



Farming within a dual legal land system: An argument for emancipatory food systems planning in Accra, Ghana

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ABSTRACT

Contestation over land is a central element of urban food systems. This paper examines how Ghana's dual legal land system affects urban farmers. Situated within the "emancipatory planning" discourse, the paper investigates how farmers navigate customary and statutory land rules using tactics that include compliance, opposition and adaptation. Based on field work conducted in urban and peri-urban areas of Accra, the study demonstrates that farmers access land by working around, outside, and within the rules of the dual legal land system. The land-owners on whom urban farmers depend also both comply with and violate these same rules. This system perpetuates inequities. Food systems policy and planning must address the structural and systemic inequities that are reinforced by the rules of the land game. The paper concludes with some reflections on how local and national policy and planning can do a better job in supporting urban food production in contexts characterized by complex, dual legal land systems.

1. Introduction

Contestation over land is at the heart of most urban food systems. A city can be understood as constituting a "bundle of rights" that shape who and what are included or excluded (Lefebvre, 1967). These rights have spatial and temporal variations depending on local contexts. The longstanding challenge, Marcuse (2009) observes, is to unpack "whose right, what right and to what city" in order to "expose, propose, and politicize" issues that marginalize, oppress, and alienate different groups. Calls to affirm farmers' right to the city have grown over the last decade across both the Global South and North, especially in the burgeoning literature on urban food systems planning. Yet, scholarship examining the theoretical basis of farmers' right to the city is limited, especially in the Global South.

The Accra city-region primarily constitutes the Greater Accra Metropolitan Area (GAMA). It had 4.6 million inhabitants as of 2016 (World Bank, 2017) and the population is projected to double within 20 years (Obuobie et al., 2006; Cities Alliance, 2016). The Accra city-region occupies a land area of about 4998 square kilometers, and its built area has increased from around 246 square kilometers in 1990 to 1050 square kilometers in 2015 (Agyemang et al., 2017). Today, the city-region includes a wide range of land uses, from very high-density urban

development in the inner-city areas to low-density uses (including agriculture) in peri-urban and more rural areas. Most land in the city-region is customary, which means it is owned by traditional chiefs as well as family and clan leaders on behalf of the Ga, the indigenous people of Accra. Some land is statutory, which means it belongs to the state (Kasanga and Kotey, 2001). Generally, private individuals who lease customary land are supposed to conform to statutory rules and regulations concerning land registration and titling, zoning and so forth. However, customary landowners wield enormous power to lease their lands as they see fit: both lessor and lessee must decide whether and how to comply with state rules (Gough and Yankson, 2001; Obeng-Odoom, 2014).

The resulting power asymmetry between lessor/lessee on the one hand, and the state on the other, limits enforcement of the "state's right to enforce [planning] regulation [...] for the use of lands it does not own" (Frimpong Boamah and Walker, 2017, p. 90). While the state has the right to procure land through eminent domain as stipulated in the written laws (rules-in-form), its exercise of this right has repeatedly been challenged in practice (rules-in-use). For instance, Richard Grant and others have documented multiple resistance strategies deployed by non-state actors, such as slum dwellers moving back to occupy lands previously acquired by the state, chiefs contesting compulsory purchase

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in court, and chiefs re-leasing lands that were previously acquired by the state (see Grant, 2006; Berry, 2008; Grant, 2009; Bob-Milliar and Obeng-Odoom, 2011). Thus the state faces real costs (political, economic, and legal) exercising its statutory powers to regulate land use. The dual legal land system raises a fundamental question: what are the rules of the land game, and who benefits or suffers from these rules?

Scholars have yet to interrogate how the dual land rules affect farming and food systems in the Accra city-region. Our study begins to address this gap. The vast majority of individuals who farm in the city-region work on a small-scale (Owusu-Boateng and Amuzu, 2013): their average landholding ranges between 0.1–0.2 ha (MoFA, 2018), and is smaller in urban areas (0.01–0.02 ha) and larger in peri-urban areas (up to 2 ha) (Drechsel and Keraita, 2014). Most of these individuals are migrants, primarily Muslims from the northern parts of Ghana (Upper East, Upper West, and Northern regions) and neighboring countries (e.g., Burkina Faso and Togo), and have lived in the city-region for more than 15 years (Danso et al., 2014; World Bank, 2013). Some studies assert at least a 50% decrease in the open-space areas in the urban parts of GAMA between 2001 and 2008 (Drechsel and Keraita, 2014; Johnson, 2014). Within the city-region, land used for irrigated vegetable farming has decreased by 20% (from 52 ha to 42 ha), while that used for mixed farming (vegetable and maize) has increased 67% (from 251 ha to 419 ha) since 2005 (Cofie et al., 2008; Drechsel and Keraita, 2014).

The right to farm in the Accra city-region is contested, and historical factors drive this conflict. During the colonial era, production of exotic vegetables and ornamental plants was undertaken to feed the European population and beautify the landscape (La Anyane, 1963). The post-colonial era ushered in hostile government policies aimed at ridding the city of farming, ostensibly for reasons of sanitation and public health. In 1957, urban farms were destroyed, and strict city byelaws were introduced and enforced by health inspections (Asomani-Boateng, 2002). The early postcolonial years brought territorial demarcations of farm (i.e. rural) and non-farm areas (i.e. urban). Today, government policies are food-blind; they neither deny nor promote the right to farm, in part due to the complicated, often oppositional relationship between customary and statutory land tenure systems (Raja et al., 2014). As a result, even though some sites have been cultivated for more than 50 years, there is pressure to relocate farming to rural and less-desirable, flood-prone areas (Johnson, 2014; Kuusaana and Eledi, 2015).

