

### Transforming land for sustainable food: emerging contests to property regimes in the Global North

Adam Calo, Sarah Ruth Sippel, Sylvia Kay, Coline Perrin, Kirsteen Shields

#### ▶ To cite this version:

Adam Calo, Sarah Ruth Sippel, Sylvia Kay, Coline Perrin, Kirsteen Shields. Transforming land for sustainable food: emerging contests to property regimes in the Global North. Elementa: Science of the Anthropocene, 2024, 12 (1), 10.1525/elementa.2024.00028. hal-04885650

### HAL Id: hal-04885650 https://hal.inrae.fr/hal-04885650v1

Submitted on 14 Jan 2025

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.





#### **RESEARCH ARTICLE**

# Transforming land for sustainable food: Emerging contests to property regimes in the Global North

Adam Calo<sup>1,\*</sup>, Sarah Ruth Sippel<sup>2</sup>, Sylvia Kay<sup>3</sup>, Coline Perrin<sup>4</sup>, and Kirsteen Shields<sup>5</sup>

Land relations—property, access, tenure, landscape—are a central underlying driver of the material form of food systems, from farm to distribution. Despite their fluidity and historical and geographical diversity, land relations have a tendency to become normalized through law, custom, and practice. In particular, the exclusionary private "ownership model" of property has come to be deeply entrenched in legal systems worldwide, particularly in the Global North. The power of this normalization is evidenced, for example, in how research and practice aimed at reshaping food systems from grassroots movement, policy-level, or biophysical perspectives often omit the role of land relations in bringing about agricultural sustainability and agrarian change. Understanding land relations as static thus potentially constrains or directs the kinds of sustainable agriculture and food transformations that can take place. Entrenched norms of property drastically limit the urgent possibilities of food system transformation. However, a confluence of political and ecological conflagrations may be placing land back on the agenda and in the forefront of people's minds. In a moment when hegemonic understandings of land and property can also appear absurd and paper thin, we describe counter movements bubbling up to contest the status quo of the land food nexus from within the core. This article introduces a special feature centering the role of land in sustainable food transformations. The collection provides new understandings on how governance of land (property relations, land access, land tenure, landscape policy) mediates the potential for food system change. The special feature goes beyond understanding dynamics of the land food nexus to ask how land relations can be reformed to create favorable conditions for more just and sustainable food systems to emerge. We highlight 5 empirical domains of transforming land relations from within the Global North: legislating land reform, quasi-market reforms, remaking land for sustainability agendas, Indigenous claims to land in the settler state, and using municipal power to unlock land. Each domain has the potential to act as a non-reformist reform but each carries its own drawbacks and limitations. Nevertheless, if our argument holds that there will be no food system transformation without a parallel remake of land relations, it is time to start organizing a concerted effort for land reform bespoke to geographical and political contexts.

**Keywords:** Land reform, Sustainable food system transformation, Agrarian change, Property, Sustainability transformations, Food systems

#### Introduction

In June of 2022, the Dutch government announced it would halve its national nitrogen emissions by 2030 (Mukpo, 2023). The drastic cut came after decades of a failure to comply with EU standards that set pollution limits and established bare minimum environmental quality

\* Corresponding author: Email: adam.calo@ru.nl targets in the Eurozone (van der Ploeg, 2020). The Netherlands was in a bind. Decades of pollution exemptions were finally ruled illegal and future emission permits were halted until the agreed upon targets were met. To meet other domestic goals like the construction of new housing, emission reduction would need to come first. The government looked to the agricultural sector to achieve these cuts. An allocated budget of 25 billion euros was put forth to buy out large farmers in the intensive livestock sector, whose nitrogen runoff from fertilizers, other inputs, and manure were a leading source of harmful emissions into waterways and vulnerable protected areas (Engelen, 2023).

The announcement of the plans sparked a wave of protests, where allied groups of intensive farmers blocked highways with farm equipment, sprayed manure on public buildings, clashed with police, and at the height of the

<sup>&</sup>lt;sup>1</sup> Department of Geography, Planning, and Environment, Institute of Management Research, Radboud University, Nijmegen, the Netherlands

<sup>&</sup>lt;sup>2</sup>Institute of Geography, Münster University, Münster, Germany

<sup>&</sup>lt;sup>3</sup>Transnational Institute, Amsterdam, the Netherlands

<sup>&</sup>lt;sup>4</sup>UMR Innovation, INRAE, CIRAD, Institute Agro, University of Montpellier, Montpellier, France

<sup>&</sup>lt;sup>5</sup>Global Academy of Agriculture and Food Systems, University of Edinburgh, Edinburgh, UK

protests, prevented access to major food distribution centers, leading to momentary shortages in national supermarkets. The protesting farmers and their allies, under a banner of "No Farmers, No Food," framed the government action as elite bureaucratic folly that favored protection of natural areas over efficient food production from the country's heartland.

In the parliamentary elections of the following spring 2023, the "Farmer Citizen Movement" seized on the nitrogen reduction plans as part of their populist center-right discourse (Engelen, 2023). The party's rhetorical moves were electorally effective, gaining 15 parliamentary seats in the March election to become the single largest party in the upper chamber, and thereby threatening the political capacity to convert the nitrogen plan into national law.

While this political rupture is often framed as a tension between trends of agricultural intensification and ecological limits, such a nature-versus-farming discourse obscures a deeper dynamic that is at the heart of agrarian change: The struggle for control of farming assets underwrites all conflicts about the function of agriculture.

While the debate continues to focus on the technical merits of differing visions of agricultural land use, competing arguments carry strong *implicit* assumptions about the nature of land relations. Such "land imaginaries" refer to the various ideas and societal understandings of what land is and what it can, or should, do in society (Sippel and Visser, 2021, p. 293).

For the proponents of emissions reduction, an unsaid argument suggests that the state ought to have the power to intervene into one's property to address public concerns over the broader environmental implications of private land use. For those in opposition, the farmer's right to make decisions on their land was an assumed bedrock contract between the entrepreneur and the state that should always be sacrosanct. Unfortunately, these implicit assumptions about land are regularly subsumed by technocratic arguments about farming or food security, preventing meaningful resolution.

Months later, agricultural lobbies successfully watered down the imperiled EU Nature Restoration Law's ambition to have farmers set aside productive areas in favor of biodiversity conservation. In 2024, another wave of European farmer protests forced the EU Commission to withdraw a proposal that would reduce pesticide use by 50% by 2030. It seems the best laid policies to deliver a green transition agenda are being turned back by the implicit power of the owners of farmland assets.

We begin this introduction to the special feature on "Land and Sustainable Food Transformations" with the case in the Netherlands because of how clearly the recent ruptures reveal the way entrenched norms of property limit the possibilities of food system change.

We argue that conflicts over the character of farming are more saliently understood as new disturbances to deeply entrenched patterns of land ownership and asset control (Colgan et al., 2021). A disturbance that is only more likely as the ecological impacts of productivism increasingly pit private ownership against public benefit.

These conflicts between landed farmers in the Global North and efforts to rein in their environmental consequences are a new conjuncture in the long story of land struggle. Scholarly attention has focused on the peasant and landless peoples' movements struggling over land in the majority world as capitalist accumulation continues to pursue new stable sources of surplus (Wolford, 2010; Shattuck et al., 2023). This work has led to important understandings of dynamics of exclusion, access, control, and the social dimensions of property relations (Hall et al., 2011; Lund, 2020). But within new conflicts over agricultural land in places like the United States, Western Europe, and other industrialized agricultural societies, the politics of popular struggle that have proved so instructive for environmental social movements and visions of sustainable food may not map so evenly onto a terrain with a wholly different cast of characters and class positions. This becomes clear when visions such as food sovereignty travel to places rather hostile to these principles and where obstructive conditions and institutions exist (Sippel and Larder, 2021). To survive within this dynamic, the much needed postcapitalist visions of production and consumption offered by food sovereignty and repeasantization (Patel, 2009; van der Ploeg, 2014) must address the land question in new ways bespoke to the legal and geographic contexts where narrow conceptions of property are dominant.

Alarmingly, the global social and ecological pressures to reform food systems have increased at the same time as attention to the rules that allocate control over land continue to be skipped over in favor of technocratic changes (Davis et al., 2023). Focus on optimal land use arrangements, dietary change, and green agricultural technologies abound, without the much needed corollary of how these changes relate to the land politics that govern their application (Calo et al., 2021). Failing to engage with the "hidden" struggle over productive assets risks political backlash, blocked environmental reform, and a squandering of alternatives.

Entitlements to land are a form of Gramscian common sense and thus popular interventions made to bring about sustainable food systems all too frequently graft onto existing land relations. Changing the food system, then, requires strategic adjustments to land tenure as much as it focuses on the techniques of land use. If our argument holds, the rupture in the Netherlands is a bellwether for conflicts between environmental degradation and farming practice across the minority world. Will landowning farmers continue to produce with relative impunity granted by the naturalized power of property? Or will democratic concerns over sustainable food turn their attention to the structure of property as a strategy to drive new more ecologically sensitive and socially just forms of land use? Will a new wave of consolidation of land articulate with the legitimacy gained through green land use practices? Or will some new form of land relation emerge that facilitates rather than hinders sustainable land use?

Such questions are the focus of this special feature. Instead of absolute answers, the collection of papers reveal that new forms of land relationships are being born

and dying back all of the time. The crucial question is: which ones stick, from which contexts, who benefits, and why?

### Toward empirical observations of remaking property for sustainable food systems

While some scholarly work has been done to address guestions over the role of land governance in scaling alternative food (Trauger, 2014; Wittman et al., 2017; Kepkiewicz and Dale, 2019; Calo et al., 2021), we situate the current research frontier as exploring the domains of transformation that show promise for contesting dominant property regimes in the name of food system sustainability. These domains of transformation are first established based on theoretical concepts of how land relations are formed and changed through engagement with the nature of landscape, land access, property law, and the history of land reform. These theoretical guesses at how to shift land relations are contextualized by learning from emerging cases of civil society groups contesting land relations as a precursor for alternative relations of production. As the contributions in the special feature corroborate, there is a shift in food movements at the margins, where actors desiring an alternative food production paradigm are beginning to grapple with the land politics that shape the control over the assets of the food system.

A "land first" food movement is in stark contrast to the earlier food politics in the global core that rested its power in strategies such as localism, elite consumption, certifications, individual dietary choice, and direct to consumer markets (Guthman, 2000; 2007). While these early efforts may have succumbed to dominant neoliberal logics, perhaps the decades of critical engagement with milquetoast "good food" reforms have born radical fruit. Farmers and eaters who want a food system without corporate control, with less synthetic inputs, without livelihood precarity, with biodiversity inclusion, and with a direct ability to feed hungry people instead of the highest bidder are, perhaps reluctantly, realizing that they need the land to do so. They need the material basis of food system production and not just the techniques or the knowledge. And, as many aspiring agroecological farmers in the Global North have discovered, leveraging the power of property to deliver new food production systems only lends itself to a form of neo-feudal agrarian populism, rather than an emancipatory food system for producers, laborers, nonhuman nature and consumers (Calo, 2020; Pickard, 2021).

