

Biofuels and land politics:

Connecting the disconnects in the debate about livelihood impacts of
jatropha biofuel land deals in Ghana

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DEDICATION

Isn't it a great privilege to be supervised consecutively—for both MPhil and PhD projects—by a skillful researcher who is privy to a student's strengths and weaknesses? The one who has shown keen interest in Ghana and Ghanaian students and subjects her students' manuscripts to what I call 'radical surgery'. Throughout the years I have been under her supervision, I have greatly benefited from her meticulousness and attention to detail. Even our occasional disagreements over choice of concepts and argument formulation have always challenged me to think outside the box immediately after our meetings. The years under her supervision have been very eventful and successful – from e-mail communications, conference presentations, etc. to publications in prestigious journals.

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(Proverbs 2:6-7, NIV).*

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Abstract

In the 2003-2006 period, the Ghanaian government supported jatropha biofuel initiatives on so-called degraded land areas to reduce Ghana's high oil import bills and to generate employment opportunities. However, after Ghana's discovery of oil and gas in 2007, the government retreated from jatropha biofuel promotion, leaving the burgeoning biofuel industry to be dominated by chiefs, private investors and NGOs. Moreover, economic hardships that prevailed in Ghana as a result of the 2007-2008 global financial and oil crises compelled the Ghanaian government to subsidise both domestic fossil fuel prices and food crop production. The swift switch of the government's attention to fossil fuel without formulating biofuel regulations created a leeway for allocations of productive land to biofuel investors by chiefs, who strategically categorised certain land areas as marginal land and therefore suitable for jatropha projects which were promised to be 'pro-poor'. The situation generated a proliferation of reports analysing livelihood impacts of biofuel projects in Ghana. The reports were mainly based on media news headlines, anecdotal observations and short-term fieldwork on biofuel projects or sometimes on uncompleted projects. The reports only to a limited extent discussed the diverse social networks upon which different people draw to access resources and the socio-political institutions that mediate resource access in place- and context-specific ways. Livelihood creation or loss related to biofuel projects was hence often represented as a one-time event. Moreover, the shifting authority over land between the Ghanaian state and chiefs since the pre-colonial period to the present and its implications for the recent large-scale land deals did not feature prominently in the land deals debate.

This methodological incompleteness of the conceptualisation of local livelihoods and research on biofuel projects suggests that the discourses used in the representation of potential outcomes of biofuel projects often overlook the historical background of ongoing local land politics which are crucial for an understanding of contemporary agrarian development trajectories and of the ways in which resource access manoeuvring spaces are defined by evolving social institutions in a specific polity. These crucial issues, or what I call *disconnects* need to be included and thoroughly examined in the land deals debate. Drawing mainly on ethnographic fieldwork (household surveys, archival records, case studies, etc.), and follow-ups on biofuel projects in Ghana for a period of over three years, the study shows that a person's or a group's recognition by legitimate institutional actor(s) is a prerequisite for the (re)gaining of resource access during and after biofuel project implementation. Since the

institutions defining resource entitlement are in a constant flux, creating or sustaining livelihoods then becomes a process rather than as an event. The impacts of biofuel projects on livelihoods are therefore not simply shaped by ecological conditions or by the predominant livelihood activities in biofuel project areas. Using ethnographic methods and analysing qualitative data in detail and over time, the study connects the *disconnects* in the biofuel land deals debate. The study shows that specific biofuel projects may have differentiated impacts on the livelihoods of different individuals and social groups depending on: **a)** how apt particular individuals and social groups interact with the evolving social and political institutions in specific locations to create and sustain livelihoods; and **b)** how investors (re)negotiate local socio-political institutions in the implementation of biofuel projects. The study concludes that regulations that explicitly define the roles of the specific actors involved in biofuel projects and the establishment of a governmental institution enforcing the regulations can provide a promising avenue for better biofuel governance.

Keywords: discourses; livelihoods; socio-political institutions; households; land deals; chiefs; biofuels; Ghana; global south.

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Acronyms

AAG	Action Aid-Ghana
ATC	Agogo Traditional Council
BOPP	Benso Oil Palm Plantations
CSR	Corporate Social Responsibility
CPP	Convention People's Party
EIA	International Energy Agency
EPA	Environmental Protection Agency
EU	European Union
FDI	Foreign Direct Investment
FoodSPAN	Food Security Policy Network
GEXSI	Global Exchange for Social Investment
GHS	Ghana New Cedis
GHSs	Greenhouse Gas Emissions
GIPC	Ghana Investment Promotion Centre
GOPDC	Ghana Oil Palm Development Company
GPRS	Ghana Poverty Reduction Strategy
GPS	Global Positioning System
ICT	Information and Communication Technology
IIED	International Institute for Environment and Development
IPCC	Intergovernmental Panel on Climate Change
IMF	International Monetary Fund
ISSER	Institute for Statistical, Social and Economic Research

MOFA	Ministry of Food and Agriculture
NDC	National Democratic Congress
NGO	Non-governmental Organisation
NLM	National Liberation Movement
NPP	New Patriotic Party
NTC	Nkoranza Traditional Council
OASL	Office of the Administrator of Stool Lands
OECD	Organisation for Economic Co-operation and Development
TOPP	Twifo Oil Palm Plantations
UK	United Kingdom
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
USA	United States of America
USD	United States Dollars
USDA	United States Department of Agriculture

Glossary

Ado kane (or Nsutɔberɛ adɔ)	First farming season
Afe	One year
Afehɔiatɔ	Annual agricultural tributes paid to chiefs
Agogomanhene	Paramount chief of Agogo
Agogomanmakuo	An association of local citizens and youth of Agogo
Agyapadɛɛ	Assets or property
Ahoma (or Pole)	One acre of land
Apaafoɔ	Labourers
Apaa sika	Labour cost
Asaase (or Nsaase in plural)	Land
Asanteni (or Asantefoɔ)	A person belonging to the Asante ethnic group
Atuagya	Land areas abandoned because the users are either dead or have emigrated
Awia adɔ	Second Farming season
Bosome	One month
Bosome adwuma	Livelihood activity in which salaries are paid at the end of the month
Ehyee	Land or farmland boundary
Eserɛ	Grass or grassland
Efiri tete	Since time immemorial
Kuromani (or Kuromafo in plural)	Local citizen or indigenous person of a place
Kutawonsa	The months of June and July characterised by economic hardships in Ghana.

