian sector, combining agro-industrialization alongside a huge peasant sector – which produces

20 percent of the world's food supply on 10 percent of the land (Ploeg & Ye, 2016, p.1). Unlike the Indian government (as below), the PRC appears to be committed to maintaining its peasant sector, including organic farming, in various expeditious forms.

WTO admission of China in 2001 was on the assumption that it would embrace market rule, but China's entrance was on its own terms: "The WTO's rules were not written with an economy like China's in mind, and critics say the organization has failed to adequately police Beijing for using a mix of private enterprise and state support to dominate global industries" (Swanson, 2019). In 2019 a member of the US Council of Foreign Relations, commented that "China is no longer seen as on a trajectory that favors the US" (quoted in Farrer & Kuo, 2019). Ultimately this was a dispute over the changing of the world-economic guard, and, likely the *denouement* of neoliberalism, with emergence of a 'multipolar world.'

The rise of (formal) multipolarity in the early 21st century contributes to declining multilateralism, where the latter was premised on an international order modeled by the US, and UN, and instituted in the WTO architecture of global food governance. However: "the nature of economic interdependence today is denser, consisting of trade, finance, and global production networks and supply chains, whereas ... multipolarity is mainly trade-based" (Acharya, 2017, p.11). Foreign investment relations in particular override *substantive* multipolarity insofar as they embed states in commodity (input) flows that are internal to corporate networks of production and circulation, mediated by states in their quest for competitive market positioning, often via 'public-private partnerships.' Alternatively, the Chinese government reverses this partnership model with a state-centered form, including state-owned enterprises (SOEs), deployed internationally via its 'Belt and Road Initiative' (BRI).

This model emerged via parallel engagement with the food regime, with China's deepening investment in agricultural regions of Southeast Asia in the 1990's. China-centered supply chains organizing Asian regionalism then reached westward across other regions, deploying the PRC's longstanding diplomatic claims for mutual state-to-state benefits via varieties of infrastructural 'aid for resources.' And so, China's accession to the WTO in 2001 portended China's flexible combination of a *short game* of maturing trade and investment relations within the 'globalization project' at large, and a much *longer game* of reorganizing infrastructures of trade and investment in a multipolar world (McMichael, 1996, 2020).

For the *short run*, China has become the largest trading partner of the US, and "surpassed the US as the world's top choice of foreign direct investment" (Pieterse, 2018, p.11). It is now the world's largest food importer (Tortajada & Zhang, 2021, 4). In relation to this, the Chinese 'National Agricultural Sustainable Development Plan (2015-2030)' proclaimed:

Make good use of international markets and resources... Improve the quality of opening up ... cultivate large-scale enterprises such as grain, cotton and oil that are internationally competitive, and support agricultural production and trade cooperation with foreign countries, especially with neighboring countries, and improve relevant policy support systems.¹⁴

The BRI has access to unmatched foreign exchange reserves, and its banking system is largely state-owned to finance global activities of SOEs. In turn SOEs exploit the market paradigm, in the public interest, as defined (largely) by the PRC. Such state-developmentalism contrasts with the global neoliberal model where states have mediated, rather than directed, transnational corporate activity during the corporate food regime historical conjuncture (cf., Zhan, 2022).

While neo-mercantilism has underpinned food regimes largely as the privilege of the US and EU 'global breadbaskets,' Chinese 'agro-security mercantilism' is of a different order. This stems from China's historic

¹⁴ <http://www.sagash.com.cn/userlist/sagash/newshow-642.html>

struggle against foreign interference, and its possession of only 10 percent of global arable land to feed 20 percent of the global population, requiring growing involvement in the food regime. And for historical reasons, given the Western-centered corporate food supply chains, late-starter East Asian and Mideastern states have responded by circumventing the multilateral trading system and investing directly in offshore food supplies, with China in the lead (McMichael, 2020).

For the PRC, securing offshore food sources demands stable bilateral relations, pursuing longer-term 'profit-optimization' (infrastructural) goals, rather than finance-driven 'profit-maximization' goals, in pursuit of 'mutual benefit' with host states (Lee, 2017, p.11). And this includes the BRI working as a strategic infrastructure of alternative global trade routes to those formed by the US. The BRI is essentially the product of rising Chinese consumption, generating a new food import complex – especially with rising Chinese investment in agricultural development, especially in Asia and Africa. In addition to securing food supplies, China's BRI includes technology transfer, infrastructure upgrading, and farming enterprise collaboration. As the FAO notes: "Chinese science and agriculture have much to offer developing countries, since intensive small-scale agriculture has been practiced in China for centuries" (quoted in Buckley 2013, 43).