The move to politicizing land for food system change may have been spurred by cutting analysis of the underlying drivers of food system sustainability, but it may also be driven by how new climatic threats elucidate the stubborn power of extant agricultural land owners as a key enforcer of the status quo (Borras et al., 2022; Shattuck et al., 2023). In the framework of food system transformation offered by Holt Giménez and Shattuck (2011), these nascent shifts from concerns over production practices to land access and land decommodification demonstrate a potential space for advancing from *progressive* to *radical* food politics. Regardless of the drivers, moves that

challenge the hegemonic understanding of land relations reflect a willingness to question who owns what and who ought to own what—questions that harken back to older struggles at the heart of agrarian change and the political economy of the countryside (Chayanov, 1986).

This introduction to the special feature first offers a theoretical grounding that makes strange the concept of property, demonstrating an inherent tension between strong property entitlements and food system transformation. Here, we liken the assumed naturalness of property to a hegemonic force, one that routinely manifests the broad consent to a set of rules that benefit the minority of landowning peoples. However, property is a strange form of hegemony because its power is doubly vested in its embodied acceptance of its logics as well as the coercive force that is ready to pounce on any challenge to its rule (Litowitz, 2000). What's more, while property is strongly guided by mythos, narrative, and norms, land is stubbornly material (Sippel, 2023). This means that even powerful designs for how to discipline a flow of benefits through property often run aground amid thorny spatial contexts, creating a space for alternative politics to emerge. In this way, we see attention on the politics of land more transformative than the scientific debates over the "best practices" of land use.

To navigate these complexities we draw on theory from critical legal studies, rural sociology, and legal geography to describe a template of the two-way street between law dictating social practice and cultural performance as the legitimizing force for legal norms (Sikor and Lund, 2009; Lund, 2016). Property is a social relation constructed through an overlapping triad of cultural norms, routinized social practices, and legal argumentation and doctrine (Blomley, 2013; Rose, 2019). Having offered a narrative of what property is and how it gets made, we turn to a set of institutional, legal, and cultural domains that demonstrate the capacity to make property anew. These domains match the lessons learned through empirical studies of the special feature, where we observe actors practicing new culture, legal innovations, and mobilizing discourses to reshape land relations as means of producing a more sustainable food system.

# Property regimes and food system transformation

Models for optimal land use are useful, but decisions that shape what happens on land is mediated through relational dynamics such as who owns the land, the quality of tenure, speculation on land value, and the state's commitment to defend absolute property entitlements. In high-income nations, strong property entitlements set up an inherent tension between the rights of individual owners and the ability of regulators to influence changes in property holders' behavior (Shoemaker, 2021; Calo et al., 2022). Policy interventions that promote collective action, like regional farming strategies or zoning changes, may unwittingly challenge individual entitlements over property that are codified by law and embodied in social values. This problem is compounded as certain property forms, like farmland, become increasingly viewed as

speculative financial assets, pitting the asset's future value against its future contribution to environmental ills (Fairbairn, 2014; Sippel, 2018).

A clear-eyed assessment on the role of land on sustainable food transformations demands theoretical constructions from critical agrarian studies, property studies, landscape geography, and political ecology. Land relations—property, access, tenure, landscape—are a central underlying driver of the material form of food systems, from farm to distribution. Despite their fluidity and historical and geographical diversity, land relations have a tendency to become a form of "common sense" through law, custom, and practice. In particular, the exclusionary "ownership model" of property has come to be hegemonic in legal systems worldwide, particularly in wealthy industrialized nations.

Gramscian scholars use the concept of hegemony to think of ways political organization may succeed or fail in breaking the disciplining force of embodied consent. Discipline—in this case the normalization of strong private property entitlements—is achieved through both state sanctioned physical coercion and internal subject making (Thomas, 2010). Litowitz (2000), in an analysis of the relationship between law and hegemony, argues that:

[D]omination is increasingly a matter of colonizing the internal world of the dominated classes, a feat that cannot be accomplished by force but only through messages, codes, and the dissemination of images and information. After all, brute force still leaves the individual free to harbor rebellious thoughts, but complete control is both external and internal. (Litowitz, 2000)

The ownership model of property is a paragon case for the 2 types of hegemonic control. The interests of property not only enforce physical control but also disseminate ideological norms, ensuring that property rights are accepted and internalized by society. In the first instance, claims to property are validated by state institutions with authority to deploy force to resolve disputes (Sikor and Lund, 2009). The right to exclude, often considered the core power of the ownership model, is only legitimate because, at the end of the day, the agents of the state will reliably do the work of exclusion.

The more insidious form of domination occurs when the virtues of the ownership model become embodied, championed, and sacrosanct. Images of the open road achieved through car ownership, the equation of home ownership with success and security—such codes that reify property are the source of its true power. A power such that we don't blink when we see agricultural land bought up and transformed, feeling this is the natural state of things.

When one speaks of the ownership model as hegemonic, meaningful change only comes about through mass shifts in social consciousness, often through class agitation. However, in the world of land and food, ecological change may also force such class ruptures. The result of climate change and other biophysical pressures

presents new *existential* class conflicts between owners of climate forcing assets and climate vulnerable assets (Colgan et al., 2021). Viewed this way, the demands to manage land for collective change to mitigate and adapt to climate change may run in direct opposition to the taken-for-granted rules about private ownership. This is both fertile ground for remaking sense about relations to land but also violent defenses of property by those who already have it.

Relationships with land that are based on understandings of ownership and private property are not, from a historical perspective, the only nor the most prominent human engagement with land. The property system we currently still live in only emerged in the historical and social context of 17th-century rural England (Blomley, 2019). Nevertheless, as Blomley (2005) points out, conceptualizing land as property has become so widespread and common that it often seems "simply taken for granted" (Blomley, 2005, p. 125). The diversity of existing alternatives "fail to appear on our maps of property" (Blomley, 2005, p. 127) while processes of enclosure are seemingly complete. To remind ourselves of these alternatives, and the long history of humankind during which there was no understanding of land as property-and any such idea would have most likely at best appeared absurd-we first need to make strange the concept of property.

#### Making strange the concept of property

Land is a strange object (Li, 2014). It is at the same time deeply social as well as biomaterial, (relatively) stable, and tangible (Sippel and Visser, 2021). As such, land is different from other resources. Land has a high degree of fixity, it serves as a reservoir for other resources, and it is a renewable resource itself. Land's biomaterial qualities—especially its life-giving affordances to produce food and resources-are essential to human survival. Land's particular materiality remains one of its core features and still poses a challenge for its integration into (financialized) capitalism (Fairbairn, 2020; Sippel, 2023). At the same time, land is laden with manifold social and cultural meanings-throughout human history it has been tied to community and remembrance, served as heritage, and represented belonging and identity. It has also been subject to conquest, dispossession, and expulsion, most prominently as part of imperial and colonial endeavors.

Relationships with land are as diverse and multiple as human existence on this planet. This richness of land relationships is particularly evident from the anthropological record, which documents the multifaceted dimension of human interaction and coexistence with land, especially from research by and with Indigenous peoples. As Black (2010) writes, within Indigenous jurisprudence land is the source of the law with the pattern of law being posited in the land. Land also has feelings and misses people, while land—not humans—is placed at the center of the universe. Land, as Altamirano-Jiménez and Kermoal (2016) show, is also inherently connected with Indigenous knowledge systems. There are particular landscapes, landforms, and biomes where ceremonies are being held, and which are linked to knowledge transfer, the recitation of stories, or

the collection of medicine. The term "land" might, however, not always be the appropriate term to describe these interactions with land, as Li (2014) reminds us. When Indigenous highlanders in the Indonesian island of Sulawesi first started treating land as a commodity, they had to invent a new word, as the existing words for land relationships referred to more specific qualities and joined together material substances and social relations.

The notion of private property is probably one of the most powerful, albeit contested human inventions. Private property has been associated with great hopes and optimism, as well as considered as a hegemonic tool serving the interests of the powerful. The first position is promoted by (neo-)utilitarian, libertarian, and neoconservative schools, which (in the tradition of thinkers such as Jeremy Bentham, Robert Nozick, Richard Epstein, and Richard Posner) hold that property is a wealth-producing institution. Property, within this understanding, encourages people to invest into things they claim and serves as a precondition for trade (Rose, 2019 [1994]). Here, security of property is the political message, because "if we want to reach that result of collective well-being [w]e need to have clear and secure property rights; the more valuable the resources at stake, the clearer and more secure the property rights should be" (Rose, 2019 [1994], p. 3). From a more critical position—most prominently following the critiques of Karl Marx and Pierre-Joseph Proudhon-property is considered as an "artificial construct, masking the force and oppression of the powerful few and duping the rest of us into going along with their hegemonic pretensions" (Rose, 2019 [1994], p. 2).

At its core, property-which is almost exclusively conceptualized as private property—is a social relationship. Rather than being mostly a relationship between a thing and their owner, however, it is foremost a relationship between owners and nonowners, as "my rights to 'my things' are meaningless without my power to exclude you from the use and benefit of those things" (Blomley, 2005, p. 126). This power to exclude is sustained by the state and creates relationships of systemic inequality and dependence between owners and nonowners. In addition to excluding others, property rights usually also grant owners the right to transfer or sell their property, and to use it in whichever way they want. There is hence an ambivalent relationship with the state. The state is the "guarantor" of property rights (Robbins, 2008) while also always a suspected source of infringement:

The dominant [property] model underwrites the moral geographies of the public-private divide, with its deep-seated assumption that clear limits should beset upon the ability of states to 'intervene' (as if they were not there already) in the 'private' sphere. The private sphere is valued as a site of individuality, liberty and autonomy, while state action is a potential threat to freedom. (Blomley, 2005, p. 126)

Thus, as a complex system of powerful relationships between people, the organization and distribution of property rights also implies a certain organization and distribution of social privileges and powers (Blomley, 2019, p. 245). Following Singer:

The legal system makes constant choices about which interests to define as property. It also determines how to allocate power between competing claimants when interests conflict. And the pattern of protection and vulnerability is a result of a historical and social context which has created different opportunities based on such factors as race, sex, sexual orientation, disability and class. (Singer, 1991, p. 46; quoted in Blomley, 2019, p. 245)

The globalization of land regimes based on the powerful land imaginary of "land as private property" has been crucial to the expansion of global capitalism. As Araghi and Karides (2012, p. 1) write, from a world-historical standpoint, "the history of capitalism begins with the transformation of land rights." Within this, land reforms have served as the central tool to "progressively (re)organize the multiplicity of existing land regimes into land regimes based on private property instrumental to the expansion of centralized state power and the accumulation of capital" (Cottyn, 2018, p. 243). Underlying this globalization of land property regimes was specifically the concept of "perfect property" outlined above, which, invented by 17th-century Britain enlightenment philosophers Thomas Hobbes and John Locke, can be traced through European imperialism and colonialism from the mid-17th till late 19th century, to the paradigm of developmentalism during the 20th century, to global neoliberal restructuring since the 1980s. Within this understanding, private property rights are envisioned as superior and universal, linked to progress, and seen as the outcome of a linear process from relative, negotiable rights to "concretely delineated, private, legal and written, and hence marketable titles to the ownership over a piece of land" (Cottyn, 2018, p. 243). These endeavors to control and territorialize land through private property regimesfrom Imperial and colonial conquest to the establishment of nation states to the creation of global land markets have relied on practices of exclusion and enclosure, supported by mapping, surveying, and registering; on tools such as the invention of the "frontier," grids, and cadasters; as well as powerful narratives, belief systems, and storytelling (Blomley, 2003; Elden, 2010; Rose, 2019). Violence, as Blomley (2003) shows, has played an integral role throughout all these practices of founding, legitimizing, and operating of private property regimes.

