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Expanding Cashew Nut Exporting from Ghana's Breadbasket: A Political Ecology of Changing Land Access and Use, and Impacts for Local Food Systems

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Abstract.

The Brong Ahafo region supplies most of Ghana's staple foods and is often described as the 'breadbasket' of Ghana. Despite the important role of this region in the provision of local food, farmers are shifting towards the cultivation of cashew nuts for export. The increasing production of cashew for export is driven by multiple factors across scale; including historical legacy of export-led agriculture, increasing global demand for cashew nuts, and a number of local level socio-cultural factors. While farmers may benefit from cashew production, the conversion of land into production of cashew poses local level socio-cultural and economic challenges. In this paper, we adopt a critical perspective through the lens of political ecology to demonstrate how the transition towards the production of cashew is driving land accumulation, social differentiation, alongside a decline in access to land for local food provisioning. Through the use of a range of qualitative methods, including interviews, focus group discussions, observation and policy document analysis, this paper reports on in-depth data collected from cashew farmers and local agricultural actors in the Brong Ahafo region. Findings demonstrate that cashew production is transforming land tenure relations through individualisation, alongside the acquisition of communal land for cashew cultivation. In particular, the acquisition of land by local elites, and alongside the increasing conversion of family land into cashew production, is changing existing social and land tenure relations, with profound outcomes for migrant farmers and local food provisioning. We conclude there is an urgent need for agricultural policies to consider these impacts of export-led cashew production for land tenure and local food security.

Keywords: agricultural change, Brong Ahafo, cashew nut, food security, Ghana, land use change.

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INTRODUCTION

Land in Ghana – and similar in much of the world – represents a productive asset upon which livelihoods are predicated (Amanor, 1999). For centuries, land in Ghana has been tied to the production of food for subsistence, with export crop production expanding from the 18th century onwards. This agricultural transformation was driven by political, economic and cultural colonisation by the British, the outcome of which drove the enclosure of land, and the privatisation and commercialisation of natural resources (Campbell, 2013). Export agriculture has continued to expand since the early colonial period, including via the production of tropical commodities destined for the so-called developed world (Campbell, 2013; Austin, 2007; Austin, 1987; Hill, 1961). Cashew nuts represent one of the most recent commodities to enter the export market. Since its introduction in the 1960s, cashew nut production has increased significantly in Ghana – including specifically over the past decade – a pattern that has also occurred in other West African countries (Evans et al., 2015; Rabany et al., 2015). The primary site for Ghana's growing cashew nut industry is in Brong Ahafo[1], a region often described as Ghana's 'breadbasket'. Brong Ahafo has earned this title on the basis that it produces 30% of Ghana's staple foods such as maize, yam, cassava, beans, sorghum and cowpea (Ghana Statistical Service, 2013; Statistics Research and Information Directorate-Ministry of Food and Agriculture (SRID-MOFA), 2015). The Brong Ahafo region has a long history of integration within the global economy, including via gold mining and the production of cocoa, coffee and timber for export. The expansion of cashew production is further extending the region's global market integration (Amanor and Pabi, 2007; Amanor, 2009). Brong Ahafo's participation in the global economy via cashew trading – the focus of this paper – is driving significant social and ecological transformation at the local level. Despite the increasing conversion of land into cashew production for export, there has been little research giving attention to analysing these changes – with the exception of Evans et al. (2015) and Amanor (2009), who have analysed the changing power and land tenure relations associated with cashew production in the region.

This paper advances these existing studies by examining the transformation occurring in the Brong Ahafo region alongside the expansion of cashew nut production. Through a political ecology approach, the paper considers the ways cashew industry expansion is connected to changes in land tenure, including impacts for changing land access and use. We examine some of the impacts of these socio-political changes related to land for local level social relations and local food production. On the basis of the findings presented, we argue the transformations associated with Ghana's expanding cashew industry in the Brong Ahafo region is concentrating and individualising land ownership and control, with outcomes that reinforce social differentiation, inequalities and class struggle. Migrant farmers are amongst some of the most vulnerable. These findings contribute to the nascent literature documenting accelerated cashew production in Ghana and its local level impacts (see for example Evans et al., 2015; Amanor, 2009).

This paper begins by providing some historical context related to the expansion of plantation agriculture, as well as describing the extension of colonial legacies of plantation agriculture in shaping contemporary local economic and socio-cultural dynamics in Ghana. The paper then

[1] Note that after the fieldwork in 2016, the Brong Ahafo region was divided into three administrative regions namely Bono East, Brong Ahafo and Ahafo through a referendum in 2018. In this paper, Brong Ahafo region is a collection of three regions. Also all administrative regions mentioned in this paper refers to the regions before the creations of six new regions through a referendum in 2018.

introduces the case study of cashew nut production in the Brong Ahafo region. Drawing from political ecology, we analyse the transformations associated with the expanding cashew nut sector in this region, including changes in land tenure and labour relations. At the heart of this analysis are struggles related to power, with outcomes, we argue, that disadvantage already vulnerable communities, including smallholder farmers, migrant workers and ethnic minorities. On the basis of findings presented, we conclude with policy recommendations that can inform policy and planning related to agricultural transition in Ghana.

PLANTATION AGRICULTURE FOR DEVELOPMENT AND THE EXPANSION OF CASHEW NUT PRODUCTION

The concentration of wealth and power amongst elites remains a colonial legacy across much of the global South (Bryant, 1998). The expansion of commercial export agriculture during the colonial period provided a conducive environment for such wealth accumulation. Importantly too, it established the foundations for new forms of industrial commodity production in so-called postcolonial contexts. Colonial plantations, in particular, have provided a basis for the emergence of new social, economic and labour relations, and with outcomes that continue to define current agrarian social structures across the globe, including Ghana, the focus of this paper.