As noted elsewhere:

...it is premature to define a future food regime trajectory. China's current engagement does however offer a lens on transitional processes, taking into account the dynamic combination of conjunctural relations, but not assuming China will necessarily become a new hegemon. Interestingly, the Chinese 'moment,' so to speak, occurs at a time when political liberalism is in decline, as compared with the 'moments' when Britain and the United States established their international hegemony (McMichael, 2020, pp.25-26).

POLITICAL TENSIONS

However current unstable geo-political relations play out, there are deepening tensions between agriculture with, or without, farmers, where the former involves multi-functional/ecological farming systems – as a palliative, or revolutionary, move to regenerate agriculture in the interests of environmental and ecological stability (see, *eg.*, IPES-Food & ETC Group, 2021).

In general, whether from the grassroots or via policy shifts, there is growing evidence of commercial farmers converting to ecological practices as agro-input costs inflate with corporate monopoly (*eg.*, Philpott, 2020), nested markets across the world integrate local producers and consumers into solidary economies, and small farmer networks of seed and information exchange embed food sovereignty principles in the interstices of the formal economy (Da Via, 2012). This includes a plethora of local food initiatives in rural and urban spaces alike, as Food Councils form (Chappell, 2018), urban gardens proliferate, unemployed/informal workers 'return' to the land, and long-ignored indigenous territorial rights emerge as a new terrain of political struggle (Mayes, 2018).

Mexico's Obrador (AMLO) government favors self-sufficiency in basic grains and improved livelihoods for family farmers and rural communities, following displacement of almost 5 million family farmers via NAFTA. And, following Brazil, ecological farming is gaining in India – with a Zero Budget Natural Farming program transitioning millions of farms to chemical-free agriculture (Khadse *et al.*, 2018).

Meanwhile, a growing consensus among researchers, practitioners and official organizations attests to the resilience of agroecology and its parallel productivity to corporate agriculture. Earlier, a UN study found "organic agriculture outperformed conventional production systems based on chemical-intensive farming and is thus more conducive to food security in Africa" (UNCTAD & UNEP, 2008, p. 236). Accordingly, organic and/or agroecological methods increasingly inform policy recommendations. At the same time,

agroecology's growing value is confronted by appropriation by agribusiness interests to contain it (Holt-Giménez, 2019). The evolving tensions between industrial and agroecological versions of food production will transpire on political as well as biophysical terrains.

Agroecology

A recent HLPE Report, *Agroecological and Other Innovative Approaches*, submitted to the CFS in 2019, was a milestone, even though the CFS definition excludes the social movement dimension. The title of the report indicates pressure to leave 'agroecology' open to interpretation and forms of adoption by corporate agriculture, especially as it is termed 'one tool in the toolbox' by industrialists. As the FAO Director-General, José Graziano da Silva stated in 2015: "Agroecology continues to grow, both in science and policies. It is an approach that will help to address the challenge of ending hunger and malnutrition in all its forms, in the context of the climate change adaptation needed [and] agroecology represents a *promising option and is one possibility among others*, such as GMOs and reducing the use of chemicals" (quoted in Rosset & Altieri, 2017, p.2, emphasis added).

As an 'option,' some agroecological methods might be 'added' to conventional agriculture (eg, climate-smart agriculture) vs. the holism of genuine community-based agroecology, linked to landscapes with distinctive biophysical relations and processes. While such reductionist acknowledgement may represent 'business-as-usual' manipulation, it also invokes the efficacy of agroecological practices over the long term. Industrial agriculture and factory farming face a rising legitimacy deficit, and recognition that some greening adjustment is necessary. Under these circumstances, IPES-Food has adopted a 'boundary-crossing' approach. It emphasizes positive leverage to avoid "organic/agroecology becoming closed niches, facilitating ongoing exchanges with mainstream actors, and keeping the door open for late adopters [are] key factors in maintaining momentum and building powerful alliances over time" (Gliessman, 2018, p.6). This proposal expresses the pivotal social movement declaration at the 2015 International Forum on Agroecology Nyéléni in Mali (West Africa), led by La Vía Campesina:

The industrial food system is beginning to exhaust its productive and profit potential because of its internal contradictions – such as soil degradation, herbicide-tolerant weeds, depleted fisheries, pest- and disease- ravaged monocultural plantations – and its increasingly obvious negative consequences of greenhouse gas emissions, and the health crisis of malnutrition, obesity, diabetes, colon disease and cancer caused by diets heavy in industrial and junk food. Popular pressure has caused many multilateral institutions, governments, universities and research centers, some NGOs, corporations and others, to finally recognize "agroecology". However, they have tried to redefine it as a narrow set of technologies, to offer some tools that appear to ease the sustainability crisis of industrial food production, while the existing structures of power remain unchallenged.