However, as Cottyn argues, the liberal paradigm of "perfect property" is a historical construct—a myth—that "when put into practice, appears to be an illusion" (p. 244). While non-property-based forms of land governance have without doubt been significantly reduced, there is still no uniform outcome, not even throughout the "West." Even in contexts as profoundly dedicated to neoliberal, market-based land governance such as Australia, private land property rights are far from "perfect" but under certain circumstances can be significantly restricted by the state (Sippel and Weldon, 2021). Diversity of land

regimes continues to exist, and although the imagination of land relationships based on notions of private property has become the "global standard," their implementation remains a matter of degree and can rather be understood as a coexistence of "un/commodified" (Cottyn, 2018) land regimes and associated land management practices.

Even if land under the ownership model is an illusion, its effects are very much real. Actors wanting to use land differently must therefore struggle with creating alternative land governance structures that range from creating islands insulated from the coercive forces of the property regime to creating a direct counter to the logics of property.

### Domains of land relation transformation (A typology)

If recent struggles over land and land use demonstrate a potential *interregnum* between the ownership model's supremacy and some new imagining of land relations, what logics are being deployed to make property anew in places where it is sacred? Drawing from the literature, the authors' collective experience working with land relations in the Global North, and key insights from the special feature, we highlight 5 discernable "domains of land transformations." These domains represent distinct strategies to unwind both the coercive power of state-backed property regimes and the internal discourse of property.

A typology introduces temporal and categorical boundaries that ought to be taken with healthy skepticism. If the ownership model is made through complex, everyday social work, then so goes property's resistance. Land's stubborn materiality demands constant work to contort social relations of landscape into, for example, a thing that can be bought and sold. Our typology must be considered alongside the deep history of everyday counter-meaning making on land and landscapes (e.g., Rissing and Jones, 2022). Thus, the domains presented are not new ruptures from a hegemonic, homogenous sea of the ownership model but new iterations of long-standing forms of resistance thereto. Importantly, there may be constituencies that do not see their interests nor their histories reflected in these domains. A chief complaint against the ownership model is not its construction but its unjust distribution. Those who have been disposed of property may lobby for its return rather than its transformation. These limitations in mind, the exercise in categorization is a useful starting point to surface how some movement actors envision a theory of change in land relations and thus present an opportunity for critical engagement.

# Legislating for land reform: State backed legal changes

Legislative land reforms where politics direct new rules and entitlements for land redistribution, compensation, and transfer are often considered a practice of history. Perhaps such reforms are stigmatized as a practice of nations that don't have a settled rule-based order. But, given the demands of the time, this may be about to change. For, if reworking property relations is the demand of the day, then the way the state relates to property

should surely be part of the contested terrain. And while such legislative changes to property conjures images of constitutional conventions, there appears to be an appetite for a modest land reform policy agenda that is palatable to the political agenda (Roman-Alcalá, 2024, this feature)

The paragon case for state-led land reform in the Global North is the modern Scottish case. Since the creation of the Scottish Parliament in 1998, the Scottish Government proposed new land legislation containing a set of community rights to buy which was passed into law by the Scottish Parliament. The Land Reform (Scotland) Act 2003 introduced "a community right to buy land when it comes on the market" and "an absolute crofting community right to buy land." The 2003 community rights to buy only apply if there is a willing seller, in which case the community right is one of first refusal. The next wave of rights from the Community Empowerment (Scotland) Act 2015 and the Land Reform (Scotland) Act 2016 create community rights to buy land even where there is not a willing seller.

What this wave of legislative experimentation offers is a direct asset transfer mechanism that is mostly absent in the agroecological movements of the Global North (Calo et al., 2022). The reforms tip the scales to local communities who maintain different visions for the land as well as indicate certain favorable land uses that include sustainable development and full use of derelict properties.

The Scottish example demonstrates that to change land use patterns, a direct path is to change property law and that seemingly intransigent legal traditions can be challenged and changed (Shields, 2024). Interventions in property rights are within the remit of the state, however they rarely occur beyond the realm of taxation (McCarthy, 2020). That the government has the power to intervene in property distribution is overlooked within land debates to such an extent that it is sometimes assumed that the state does not hold that power, let alone have a responsibility to use it to intervene and prevent human rights violations.

While the Scottish legislative land reform is a clear case that state powers can be mobilized for the purposes of challenging property's common sense, important questions remain. First, as Roman-Alcalá (2024) in a review of appetite for land reform in the United States and Wach and Hall's (2024, this feature) assessment of land reform movements in England and South Africa elaborate, mere redistribution of property may not be enough to reshape land relations for sustainable food. State reforms must also remake the meaning of property, less they ultimately be defeated by the logics of the ownership model. The core provocation in these authors' analyses is that a discourse of racial reparations ought to mobilize the politics of land reform to bring forth a durable coalition of the landless with the social power to challenge interests of property.

Next, as Baysse-Lainé's (2024, this feature) analysis of land reform efforts in France shows, these can fail if the reform agenda does not find enough public support. As Baysse-Lainé demonstrates, the French land reform efforts were initially grounded in agrarian justice

arguments, such as achieving fairer mechanisms of land distribution. Subsequently, however, this justice-based argumentation was replaced with a "climatized rationale," foregrounding instead ecosystem services of soil and carbon sequestration. This reframing allowed land reform advocates to legitimize their goals in more sociopolitically opportune ways as the land imaginaries that were underpinning the agrarian justice discourse had not proven sufficiently socially legitimate. At the same time though, the social issues became relegated and eventually disappeared from the land reform agenda. What is more, even the reframed land reform efforts eventually largely failed as the government's agenda had moved on.

### Quasi-market-based reforms: The land trust movement

Across the wealthy industrialized world a group of food system actors have linked their ambitions of ecologically sound food production to calls for new land relations achieved through legal trust instruments (Van Sant, 2024). In this strategy, actors gather capital by some creative means and use it to purchase land at market value. They then use existing legal tools designed for asset management to hold the land which may provide tax benefits as well as break the chain of individual ownership (Lovett, 2019). A trust is often structured to facilitate a kind of collective tenure through articles of incorporation and lease arrangements drawn up by the trust board to encourage alternative agricultural use. Some offer maximum allowable leases to encourage long-term agricultural management, whereas others dictate specific land use mandates that tenants must follow. These interventions aim to separate ownership from decisions about land use and access, destabilizing one of the core features of the ownership model.

In Goris et al. (2024, this feature), we learn of a Dutch context where a diversity of agricultural land trust models have formed to try to roll back the nation's dogged commitment to intensive production. Groups like *Land van Ons* work under a banner of sustainable finance to enroll capital interests into sustainable production. *Herenboeren* uses local capital to create small-scale food democracies. *Toekomstboeren*, party to *La Via Campesina* explores pathways to commoning the land once acquired.

The advocates of community land trusts point to long running affordable living arrangements that can only be maintained because the asset is removed from the market (Lovett, 2019). Goris suggests users of these land trusts begin to see the land differently knowing that it is protected from development. The land is still owned, but it is hard to see it *only* as a commodity because there is a buffer between raw market logics that normally introduce tenure security. These may create a "shared narrative on land decommodification," that "creates the space and time" for agroecological transformations (Goris et al., 2024, p. 12). That is, even though new agroecological farmers may enter these trust instruments for immediate purposes of land access in a regime of impenetrable land markets, they emerge as politicized actors engaged in a long struggle for remaking land relations. This is evidenced in how farmers of these trust projects have engaged in a national campaign to intervene in a creeping liberalization of farm tenancy regulations.

Despite this potential, it is unclear if these models will only serve as islands of production insulated from capitalist logics. While some of these projects have bold ambitions, their relative scale in each national context is rather miniscule. The high prices of land force high transaction costs for trust formation. The parcel to parcel struggle of acquiring expensive land through the market and drumming up legal loopholes may be too slow and costly to transform the food system. Acquisition through market mechanisms may have a rebound affect where the price of agricultural land under pressure for farmland conservation could drive the price up further, slowing the rate of new land trusts (Morris, 2008).

A long running critique of land trusts (both for housing and rural land) points out that the intervention is decidedly neoliberal. Land trusts and conservation easements use public funds but make private decisions—a model of private governance for public resources (Kay, 2022). Even initiatives that do maintain an impressive portfolio of sites still often govern land as a series of small farm businesses. In this system, the success of the farm is still tied to business efficiency, where units within the trust compete with each other and with the broader market. This may represent an unspoken commitment among trust decision-makers to an ideology of renewing the family farming model as opposed to intervening in agricultural practices or other societally relevant goals (Calo and Corbett, 2024).

In the absence of a greater transformation to the legal entitlements of property, agricultural trusts may ultimately be warped by production logics that exploit farming tenants. As Van Sant (2024) concludes in a historical review of land trusts, these models appear to be a "stopgap effort" aimed to address the "limits of decentralized land-use planning under capitalism" (p. 10). These types of legal experimentations and loophole seeking may be a far cry from land occupations that form the basis of many agrarian social movements outside the Global North. But they may offer a replicable intermediate strategy for geographies hostile to direct confrontation of deeply held notions of property. Above all, they perhaps reveal a reality that if progressive farm activists are to meet their values of sustainable food, they must engage in struggles over land, which cannot be overcome through technical measures alone.

#### Municipal power and zoning

Alongside legal innovations at national or supranational level, local land alternatives also play a role in the recognition of new ways of managing land. Local territories (cities, towns, regions) are potentially key intermediary scales for generating solutions, implementing agricultural, ecological, energy and food transitions, and initiating systemic transformations through a bottom-up process (Blay-Palmer et al., 2018; Lamine et al., 2019; Sonnino and Milbourne, 2022). A growing number of local authorities engage in ambitious, radical strategies about land access,

use, and management. Some municipalities are challenging the status quo, building local alternatives to the dominant private property regime. In France, for instance, municipalities traditionally focused on land use planning, notably zoning, to preserve farmland from further urbanization and constrain the hegemony of the landowners (Perrin et al., 2018; Kassis et al., 2021). In the last decade, scholars have documented local governments identifying available lands and supporting the establishment of new farms and community supported initiatives, for instance, by renting publicly owned land to new-entrant farmers (Perrin and Baysse-Lainé, 2020), sometimes with tenancy contracts including environmental clauses (Léger-Bosch et al., 2020). Public land policies may help new-entrant farmers access land, otherwise impossible given current speculative private land markets (Horst and Gwin, 2018; Vandermaelen et al., 2023). Public land is also key to the development of new urban agriculture initiatives (Jahrl and Schmid, 2017; Jarrige et al., 2020; Holligan and Howe, 2024, this feature). However, as underlined by Holligan and Howe (2024), "lack of available land implies that most opportunities for new urban growing sites [are] located in underused, marginal or 'meanwhile' spaces," which undermine their long-term stability, and "reinforce commodified approaches to land" (p. 9).