The arrival of Europeans to The Gold Coast (now Ghana) in 1472 marked the beginning of significant political, economic, social and environmental change in the region. The expansion of the colonial project diffused "western civilisation", including market based capitalism, and science and technological "innovation" across landscapes, ecologies and culture. Importantly, the precolonial belief that the environment was sacred was altered, with a colonial ontology that assumed the environment was an inert object available for control – and exploitation – by humans (Campbell, 2013). Although Portuguese were the first European colonisers to establish trade relations with The Gold Coast in the late 15th century, the Danish later introduced plantation agriculture to The Gold Coast by the late 18th century (Yaro et al., 2016; Austin, 2010). Danish plantations were, for the most part, established at the foothills of the Akwapim Range (Awadzi et al., 2001). The main purpose of such plantations was to produce crops for export to the empire, while making use of slave labour without the cost of transporting African slaves to the West Indies and the Americas.

Although there were intentions by the Dutch, British and other European colonial powers to expand plantation agriculture in The Gold Coast, initial plantation agriculture failed to gain acceptance amongst native farmers (Fold and Whitfield, 2012; Awadzi et al., 2001). The rejection of plantations as a model of farming was tied to the struggle of European powers to secure territorial dominance, the fear that the plantation system would dispossess and alienate native people from their land – a fear that would later be realised – alongside internal ethnic conflicts (Yaro et al., 2016; Gyasi, 1996; Dickson, 1969). However, the introduction of cocoa by a Gold Coast native, Tetteh Quarshie in 1879, went on to gain wide acceptance among farmers of the forest regions, and quickly established as a major economic activity by the 1890s (Campbell, 2013). Reflecting this, by 1920 The Gold Coast supplied about 40% of the world's cocoa, positioning it as the world's leading producer of cocoa (Green and Hymer, 1966). While cocoa production was primarily undertaken by local populations – with some technical assistance provided by the British colonial government – Europeans acted as merchants, buying and shipping

cocoa beans to Europe. This expanding cocoa trade integrated Ghanaian smallholder farmers into global economic systems, and tied their livelihoods to the global economy (Campbell, 2013; Grier, 1981).

Production of cocoa was widely recognised as suitable for cultivation in forest regions, and as a result, its production expanded across all the forest regions of Ghana during the colonial and postcolonial eras (Berry, 1993; Whitfield, 2018). As an outcome, cocoa is today mostly produced in the forest areas of the Western, Ashanti, Eastern, Volta and Brong Ahafo regions. In the colonial period, Ashanti was established as the centre of economic activities, including the production of cocoa. Cocoa production was especially concentrated in Ashanti (which included the Brong Ahafo region) during the colonial era. The Brong Ahafo region remains the third largest producer of cocoa after the Western and Ashanti regions (Ghana Statistical Service, 2013). Alongside cocoa, other cash crops such as coffee, rubber and tobacco have also historically been produced in the Brong Ahafo region (Ghana Statistical Service, 2013).

Despite its expanding export-led agriculture industries, the Brong Ahafo region has also historically played a vital role as the 'breadbasket' of Ghana, with the region dominating production of major cereal and tuber staples destined for national consumption, including maize, yam and cassava (SRID-MOFA, 2015). Food crops from the Brong Ahafo region are largely consumed in the countries' urban areas, suggesting the importance of the region for Ghana's domestic food security.

Alongside the historical importance of the Brong Ahafo region to Ghana's food provisioning, the region has experienced recent, and on-going, expansion of export cropping (see Amanor, 2009; Boafo et al., 2019). Cashew nuts represent one of the latest of these export crops gaining acceptance amongst farmers in the region. While it is not clear how cashew production first arrived in the Brong Ahafo region, Ghana's cashew production has a history that dates back to at least the 1960s (Rood, 2017; Evans et al., 2015). During its early production phase, limited markets, combined with low farm gate prices and a lack of government policy support, all constrained sectorial expansion (Frimpong, 2016). By the 1970s, however, cashew production began to expand from the Ivory Coast along the Ivoirian-Ghanaian border into the Brong Ahafo region (Amanor, 2009). By the 1980s, Ghana's national Economic Recovery Programme (ERP) began to encourage the production of cashew as one of a number of non-traditional export crops that could assist to achieve export diversification. This state-led agricultural exporting agenda was part of the broader modernisation and industrialisation of agriculture, reflecting the broader neoliberal policy turn occurring across many African countries (Wiegratz et al., 2018). The liberalisation of commodity markets as part of the ERP and Structural Adjustment Programme further encouraged export crop production, including of cashew nuts.

As a result of state-led market supports and the expansion of cashew cultivation via farmer networks, by 1991 Ghana was exporting 15 metric tonnes of cashew (Government of Ghana, 2000). Estimates indicate that export of raw cashew nuts continued to increase to 3,571 metric tonnes by 1997 (Government of Ghana, 2000). These figures have continued to rise, and by 2015 Ghana was producing 85,000 metric tonnes of raw cashew nuts, of which 98% was exported to Asia (Rabany et al., 2015; Heinrich, 2012). A mix of state and development sector support has supported this cashew industry expansion. The Ghanaian Government's Ministry of Food and Agriculture, for example, commissioned cashew projects with the aim of assessing the potential of cashew production, and to support ongoing development of the sector (Cashew Development

Project, 2009). In addition to these, and other government initiatives, a number of donors – including from cashew consuming countries – have also funded programmes aimed at promoting the production of cashew (Amanor, 2009). In recent years, United States Agency for International Development (USAID), Gates Foundation and *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ) have each funded projects aimed at increasing cashew production in Ghana and other African countries (Africa Cashew Alliance, 2016); all of which reflects the privatisation of agricultural development in Ghana. Through these supports, there has been increasing conversion of food crop land into cashew production in the Brong Ahafo region for export. To situate the local level impacts of this cashew production expansion in an analytical context, we now turn to examine the political ecology of cashew production.