The land rules in the Accra city-region determine who has power to allow farming in urban and peri-urban spaces, to secure land titles for farmers, and to evict farmers from certain lands. In 1958, one year after Ghana's independence, the first postcolonial plan for the city-region asserted the need to vest all lands in the state to allow the effective (re) development of the city:

“...redevelopment in accordance with modern standards cannot proceed whilst the land remains in a multiplicity of small ownerships. The solution normally adopted is to purchase all the land and property and to compensate those persons whose interests are affected” (TCPD, 1958, p. 76).

In effect the object was to vest preemptive power in the state (and its local government and parastatal agencies) and disenfranchise the multiplicity of traditional authorities (i.e., chiefs, family and clan heads, and individuals). In 1958, the state owned about half of the land in Accra, which the colonial government had formerly acquired as Crown Lands for public purposes (TCPD, 1958). The 1958 plan promoted the idea that state agencies (e.g., education and health institutions) should acquire land for future development. On the one hand this was good planning, but it also bolstered the state's control over land use. Since then, the state's preemptive power in land matters has co-existed in tension with that of customary landowners. This tension, and the resultant difficulty of designating and protecting farmland, has marginalized farmers and farming, and farmers must therefore continually renegotiate their “rights to farm the city” (cf. Allen and Frediani, 2013; Maxwell et al., 1998).

This paper investigates the city-region's complicated land- and food-planning nexus by examining how farmers navigate the complex dual land system. Underpinning the paper is the understanding that land rights are the epicenter of struggle for smallholder farmers in many countries in the Global South (cf. De Soto, 1989). We employ the “emancipatory planning approach” (Albrechts, 2003; Irazábal, 2009) to examine the heterogeneous land rules affecting farmers in Accra. Based on conceptual analysis that is illustrated with empirical examples, the paper argues for a reexamination of current farming practices and their intersection with land tenure regimes (see also Allen and Frediani, 2013). We explore examples that illustrate how farmers employ different tactics and practices to navigate land tenure regimes, and we show how these tactics and practices can be emancipatory. We argue that food systems policy and planning must address the structural and systemic inequities that are reinforced by the rules of the land game.

2. Emancipatory planning for dual legal land systems: Insights from the literature

Customary and statutory rules define Ghana's land tenure system. Customary land tenure constitutes the allodial title vested in indigenous institutions—chiefs, land priests, and family or clan heads (Amanor et al., 2008). Among the Ga, the people indigenous to the Accra area, land belongs to theocratic spiritual leaders, “Wulomo” or “Wulomei” (plural), which translates as “our leaders.” The secular aspects of the Wulomo's duties, such as land tenure arrangements, are decentralized to chiefs and sub-chiefs, “Mantse” (town father) or “Mankralo” (town guardian), and family or clan heads. About 80% of private land in the city-region is owned under customary land tenure (Kotey, 2002; Obeng-Odoom, 2014). In contrast, the statutory land tenure system vests the allodial title in the state, or government of Ghana. Individuals or groups can acquire land from the customary or statutory allodial title holders. However, according to Ghana's constitution, lands acquired through the customary land tenure system must also comply with the relevant statutory rules and processes such as surveying and mapping, valuation, conformity with zoning ordinance, and land registration and titling.

Coexisting customary and statutory legal land systems create a tendency for “rule shopping” (Benton, 1994, p. 237). That is, individuals, including farmers, choose to comply with or violate customary and/or statutory rules based on their analysis of costs and benefits (see Frimpong Boamah and Walker, 2017). Acquiring customary land, through either rental or purchase, requires the financial means to (a) pay for the land (Amanor et al., 2008; Owusu, 2008), (b) build quickly on it or hire guards to secure it from encroachers (Barry and Danso, 2014; Obeng-Odoom, 2014), and (c) comply with the applicable rules and regulations. Landholders must also have the political capital to navigate the bureaucratic statutory process if they want to obtain title to land. Acquiring state-owned lands further requires political capital and financial resources, just to know which lands are available for rent or purchase from the state, and whom to contact at each step in the process. The poor, including poor farmers, generally do not have these levels of financial and political capital: instead, they enact and play by their own rules.

The literature on emancipatory planning investigates practices and discourses that individuals or groups (e.g. planners, farmers, etc.) use to try to address structural and systemic inequalities (Albrechts, 2003; Irazábal, 2009). Specifically, it examines how asymmetric power relations structure individual decisions and actions, which lead to unequal outcomes (Albrechts, 2003; Flyvbjerg, 1998). Irazábal (2009) observes that in addition to studying power, an emancipatory planning approach, should also consider knowledge, subjectivity, and relations over space (also see Forester, 1989; Friedmann, 1998; Healey, 1997).

An emancipatory planning approach thus interrogates four concepts – power, knowledge, subjectivity, and space – within a given socio-spatial context, to illuminate whether agents such as farmers, planners and elected officials are “self-conscious of their roles in the

reproduction of [inequitable] social practices, and [can be] empowered for transforming them” (Irazábal, 2009, p. 129). Conceptually, emancipatory planning is relational and processual, with actors being capable of identifying forms of power and building network power to overcome asymmetric power relations; acquiring emancipatory knowledge and practices to strengthen their networks (or coalitions); building enhanced subjectivity with members of their coalitions through practices that enhance their self-esteem, advocacy, trust, and reciprocity; and building spaces of solidarity. In the remainder of this section we discuss each of the concepts and their interplay in relation to unequal access to land for farming.

Power: The debate on the “faces of power” in the 1950s and 1960s focused on who held power and how they exercised it (Bachrach and Baratz, 1963; Dahl, 1961; Hunter, 1953). Digeser (1992, p. 979) described the “liberal conception” of power whereby A can make B do things that B does not want to do (first face), or when A can prevent B from doing what B wants to do (second face) (Bachrach and Baratz, 1963). Lukes (1974) argued that the third, or radical, face of power occurs when A can make B willingly do things that favor A but are not necessarily in B’s interest (see also Gaventa, 1980; 2006). Irazábal (2009) describes the capacity to make *others* do things as *power over*, to prevent things from happening as *preemptive power*, and to make things happen as *power to*, or *network power* (see also Lukes, 1974; Gaventa, 1980; Digeser, 1992; Flyvbjerg, 1998; Booher and Innes, 2002). These faces of power are interrelated and often work simultaneously (Irazábal, 2009). For instance, customary authorities in Accra can determine which farmers are able to lease land and how that farmland is used (preemptive power); the state and its agencies as custodians of statutory land and planning rules can force certain nonagricultural uses of land (power over); and farmers can sometimes build coalitions to negotiate the use of either statutory or customary land (power to or network power).