Santo et al. (2024, this feature) analyze the transformative potential of farmland access policy for the 40 most populous U.S. cities. They observe a wide variability of land access mechanisms for urban agriculture, ranging from small, seasonal access (primarily supporting household food security) to larger scales (suitable for entrepreneurial projects). In addition to the sheer complexity of land access mechanisms identified, Santo et al. find that land access programs are short-lived, usually granted for only 1 year. Existing land access mechanisms are moreover mostly based on either "civic" or "market-oriented" land policies. Although justice-driven land access initiatives have been emerging in a number of U.S. cities, these are not (yet) reflected in the existing policies.

Liu et al. (2024, this feature) examine the integration between land use planning and local food policies in France at regional scales. They confirm that unbalanced power relations between coexisting agri-food models restrict land-based policy interventions that seek to transform food systems and rural landscapes. To avoid conflicts when leading such interventions, local authorities seek to involve major farmers' organizations while empowering alternative minority agri-food professionals through greater influence in the political arena. The authors also show that this process helps local authorities to acquire legitimacy in agri-food matters.

Besides these pioneers, more and more local governments are taking early steps toward land property regime transformation. Several collections of good practices (Forster et al., 2015; Nyéléni Europe and Central Asia, 2020) and networks may bring supportive yet hesitant municipalities inspiration and policy ideation. For instance, the European Access to Land network, a group of civil society organizations working to promote access to land for agroecology, has produced a free online

handbook entitled *Local Authorities Making Farmland Work for the Public Good* (Martin-Prével et al., 2023). This handbook provides resources, tools, and field-based examples on how local governments can act as an owner and manager of public land, as a facilitator of the local land system, and as a regulator of land markets through local policies.

Networks of local governments play also a role for possibly up-scaling local innovations. Territories are not closed; they interact with each other and on national and global scales. Looking at several place-based knowledge creation and dissemination networks such as ICLEI,<sup>1</sup> Blay-Palmer et al. (2016) suggest "that sharing community-derived good practices can support and reinforce global networks of sustainable community food systems, foster knowledge cocreation and ultimately cement collective action to global pressures." The dynamism of the 200+ cities involved in the Milan Urban Food Policy Pact bears witness to this, as does a recent report from High Level Panel of Experts on Food Security and Nutrition (2024).

#### Reclaiming common lands

Municipal authorities and zoning powers also frequently determine the fate of remnant common lands that have remained outside the private property regime. In the Global North, processes of enclosure and relentless resource exploitation have forced the disappearance of many natural resource commons. However, there is great diversity in the loss, endurance, evolution, and resurgence of the commons. As Gătejel and Maiello (2024, this feature) detail in the case of Romania, a significant share of pasture and forest land in the country is still held under some form of commons. The transformative potential of these commons of various types and their relationship to food sovereignty and an agroecological transition is precarious and under constant threat from the expansion of agro-commodity production, farmland concentration, high levels of land fragmentation, extraordinary market pressures, and deeply uneven access to capital, labor, technology, and other public support and services.

While classic theorizations of the commons primarily emphasize the intrinsic character of the underlying resource or good ("common-pool resources"), more recent work on the commons highlights the relational and emergent qualities of governing and managing the commons. In this understanding, commons don't exist as a bounded place but rather become "real" through commoning practices. These refer to a range of strategies that are being used to "carve out common spaces from within the cracks of the dominant ownership model" (Smith, 2024).

<sup>1.</sup> ICLEI-Local Governments for Sustainability is a global network of more than 2,500 local and regional governments (cities, towns, regions) committed to sustainable urban development in more than 125 countries. The network helps to incorporate sustainability into day-to-day operations and policy. It builds connections across levels of government, sectors, and stakeholder groups, sparking city-to-city, city-to-region, local-to-global, and local-to-national connections (https://iclei-europe.org).

The key for these commons to thrive is to alter the web of power relations in which they are embedded. This requires active and strong agrarian movements that can manage tensions and contradictions in the administration of commons, focusing on practices of commoning as discussed above to ensure their continued preservation and renewal. This can include for example, the saving, open and free exchange of native seed varieties by peasants and small farmers. In the post-Socialist countryside, such commoning practices, Gătejel and Maiello argue, can be conceived as forms of "quiet food sovereignty" manifest in everyday acts of resistance, staying on the land, and through farming in a particular way rather than in more visible and overt forms of social and political mobilization. Whether such forms of quiet food sovereignty can successfully push back against encroachment as well as inoculate against the more repressive and authoritarian variants of agrarian populism remains an open question (Hajdu and Mamonova, 2020).

### Recognition of Indigenous land relations within settler and postcolonial contexts

The struggle for the recognition of Indigenous land claims in settler and postcolonial contexts is a vivid current within counter-hegemonic and anti-capitalist framings of food politics. Territoriality, as Wolfe (2006, p. 388) famously put it, is settler colonialism's specific, irreducible element. Here, rather than land relations being somehow "hidden" or "implicit" in proposals for more just and sustainable ways of organizing food systems, control over land and territory is at the forefront. This can be understood as the result of the ongoing legacy of dispossession and land theft in settler colonial states, triggering powerful calls for "land back" to local Indigenous communities (Kepkiewicz and Dale, 2019). It is also the outcome of many Indigenous ontologies and legal practices where relationships to land and relationships to food and life sustaining ecosystems are deeply intertwined, if not impossible to separate out (Daigle, 2019). Indigenous land relations are informed by an approach to land not as a productive asset but rather as a territory which Indigenous peoples live in and off, imbued with a set of responsibilities of care toward human and nonhuman nature carried forward over multiple generations (Coté, 2016; Kepkiewicz and Rotz, 2018). To establish the settler colonial order, the physical land area in addition to Indigenous land ontologies had to be replaced by the settler modes of thinking and controlling land (Burow et al., 2018). Here, the concept of private property served as a powerful conceptual tool in European colonialism (Bhandar, 2018). As Nichols (2020, p. 33) reveals, Indigenous peoples were assigned a peculiar form of nominal, "negative property" right, namely the right only to sell their land. Indigenous property emerged as "an already paradoxical conjunction, a truncated form of property" as it was "only cognizable by Western law in and through its alienation" (Nichols, 2020, p. 33). Current Indigenous struggles to reclaim territories and to re-build relationships with land are located within these complex layers of colonial legacies and persisting forms of dispossession and domination, as relationships with land need to be restored both at the physical and the ontological level under circumstances legally and politically determined by the settler state (Coté, 2016). Confronting this legacy within decolonial practices, as Burow et al. (2018, p. 68) write, requires "a land base that is often reacquired only through strategic engagements premised on settler ontologies of land-as-property."

Describing struggles for Indigenous land sovereignty by Maori in Aotearoa New Zealand, Oldham et al. (2024, this feature) document how Indigenous land-based resistance struggles have placed the resurgence of Indigenous "food ways" as one of the pillars in their fight for autonomy and self-determination. This is exemplified in the case study of the #ProtectIhumatao campaign, where Maori successfully reclaimed ancestral land-formerly used for the harvesting of sea food and the cultivation of crops—through a strategy of occupation, planting seeds, and gardening. That this campaign culminated in the New Zealand government purchasing the land from a private owner with the intention of ceding it to the Maori is considered a significant victory in light of the fact that the existing Treaty process through which Indigenous land claims are managed by the State only pertains to public, Crown land. In this way, the campaign also upended the existing constitutional settlement and the legal parameters set by the state for engaging in land disputes and addressing competing claims.

Indigenous land movements outside of the Global North can provide unique experience inspiration for understanding land transformation pathways, when considered in the appropriate legal contexts. Interviewed by Sippel and Sippel (2024, this feature), the human rights defenders Maudy Ucelo and Gilberta Jímenez from the Xinka women's association Asociación de Mujeres Indígenas Xinkas de Santa Maria Xalapán, Jalapa (AMISMXAJ) describe the multiple dimensions of land for Indigenous communities, and women in particular, in Guatemala (Taylor and Lublin, 2021).2 Land means livelihood and community, it represents a vital space for the coexistence of humans and nonhuman beings, and-being at the center of the Xinka cosmovision-it is a spiritual, historical, and emotional place. The Xinka women reject the notion of private land ownership as within their belief land cannot be owned. Rather, humans are part of the land; it belongs to those who take care of it and cultivate it for their own sustenance. At the same time, western practices of treating land as private property are encroaching upon the communities' everyday lives in the form of increasing title claims, paperwork, or fences. The Xinka women counter these by promoting their ancestral practices of collective land use and crop diversification and by trying to recover the knowledge of growing and using medicinal plants and preparing traditional dishes.

The challenge to the coercive power, authority, and legitimacy of the state—in particular the settler-colonial

<sup>2.</sup> Latin American states are not usually considered as "settler colonies." However, settler colonial theory provides useful perspectives for the Latin American context, especially when it comes to land (Taylor and Lublin, 2021).

state—when it comes to enforcing a particular vision of land and property relations is one of the most potent questions to be grappled with. This also speaks to long running debates within the food sovereignty movement around wherein lies the locus of sovereignty and whether appeals to the state risk legitimatizing what some see as an unjust status quo (Coté, 2016; Dale, 2021). This is all the more pertinent to ask in cases where colonial and racialized formations of property have emerged and consolidated. To what extent these formations can be deconstructed and built anew through the existing constitutional order within the nation-state system, or outside of it, or through new forms of state-society interaction, are challenging questions. Decolonization, however, is not a single pathway but a host of context and location specific practices in the midst of lasting legacies and persisting structures of dispossession and domination. As such, it cannot simply consist in "going back" to precolonial situations but rather "is something creatively formed through contemporary struggles around what it means to be Indigenous amid enduring-but not immutable-structures of capitalism and settler colonial domination" (Burow et al., 2018, p. 68).

#### Sustainability claims as a mobilizing discourse

At a recent climate protest in The Hague, members of the young farmer association *Toekomstboeren* (Future Farmers) held up a banner that read "more farmers, less CO2." The message accompanied by imagery of a diverse farm landscape and the words "agroecological farmers" invoked a sort of ecological contract. If the goal of emerging European Union policy like the European Green Deal promises carbon emission reductions of 55% by 2030, the banner suggested a trade: give our organizations access to land and we will farm in a way that helps meet that target.

As emerging environmental policy in the EU and the United States add mandates to deliver certain *outcomes* for carbon emission reduction, water quality provisioning, and biodiversity maintenance, a new wave of agricultural groups see an opening to argue that their acquisition of land provides the *process* to achieve the governments stated aims. The EU may not have been considering land reform as a tool to meet their target-based policies, but they may be forced to engage in this legal argumentation.