THE POLITICAL ECOLOGY OF CASHEW NUT

This paper adopts a political ecology approach to examine the drivers and impacts associated with the on-going socio-economic and ecological transformation of the Brong Ahafo region – Ghana's breadbasket – via cashew nut expansion. In so doing, we acknowledge the uptake of cashew in this region is connected to broad level agrarian restructuring and rural transformation. This approach enables us to draw attention to the intersection between nature and socio-political relationships, and the socio-political, historical and economic forms and forces shaping resource management, land access and use (see also Neumann, 2009; Tan-Mullins, 2007). Political ecology provides a framework for local level analysis of struggles that sit at the intersection of environment and society, that are also grounded in a national and global analysis (Bryant, 1998).

Political ecology has a particular interest in the analysis of access to, and control over, what is often highly contested; land and natural resources (Swyngedouw and Heynen, 2003). Land – including its use and access – is constituted and reconstituted via on-going struggles, including via both material and discursive means. Budd (2004) describes such attempts to control land, water and the environment as highly contested, and generally underpinned by unequal power structures and politics. By focusing on specific points of contestation related to land, our paper offers new understandings of how use of, and access to, land and natural resources is being (re) organised alongside the expanding cashew nut sector in Ghana. Specifically, our analysis of expanding cashew production in the Brong Ahafo region illuminates struggles to secure access to land as the basis for participation in the growing cashew nut export economy. These struggles play out at the local scale – as documented in this paper – and are also connected to the global capitalist political economy, including growing international consumer demand for cashew nuts, alongside national and international neoliberal policies driving the modernisation and industrialisation of Ghana's agriculture (see, for instance, Boafo et al., 2019).

In addition to drawing attention to changes in the forms of access and control over land resources associated with expanding cashew production in the Brong Ahafo region, our approach also enables analysis of the broader social and livelihood implications of these changes (see also Watts, 2000). Specifically, it enables us to identify some of the social and ecological outcomes of these processes, including their impacts for livelihoods, property regimes and social relations (Castree, 2001; Escobar, 1999).

To do this, our analysis is directed towards questions of power, including how relations of power shape access to, and the distribution and control over, land and other resources. Drawing from Robbins (2012), and Zimmerer and Bassett (2003), we conceptualise power as 'relational',

and mediated through processes in which resources are defined, accessed and contested (Ahlborg and Nightingale, 2018; Allen, 2014). We take power then, as the *ability* to control productive resources, such as land, water and biological materials. The power to control land, and more broadly, the means of production, is derived through *ability* (social and economic capital), rather than *rights* acquired through traditional practices. By approaching power as relational, we are able to understand its multiple effects; including empowering some, while engendering new forms of domination and control over others (Bryant, 1998).

Within the social context of Ghana – the focus of this study – local elites are able to assert power over lower classes of society by force, including via the uneven distribution of resources in society. Local elites are able to wield power on the basis of the privileges they derive from existing social institutions. Class differentiation is in turn embedded in these political and social relations of agrarian production, with outcomes that often disadvantage already marginal groups – including smallholder and migrant farmers, and Indigenous peoples (Nyantakyi-Frimpong and Bezner-Kerr, 2017). We now turn to introduce the case study that comprises the focus of our paper.

THE CASE OF CASHEW NUT PRODUCTION IN THE BRONG AHAFO REGION

Our study was conducted in Brong Ahafo, the second largest region – in terms of landmass – in Ghana. The region has tremendous agricultural endowments, including favourable agro-ecological and climatic conditions for agricultural production (Amanor, 2009; Amanor and Pabi, 2007). The region has also been the centre of both historical and contemporary export tree crop production, alongside land grabbing and enclosures (see Boamah, 2014; Amanor, 2009). Fieldwork was conducted in four communities across two municipalities engaged in cashew production in the region; Wenchi and Kintampo North Municipalities.