Albrechts (2003) outlines four general conditions for power: intimidation, which manifests through physical or psychological threats to deter or compel certain actions; manipulation, which involves unfair means to control resources and people; persuasion, which is the use of discourses to advance a course of action; and authority, the use of one’s position as an elected or appointed official, bureaucrat, scientist, opinion leader, etc., to direct actions or thoughts (see also DiGaetano and Klemanski, 1999; Irazábal, 2009). Analysis of the interplay of the different faces of power has not yet been brought to bear the land game and farming in the Accra city-region.

Subjectivity: Drawing on Foucault (1977, 1980), Digeser (1992, p. 980) refers to subjectivity or individuality as “the enabling or disabling of agency, i.e., the ability to have desires, form goals, and act freely.” Irazábal (2009, p. 126) defines subjectivity as an individual’s construction of self-identity based on “... (who they think they are), their individual and institutional projects (who they want to become), the way they think others perceive them (projected self-identity), and the actual way they are perceived by others (socially constructed identities).” The subject, according to Bourdieu’s “habitus” (1984, p. 170), is formed through the interplay over time between an individual’s agency (free will) and the structures (i.e., past events, societal norms, practices, ideology, power, etc.) that guide the individual’s desires, thoughts, and actions (see also Wacquant, 2005). According to Wendt’s (1987) analysis, the subject becomes a product of “structuration,” an ongoing process whereby an individual’s agency affects and is affected by structural processes (see also Giddens, 1979, 1984). Subjectivity produces and is a product of power relations (Foucault, 1977, 1980; Irazábal, 2007, 2009); thus, an emancipatory analysis must address Digeser’s (1992, p. 980) question, “What kind of subject is being produced?” within a network of power. This question unpacks what Digeser (1992, p. 977) refers to as the “fourth face of power,” the recognition that the subjects of power and the power of subjects are continually reconstituted as human agency interacts within structural forces. For instance, Raja et al. (2014) discuss how nonstate subjects

(i.e., “rustbelt radicals”) mobilized power over time through incremental practices and by building advocacy coalitions to subvert structurally determined land use policies (e.g. zoning laws), in order to transform Buffalo’s food system. In the Accra city-region, farmers’ subjectivity, their construction of who they think they are, who they want to become, how they think others perceive them, and how they are actually perceived in the city, remain largely unexplored.

Knowledge: Knowledge is either tacit (rooted in actions, values, emotions, etc.) or explicit (formal language in data, reports, etc.) meanings “generated about issues, objects, events, processes, people, and relations...” (Irazábal, 2009, p. 125; McFarlane, 2006). Knowledge is the product of interactions (McFarlane, 2006) embedded within the power relations structuring the decisions of subjects (Irazábal, 2009). Foucault observes, “... power and knowledge directly imply one another [...] there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations” (1977, p. 27). In simpler terms, “power produces and is produced by knowledge” (Digeser, 1992, p. 989). An emancipatory approach requires the formation of subjects who can produce and are produced by “network power—emancipatory knowledge,” which Irazábal (2009, p. 126) explains as “...power of networks...[and] knowledge free from the constraints posed by uncritically assimilated assumptions and discriminatory views...”. Farmers, for example, form power networks and generate emancipatory knowledge with which to challenge the asymmetric power and discriminatory practices within GAMA’s dual legal land system.

Space: Space is “how the built environment is imaginatively, discursively, and physically enacted” (Irazábal, 2009, p. 128). Similarly, urban agricultural space produces and is produced by social relations and structures, which in Smith’s (2004, p. 18) view, “structure, mold and reinforce certain kinds of social behaviors, assumptions and relationships that in turn have profound political effects.” A dialectics of space, social, and natural processes, also described as “thinking space relationally” or “relational space” (Jones, 2009, p. 488), was inspired by Lefebvre’s (1991) argument to move beyond the absolute Newtonian or Cartesian conception of space as predetermined locations containing different elements and processes (see Smith, 2004). An emancipatory approach recognizes that space, such as where urban farming unfolds, is an arena of social contestation and solidarity (Irazábal, 2007). Farmers, too, construct spaces of solidarity through network power and emancipatory knowledge in order to claim land rights, a proposition that we investigate further in this paper.

In summary, emancipatory planning draws attention to multiple, complex facets of the activities of actors, in this case small-scale farmers in the Accra city-region. We draw on this frame to examine actions and discourse that allow farmers to gain access to land by networked power through coalitions with state and non-state actors. Yet, doing so requires them to be reflexive in how they think about the dual legal land system: they must co-produce knowledge that challenges assumptions about land tenure regimes. This co-production allows farmers and others to negotiate their land interests and rights through opening small opportunities in the short term and large opportunities in the long term. Doing so creates avenues for multi-scale negotiation and coalition-building to produce emancipatory spaces of solidarity and mutual appreciation. We distill the insights from emancipatory planning to unpack how farmers in Accra navigate the dual land tenure system, and to what effect.

3. Study setting

The paper focuses on four sites, three in the urban part of Accra (Dzorwulu, Okponglo, Korle Bu) and one peri-urban site (around the Adjei Kojo Mubi Irrigation Scheme (AKMIS) in the municipality of Ashaiman). The literature on farming in and around the city of Accra informed our choice of the study areas (e.g. Allen and Frediani, 2013;

Allen et al., 2014; Asomani-Boateng, 2002) as did field visits in 2018. The region in and around the city of Accra has varied levels of urbanization, which offer a diversity of settings (Fig. 1).