A land access claim based on the promise of delivering climate targets suggests that to meet ambitious state sponsored targets, statutory institutions ought to intervene in dominant property regimes if they really want to meet their goals. This is a potent sentiment that challenges the notion of the law as static and unchangeable to something that is much more fluid and contestable. As Santo et al. (2024) demonstrate, calls for urban cooling or stormwater drainage motivate policy frameworks to provide land for urban farmers. That is, legal rulemaking in response to environmental change may spur action and organizing in agricultural fields and city streets which may in turn lead to changes in legal interpretation or even changes to the law itself.

The opposite may also be true. Sustainability discourses can be—and indeed are—frequently used to shore up rather than remake existing property regimes as the

ample literature on green grabbing attests (Fairhead et al., 2012). This involves also new actors, such as those drawn from the financial world, mobilizing around narratives of green transition to advocate for capital and technology intensive solutions to convergent crises (Alonso-Fradejas, 2020). While strategies differ, nearly all include an expansion of property as commodified nature, often accompanied by prosocial branding strategies to stave off some of the more obvious and egregious charges of fortress conservation or green extractivism.

### Discussion: Toward a land reform agenda for the Global North

In this article, we have drawn on land relations literature, recent property contestations, and contributions to the special feature to identify 5 domains of land transformation: state land legislation, municipal power, trust instruments, Indigenous land claims, and agenda setting from sustainability agendas. These domains represent observed pathways for contesting the coercive power of property relations, a challenge we deem necessary to achieve sustainable food system transformation in the Global North. Are these socio-institutional-legal pathways bold enough to contest the hegemonic discipline of the ownership model of property? Or are these interventions destined to a type of neo-Chavanovianism, where the best outcome is simply islands of alternative production? Could these pathways be considered a "non-reformist reform" (Akbar, 2022) that contests the way the episteme of property (Trauger, 2014) disciplines our imagination? Given these questions, our discussion constructively critiques these domains less they succumb to a weaker version of their potential.

In Holt Giménez and Shattuck's (2011) framework for food system interventions, the authors categorize the politics of food movements along a continuum of Neoliberal, Reformist, Progressive, and Radical responses. The authors argue they have observed a retrenchment of Neoliberal and Reformist trends post the 2008 food crisis that employ strategies like trade liberalization, eco-certifications, and productivism that try to resolve hunger needs by making food abundant and cheap. Here, stabilizing the food system is based on a logic of food enterprise and food security, mostly emboldening antidemocratic actors in the food system. In suggesting what strategies might move past the "corporate food regime," Holt Giménez and Shattuck offer that alliances between Progressive and Radical tactics hold the most promise.

But this optimism is blunted by a note of warning that says Progressive strategies absent clear-eyed politics may experience a Reformist slide where "The Reformist trend will continue to reach out to organizations in the Progressive trend in an attempt to build its social base of support and pre-empt their radicalization" (p. 133). The dangers of the Reformist slide force a reflection upon the domains of land for food system transformation we identify. In particular, we are concerned with to what extent these pathways engage sufficiently with the legal and insidious interpersonal power of property. An intervention into land that relies on the power of property may only reify its power.

To begin, most *land trust experiments* rely on the power of land ownership to rework the land relations that dictate farming land use (Van Sant, 2024). It is only through market purchase that community owners are empowered to implement new structures to facilitate alternative food production. Perhaps the use of ownership to disrupt ownership is a feasible transition or drawdown strategy. Yet, as Wittman et al. (2017) discovered in an analysis of alternative land trust models in British Columbia, many participants in collective farming operations still hoped for a day when they might own their own plot of land. There may be cultural values of property ownership that may overrule clever commoning governance arrangements. Positive associations with ownership may extend to groups who have been purposely excluded from the benefits of property and thus seek redistribution rather than transformation. Such forceful values toward property are the engine behind authoritarian populist farmer protest movements, where state planning to rein in the environmental devastation of industrial agriculture is perceived as a threat to control over land. Thus, a concern for quasi-market reforms is the extent to which they develop a spiritual alternative to the security offered by private ownership.

In contrast, Indigenous land claims in settler colonies offer a clear values-based alternative to ownership. By critically interrogating the locus and nature of sovereignty. Indigenous land claims can point food movements, including those that espouse a more radical or progressive politics, in directions that allow for new forms of territorial food governance to emerge. The challenge with this approach may lie in the thorny question of how to build alliances between Indigenous food actors and settler and/ or non-Indigenous agroecological farmers. While it can be argued-many times rightly so-that an overly broad "land to the tiller" framing overlooks the legitimate and particular struggles of Indigenous peoples, there is also the risk that land claims made only on the basis of identity can curtail the potential for cross-class and cross-identity (be it ethnic, racial, Indigenous, gender, generational, etc.) land mobilizations to emerge. Roman-Alcalá (2024) and Wach and Hall (2024) both point toward the need to identify the most suitable framing for a broad movement of "the landless."

While state-legislative reforms to property is appealing and inspiring to some, it also highlights some core contradictions. Because the legitimacy of the state is in part granted through its ability to back up property disputes, the state must be willing to reduce its authority if it means to seriously remake property entitlements (Sikor and Lund, 2009). Thus, state action like Scotland's land reforms or the Netherland's plans to buy out farmers create a political opportunity to destabilize the very powers that might remake property. A continuous program of legitimacy for land reform, like the Land Equity taskforce in California (Kennedy and Frazier, 2024, this feature), must accompany such reforms.

Even when a set of constitutional commitments or legislative acts have been passed, land reforms, including of the more redistributive kind, are often subject to reversal through counter agrarian reforms. Horstink et al. (2024,

this feature) detail the case of the failure of Portugal's agrarian reform of the 1970s. They foreground the concept of the "social function of land" which submits that any kind of entitlements over land must be accompanied by an obligation to use property in ways that contribute to the collective or common good.

While this concept has gained a foothold in Latin America in particular,<sup>3</sup> Horstink et al. (2024) argue that it can have resonance in the Global North as a means by which to regain socio-ecological balance, democratize land governance, revitalize agro-territories, and confer a degree of legitimacy and popular control over land and natural resources. To what extent this notion of the social function of land can be used to stress test existing ownership and land use regimes and to mount challenges in the context of the Global North is unclear. Much could depend whether such concepts find expression and kinship in public policy tools such as the community right to buy provision in Scotland or expropriations justified on the basis of public interest.

Despite these warnings of enrolling the state in a project of rolling back its own legitimacy, existing tools like eminent domain, constitutional commitments to human rights, and first right of refusal ought to be a terrain of struggle rather than legal artifacts reserved in service of the ownership model.

Perhaps the municipal scale is the right site of struggle to perform this project of legitimizing land reform. Certainly, municipal plans for food could also carry with them a plan for agricultural restructuring to deliver those objectives. Pragmatically, it is easier to experiment with a new tool or a new land governance scheme at a local scale. Alternative land initiatives can be adapted to the local agricultural, environmental, and land ownership context. As Coulson and Milbourne (2022) offer, land justice should be pursued though "creating spaces for meaningful participation and co-learning at the translocal landscape scale (across the city and countryside) to deliver a broad range of social and environmental 'public goods'" (p. 133). The potential for municipal action to reshape land relations that produce both urban housing disparities and rural food unsustainability is a compelling strategy to break down an urban-rural binary (Van Sant et al., 2023).

The recurring criticism toward these municipal initiatives in farmland is that they remain on a small scale. Without the ability to affect a larger land area, municipal initiatives do not really challenge the hegemony of the private land regime, except in a symbolic way. The potential power of municipalities is to legitimize a new way of

<sup>3.</sup> It is included in the 1988 Federal Constitution of Brazil for example which declares that the state is responsible for expropriating, in the interests of agrarian reform, rural properties that are not fulfilling their social function. A number of agrarian and social movements have referred to this provision to justify strategic land occupations. The most emblematic of these movements is perhaps the MST (Movimento dos Trabalhadores Rurais Sem Terra, Landless Workers Movement) which has mobilized approximately 1 million settled families in 9,000 settlements spread over 88 million hectares of land in Brazil.

conceiving land relations. For example, municipal actions may "deliver a political signal to the stakeholders about public support for a territorial food system" (Liu et al., 2024). They contribute to the scaling deep (changes in cultural values) beyond their potential to scaling out (replication, dissemination) of successful innovations (Moore et al., 2015). A more radical transformation would mean "not only creating isolated, ad-hoc progressive initiatives (as in some of the examples above), but to systematically break speculative land markets" (Tornaghi and Dehaene, 2020). Put another way, the pressure on land value from housing and other urban land uses raises serious concerns about the temporary or provisional land access mechanisms for urban agriculture that appear to dominate the policy mix (Santo et al., 2024).

Lastly, national or transnational sustainability agendas may deliver a mobilizing discourse strong enough to affect land relations at the landscape scale and deliver legitimacy for state action. However, this practice of attempting to validate farmland access through a parallel claim to sustainability brings latent dangers. While it is possible for green and sustainability agendas to be put in the service of rural working people, this would require a much more fundamental transformation in how property is understood, enforced, governed, and legitimized. More often than not, the potential for sustainability needs to drive change has been overstated. As Horstink et al. argue in their discussion of Portugal (2024), sustainability claims backed up by the EU's Green Deal have been instrumentalized by more powerful actors involved in lithium mining or solar energy production to further consolidate, concentrate, and monopolize land, control access to socalled environmental services, and transfer the burden of waste and contamination to others.

Claiming that a certain land use will deliver certain desired public outcomes also leads to 2 practical challenges. The first is that the production of such outcomes may not come about. Hitching one's access to some sort of narrowly defined deliverable is a risky proposition for food producers whose complex systems of production defy myopic categories. For example, two recent articles offered a fresh analysis to the way certain farming methods contribute to emissions. The first found that many urban agricultural systems are net emitters (Hawes et al., 2024) and the second modeled that regenerative grazing practices would struggle to offset emissions through soil sequestration techniques (Wang et al., 2023).

More importantly, it forces a parallel debate about which form of agriculture is "more sustainable." For if ecomodernist visions of sustainable farming prevail, it is likely for the claims of agroecological farmers to be rejected in favor of more productivist actors. Of course, the perfectly feasible counter claim to "more farmers, less CO2" is "less farmers, less CO2." Far from hypothetical, this messaging is at the core of what seems to be an increasingly renewed and confident expression of "land sparing" visions for the future of farming (Monbiot, 2022). In this vision, steady increases in production efficiency reduce pressure on land use for agriculture, allowing for significant gains for biodiversity conservation and reforestation "elsewhere."

Attaching a land access claim to a parallel scientific claim depends on also winning those contested scientific arguments—a battle the food movement seems unprepared to win. Recent industrial farmer protests in Brussels quickly won concessions from environmental policymakers at the EU level. This appears to be developing in lockstep with increasing environmental standards on imports from abroad. Here, the risk of attaching land access claims to sustainability measures is made clear. As the narrative of what types of farming are to be valued continues to be contested, so do the legal interpretations of who ought to have control over the land.