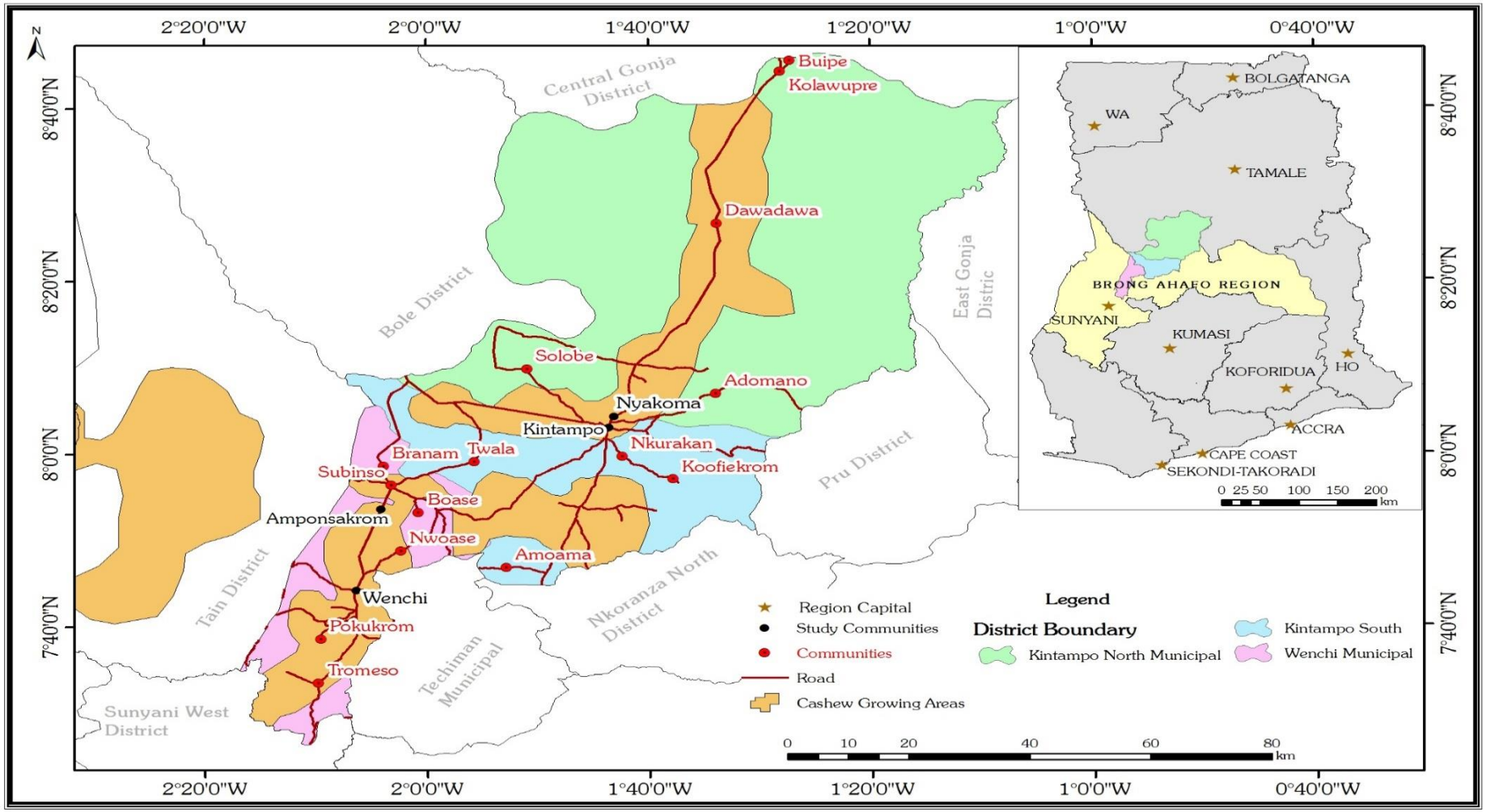
The Wenchi Municipality is located in the western part of the region, and covers close to 100 agrarian villages. The Municipality has about 493,215 hectares of cultivable land that is suitable for both food crops and cashew nuts (Cashew Development Project, 2004). There are two distinct agro-ecological zones; a moist semi-deciduous zone that in the south-west, and a Guinea savannah woodland zone in the north (Cashew Development Project, 2004). There are two wet seasons that allow for two farming seasons in a year. The major farming season begins from March to July, followed by a minor season from August to December. The Municipality is inhabited by Bonos, Dagaabas, Badu, Banda, Mos, Sisalas and other migrant ethnic groups, however, the Bonos are the traditional owners of the land. Fieldwork was conducted in Wenchi and Amponsahkrom. While Wenchi is relatively endowed with socio-economic services, alongside several emerging commercial activities, Amponsahkrom is classified as one of the poorest communities in the Municipality, and its inhabitants are mostly migrant/landless farmers (Dagaabas) (WMAMTDP, 2014-2017).

Meanwhile, Kintampo North Municipality is located in the northern part of the Brong Ahafo region, and covers a surface area of 5,108km^2 (Kintampo Municipal Assembly, 2014). The Municipality comprises interior wooded savannah, however the area comprises a transitional zone, and therefore does not exhibit typical savannah characteristics. With its strategic location in the centre of Ghana, it serves as a transit point between the northern and southern sectors of the country, as well as a key market for agricultural products, including, maize, yam and cassava. The ethnic composition of the Municipality is heterogeneous, with the Mos and Nkoranzas as the

Indigenous peoples of the land. Fieldwork was conducted in Kintampo and Nyakoma. Inhabitants of Nyakoma are migrant farmers from northern Ghana.

Production of tree crops such as cashew requires secure access to land. In Brong Ahafo, including the two Municipalities included in this study, land is communally owned and used. Securing long-term access to land for cashew production therefore sometimes requires alienation – or eviction – of other communal users (Amanor, 2009). The dispossession of other communal users from land – including land previously relied upon for livelihood activities – often produces struggle and differentiation between landowners, local elites and migrant farmers. Indeed, these social dynamics are now part and parcel of the 'differentiated character of contemporary agrarian change' and local politics of production (Nyantakyi-Frimpong and Bezner-Kerr, 2017, 425).

Figure 1: A Map Showing cashew growing are in Ghana's Brong Ahafo Region, including the research communities



Source: Modified from Center for Remote Sensing and Geographic Information Service (CERGIS), University of Ghana (*n. d.*)

RESEARCH METHODS

Our paper sets out to examine the impacts of expanding cashew production for local food production, land tenure and labour relations across the four selected communities in the Brong Ahafo region (introduced above). To do this, we adopted a qualitative case study approach (Yin, 2003), enabling us to generate insights into emerging land use changes and their impacts across these four selected communities. Given the central role of the Brong Ahafo region for national food provisioning, this case generates findings that can inform policy and planning related to domestic and export agriculture in Ghana.

As part of this case study, the first author conducted interviews and focus groups with farmers, government officials and local leaders over six-months, between June and November 2016. In total, in-depth interviews were conducted with 39 women and men farmers (within an age range of 27 to 72 years) across the four cashew growing communities. Participants were sought from diverse ethnic groups. In the Wenchi Municipality, most participants belonged to the Bono ethnic group (indigenes of the Wenchi area) and Dagaabas (migrant farmers from the Upper West region of Ghana). Meanwhile in the Kintampo Municipality, participants consisted of Mos (one group of indigenes of the area) and Konkombas (migrant farmers from Northern region of Ghana). While cashew farms varied in size from one acre to more than 100 acres, the majority of our participants were smallholders with an average cashew farm size of two acres. Migrant farmers who participated in this research do not have long-term land tenure security and depend on sharecropping or land rental arrangements to access farmland from locals (indigenes). The locals (indigenes) have a relatively better tenure security on the basis that they could access land through inheritance or existing customary tenure relations. Large-scale cashew farmers were not included in the study; as they were difficult to identify, with most wealthy local landowners living in cities and therefore distanced from the study sites. Moreover, the research was unable to collect data on the total area of land under cashew production. This is because cashew production is an emerging sector in Ghana, and on this basis it has attracted research only recently, the result of which results in limited data available.