Agroecology is political; it requires us to challenge and transform structures of power in society. We need to put the control of seeds, biodiversity, land and territories, waters, knowledge, culture, and the commons in the hands of the peoples who feed the world.¹⁵

Implementing such a political program, India's Zero Budget Natural Farming (ZBNF) program, is a successful grassroots agroecology mobilization that has gained support from several federated states. Beginning in the state of Karnataka with 100,000 farms, it spread to southern states of Tamil Nadu, Andhra Pradesh and Kerala via millions of farmers: a 2017 report of an extensive survey noted that "by adopting ZBNF practices over time 78.7 percent of the farmers saw improvements in yield, 93.6 percent in soil conservation, 76.9

¹⁵ <https://link.springer.com/article/10.1057/s41301-016-0014-4>

percent in seed autonomy, 87.8 percent in household food autonomy and 85.7 percent in income, while 92.5 percent experienced reduced farm expenses and 92.5 percent a reduced need for credit." Over time and across space the ZBNF movement "has organized about sixty massive state-level training camps... with an average of one or two thousand farmer participants at each camp, including women, men and youth" (Rosset and Altieri, 2017, pp.76, 108). ZBNF's organizational impetus arose from the Karnataka Rajya Raitha Sangha (KRRS) farmer organization, a conservative middle-farmer organization in La Vía Campesina.

ZBNF models two rural initiatives that endure across the agrarian world: rejection of 'debt farming,' and elaboration of countermovement learning, such as mobilization of human resources and agroecological training. Reductions in 'debt farming' enable producers to wean themselves off expensive agro-inputs (commercial seeds, fertilizer, chemicals). This process of 're-peasantization' (Van der Ploeg, 2009), substitutes ecological wealth for dependency on credit and purchasing external inputs.

As the counterpart to *vertical* power exercised over farmers by agribusiness, rural social movements and peasant organizations build on *horizontal* social methodologies practiced by small farmers across time, known as 'Campesino-a-Campesino' exchanges of seeds, ecosystem knowledge and support. La Vía Campesina has organized over 40 agroecology training programs and schools across the global South, including Brazil, Chile, Paraguay, Venezuela, Colombia, Nicaragua, Indonesia, India, Mali, Zimbabwe, Niger, and Mozambique. Small farmers learn through peer-to-peer teaching – not only in farming 'best practices,' but also in collective organization (Rosset and Altieri, 2017, pp.109-10). Unlike the tendency of corporate agribusiness to manage its agri-food empires through global standardization, food sovereignty movements respect diversity, operating via 'co-relations.' Local organization has pay-offs, as an increasing number of countries "are in the process of adopting a framework of legislation for agriculture, food, and nutrition that enshrines rights-based principles of entitlements and access to food in national policies, public policies, laws and constitutions. Constitutional recognition of the right to food sovereignty has been achieved in countries such as Ecuador, Bolivia, Nepal and Venezuela," and other countries have been following suit (Gaarde, 2017, p.151).

As these developments regenerate local food system spaces and recognition of sovereign rights, they implicate state policies in demanding domestic initiatives for food security and healthy farming for soils, humans and the planet. In fact, agroecology's unique ability to:

reconcile economic, environmental, and social dimensions of sustainability has been recognized by the World Bank-led global agricultural assessment (IAASTD), the UN Food and Agricultural Organization (FAO), and landmark reports from the IPCC and IPBES. France, Switzerland, China, Mexico, Senegal and Cuba are among the Governments now promoting agroecology through various policies (De Schutter & Yambi, 2020).¹⁶

In coming years, shortening of food supply chains will continue (at regional and national levels), and food systems will embrace more localization, given the food security shocks associated with COVID-19, disruptions of 'breadbaskets,' and growing recognition of industrial agriculture's harmful effect on biodiversity, soil and water health and climate change.