#### Non-reformist (land) reforms

The question of how to make interventions within the capitalist system without serving dominant interests can be expressed within André Gorz's concept of non-reformist reforms (Gorz, 1968). Non-reformist reforms are processes that "undermine the prevailing political, economic, social order, construct an essentially different one, and build democratic power toward emancipatory horizons" (Akbar, 2022, p. 2507).

Critical legal scholar Amna Akbar (2022) suggests it is a powerful frame to evaluate postcapitalist pathways because it offers a "larger meditation on what strategies and tactics will help build a more equal and just society" (p. 2507). In Gorz's and Akbar's analysis, some reformist approaches—not to be confused as an end goal—have the potential to produce radical results.

In our review of land access interventions among food movement actors in the Global North, we are hard pressed to observe a dominance of revolutionary stances or tactics like occupations, political vanguards, or seizure of agricultural assets. Instead, the strategies we observe appear molded by the social and legal commitments to property. Akbar suggests this isn't necessarily an indicator of the Reformist slide. That in fact we, as academics, ought to see struggle from the politics of the possible. The lens of non-reformist reforms instructs us to pursue a precarious yet hopeful possibility to *avoid* revolutionary struggle while still developing new democratic control over the life-giving means of production. Whether these interventions meet the standard for non-reformist reforms is the subject of an important research agenda.

While we firmly believe that remaking land relations is necessary for any meaningful green transformation agenda, we acknowledge that it may not be sufficient. Powerful forces beyond the property regime like discourses of food security, agricultural technologies, tradedependent market forces, and actors committed to furthering the corporate consolidation of food also threaten to water down or defeat alternative food and land use movements (Béné, 2022). However, as we have shown, the logics and power of property are so imbricated in these confounding forces to the extent that unraveling land relations might destabilize other resistances to food system change. For example, without the distorted land markets in Europe and the trend of consolidated landowning industrial farmers, there would be no easy target for agribusiness lobbies to align with in their opposition to emissions restrictions. Thus, we suggest a research frontier in mapping the ways different contests over the property regime interact with other key drivers of the unsustainable food system. This work would move scholarship beyond an "all tools in the toolbox" approach to transformation and toward identifying the relationships between the land regime and other drivers that prop up the industrial agricultural model.

#### Conclusion

This introduction to the special feature showcases the need for property reform for sustainable food. We show evidence of the ownership model's contestation, and theoretical entry points into future action where narrow visions of property appear as self-evident truths. We document a shift in some food movement actors who are deploying a range of strategies to intervene in hegemonic land logics in order to create the enabling conditions for a truly alternative food system. A focus on the Global North is important in the broader studies of food system transformation. First, the food systems of the world core are propped up by trade relations and regimes of extraction that distort the emancipatory potential of agroecology and food sovereignty in the world periphery. Targeting myopic property relations that undergird productivist agriculture is crucial in a project to defang the imperial tendencies of the corporate food regime. Second, if food movement actors in the Global North are blocked from a more militant revolutionary stance to system transformation, then evaluating observed pathways to change is important to prevent a "reformist slide" of food politics.

As industrial farmers clash with police in Brussels, the strategy of incentivizing existing owners of land to make changes in their practices appears woefully unsuited to meet social-ecological food system objectives. Land reform in Global North contexts is often waved away as too difficult on pragmatic grounds, but recent developments suggest that even incremental reforms to the existing land regime develop reactionary backlash. Putting land reform back on the political agenda has the potential to mediate against the overwhelming political force of landed interests. Diversifying the composition of the rural sector may generate unexpected and welcome allies for evidencedbased land use change. A land reform agenda may therefore reduce coming climate-induced conflicts. Under increasing environmental degradation, the current property regime pits owners of climate-forcing assets versus owners of climate vulnerable assets (Colgan et al., 2021) in a struggle of competing claims to land. Commonsense land reforms can mitigate this legal deadlock and open a path where the environmental legislation can take hold. A world where agricultural land is legislated and understood as a shared entity that fulfills a panoply of interests has greater capacity for democratic governance and ecological sanity. Building toward that future with an urgency and militancy against reformist slides ought to be the driving interest of food movements in the Global North. Undergirding this project will be a continued search for a counter hegemonic understanding of land. Arriving at such a place will take creative and determined struggle, but building on the domains of transformation we have identified creates a starting point for non-reformist reforms. Only then, can the wisdom of any green or social agenda have a chance at reshaping and contributing toward social and ecological flourishing.

#### Data accessibility statement

Data used in support of analysis are available from the cited refences.

#### Acknowledgments

This article (and concept for the special issue) was born out of many interactions among scholars working at the intersection of land and food, most notably the Land Logics group, the Root and Branch Collective, and the Land Relations Reading Group. This article received excellent feedback from the European Consortium for Political Research Deep Politics of Land working group. Special thanks to Edward Shepard for convening the session and to Kira Gartzou-Katsouyanni for being a supportive and critical reader. The idea of land reform being either necessary but not sufficient compared to necessary and sufficient process for sustainable food comes from Dr Gartzou-Katsouyanni. Two anonymous reviewers provided thoughtful responses to an earlier revisions that dramatically improved the piece. Finally, thank you to the contributors to the special issue that forms the basis for our arguments.

#### **Funding**

Partial funding from project CO4, SFB 1199, funded by DFG (German Research Foundation).

#### Competing interests

The authors report no competing interests.

#### **Author contributions**

Contributed to conception and design: AC, SRS, CP, SK, KS. Contributed to acquisition of data: AC, SRS, CP, SK. Contributed to analysis and interpretation of data: AC, SRS, CP, SK, KS.

Drafted and/or revised the article: AC, SRS, CP, SK, KS. Approved the submitted version for publication: AC, SRS, CP, SK, KS.

#### References

**Akbar, AA.** 2022. Non-reformist reforms and struggles over life, death, and democracy. *The Yale Law Journal* **132**(8): 2497–2577.

**Alonso-Fradejas, A.** 2020. *Protecting injustice: How a reformed resource property regime maintains inequality.* Amsterdam, the Netherlands: Transnational Institute.

Altamirano-Jiménez, I, Kermoal, N. 2016. Introduction: Indigenous women and knowledge, in Kermoal, N, Altamirano-Jiménez, I eds., *Living on the land: Indigenous women's understanding of place*. Athabasca, Canada: AU Press: 3–17.

**Araghi, F, Karides, M.** 2012. Land dispossession and global crisis: Introduction to the special section on

- land rights in the world-system. *Journal of World-Systems Research* **18**(1): 1–5.
- **Baysse-Lainé, A.** 2024. Moving toward a fairer access to land fostering agroecological transition? A decade of legal change and reframing of debates around soil and climate in France. *Elementa: Science of the Anthropocene* **12**(1): 00070. DOI: http://dx.doi.org/10.1525/elementa.2023.00070.
- **Béné, C.** 2022. Why the great food transformation may not happen—A deep-dive into our food systems' political economy, controversies and politics of evidence. *World Development* **154**: 105881. DOI: http://dx.doi.org/10.1016/j.worlddev.2022.105881.
- **Bhandar, B.** 2018. *Colonial lives of property: Law, land, and racial regimes of ownership.* Durham, UK: Duke University Press. (Global and insurgent legalities).
- **Black, CF.** 2010. The land is the source of the law: A dialogic encounter with indigenous jurisprudence. New York, NY: Routledge.
- Blay-Palmer, A, Santini, G, Dubbeling, M, Renting, H, Taguchi, M, Giordano, T. 2018. Validating the city region food system approach: Enacting inclusive, transformational city region food systems. *Sustainability* **10**(5): 1680. DOI: http://dx.doi.org/10.3390/su10051680.
- **Blay-Palmer, A, Sonnino, R, Custot, J.** 2016. A food politics of the possible? Growing sustainable food systems through networks of knowledge. *Agriculture and Human Values* **33**(1): 27–43. DOI: http://dx.doi.org/10.1007/s10460-015-9592-0.
- **Blomley, N.** 2003. Law, property, and the geography of violence: The frontier, the survey, and the grid. *Annals of the Association of American Geographers* **93**(1): 121–141. DOI: http://dx.doi.org/10.1111/1467-8306.93109.
- **Blomley, N.** 2005. Remember property? *Progress in Human Geography* **29**(2): 125–127. DOI: http://dx.doi.org/10.1191/0309132505ph535xx.
- **Blomley, N.** 2013. Performing property: Making the world. *Canadian Journal of Law and Jurisprudence* **26**(1): 23–48. DOI: http://dx.doi.org/10.1017/S0841820900005944.
- **Blomley, N.** 2019. The territorialization of property in land: Space, power and practice. *Territory, Politics, Governance* **7**(2): 233–249. DOI: http://dx.doi.org/10.1080/21622671.2017.1359107.
- Borras, SM Jr, Scoones, I, Baviskar, A, Edelman, M, Peluso, NL, Wolford, W. 2022. Climate change and agrarian struggles: An invitation to contribute to a *JPS* forum. *The Journal of Peasant Studies* **49**(1): 1–28. DOI: http://dx.doi.org/10.1080/03066150. 2021.1956473.
- **Burow, PB, Brock, SPB, Dove, MR**. 2018. Unsettling the land: Indigeneity, ontology, and hybridity in settler colonialism. *Environment and Society* **9**(1): 57–74.
- **Calo, A.** 2020. The yeoman myth: A troubling foundation of the beginning farmer movement. *Gastronomica* **20**(2): 12–29. DOI: http://dx.doi.org/10.1525/gfc. 2020.20.2.12.