The Accra metropolis encompasses 139 square kilometers and had an estimated population of 1.8 million in 2010. The city experienced rapid growth in its built-up area from about 90 square kilometers in 1990 to about 129 square kilometers in 2015 (Agyemang et al., 2017). This expansion included a mix of high-rise commercial and residential buildings within inner parts of Accra and low-density sprawl of residential and commercial areas in adjoining peri-urban areas. Dzorwulu, Korle Bu, and Okponglo are located in the inner-city and are governed by the Accra Metropolitan Assembly (AMA). Dzorwulu is to the north of downtown Accra, and home to some of the wealthiest neighborhoods including Airport Residential Area, East and West Legon. Okponglo is rapidly developing into a major residential area partly to house off-campus students from the adjacent University of Ghana. Korle Bu is west of downtown Accra and about 15 km southwest of Dzorwulu and Okponglo.

The Ashaiman municipality had an estimated population of 190,972 in 2010, and is governed by the Ashaiman Municipal Assembly, though portions are also co-developed by authorities from adjacent municipalities including Tema Development Authority (TDC), creating a layered development framework. Compared to the AMA, Ashaiman is a young municipal entity, and encompasses about 19 square kilometers. It has also experienced growth in its built environment, from about 11 square kilometers in 1990 to about 15 square kilometers in 2015 (Agyemang et al., 2017). Its location, with the AMA to the west, other metropolitan areas to the east, and the nearby Accra-Tema Motorway, has fueled sprawl. Land in the AKMIS area was leased by TDC to the Ghana Irrigation Development Authority (GIDA) for 90 years to be developed for commercial agriculture (Allen et al., 2014). Irrigation infrastructure has been built on the northern part of the leased area, but there is no irrigation in the southern part, mostly known as the Roman Down area (Allen and Frediani, 2013). Today, the entire AKMIS area is experiencing encroachment by residential development from the west and the east.

4. Research design and methods

This paper draws on interviews conducted in June and July of 2018 with 13 farmers and 17 government officials and nongovernment stakeholders.¹ The average land held by farmers interviewed in the inner-city areas (Dzorwulu, Okponglo, and Korle Bu) was about 0.5 ha, and that of farmers within AKMIS was about 1.8 ha. Farmers in the inner-city areas were younger (average age of 38 years) than those in the peri-urban areas (average age of 57 years). Government organizations own most of the farmed land in the inner-city areas: Korle Bu Teaching Hospital, and at Okponglo and Dzorwulu, the Ghana Grid Company Limited (GRIDCo) and the Power Distribution Services Ghana (PDS), formerly known as the Electricity Company of Ghana (ECG). Farmers in the inner-city areas grow mostly vegetables (including cabbage, lettuce, cauliflower, green pepper, cucumber, broccoli, amaranths, shallots, spring onion, and carrots) and herbs (mint and coriander). Maize, tomatoes, onion, and okra are the most commonly cultivated crops in the AKMIS area. Revenue generated from crops ranged from 4500 Ghana cedis (GHS) per season (\$958 according to the June 2018 exchange rate, whereby \$1 equals GHS 4.7) to GHS 20,000 per season (\$4255) depending on farm size, crop types, soil fertility, and so forth. Several farmers complained of flooding during periods of heavy rain, and also

¹ This study is part of a multi-country study titled Planning for Regenerative Equitable Food Systems in Urbanizing Global Environments (Plan-REFUGE) across urban, peri-urban, and rural farming sites in India, Ghana, and Jamaica. The field instrument was shared across multiple sites and was modified for Accra.

oversupply in the market.

We conducted in-depth interviews to understand issues affecting the farmers' daily lives across five domains: agrarian, ecological/environmental, politico-economic, social and cultural, and dietary/food. We developed a mix of closed and open-ended questions in English, which were reviewed by the research team's institutional review board. The interviewers, who spoke English, Twi, and Ga, worked in the respondents' local dialect (either Twi or Ga) and took notes in English. With the respondents' permission, interviews were recorded and later transcribed and translated into English. Two field supervisors cross-checked the transcripts for accuracy, and they were coded using the qualitative software package NVivo 10. Following LeCompte's (2000) suggestions for the analysis of qualitative data, we initially assessed the transcripts to identify possible data holes and compared the responses to the research questions. The transcripts were read several times and coded following an iterative, inductive process (Glaser and Strauss, 1967) until patterns (similarities, differences, sequences, corroboration) emerged. We later revised and recoded multiple times, using additional insights gained from rereading the transcripts. The exploratory nature of the research justifies the small-n, qualitative approach (Gerring, 2007; Merriam, 1995) and the multi-site case study design (Glaser and Strauss, 1967).

The interviews with farmers are complemented by in-depth interviews with stakeholders and analysis of scholarly and gray literature on planning, land tenure, farming, and food issues in Accra. The stakeholders interviewed included local government officials (in the Planning and Agricultural Development departments in the Accra Metropolitan Assembly and the Ashaiman Municipal Assembly); national government officials (at the Ministry of Food and Agriculture (MoFA); GIDA; Ghana Lands Commission; National Development Planning Commission, or NDPC; and Ministry of Inner City and Zongo Development (MICZD)); and officials at local research institutions, civil society groups, and businesses (International Water Management Institute (IWMI), and Alliance for Green Revolution in Africa (AGRA)). Finally, to triangulate and properly contextualize information from the interviews, we analyzed documents such as the 1958 master plan for the Accra city-region, the 2014–2017 Medium-Term Plans for AMA and Ashaiman, and case study reports and scholarly works on land tenure and farming issues in the city-region.

5. Analysis of power, subjectivity, knowledge, and space in urban farming practices

Farmers play a key role in Accra's urban food system, which moves food from farm to consumers' plate via a complicated set of transactions and exchanges. A well-functioning urban food system – which includes markets, retailers, and others – depends on the well-being of agricultural producers, which is intricately tied to the land they use, and the power they exercise over this land. A failure to understand the ways in which farmers exercise power limits the possibility of well-functioning food and planning systems.