Interviews were conducted with key informants at the village, district and national levels. This included interviews with nine representatives of District Agriculture Offices, seven traditional/assembly members, and one representative from the Ministry of Food and Agriculture.

Two focus groups comprising both women and men were also conducted in Amponsahkrom and Nyakoma. This enabled in-depth discussion of themes that emerged from the interviews. Five farms that belonged to cashew farmers were also visited to observe – and learn firsthand – about recent changes in land use and agronomic practices. All interviews and focus group discussions

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were conducted in Akan; the dominant language spoken in much of Brong Ahafo, and the first language of the first author.

While the findings presented here are limited to the selected four communities included in this study, and therefore should not be regarded as representative of the entire Brong Ahafo region, they provide important insights into emerging trends occurring across the region. We turn now to present these findings, starting first with details of how conversion of land to cashew cultivation is associated with social and cultural struggles, and with outcomes that are driving changes in land tenure.

CASHEW PRODUCTION ASSOCIATED WITH CHANGES IN LAND TENURE

In many societies in Ghana, including the four communities included in this study, land represents a cultural, social, economic, productive and intergenerational asset upon which social identity, power, livelihoods and inheritance are predicated. Customarily, land is divided into stool,[2] communal, family and individual land. Although each of these categories of land is designated under the guidance of the chieftaincy institution, chiefs directly administer stool land. The majority of farmers included in this study farm on family and communal lands. The Bonos of Wenchi predominantly practice the family land tenure system, meanwhile the Mos of Kintampo practice the communal land tenure system. We describe each of these in turn, including how contestation related to expanding cashew nut production is driving pressure within families and across communities.

First, Wenchi is largely comprised of the Bono ethnic group, a sub-grouping of the Akans[3], an ethnic group who make up 48% of Ghana's population (Kutsoati and Morck, 2012). The Akans practice matrilineal inheritance and, among them, family land is inherited from one's maternal lineage. One interviewee – a family head and chief in the Wenchi Traditional Council – explained that family land was established when settlers first started farming on a portion of uncultivated land. On this basis, wherever a member of the family started to farm, this would eventually become part of the family land. The family/clan head, earning their position on the basis of genealogical seniority, is the custodian of family land. The allodium, however, is vested in the paramount chief, who is the custodian of all land and mediator in any disputes. The family head is responsible for allocating a portion of this land to family members for subsistence farming. This process of allocation of family land has its origins in a tradition in which food was considered as a basic need, and as a result, each member of the family was ensured access to land to produce food to meet basic subsistence needs. In short, each family member was ensured usufruct rights to the family land, irrespective of their gender, social status or age (except for very young people).

This Bono tradition of land inheritance prohibits the individualisation of family land, with the tenet that land belongs to every member of the family, including past and future generations. On the basis of this land tenure system, no one is able to acquire exclusive possession. In the case where tree crops (including cashew nut trees) are planted, while the farmer may have exclusive rights to the produce, he or she cannot transfer their land use right to their descendants under any circumstances. This was confirmed by one chief, who explained that both food and cash (tree) crops could be grown on family land, but the farm would return to the family when the farmer died. Passing family land, or a plantation on family land, onto one's children as property is also prohibited. While this tradition has been observed from generation to generation, increasing

[2] Stool refers to community land held in trust by Chiefs for the community.
[3] The Akans are the largest ethnic grouping in Ghana.

pressure to convert land to cashew production was described by some as transforming these land tenure traditions, as we detail further below.

Second, in Kintampo – especially among the Mo ethnic group – farmland belongs to specific families. Every member of the Mo ethnic group is allowed to use any portion of their family land once it is free. There is no family inheritance of land – except the families that own the land – given everybody belonging to this ethnic group can use the land. This pattern of land use among the Mos reflects a dictum of communal living and togetherness, arguably more so than other ethnicities in Ghana. However, the introduction of cashew production is associated with the Mos planting cashew on communal land. This may drive long-term individual ownership of communal land so as to enable harvest of cashew nuts.

These divergent land tenure arrangements related to the Bonos in Wenchi and the Mos in Kintampo appear to shape local level land tenure related impacts arising from cashew cultivation.

In Wenchi (Bono), for example, once a male head of household establishes cashew on their family land, other members of the family commonly described the land as property that could be inherited. This was not always the case, however, with some family members disagreeing with this new tenure arrangement, arguing instead the cashew farm remains the property of the entire family.

In an attempt to avoid disagreement and dispute, some male heads of households described resorting to the court system to secure tenure on the family land. This is undertaken in two ways. First, after a cashew farm has been established on the family land, they may instigate the preparation of a lease through the court to formally recognise the owner of the cashew farm as the owner of the land on which the cashew farm is established. Second, a Will may be prepared that allocates portions of the cashew farm to both the extended family and wife and/or children. Each of these processes was described as intending to secure tenure over portions of family land on which cashew is established. In cases where a cashew farmer dies without a Will, or without determining proof of land ownership, the family – led by the family head – is able to take over the entire cashew plantation. This outcome, however, can drive tensions between the wife and/or children, and extended family of the deceased. As one participant in Wenchi testified:

> For me my cashew farm will go to my children; but if I had not planted cashew on the land, the land will go to my extended/maternal family when I pass on.