Governance politics

In the meantime, political tensions abound in the higher reaches of agri-food policy and governance, implicating corporate power. In particular, UNFSS planning marginalizes food producer voices by overriding the CFS role as principal intergovernmental body promoting policy convergence among states to develop

¹⁶ <https://foodtank.com/news/2020/03/2021-food-systems-summit-started-on-wrong-foot-it-could-still-be-transformational/>

a global strategic framework for food security and nutrition, and as "the foremost inclusive international and intergovernmental platform"¹⁷ in the UN system. And this override is undoubtedly directed towards dismissing agroecology as a key socio-ecological system promoted (politically) by the IPC and practicing communities of farmers. This was evident in the response to the HLPE Report on Agroecology by the US Ambassador to the FAO, who suggested that such policy recommendation "did not share the basic values and core assumptions on which we operate here in the United States [and is] an explicit rejection of the very idea of progress."¹⁸ Agroecology is not featured seriously in planning, underscoring the diffuse focus on (select) 'stakeholderism,' rather than engagement with agroecology as a key practice for farming cultures and preserving biodiversity and planetary health for species survival in the future.

Stakeholderism informs the UNFSS model, having emerged across the last two decades of public partnerships with food corporations. The 21st century strengthening of the corporate food regime moved beyond simply a license to profit via the liberalization of foreign trade and investment by food companies. Now states partnered collectively, through joint alliances or with the UN, to mobilize public resources and reframe land and agricultural policy in the name of productivity, and market supplies, and greening, to be managed by transnational food corporations. Most importantly, the notion of the 'public good' underwent reformulation via discursive legitimation: as best served by private interest. Such blending of public and private interests constitutes a new standard, with the rights of the so-called 'invisible hand' displacing the rights and sovereignty of farmers and civil society at large. This public-private partnership (PPP) model informs the UNFSS, but now with an important twist, introduced by the WEF.

The WEF represents itself as a global platform for public-private cooperation: having "catalyzed stakeholder support for ambitious global political initiatives such as COP21 and the United Nations Sustainable Development Goals, [and further] The Forum is officially recognized with a special status to act as the International Organization for Public-Private Cooperation."¹⁹ That is, the WEF has been a key player in the promotion of PPPs with global consequence – especially legitimizing corporate power in international public reforms. Substantively, this is expressed in WEF claims to have "influenced global thinking by being at the forefront of concepts such as multi-stakeholder engagement, social entrepreneurship, corporate global citizenship and the Fourth Industrial Revolution" (*WEF Institutional Brochure*, 2013, p.8).

In the shadow of COVID-19, the WEF has taken leadership in reconfiguring "the totality of institutions, policies, norms, procedures and initiatives" through which public-private/multi-stakeholder interests "try to bring more predictability and stability to their responses to transnational challenges" (Schwab & Malleret, 2020, p.47). It is this intent that animated the WEF's 'takeover' or overshadowing of the UN Committee on World Food Security, in staging a Food System Summit, to address global chaos, along with its claim that corporations are "trustees of society."

Klaus Schwab, founder, and executive chairman of the WEF, and co-author of *The Great Reset*:

The worldwide crisis triggered by the coronavirus pandemic has no parallel in modern history... It is our defining moment – we will be dealing with its fallout for years, and many things will change forever...

The connectivity between geopolitics and pandemics flows both ways. On the one hand, the chaotic end of multilateralism, a vacuum of global governance and the rise of various forms of nationalism make it more difficult to deal with the outbreak. On the other hand, the pandemic is clearly exacerbating and accelerating [prior] geopolitical trends that were already apparent before the crisis erupted (Schwab & Malleret, 2020, pp.8, 22, 44).

¹⁷ <http://www.fao.org/cfs>

¹⁸ <https://foodtank.com/news/2020/05/u-s-agribusiness-takes-aim-at-global-food-policy-reform/>

¹⁹ http://www3.weforum.org/docs/WEF_Institutional_Brochure_2016.pdf

The focus on the *crisis of multilateralism* invokes the issue of food regime transitioning. What is proposed is a new form of global food governance, represented in the concept of 'multi-stakeholderism.' This proscription, falsely premised on the notion of a 'level playing field' elevates powerholders over those subject to that power: privileging agribusiness (agro-input firms, industrial farms, financial and digital firms, corporate processors and retailers) over small-scale producers, Indigenous peoples, farmworkers, fisherfolk, pastoralists and their representatives in the Civil Society and Indigenous Peoples' Mechanism (CSIPM) of the CFS.