The three forms of power—power over, preemptive power, and network power—are enacted by both statutory and customary land-owners. For instance, both hold *preemptive power* enshrined in statutory laws. That is, they hold a statutory right to prevent development of a parcel of land. However, such preemptive power is necessary but not sufficient for the successfully defence of their rights. They must also exercise other forms of power: power over and power to. Zoning ordinances and court orders exemplify how the state and local government enact *power over* land matters through, for example, forced evictions. An interviewee clarified this point:

Yes, I know that the law gives us [i.e., local officials] the right [**preemptive power**] to allow farming in Accra. But you see, when it comes to land in Accra, you get things done by sometimes talking extensively with the chiefs to negotiate [**power to or network**

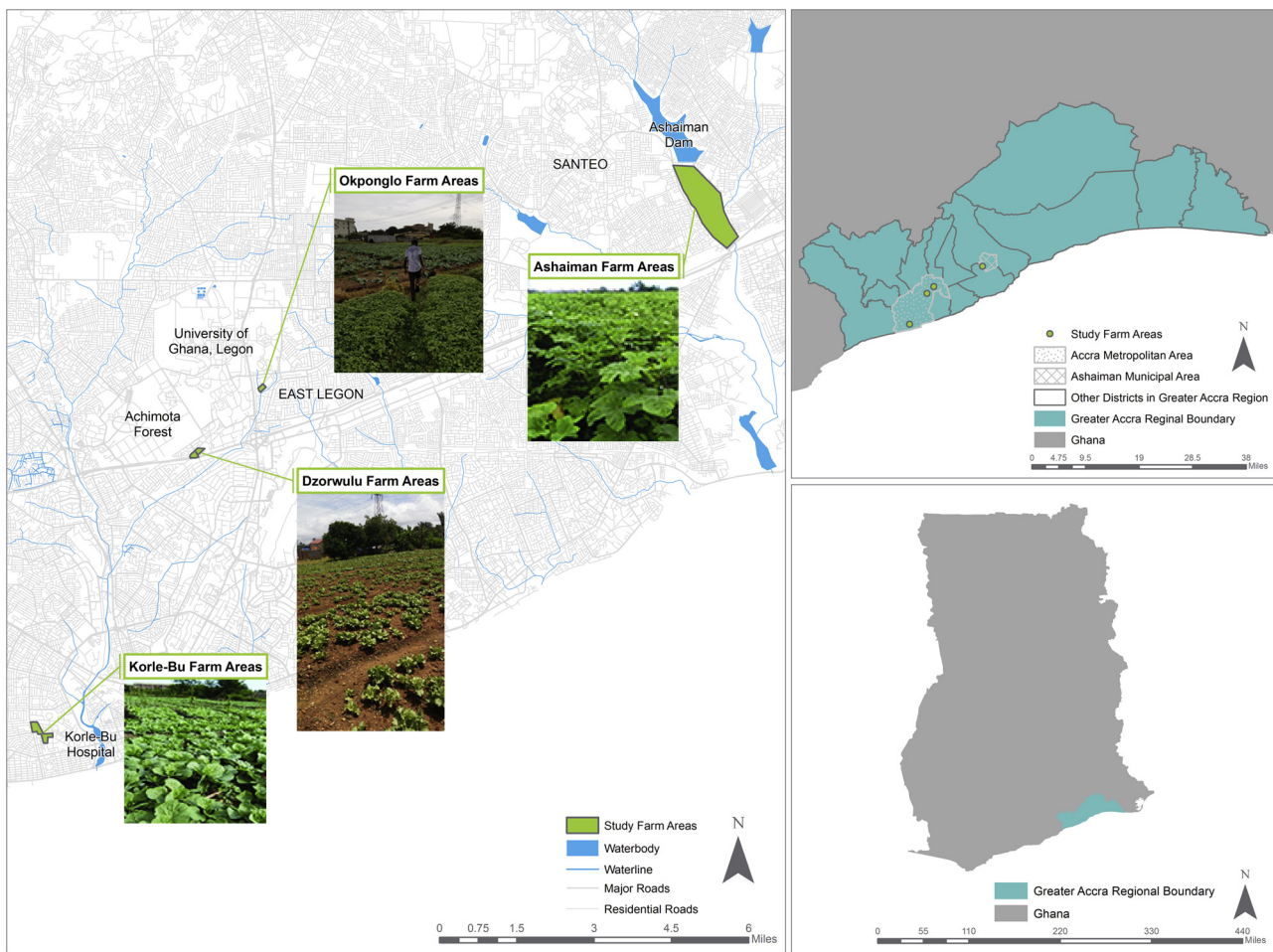


Fig. 1. Location of the four study sites.

power] and if the talking fails, you get court order to make things happen [power over]. The court option is not easy and is often not the best option. (Interview with a local government official in the Accra Metropolitan Assembly, 2018).

Similarly, the use of guards exemplifies how customary landowners enact their *power over* land. For instance, Allen et al. (2014) discuss how a member of the local chief's family at Dzorwulu used guards to intimidate farmers and even local government officials. Other studies have shown how the use of guards has animated and sustained the dual legal land system (Frimpong Boamah and Walker, 2017; Hughes, 2003; Obeng-Odoom, 2014). For instance, reports of guards attacking farmers on AKMIS lands have been well documented (see Metro News article in Doron et al., 2010).

Within the dual legal land system, the rules of the "land game" may offer preemptive power to these customary and statutory landowners, but much rests on an actor's ability to deploy other mechanisms that ensure power over and/or network power (or power to). Of particular concern here is how farmers, who generally do not have preemptive power, are still able to farm. In other words, what do they do when the rules of the land game are apparently stacked against them? We argue that while farmers' land tenure practices seem to produce some forms of power and knowledge, they are not enough to assure long-term and more-permanent access to land.