Similarly, in Kintampo, members of the Mos ethnic group who farm on communal land described purchasing a portion of the land on which cashew was established from the chief, or owners of the land. For these farmers, they described their cashew farms would go to their children before they passed on, even though the farms were established on communal land. These farmers explained that obtaining exclusive rights for cashew production on communal land via transferring cashew farms to their children was changing intra and (inter) generational land tenure traditions. Demonstrating this, one farmer asserted:

> I agree that cashew will change the land tenure system because all of us will make sure all our cashew farms go to our children before we pass on [……] So I agree that cashew farming will change our land tenure systems and inheritance.

Another farmer similarly explained:

> The tradition is already changing, because if we continue to plant cashew on communal land, a greater part of the land will go to our children.

Evidence from the field indicates that family members from both Wenchi and Kintampo, especially those from middle and older generations, are individualising family and communal land through cashew production. These findings concur with those of Evans et al. (2015), who similarly found that increasing conversion of family land into cashew production was individualising family land in Seketia, also in the Brong Ahafo region. As an outcome of this changing land tenure arrangement, cashew production is driving land concentration, including amongst middle-aged and older generations. At the same time, younger generations are increasingly denied usufruct rights to family or communal land. Even if the younger generation were to inherit family land in the future, this land will likely be tied to cashew production.

LOCAL ELITES AND "BURGERS" LOCK UP COMMON LAND FOR CASHEW PRODUCTION

In addition to the tensions associated with changing land tenure arrangements – including patterns in our findings that demonstrate the concentration of land ownership and exclusion of younger farmers – members of cashew growing communities also described the expansion of cashew production as driving the capture of land by local elites. Demonstrating this, and on the basis of growing recognition of cashew nuts as an income earning opportunity, local elites with the financial capacity to acquire land and labour required for cashew production have begun to secure land for cashew growing. Local elites here refer to wealthy Ghanaian locals in the cashew growing areas, often living somewhere else in Ghana, while "Burger" is a local slang used to describe "transcontinental migrants who have achieved middle-class status in Ghana by doing working-class jobs in Western Europe or North America" (Nieswand, 2014, p.403). In particular, "Burgers" were described as able to acquire land through relatives who were living in cashew growing communities, alongside other social relations – including informal and formal relationships with local elite business and government representatives – that may also assist in mediating the land acquisition process.

Many farmers described the introduction of cashew nut exporting as corresponding with an increase in land acquisition in the region. Some local elites, including those who did not previously own land, were described as buying and registering common land (stool and family land), so as to obtain secure tenure. This often occurred on land that was occupied by either migrant farmers or Indigenes of the area. Of significance, across all four communities, the largest cashew farms were those owned by wealthy farmers, or these local elites (see also Amanor, 2009). Demonstrating this, a local Chairperson of cashew farmers in Wenchi explained the average cashew farm size in the Wenchi Municipality was two acres (which included over 4000 cashew farms). Yet despite this average, he explained that some farms were up to 40, 50 and 100 acres. In explaining the growing number of large farms in the municipality, he explained:

> Many people have come here to acquire land for cashew production. These are business people, even Parliamentarians. There is a Member of Parliament from [….], he has about 200 acres of cashew farm around [……] District.

Land acquisition by elites for large-scale cashew production is displacing migrant farmers, who describe increasingly struggling to maintain secure access to land. As detailed above, Amponsahkrom (in the Wenchi area) and Nyakoma (in the Kintampo area) are comprised of migrant communities that include about 90% of their inhabitants from the northern part of Ghana. In Amponsahkrom, most of the migrants farmed on lands belonging to indigenes of the area

(family land) and Wenchi Traditional Council (Stool land), and were enabled via contractual arrangements, such as sharecropping or land rental. In some cases, migrants who farmed on stool land described paying annual land levies to the Traditional Council. Such arrangements, however, leave migrant farmers without secured tenure over land they farm, circumstances that enabled them to be evicted when a portion of the land was leased out or sold to local elites, or "Burgers". Many migrant farmers described land as increasingly leased out to local elites and "Burgers", who they identified as coming to increasingly dominate the cashew industry. Increasing land acquisition by local elites for cashew production was described as increasingly threatening the livelihoods of migrant farmers, with some migrant farmers reporting they had already been displaced by large-scale land acquisition from "Burgers" and local elites. The Odikro[4] of Amponsahkrom similarly explained:

> The "Omanhene" [Paramount chief] has leased out the stool land to "Burgers". For instance, there is a village here called Wiafe, there were many "Dagaabas" in that village but the "Omanhene" has leased out the land to "Burgers", so the "Dagaabas" do not have any place to farm food crops. Some of them have relocated to other villages to search for land. Some of the "Burgers" gave the land to them to intercrop cashew with food crops and when the cashew grows, they leave. The land issues are very complex now.

These land acquisitions do not only affect migrant farmers, but also indigenes of the area who live in Amponsahkrom. Demonstrating this, in one focus group discussion a Bono woman described her concerns related to the increasing acquisition of land by "Burgers":

> Because the "Burgers" are buying land, land is scarce here. Currently, even if you own a piece of land here, but you are not careful, someone who is wealthy would take over your land from you.

This increasing acquisition of land for cashew production by local elites and "Burgers" is reinforcing existing social differentiation, alongside continuing to marginalise the landless class, mostly comprising migrant farmers. While cashew production is promoted by government and donors as a livelihood diversification strategy, and therefore a pathway out of poverty, the rising acquisition and concentration of land amongst local elites and privileged rural individuals raises serious questions about the potential for cashew production to deliver poverty alleviation. The emergence of cashew production appears to consolidate the position and power of those landowners and local elites who can afford to buy land for cashew production, alongside driving the commodification and commercialisation of land (also see Amanor, 2008; 2009). A similar pattern was evidence related to the plantation cocoa industry in Ghana. In that case, world demand for cocoa from the 1890s to the 1920s drove significant changes in the land tenure system, as well as impacting socio-economic patterns in Ghana (see Austin, 2007). The commodification of land via expanding cocoa production during the colonial days consolidated the powers of chiefs, family heads and local elites. These have historically remained key actors in land transactions in the export crop sector in Ghana (Amanor, 1999; 2009; Yaro et al., 2017).