- **Calo, A, Corbett, R.** 2024. New entrant farming policy as predatory inclusion: (Re)production of the farm through generational renewal policy programs in Scotland. *Agriculture and Human Values* 1–17. DOI: http://dx.doi.org/10.1007/s10460-024-10557-4.
- Calo, A, McKee, A, Perrin, C, Gasselin, P, McGreevy, S, Sippel, SR, Desmarais, AA, Shields, K, Baysse-Lainé, A, Magnan, A, Beingessner, N, Kobayashi, M. 2021. Achieving food system resilience requires challenging dominant land property regimes. *Frontiers in Sustainable Food Systems* 5: 683544. DOI: http://dx.doi.org/10.3389/fsufs.2021.683544.
- **Calo, A, Shields, K, Iles, A.** 2022. Using property law to expand agroecology: Scotland's land reforms based on human rights. *The Journal of Peasant Studies* **50**(5): 2075–2111. DOI: http://dx.doi.org/10. 1080/03066150.2022.2083506.
- **Chayanov, AV.** 1986. *The theory of peasant economy.* Madison, WI: The University of Wisconsin Press.
- **Colgan, JD, Green, JF, Hale, TN.** 2021. Asset revaluation and the existential politics of climate change. *International Organization* **75**(2): 586–610. DOI: http://dx.doi.org/10.1017/S0020818320000296.
- **Coté, C.** 2016. "Indigenizing" food sovereignty. Revitalizing indigenous food practices and ecological knowledges in Canada and the United States. *Humanities* **5**(3): 57. DOI: http://dx.doi.org/10.3390/h5030057.
- **Cottyn, H.** 2018. Property demythologized: Historical transformations and spatial hierarchies of land regimes, in Middell, M ed., *The Routledge handbook of transregional studies*. London: Routledge: 243–251.
- **Coulson, H, Milbourne, P.** 2022. Agriculture, food and land: Struggles for UK post-Brexit agri-food justice. *Geoforum* **131**: 126–135. DOI: http://dx.doi.org/10. 1016/j.geoforum.2022.03.007.
- **Daigle, M.** 2019. Tracing the terrain of indigenous food *sovereignties. The Journal of Peasant Studies* **46**(2): 297–315. DOI: http://dx.doi.org/10.1080/03066150. 2017.1324423.
- **Dale, B.** 2021. Food sovereignty and the integral state: Institutionalizing ecological farming. *Geoforum* **127**: 137–150. DOI: http://dx.doi.org/10.1016/j. geoforum.2021.10.010.
- Davis, SJ, Alexander, K, Moreno-Cruz, J, Hong, C, Shaner, M, Caldeira, K, McKay, I. 2023 Nov 6. Food without agriculture. *Nature Sustainability* **7**: 90–95. DOI: http://dx.doi.org/10.1038/s41893-023-01241-2.
- **Elden, S.** 2010. Land, terrain, territory. *Progress in Human Geography* **34**(6): 799–817. DOI: http://dx.doi.org/10.1177/0309132510362603.
- **Engelen, E.** 2023. Farmers' Revolt. NLR/Sidecar. Available at https://newleftreview.org/sidecar/posts/farmersrevolt. Accessed May 3, 2023.
- **Fairbairn, M.** 2014. 'Like gold with yield': Evolving intersections between farmland and finance. *The Journal of Peasant Studies* **41**(5): 777–795. DOI: http://dx.doi.org/10.1080/03066150.2013.873977.
- **Fairbairn, M**. 2020. *Fields of gold: Financing the global land rush*. Ithaca, NY: Cornell University Press.

- **Fairhead, J, Leach, M, Scoones, I.** 2012. Green grabbing: A new appropriation of nature? *The Journal of Peasant Studies* **39**(2): 237–261. DOI: http://dx.doi.org/10.1080/03066150.2012.671770.
- Forster, TF, Egal, H, Renting, M, Dubbeling, A, Escudero, G. 2015. Milan urban food policy pact. Selected good practices from cities. Milano, Italy: Fondazione Giangiacomo Feltrinelli. Available at https://fondazionefeltrinelli.it/schede/ebook-utopie-milan-urban-food-policy-pact/#top. Accessed May 4, 2023.
- **Gătejel, A-M, Maiello, A.** 2024. Commoning, access, and sovereignty: Disentangling land–food relations in the case of peasant livestock farmers in Romania. *Elementa: Science of the Anthropocene* **12**(1): 00060. DOI: https://doi.org/10.1525/elementa. 2023.00060.
- Goris, M, Bakker, E, van den Berg, L, Siegmund-Schultze, M, O' Keeffe, S, Ravesloot, M, Bufe, C, Hassink, J. 2024. Collective land arrangements that decommodify land for agroecological transformations. *Elementa: Science of the Anthropocene* **12**(1): 00061. DOI: http://dx.doi.org/10.1525/elementa. 2023.00061.
- **Gorz, A.** 1968. Reform and revolution. *The Socialist Register* **5**: 111–143.
- **Guthman, J.** 2000. Agrarian dreams: The paradox of organic farming in California (vol. 1). Berkeley, CA: University of California.
- **Guthman, J.** 2007. The Polanyian way? Voluntary food labels as neoliberal governance. *Antipode* **39**(3): 456–478.
- **Hajdu, A, Mamonova, N.** 2020. Prospects of agrarian populism and food sovereignty movement in post-socialist Romania. *Sociologia Ruralis* **60**(4): 880–904. DOI: http://dx.doi.org/10.1111/soru.12301.
- Hall, D, Hirsch, P, Li, T. 2011. *Powers of exclusion: Land dilemmas in Southeast Asia.* Honolulu, HI: University of Hawai'i Press. (Challenges of the Agrarian Transition in Southeast Asia (Project)).
- Hawes, JK, Goldstein, BP, Newell, JP, Dorr, E, Caputo, S, Fox-Kämper, R, Grard, B, Ilieva, RT, Fargue-Lelièvre, A, Poniży, L, Schoen, V, Specht, K, Cohen, N. 2024. Comparing the carbon footprints of urban and conventional agriculture. *Nature Cities* 1(2): 164–173. DOI: http://dx.doi.org/10.1038/s44284-023-00023-3.
- **High Level Panel of Experts on Food Security and Nutrition**. 2024. Strengthening urban and periurban food systems to achieve food security and nutrition, in the context of urbanization and rural transformation. Rome, CFS HLPE FSN. Available at https://www.fao.org/cfs/cfs-hlpe/publications/hlpe-19. Accessed August 20, 2024.
- **Holligan, B, Howe, H.** 2024. How property relations shape experiences and transformative potential of urban growing spaces: Connecting land, food, and earth justice perspectives. *Elementa: Science of the Anthropocene* **12**(1): 00082. DOI: http://dx.doi.org/10.1525/elementa.2023.00082.

- **Holt Giménez, EH, Shattuck, A.** 2011. Food crises, food regimes and food movements: Rumblings of reform or tides of transformation? *The Journal of Peasant Studies* **38**(1): 109–144. DOI: http://dx.doi.org/10. 1080/03066150.2010.538578.
- **Horst, M, Gwin, L.** 2018. Land access for direct market food farmers in Oregon, USA. *Land Use Policy* **75**: 594–611. DOI: http://dx.doi.org/10.1016/j.landusepol.2018.01. 018.
- Horstink, L, Schwemmlein, K, Masson, GA. 2024. Land sovereignty in depressed and contested agro-territories: The cases of Portugal and Brazil. *Elementa: Science of the Anthropocene* **12**(1): 00075. DOI: https://doi.org/10.1525/elementa.2023.00075.
- Jahrl, I, Schmid, O. 2017. The governance of urban agriculture and multifunctional land use in the city of Zurich, in Soulard, C-T, Perrin, C, Valette, E eds., *Toward sustainable relations between agriculture and the city.* Cham: Springer International Publishing: 219–235. Available at https://orgprints.org/id/eprint/33499/. Accessed February 21, 2024.
- Jarrige, F, Mumenthaler, C, Salomon-Cavin, J. 2020. Une ferme urbaine multifonctionnelle: Maîtrise foncière publique pour un projet d'agriculture innovant à Rovéréaz, Lausanne, in Perrin, C, Nougarèdes, B eds., *Le foncier agricole dans une société urbaine: Innovations et enjeux de justice.* Avignon, France: Cardère: 233–250. DOI: http://dx.doi.org/10. 15454/gbmk-tc25\_ch8.
- **Kassis, G, Bertrand, N, Pecqueur, B.** 2021. Rethinking the place of agricultural land preservation for the development of food systems in planning of periurban areas: Insights from two French municipalities. *Journal of Rural Studies* **86**: 366–375. DOI: http://dx.doi.org/10.1016/j.jrurstud.2021.07.003.
- **Kay, K.** 2022. "Performing developability": Generating threat and value in private land conservation. *Geoforum* **128**: 37–45. DOI: http://dx.doi.org/10.1016/j.geoforum.2021.11.022.
- **Kennedy, SF, Frazier, C.** 2024. Land equity in California: Challenges and opportunities across the policy land-scape. *Elementa: Science of the Anthropocene* **12**(1): 00106. DOI: http://dx.doi.org/10.1525/elementa. 2023.00106.
- **Kepkiewicz, L, Dale, B.** 2019. Keeping 'our' land: Property, agriculture and tensions between indigenous and settler visions of food sovereignty in Canada. *The Journal of Peasant Studies* **46**(5): 983–1002. DOI: http://dx.doi.org/10.1080/03066150.2018. 1439929.
- **Kepkiewicz, L, Rotz, S.** 2018. Toward anti-colonial food policy in Canada? (Im)possibilities within the settler state. *Canadian Food Studies / La Revue canadienne des études sur l'alimentation* **5**(2): 13–24. DOI: http://dx.doi.org/10.15353/cfs-rcea.v5i2.202.
- Lamine, C, Darnhofer, I, Marsden, TK. 2019. What enables just sustainability transitions in agrifood systems? An exploration of conceptual approaches using international comparative case studies.

- *Journal of Rural Studies* **68**: 144–146. DOI: http://dx.doi.org/10.1016/j.jrurstud.2019.03.010.
- **Léger-Bosch, C, Houdart, M, Loudiyi, S, Le Bel, P-M.** 2020. Changes in property-use relationships on French farmland: A social innovation perspective. *Land Use Policy* **94**: 104545. DOI: http://dx.doi.org/10.1016/j.landusepol.2020.104545.
- **Li, TM.** 2014. What is land? Assembling a resource for global investment. *Transactions of the Institute of British Geographers* **39**(4): 589–602. DOI: http://dx.doi.org/10.1111/tran.12065.
- **Litowitz, D.** 2000. Gramsci, hegemony, and the law. *Brigham Young University Law Review* **2000**: 515.
- **Liu, T, Melot, R, Wallet, F.** 2024. Integrating land and food policy to transform territorial food systems in the context of coexisting agri-food models: Case studies in France. *Elementa: Science of the Anthropocene* **12**(1): 00063. DOI: http://dx.doi.org/10. 1525/elementa.2023.00063.
- **Lovett, JA.** 2019. Community land trusts: Institutionalizing the human flourishing theory of property progressive property. *Cornell Journal of Law and Public Policy* **29**(3): 621–642.
- **Lund, C.** 2016. Rule and rupture: State formation through the production of property and citizenship. *Development and Change* **47**(6): 1199–1228. DOI: http://dx.doi.org/10.1111/dech.12274.
- **Lund, C.** 2020. *Nine-Tenths of the law: Enduring dispossession in Indonesia.* New Haven, CT: Yale University Press. DOI: http://dx.doi.org/10.2307/j.ctv1b0fw9d.
- Martin-Prével, A, Bosch, NM, Swade, K. 2023. Local authorities making farmland work for the public good. GitBook made within the framework of the RURALIZATION project. Available at https://gitbook.accesstoland.eu/. Accessed May 4, 2023.
- **McCarthy, F.** 2020. Property rights and human rights in Scottish land reform, in Combe, M, Glass, J, Tindley, A eds., *Land reform in Scotland: History, law and policy.* Edinburgh, UK: Edinburgh University Press: 213–235.
- **Monbiot, G.** 2022. *Regenesis: Feeding the world without devouring the planet.* London, UK: Penguin.
- Moore, M-L, Riddell, DJ, Vocisano, D. 2015. Scaling out, scaling up, scaling deep: Strategies of non-profits in advancing systemic social innovation. *The Journal of Corporate Citizenship* (58): 67–84.
- **Morris, AW.** 2008. Easing conservation? Conservation easements, public accountability and neoliberalism. *Geoforum* **39**(3): 1215–1227. DOI: http://dx.doi.org/10.1016/j.geoforum.2006.10.004.
- **Mukpo, A.** 2023 Sep 8. In the clash over Dutch farming, Europe's future arrives. *Mongabay Environmental News*. Available at https://news.mongabay.com/2023/09/in-the-clash-over-dutch-farming-europesfuture-arrives/. Accessed September 20, 2023.
- **Nichols, R**. 2020. *Theft is property!: Dispossession and critical theory.* Durham, NC: Duke University Press: 238.
- **Nyéléni Europe and Central Asia**. 2020. Your land, my land, our land: Grassroots strategies to preserve farmland and access to land for peasant farming and