5.1. Urban Case: Working around (or outside) the rules

Seibu moved to the AMA about 30 years ago from the Upper East Region. He worked as a cleaner, petty trader, and later as a farmhand

before he was given a plot of land. A few years later, the owner evicted him and his crops were destroyed in the process. Seibu then traveled to Libya to work in a factory, but he returned after the overthrow of Muammar Mohammed Abu Minyar Gaddafi. Upon his return, a "brother" (i.e., a friend from the same ethnic group) offered him two plots in Okponglo on which to grow vegetables.

Seibu noted that he felt relatively more secure on this land, which was a crucial factor in his decision to return to farming. When probed further about this sense of security, he pointed to the nearby high-voltage pylons and said, "You can think of this land as 'no man's land' because people were not interested in these lands; in fact, most people were and are still afraid to even stand under these high-voltage lines." The land under power lines in areas such as Okponglo and Dzorwulu is owned by Ghana Grid Company Limited (GRIDCo), which has allowed farming to continue because it helps guard against people erecting permanent structures (see also Allen et al., 2014; Beckwith et al., 2009). In other words, GRIDCo could have preemptively disallowed the use of these spaces for farming, but it enacted its preemptive power by giving *power to* farmers. The subjectivities of the farmers and GRIDCo were thus reconstituted such that the power relations between them are more fluid and horizontal rather than vertical. That is, by recognizing complementary interests, GRIDCo and the farmers have moved toward apparently more equal and mutually beneficial relations. We can apply the same analytical lens to instances (mostly in peri-urban areas) where farmers are given use of land until the owner is ready to develop it (see Gough and Yankson, 2001; Maxwell et al., 1998; Owusu, 2008).

Seibu and other farmers' knowledge of their mutually beneficial relations with GRIDCo makes them feel relatively secure. Mr. Bashiru explains:

I inherited the land from my grandfather who happens to also be the first farmer to cultivate at this site. The land is a government property managed by the VRA/GRIDCO (electricity distribution companies). We however have been granted the right to cultivate the land which for them is also a win-win situation since the farmlands prevent squatters from encroaching on the land. Last year we had a confrontation with a car retailer who wanted to take over the land with false information that he had the backing of the AMA. Our checks with the Assembly revealed that this was false. The VRA/GRIDCO were also quick to come to our aid to ensure we could still continue farming on the land (Farmer interview at Dzorwulu, June 2018).

However, this knowledge did not result from the farmers critically challenging GRIDCO's ownership of the land; it occurred by serendipity. Seibu described how in previous times much of the land in Okponglo was farmed, but this has largely given way to residential development. As one farmer narrated,

We were left with only these areas [i.e., land under the power lines] and we continued to farm while we waited to be evicted. We later learned from some of the agricultural extension officers and the residents living around here that the place belongs to the PDS and GRIDCO, so we went to them for permission and they were okay with us using the land (Farmer interview at Okponglo, June 2018).

Those who continued to farm under the power lines did not work within the statutory land rules. They did not go through the state's complex land acquisition and titling process, but they did not violate these statutory rules, either. They learned, albeit by happenstance, how to co-opt the spaces under the power lines. We observed similar strategies in other areas. One farmer interviewed in Dzorwulu said,

Farming activities within this area [i.e., Dzorwulu] can only be found on such lands as ours [i.e. located under high voltage distribution lines owned by GRIDCO/VRA]. We the farmers here know that we are somehow safe on such lands. However, our land here, which we use for cultivation, has reduced due to encroachment by poor squatters. Some green areas have also been converted to residential and commercial use. This poses a threat to what area of land will be available in the near future (Farmer interview at Dzorwulu, June 2018).

It is not possible to know the extent to which this knowledge of safety under power lines influenced the decisions to farm at Dzorwulu and other locations. However, the Okponglo and Dzorwulu cases reveal that landowners alone do not necessarily reproduce and sustain the statutory land rules; in some instances they act in concert with farmers.

The power lines have enabled some individuals to access land within the metropolitan area. However, this occurs more by working around the rules of the land game than by changing them. These farmers, while feeling relatively secure, still face occasional pressure from the rentier class, such as real estate developers and other business elites, who build coalitions to claim land rights (Logan and Molotch, 1987; Molotch, 2011). Other studies have noted that increasing land values and limited attention to planning for urban agriculture exacerbate the challenges that farmers face (e.g., Allen et al., 2014; Owusu, 2008). Seibu narrated how a local real estate developer lobbied local government officials to evict him and the other farmers. This individual's maneuvers were foiled by a counter-action that emerged through a coalition of neighborhood residents and Seibu's brothers:

These residents enjoy buying fresh vegetables from us. They come directly to our farm to pick their crops. They came to our rescue by speaking against the actions of the Accra Metropolitan Assembly and this business man when we told them about the attempts being made to sack us from this place (Farm interview with Seibu at Okponglo, June 2018).

We observe here that farmers in Okponglo and Dzorwulu are, to some extent, able to negotiate land rights by operating within horizontal power relations with GRIDCO. However, securing land under the power lines also requires building coalitions with other actors who can offer some protection against the forces of urbanization and encroachment. As the Dzorwulu case illustrates, others are also trying to claim this same land (see also Allen et al., 2014). The local power that farmers gained by building temporary, informal coalitions with local residents and GRIDCO cannot sustain permanent spaces of solidarity. In other words, these coalitions are necessary but insufficient to guarantee farmers' access to land. Below, we discuss why and how these coalitions can become more permanent if they constitute and are constituted by network power and emancipatory knowledge (Irazábal, 2009, p. 126).