[4] A traditional leader of the community who represents the paramount chief.

CHANGING LABOUR RELATIONS, RESISTANCE AND CLASS STRUGGLE

The scramble for land for cashew production, as described above, is commercialising land tenure in the communities included in this research. Historically, migrant and landless farmers in many Akan communities of the forest south, including cashew growing areas, accessed land for farming through sharecropping arrangements (Austin, 1987; Pogucki, 1955). Migrant farmers in Amponsahkrom, for example, described conditions prior to the introduction of cashew production, where sharecropping and land rental were the main arrangements through which they accessed land. However, since the introduction of cashew, they explained that sharecropping arrangements have more frequently evolved into "Taungya",[5] a system of land use whereby land is released to migrant farmers for food crops, while landowners planted cashew on the farm. As part of this arrangement, migrant farmers described not being required to share the food they produced with the landowners or pay land rent, however they were required to provide labour to support the maintenance of the cashew trees for three years, including when intercropping was no longer possible on the basis that the canopy and rooting system of the cashew trees constrained mixed species plantings.

Some of the local elites and "Burgers" who have acquired land for cashew production often entered into "Taungya" arrangement with migrant farmers who, in some instances, were already farming on the land. One migrant farmer in Amponsahkrom explained:

> The "Burgers", after buying the land, will allow you to work on the farm or take care of the cashew plantation for them by intercropping food crops with cashew trees and when the cashew trees grow, you have to leave the land. Some of the "Burgers" too would sack you from the land immediately after they buy it.

This emerging "Taungya" system was, in some cases, driving tension between migrant farmers and landowners in the cashew growing communities we undertook this research. Such tension was emerging in the context of the "Taungya" system, which does not give migrant farmers continuous access to land, thereby limiting migrant farmers to just three years of intercropping food crops between cashew trees. In addition, this new system was described by many migrant farmers as exploitative, on the basis they did not receive any compensation for their loss of access to land. This form of labour exploitation was enabled via the condition that required migrant farmers to maintain the cashew farms – without any additional labour input from the landowners. This is an arrangement migrant farmers described increasingly resisting.

Such resistance was observed most notably in Nyakoma (in the Kintampo area), where migrant farmers were engaged in cropping on land belonging to the Mo ethnic group. These migrant farmers, while describing the land as not belonging to them, were protesting what they described as labour exploitation. Such tension and struggle between migrant farmers and landowners is not unique to cashew production; and reflects broader agrarian tensions and class struggles in Africa (Yaro et al., 2017; Bernstein, 1979).

Based on our findings, we argue the promotion of cashew production – despite its championing as a pathway out of poverty for poor farmers – is driving impoverishment and dispossession through land accumulation and labour exploitation by landowners, local elites and "Burgers". These processes of land accumulation and labour exploitation are, however, not without resistance,

[5] *Taungya* is a forestry system where land is released to farmers to inter-plant trees with food crops to serve the farmers need for arable land and reforestation (FAO, 1984).

the outcome of which is manifest in class-based struggles. The emerging land capture and labour exploitation is critical to understand both historical and contemporary outcomes of agrarian change in Ghana. The seizure of land from migrant farmers, who mostly produce food as a source of livelihood, and its increasing conversion into cashew production, raises concerns for food production. With this as background, we now turn to discuss how cashew production is driving food insecurity concerns.

CASHEW PRODUCTION DRIVES FOOD INSECURITY CONCERNS

The Brong Ahafo region has historically been the 'breadbasket' of Ghana, with the region noted for maize, yam and cassava production, including for both local (regional) and national consumption (Amanor and Pabi, 2007). The region leads in the production of these food crops, which are major staples in Ghana. The concentration of food production in this region is supported by favorable agro-climatic conditions that are suitable for the cultivation of a variety of local food crops. The region supplies most of Ghana's staple foods that are consumed nationwide, particularly in the urban south. Indeed, production of these staple crops has been a major livelihood activity of migrant farmers in the region over many decades. The expansion of market-oriented crops however, including cashew nuts, poses significant challenges for ensuring regional and national food security.

Despite the possible economic benefits that might be realized via cashew production, many farmers expressed growing concerns about the impacts of expanding cashew production for local food provisioning. The majority of participants included in this study, for example, described being worried about the impacts of changes in land use, alongside the concentration of land amongst elites, including the possible impacts for meeting national food needs. Although there are currently no available figures to measure the land use trade-off and associated reduction in food production due to conversion to cashew, local agriculture officers at the District Agriculture offices similarly described cashew production as affecting food production. For example, a Crop Development officer at Wenchi Municipal Assembly stated:

> Cashew production will make the prices of food to go high, because every farmer is going into it.

Similarly, some farmers described a reduction in the production of food as driving the cost of food upwards at local markets. One woman in Amponsahkrom, for example, lamented the impacts of cashew production during a focus group:

> Cashew production will bring famine to this community. People are saying they would buy rice with income from cashew farm. What if the rice is not available to buy? What would we eat? It is maize that gives us food here and we may no longer farm maize because of cashew, so what are we going to eat? This will bring famine here, and the rest of Ghana.

Another farmer in Kintampo juxtaposed the case of cashew with cocoa production in Sefwi (a well noted area of cocoa production in Ghana):

> The tree crops are good, but it will bring famine to this place. Because some have planted cashew all over and they don't have any place left for food crops. It will be like Sefwi. The people of Sefwi use to farm plantain a lot, but because of cocoa

> there is no land for plantain again. It is good we farm cashew, but we have to limit ourselves.