- agroecology. Collective document coordinated by European Coordination Via Campesina (ECVC), Terre de Liens, URGENCI, Eco Ruralis, the International Federation of Organic Agriculture Movements (IFOAM-EU), Real Farming Trust (RFT) and Transnational Institute (TNI). Available at https://www.tni.org/files/publication-downloads/en-your\_land\_my\_land\_our\_land.pdf. Accessed May 3, 2023.
- **Oldham, O, Newton, P, Short, N**. 2024. Land-based resistance: Enacting Indigenous self-determination and kai sovereignty. *Elementa: Science of the Anthropocene* **12**(1): 00118. DOI: https://doi.org/10.1525/elementa.2023.00118.
- **Patel, R.** 2009. Food sovereignty. *The Journal of Peasant Studies* **36**(3): 663–706. DOI: http://dx.doi.org/10. 1080/03066150903143079.
- **Perrin, C, Baysse-Lainé, A.** 2020. Governing the coexistence of agricultural models: French cities allocating farmlands to support agroecology and short food chains on urban fringes. *Review of Agricultural, Food and Environmental Studies* **101**: 261–286. DOI: http://dx.doi.org/10.1007/s41130-020-00105-z.
- Perrin, C, Nougarèdes, B, Sini, L, Branduini, P, Salvati, L. 2018. Governance changes in peri-urban farmland protection following decentralisation: A comparison between Montpellier (France) and Rome (Italy). *Land Use Policy* **70**: 535–546. DOI: http://dx.doi.org/10.1016/j.landusepol.2017.09.027.
- **Pickard, EA.** 2021. Farm life in the asset economy: First-generation farmers and the agrarian question [M.S. thesis]. New York, NY: Syracuse University. Available at https://www.proquest.com/docview/2563494715/abstract/81E0CF9E476A45B3PQ/1. Accessed January 12, 2023
- **Rissing, A, Jones, BM.** 2022. Landscapes of value. *Economic Anthropology* **9**(2): 193–206. DOI: http://dx.doi.org/10.1002/sea2.12253.
- **Robbins, P.** 2008. The state in political ecology: A postcard to political geography from the field, in Cox, KR, Low, M, Robinson, J eds., The SAGE handbook of political geography. London, UK: Sage: 205–218.
- **Roman-Alcalá, A.** 2024. Land reform in the United States: Lost cause or simply a cause that has been lost? *Elementa: Science of the Anthropocene* **12**(1): 00087. DOI: http://dx.doi.org/10.1525/elementa. 2023.00087.
- **Rose, CM**. 2019 [1994]. Introduction: Approaching property, in Rose, CM ed., *Property and persuasion: Essays on the history, theory, and rhetoric of ownership.* New York, NY: Routledge: 1–8.
- **Rose, CM.** 2019. Property and persuasion: Essays on the history, theory, and rhetoric of ownership. New York, NY: Routledge. DOI: http://dx.doi.org/10.4324/9780429303227.
- Santo, RE, Lupolt, SN, Uhde, KM, Bennaton, RC, Nachman, KE. 2024. From access toward sovereignty: A scoping review of municipal land access policies for urban agriculture in the United States. *Elementa: Science of the Anthropocene* **12**(1): 00089. DOI: http://dx.doi.org/10.1525/elementa.2023.00089.

- Shattuck, A, Grajales, J, Jacobs, R, Sauer, S, Galvin, SS, Hall, R. 2023. Life on the land: New lives for agrarian questions. *The Journal of Peasant Studies* **50**(2): 490–518. DOI: http://dx.doi.org/10.1080/03066150. 2023.2174859.
- **Shields, K**, 2024. Dances with lairds: Lessons from Scottish land reform, in Wolford, W, Peluso, NL, Goldman, M eds., *The social lives of land*. Ithaca, NY: Cornell University Press Publications.
- **Shoemaker, JA.** 2021. Fee simple failures: Rural landscapes and race. *Michigan Law Review* **119**(8): 1695–1756. DOI: http://dx.doi.org/10.36644/mlr.119.8.fee.
- **Sikor, T, Lund, C.** 2009. Access and property: A question of power and authority. *Development and Change* **40**(1): 1–22. DOI: http://dx.doi.org/10.1111/j. 1467-7660.2009.01503.x.
- **Singer, JW**. 1991. Sovereignty and property. *Northwestern University Law Review* **86**: 1.
- **Sippel, CS, Sippel, SR.** 2024. *Territorio-tierra*: A community feminist perspective on land by Indigenous Xinka women from Guatemala. *Elementa: Science of the Anthropocene* **12**(1): 00024. DOI: http://dx.doi.org/10.1525/elementa.2024.00024.
- **Sippel, SR.** 2018. Financialising farming as a moral imperative? Renegotiating the legitimacy of land investments in Australia. *Environment and Planning A: Economy and Space* **50**(3): 549–568. DOI: http://dx.doi.org/10.1177/0308518X17741317.
- **Sippel, SR.** 2023 May 1. Tackling land's 'stubborn materiality': The interplay of imaginaries, data and digital technologies within farmland assetization. *Agriculture and Human Values* **40**: 849–863. DOI: http://dx.doi.org/10.1007/s10460-023-10453-3.
- **Sippel, SR, Larder, N**. 2021. Bridging divides: Constructing food sovereignty in Australia. *The Journal of Peasant Studies* **48**(2): 368–386. DOI: https://doi.org/10.1080/03066150.2019.1655638.
- **Sippel, SR, Visser, O.** 2021. Introduction to symposium 'Reimagining land: Materiality, affect and the uneven trajectories of land transformation'. *Agriculture and Human Values* **38**: 271–282. DOI: http://dx.doi.org/10.1007/s10460-020-10152-3.
- **Sippel, SR, Weldon, T**. 2021. Redefining land's investability: Towards a neo-nationalization of resources in Australia? *Territory, Politics, Governance* **9**(2): 306–323. DOI: http://dx.doi.org/10.1080/21622671.2019.1703797.
- **Smith, ET.** 2024. Practising commoning. *The Commons Library*. Available at: https://commonslibrary.org/practising-commoning/. Accessed July 5, 2024.
- **Sonnino, R, Milbourne, P.** 2022. Food system transformation: A progressive place-based approach. *Local Environment* **27**(7): 915–926. DOI: http://dx.doi.org/10.1080/13549839.2022.2084723.
- **Taylor, L, Lublin, G.** 2021. Settler colonial studies and Latin America. *Settler Colonial Studies* **11**(3), 259–270. DOI: http://dx.doi.org/10.1080/2201473X.2021.1999155.
- **Thomas, PD.** 2010. *The Gramscian moment: Philosophy, hegemony and Marxism.* Chicago, IL: Haymarket Books. (Historical materialism book series).

- **Tornaghi, C, Dehaene, M.** 2020. The prefigurative power of urban political agroecology: Rethinking the urbanisms of agroecological transitions for food system transformation. *Agroecology and Sustainable Food Systems* **44**(5): 594–610. DOI: http://dx.doi.org/10.1080/21683565.2019.1680593.
- **Trauger, A.** 2014. Toward a political geography of food sovereignty: Transforming territory, exchange and power in the liberal sovereign state. *The Journal of Peasant Studies* **41**(6): 1131–1152. DOI: http://dx.doi.org/10.1080/03066150.2014.937339.
- van der Ploeg, JD. 2014. Peasant-driven agricultural growth and food sovereignty. *The Journal of Peasant Studies* **41**(6): 999–1030. DOI: http://dx.doi.org/10. 1080/03066150.2013.876997.
- van der Ploeg, JD. 2020. Farmers' upheaval, climate crisis and populism. *The Journal of Peasant Studies* **47**(3): 589–605. DOI: https://doi.org/10.1080/03066150. 2020.1725490.
- Van Sant, L. 2024. Trustees of (Public) reservations? U.S. land trusts and neoliberalism as bricolage. *Annals of the American Association of Geographers* **114**(6): 1330–1341. DOI: http://dx.doi.org/10.1080/24694452.2024.2351000.
- Van Sant, L, Shelton, T, Kay, K. 2023. Connecting country and city: The multiple geographies of real property ownership in the US. *Geography Compass* **17**(2): e12677. DOI: http://dx.doi.org/10.1111/gec3. 12677.
- Vandermaelen, H, Dehaene, M, Tornaghi, C, Vanempten, E, Verhoeve, A. 2023. Public land for urban food policy? A critical data-analysis of public land transactions in the Ghent city region (Belgium). *European Planning Studies* **31**(8): 1693–1714. DOI: http://dx.doi.org/10.1080/09654313.2022.2097860.
- **Wach, E, Hall, R.** 2024. Land commoning in deagrarianized contexts: Potentials for agroecology? *Elementa: Science of the Anthropocene* **12**(1): 00085. DOI: http://dx.doi.org/10.1525/elementa.2023.00085.
- Wang, Y, de Boer, IJM, Persson, UM, Ripoll-Bosch, R, Cederberg, C, Gerber, PJ, Smith, P, van Middelaar, CE. 2023. Risk to rely on soil carbon sequestration to offset global ruminant emissions. *Nature Communication* **14**(1): 7625. DOI: http://dx.doi.org/10.1038/s41467-023-43452-3.
- **Wittman, H, Dennis, J, Pritchard, H.** 2017. Beyond the market? New agrarianism and cooperative farmland access in North America. *Journal of Rural Studies* **53**: 303–316. DOI: http://dx.doi.org/10.1016/J.JRURSTUD. 2017.03.007.
- **Wolfe, P.** 2006. Settler colonialism and the elimination of the native. *Journal of Genocide Research* **8**(4): 387–409. DOI: http://dx.doi.org/10.1080/14623520601056240.
- **Wolford, W.** 2010. *This land is ours now: Social mobilization and the meanings of land in Brazil.* Durham, NC: Duke University Press.

Downloaded from http://online.ucpress.edu/elementa/article-pdf/12/1/00028/836767/elementa.2024.00028.pdf by guest on 14 January 2025

**How to cite this article:** Calo, A, Sippel, SR, Kay, S, Perrin, C, Shields, K. 2024. Transforming land for sustainable food: Emerging contests to property regimes in the Global North. *Elementa: Science of the Anthropocene* 12(1). DOI: https://doi.org/10.1525/elementa.2024.00028

Domain Editor-in-Chief: Alastair Iles, University of California Berkeley, Berkeley, CA, USA

**Knowledge Domain:** Sustainability Transitions

Part of an Elementa Special Feature: Land and Sustainable Food Transformations

Published: October 04, 2024 Accepted: August 09, 2024 Submitted: April 18, 2024

**Copyright:** © 2024 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See http://creativecommons.org/licenses/by/4.0/.