This intervention resembles Klein's 'shock doctrine': "...when markets fail it lends itself to progressive change much more organically than it does the kind of deregulatory policies that favour large corporations. So, the shock doctrine was developed as a way to prevent crises from giving way to organic moments when progressive policies emerge."²⁰ The notion of an organic moment informs *The Great Reset*, in the concept of 'stakeholder capitalism' -- the crisis at large, expressed in a global rise of activism, recognized by the WEF, heightens "the criticality of stakeholder capitalism and [environmental, social and governance] considerations in today's interdependent world" (Schwab & Malleret, 2020, p.73).

The UNFSS structure arguably marginalized agri-food activists and agrarian voices, especially in the 'organic moment' of COVID, which unveiled precarious dimensions of the food regime -- such as global supply chains, zoonotic boundary crossing, farmworker exploitation, deepening hunger, and persistent food insecurity. With its multiple dimensions the COVID crisis has been an exceptional moment for corporate-driven intervention. And the means for initiating this required rewriting procedural rules and institutional norms in the governance of the global food system and performing a takeover of the UN/CFS forum by the WEF via the UN Food System Summit -- thereby deflecting attention from the governing neoliberal principle of states serving markets that has organized the corporate food regime.

At this juncture, the CSIPM contests the proposal for multi-stakeholder governance, with platforms to undermine "responsibilities of governments and replace political participation with a model that lacks clear rules of participation, subverts traditional means of political representation and erases mechanisms of accountability" (Canfield *et al.*, 2021).

How the UNFSS legacy will unfold, given mounting public criticism of its diffuse and unaccountable goals and structure, is so far unclear. Nevertheless, it represents a potential test case of the power of the corporate sector, with its WEF champion. It may be that the power brokers in the WEF and the UN have overreached in a moment of grinding global inequality, diminished public services, and mounting threats to public and planetary health (McMichael, 2023). Food sovereignty and its growing alliances -- bolstered perhaps by the successful and instructive example of the Indian farmer rebellion against the Modi government's attempt to dismantle food producer protections in the name of corporate 'business as usual' (Baviskar & Levien, 2021; Shah & Sandwell, 2023) -- may yet gain more ground and credibility as an alternative 'food security' practice in the wake of the 'broken food system.' In this sense, food regime transitioning, as in previous regimes, may well see its key tension resolve in the direction of more territorial agro-ecological farming systems flourish.

CONCLUDING COMMENT

In lieu of a conclusion, *per se*, current food regime transitioning is clearly a fraught and currently indeterminate process. What is highlighted here is that the animating tension between large-scale monocultural corporate, and smaller-scale biodiverse, farming systems (with many actual forms in between), faces a complicated future. Corporate capture of global food governance is on the immediate

²⁰ https://www.vice.com/en_us/article/5dmqyk/naomi-klein-interview-on-coronavirus-and-disaster-capitalism-shock-doctrine

agenda (and may well be enabled by 'Fourth Industrial' technologies such as digitalization as a surveillance system of compulsion and appropriation of farmer knowledge). But while it is emboldened by fractured geopolitics and multilateralism and the immediate chaos of the pandemic, its attempt to undercut agri-food activism and demands for public responsibility may encourage or precipitate further alliances between farmers and urban citizens – as evident in the Indian uprising

At the same time, China's relation to the UNFSS may be ambiguous, give its 'short-game' engagement with the corporate food regime, and its 'long-game' vision of 'South-South cooperation,' self-reliance, and possible world hegemony. The Chinese Director-General of the FAO, Qu Dongyu, may well see the UNFSS controversy as an affair of Western subsidence, and choose to remain on the sidelines. That is, while China is a participating member of the UN/FAO, the WTO and global food relations, it perhaps has a longer civilizational view, and is more likely to manage, and in fact lead, climate change adjustment (so long as the PRC maintains its overwhelming power over its citizenry, while Western democracy experiences paroxysms and paralysis, also affecting intergovernmental cooperation).

China's model of state-developmentalism may evolve into a hegemonic form as states come to restore public responsibility in a post-neoliberal age, confronted by challenges for which private, profit-driven corporations are, by definition and conduct, unsuited. And this indeed may well include recognition of the value of smaller-scale territorial farming systems, as the foremost source of food security and nutrition, as well as public and planetary health.

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