While some farmers expressed support for converting their land to cashew nut production, they also reflected upon the impacts for local food production. While farmers expressed concerns about a coming famine within their own communities, they similarly expressed concerns about famine in urban areas of Ghana that depended upon food grown in the Brong Ahafo region. Demonstrating this, one older farmer, who had grown maize for much of his life, explained that if maize production in Brong Ahafo region reduced, the urban south of Ghana would experience severe famine:

> If production of maize reduces, there will be famine in the urban south of Ghana; because we supply the nation with maize, and if the production reduces, then there will be famine because the cost of maize will increase as well.

These emerging trends in Ghana's 'breadbasket' resonate with evidence elsewhere in the global South; where local food growing has been replaced by the cultivation of export commodities, driving questions and challenges for local food security (Lawrence, 2017; Rosin et al., 2012)

Given widely shared concerns related to the challenges of export cashew production for local food security, a number of farmers described reserving a small portion of their land for production of food for the household. In these cases, farmers described limiting food cropping to just those crops destined for household consumption. The remaining majority of land was designated to cashew production. If this trend continues, the Brong Ahafo region can be expected to have limited surplus food available to meet the demands of urban Ghanaians.

Some farmers described the deployment of a range of other strategies as they attempted to remain food secure alongside conversion of their farmland into cashew nut. Amongst these strategies included the practice of intercropping cashew trees with food crops, including maize, yam, groundnut and cassava. However, and as detailed above, intercropping was described as only possible during the first three years of cashew farm establishment. After this, the cashew trees form a closed canopy and a spreading rooting system, which prohibits intercropping.

Based on the results presented in this paper, the increasing production of cashew nuts in Ghana's 'breadbasket' for sale in the global market can be understood as presenting an immediate threat to local – referring to both household level and national – food security. This is particularly worrying given the Brong Ahafo region as supplier of most of Ghana's local food requirements, especially urban Ghanaians (Amanor and Pabi, 2007; Amanor, 2009). Already, farmers in cashew growing areas describe producing less food for themselves, and for sale in the local markets (see also Evans et al., 2015). This is likely to pose significant challenges for ensuring availability and accessibility of traditional food staples, both within the region and across Ghana.

DISCUSSION AND CONCLUSIONS

The paper has demonstrated that expansion of cashew production in Ghana – including in the Brong Ahafo region – is associated with extensive land use change, and alongside socio-economic impacts at the local level. Foremost amongst these is the challenge of ensuring local food security for both the region, and more broadly across Ghana. The conversion of land from local food growing to a cash crop intended for export is driving this food security challenge. Given state, private and development sector support for on-going expansion of the cashew export industry, these challenges and tensions can be expected to continue into the future.

Whilst our paper has presented new empirical insights and understandings related to the conflicts and tensions associated with Ghana's expanding cashew industry, it has also demonstrated the extension of agricultural transformation and rural restructuring that has persisted as part of colonial and so-called postcolonial agricultural development. The expansion of cashew nut production for export should be understood as the latest in a line of plantation-based and export led agricultural development projects established to integrate Ghanaian farmers into international markets. This reflects a neoliberal policy approach to agricultural development; that positions private sector actors and development agencies as key to driving agricultural change.

There are, however, a number of unique insights we wish to draw out from our findings, which assist to understand the particular dynamics associated with Brong Ahafo's emergent export cashew industry.

Firstly, our findings add to growing understandings of the conflicts and tensions associated with Ghana's rapidly expanding cashew industry. Changes in land tenure, including the individualisation and concentration of land amongst certain family members, alongside elites and/or "Burgers", has emerged as a direct outcome of cashew industry expansion. The long time required between cashew seedling planting and harvest of nuts requires secure land tenure to realize economic returns. It is this necessity that is, at least in part, driving these significant changes in land tenure, including the disruption and/or devaluing of traditional and customary land title.

The transformation of common and family land into individualised ownership has the effect of excluding family members, as well as migrant farmers and other smallholder farmers from land they once relied upon for food growing, and other vital livelihood activities. Similarly, the concentration of land ownership associated with cashew production is driving changes to labour relations between landowners and migrant farmers. The emerging labour relations were described by migrant farmers as exploitative, given they work on cashew farms as caretakers, but not beneficiaries of any proceeds derived from cashew cultivation.

Secondly, the paper adds to discussions on power relations, social differentiation and agrarian class struggle associated with cashew production. Drawing from a power analysis informed by political ecology, our findings demonstrate there are unequal power relations between landowners and local elites, and migrants, landless and smallholder farmers. While indigenes in cashew growing communities were once able to derive control of land via family and customary law, local elites have leveraged social and economic capital to buy land. This is disrupting traditional land tenure arrangements, and reinforcing inequalities between landowners, local elites and migrant farmers. Our findings are similar to Yaro et al. (2017) in regard to oil palm in the Western region and mango producing communities in the Eastern region of Ghana. In each of these locations, social differentiation was identified as emerging as a result of land accumulation by rich elites, creating a pool of wage labourers.

On the basis of these findings, our paper concludes by calling for a critical rethink of the agricultural policy and planning frameworks that are driving cashew industry expansion, especially in the Brong Ahafo region. While key plans – including the 10-year Cashew Development Plan and Planting for Export and Rural Development Plan – were designed to assist the development of Ghana's cashew sector as a pathway out of poverty for smallholder farmers, our findings demonstrate they are falling short on these goals. In the face of our findings, there is a requirement for frameworks to consider social inequalities, class exploitation and

marginalisation of livelihoods, alongside industry expansion. Such rethinking – including by widening the lens beyond export-led growth, to also consider local, regional and national food needs – may assist to circumvent the adverse impacts of cashew production on local, regional and national communities.

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