5.2. Peri-Urban Case: Working within (and outside) the rules

Two groups of farmers occupy different spaces on GIDA's AKMIS irrigation scheme in the Ashaiman municipality. The first group is the Ashaiman Irrigation Farmers' Cooperative Society (AIFCS), comprising individuals who have legal rights to farm in the northern half of the scheme. The second group, Ashaiman Roman Down Cooperative Farmers Society (ARDCFS), includes individuals who farm illegally on the southern part of the system where irrigation has not yet been developed. This is a tale of two farming spaces that have coexisted on a government-owned scheme for more than two decades. On one hand, the AIFCS farmers worked within the statutory land tenure rules, acquiring farmland from GIDA, making the necessary payments (irrigation service charge and annual membership fees), and abiding by the cooperative's bylaws. On the other hand, the ARDCFS members did not play by the statutory land rules but, rather, first occupied GIDA's land illegally, and only later worked with GIDA to obtain informal permission to farm.

One could argue that by working outside the rules, ARDCFS farmers have emancipated themselves from them. Describing how they came to illegally occupy this area, the current secretary of ARDCFS stated that the Roman Down area was known to be flood-prone. The excess flow from the irrigation facility floods the area, which, according to the AKMIS manager, partly explains why GIDA has not yet developed this part of the scheme (see also Allen et al., 2014). Having this knowledge beforehand was vital to the farmers, who grow mostly rice, maize, and other crops that require plenty of water. One could also argue that this exemplifies farmers deploying a strategy of manipulation to advance their interests. The farmers organized themselves into an association, ARDCFS, as part of the process of negotiating with GIDA to grant them informal usufruct rights in exchange for an annual fee.

In plural land rule environments, the formation of coalitions to gain informal usufruct rights is problematic at best. Mr. Boadu, a member of the ARDCFS, moved to the southern part of AKMIS land in 1983 when the entire nation was enduring harsh economic times: "I had no place to go, so together with two of my friends, we decided to farm here for our survival...we knew that the land was waterlogged" (Farmer interview at Roman Down, Ashaiman, June 2018). Together, they produced rice on a four-hectare plot. His friends later left to pursue other opportunities; one worked as an electrician and the other traveled to Spain. To secure this plot,

I tried to register the land with the TDC and Tema Municipal Assembly. However, I was told that the land has been acquired by the Government [i.e., GIDA], so they can't give me an outright ownership to the land (I am a private individual) but they said they will protect me or keep me secured (Farmer interview at Roman Down, Ashaiman, June 2018)

Mr. Boadu was not quite sure what was meant by "protect." However, after his plot was reduced to two hectares, due to encroachment by private developers, he realized the limitations of this protection. ARDCFS was formed to negotiate land rights with GIDA, but

they soon realized that the customary landowners, from whom GIDA (through TDC) purchased land for the AKMIS project, were reselling the land to private developers. The solution might appear obvious: GIDA should demolish unauthorized developments on AKMIS land. The AKMIS manager has tried engaging with the local government (i.e., Ashaiman Municipal Authority) and the Ministry of Water, Works, and Housing to at least warn prospective land buyers about the flooding problems. All these attempts have proved futile because the claims over this lands are so fluid that all the actors involved (farmers, GIDA, local government, and customary landowners) feel simultaneously both secure and insecure.

The ARDCFS farmers exemplify land rights gained through manipulation of knowledge and the building of localized network power. They have used knowledge to violate statutory (i.e., GIDA's) rules, and have thereby gained temporary and insecure access to land. To survive, they must work around or outside the land rules by illegally occupying the Roman Down area while also attempting to work within the land rules by negotiating with customary landowners. As one farmer described, a cycle of insecurity and struggle emerges – insecure land rights limit investment in the land, which affects productivity:

I sometimes don't want to buy more seeds to plant because anything can happen on this land. Sometime ago, some of us [farmers] were threatened by the chief's people [i.e., land guards] not to farm here again. I know that if I plant more, I can gain more, if God wills it. I will then be able to take good care of my family. But what if I plant more and they [i.e., land guards] come to sack us? (Farmer interview at Roman Down, Ashaiman, June 2018).

The AIFCS farmers have gained usufruct rights from the statutory authority (GIDA) by complying with the rules, including paying for the use of the land. Hence, they are empowered only to the extent that the statutory rules and their wealth permit. As noted, private developers who have negotiated with the customary landowners are encroaching on both the southern (i.e., Roman Down) and the northern parts of AKMIS. Conversations with the GIDA policy director unveiled the fluid interactions between power and knowledge that shape what qualifies as legal and illegal (i.e., encroachment) use of AKMIS land:

We find it difficult to protect the almost 200 ha of land under AKMIS. On paper, GIDA has the right to the land and thus has the power to evict anyone who has encroached on this land. However, we can't just decide to do things anyhow because we know and the encroachers also know that this will have serious political consequences for the ruling government. Again, our cultural values require us to respect the authority of our chiefs, so evicting these encroachers could be construed as disrespecting the traditional authorities who sold these land parcels. This is a delicate matter, to say the least (Stakeholder interview with GIDA, Accra, June 2018).

Knowledge of cultural values mediates power relations in land matters. Although AIFCS farmers have common law title to the AKMIS lands on which they farm, knowledge of cultural and political values ultimately mediates the power to enforce this right. As the AKMIS irrigation manager observed, "In the end, you don't want to step on the toes of your chiefs if you really know your cultural values and the political consequences of picking unnecessary fights with customary authorities" (Stakeholder interview with scheme manager at AKMIS, Ashaiman, June 2018).

6. Conclusion: Changing the dual land rules game through emancipatory food systems planning

In this paper we have used the lens of the emancipatory planning to analyze different practices in the Accra city-region's dual legal land system. Through these practices, farmers (and others) work around, outside, and/or within the rules of the land game. Table 1 shows how power, subjectivity, knowledge, and spaces are reconstituted and

embodied within specific land tenure practices. While these practices present opportunities for some farmers to access land—even on a temporary basis—they do not address the root of the problem: the complex game engendered by dual land rules.

Constitutional economics suggests that enforcing rules results in transaction costs, which can become prohibitive depending on the design of rules (see Brennan and Buchanan, 1985; Voigt, 1997; Buchanan, 2002; Frimpong Boamah, 2018). Thus, while the written laws (rules-in-form) concerning the state's powers in land matters seem clear, such powers do not align well with land use practices (rules-in-use). As a result, land use regulations are often difficult to enforce because they are subject to multiple legal contestations by customary authorities (e.g., Kasanga et al., 1996; Ayee et al., 2011; Frimpong Boamah and Walker, 2017) and other actors (e.g., Grant, 2006; Bob-Milliar and Obeng-Odoom, 2011; Farouk and Owusu, 2012). These enforcement challenges underpin the recent call to "...move beyond, for instance, prescriptions that center on 'enforcing planning laws'. Such prescriptions ignore, albeit inadvertently, the fact that (1) laws can be (mis) used to reinforce the power of the ruling elites and (2) the dual nature of land and planning laws present enforcement challenges—i.e., which laws must be enforced and by who?" (Frimpong Boamah and Amoako, 2019).

We conclude by briefly discussing policies that could help change the land game to benefit farmers and help assure a more sustainable urban food system.

Land rights in the Accra city-region are structured around power relations at multiple scales. Local- and national-level planning in Ghana remains vital for mediating the relationship between land rights and power. This mediation requires the planning field to consider the power relations between farmers and landowners alongside the relationships among landowners, local government agencies (e.g., planning departments), and regional and national government agencies (e.g., National Development Planning Commission, Land Use and Spatial Planning Authority, Lands Commission, etc.). An emancipatory planning vision should therefore consider how to achieve land rights for farmers through multi-scale persuasion, negotiations, authority, and network power. The executive secretary of the Ghana Lands Commission observed that food as a policy arena needs to be brought into the land reform agenda. This point touches on preemptive power, the ability to allow or disallow certain items to be put on the agenda. The planning director at the Accra Metropolitan Assembly also noted that the issue of farming specifically, and food issues broadly, are not being discussed as planning issues because both citizens and local government officials take food issues for granted.

This does not mean that the Accra Metropolitan Assembly has not engaged in food-related projects. Through its Agriculture Department and in collaborations with other agencies, the AMA undertakes projects that target farmers and other aspects of the food system (e.g., market facilities, food waste disposal, etc.). However, the director's point was that farming and food should be added to the assembly's planning and policy agenda, including the use of zoning and mechanisms to protect land for farming in light of increasing land values. The policy director at the MICZD (formerly at the Town and Country Planning Department) echoed this point when he asserted that it is problematic when people use land scarcity as an excuse not to discuss urban and peri-urban farming. To him, all the empty plots in the inner city reveal a planning failure. The ongoing second phase of the Land Administration Project (LAP II), the Accra Spatial Development Framework, and the Urban Policy Framework and Action Plan provide important spaces for coalition building among farmers, planners, real estate developers and other actors. These multi-scale coalitions can serve as a platform to:

- (1) Empower farmers to engage in dialogue on land rights with landowners, planners, real estate developers, and other policy officials, without fear of intimidation and manipulation;
- (2) Educate actors on different land rules, the challenges they pose to

Table 1
Elements of emancipatory food systems planning in Accra, Ghana.

Emancipatory elements	Work within the rules	Work around or outside the rules	Change the rules
Power	Land rights gained through authority and <i>power to possess usufruct rights</i> .	Land rights gained through manipulations and some form of localized network power.	Land rights gained through multi-scale persuasion, negotiations, authority, and network power.
Subjectivity	<i>Less empowered</i> farmers with <i>secured land rights</i> as they operate within vertical power relations in land matters.	<i>Empowered</i> farmers with <i>no or informal land rights</i> as they operate within <i>vertical power relations</i> in land matters.	<i>Empowered</i> farmers with <i>secured land rights</i> as they operate within <i>both horizontal and vertical power relations</i> in land matters.
Knowledge	Working with either explicit (e.g., scientific, legal) or tacit (e.g., cultural values) knowledge to comply with either or both statutory and customary land rules.	Working with either explicit (e.g., scientific, legal) or tacit (e.g., cultural values) knowledge to violate either or both statutory and customary land rules.	Working with both explicit and tacit knowledge to change both statutory and customary land rules.
Spaces	Spaces are commodified based on one's ability to pay-to-play the plural land rules game.	Spaces of solidarity are localized and temporary depending on how long the localized network exists for negotiation.	Multi-scale spaces of solidarity that evolves through negotiations, persuasion, and authority.

farmers, and short- and long-term opportunities to revise them to protect farmland;

- (3) Educate different actors to understand that land tenure, and, indeed, farming are part of the larger urban food system;
- (4) Propose alternative land rules that (a) support different urban and peri-urban land arrangements for farming (e.g., land trusts) and (b) compensate customary landowners through an intergenerational amortization approach (i.e. rather than paying a lump sum to the current chief or clan/family leader, farmers can pay yearly or seasonal payments over an agreed time period);
- (5) Design institutions and structures around these alternative models that involve both horizontal and vertical rule enforcement (i.e., polycentric governance) and can support the evolution of rules to meet the evolving future needs.

These suggestions capture the power, subjectivity, knowledge, and space dimensions of an emancipatory food systems planning approach. Moreover, they address the need for planning to integrate communicative rationality, specifically dialogues; value rationality, namely designing alternative rules; instrumental rationality, through optimizing alternative rules to protect farmlands with fair compensation; and strategic rationality, specifically designing power structures for horizontal and vertical enforcement of land rules. This sort of planning ensures an emancipatory approach that offers more avenues for inclusivity and more permanently empowers marginalized groups in planning interventions (Albrechts, 2003). Farmers' current land tenure practices alone cannot emancipate them from the complicated dual land rules. Their ability to farm in and around the city-region must be understood as part of the collective right to food, and as part of a broader discussion of the sustainability of urban and regional food systems. Local and national planning efforts must build the necessary coalitions and network power to actively advance a long-term vision for urban-rural food system planning.

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