Kwasi Broni (or Abrofo in plural)	Europeans or persons from the western world
Mfofoa	Fallow land or temporarily abandoned land
Mfudee (or Nnɔbae)	Farm produce
Nananom	Ancestors (or earlier generations of particular people)
Nnoboaa	A practice whereby a group of farmers assist one another in farm work
Nkanedua	Jatropha curcus plant
Nsa sika	Initial token sums of money paid to chiefs as an expression of appreciation for gaining land use right
Ohene (or ahemfo in plural)	A chief
Odehye (or adehyee in plural)	Member of a royal family or kin of a chief
Ohohoo (or ahohoo in plural)	Migrant or stranger of a place
Odikro (or adikrofo in plural)	Village chief
Omanhene	Paramount chief
Sika adwuma	Livelihood activities that generate direct incomes
Sika	Money

Chapter One

Introduction

A fundamental question concerning context-specific livelihood impacts of the increased "Green Economy" initiatives (mainly biofuel investments, carbon payments and nature-based conservation) in the global south remains unresolved in the current political economy debate. Analyses of livelihood impacts caused by biofuel projects in particular are often based on cursory country-by-country (German et al., 2011) or village-by-village assessments (Acheampong and Campion, 2014) or on media headlines (Ghana Business News, 2009; IRIN News, 2009) and short-term fieldwork (Bull, 2010; Boamah, 2011; Wisborg, 2012). Aggregated analyses of livelihood impacts often assume homogeneity of otherwise socially differentiated individuals and groups that draw on diverse networks to access a range of livelihood capitals over time (German et al., 2011; Schoneveld et al., 2011; Acheampong and Campion, 2014). Equally, studies of livelihood impacts emerging immediately after media headlines on projects (or proposed projects) tend to analyse livelihood creation (or livelihood loss) as an event rather than as a process (see Bull, 2010; for example). Context- and place-specific and ethnographic approaches that provide promising avenues for processual examination of the transmutability of livelihood capitals during and after biofuel projects and the role of local socio-political institutions in the process are either lacking or are often represented as 'snap-shots' in the biofuel literature. This results from a lack of clarity on units of analysis, short-term fieldwork and scarcity/inconsistency of data on biofuel land deals in host regions. This study shows the extent to which local socio-political contexts shape the livelihood impacts of biofuel projects by examining how and why specific biofuel investments impact on the livelihood of different individuals and social groups in specific locations. In the following section, I contextualise and set the entry point for the discussion by cataloguing the circumstances—both at the global level and in Ghana—that prompted biofuel investments.

The global food and fossil fuel price increases during the last decade has raised concerns about large-scale biofuel land deals, especially in host regions of the global south. The global economic crises coupled with political instability in oil-exporting countries and climate change discussions prompted governments to work assiduously towards reducing greenhouse gas emissions (GHGs). Although climate change discussions featured prominently throughout the 1990s, the central focus of mitigation was on forest and land use management and the developed countries were charged to play a lead role in reducing GHGs due to their higher contribution to the emission concentrations (see United Nations Framework Convention on Climate Change in 1992 and Kyoto Protocol in 1997). The former US Vice-President Al Gore's consistent claims of impending global warming after 2000 gave impetus to rethinking climate change mitigation efforts. The ensuing debate was elegantly wrapped up in the slogan 'going green' to save the world from climate change and the quest for efficient energy sources alternative to fossil fuel gained prominence (International Energy Agency [IEA], 2009, 2010). The ethos of the period thus suggested that it was politically correct and economically timely and rewarding for governments to promote cheaper alternative fuels and food security simultaneously in ways that would ensure global ecological sustainability.

Smeets et al. (2004) claimed that there were approximately 700 million hectares of "under-utilised" or "surplus" land available in Africa for bioenergy crop production. Estimates of recent land deals for biofuels and other agricultural projects differ widely, Africa remains at the top of the list, with most acquisitions occurring between 2006 to 2009 (von Braun and Meinzen-Dick, 2009; Hallam, 2009; Cotula et al., 2009). African countries experiencing recent large-scale land deals include Mozambique, Madagascar, Tanzania, Ethiopia, Ghana, Mali and several others. The period equally revived activities of policy institutes, researchers, NGOs and other civil society organisations with global networks to influence environmental resource governance, particularly in Africa. Scholarly works using value-laden concepts to describe this agrarian change in Africa emerged, including *The new scramble for Africa* (Carmody, 2011), *Biofuels, land grabbing and food security in Africa* (Matondi et al., 2011), *Africa for sale?* (Evers et al., 2013), *The Great African Land Grab?* (Cotula, 2013) and *The Global Farms race* (Kugelman and Levenstein, 2013). The unresolved issues surrounding the agrarian transition are evident in the themes of landmark international conferences; *Agrarian and Rural Development in Africa* (2010), *Land Grabbing Conferences I & II* (2011, 2012), *Land Justice for Sustainable Peace in Tanzania* (2013) and *Green Economy in the Global*

South (2014). Hence, although climate change is framed as a global problem largely caused by the developed world, its impacts are keenly felt in the global south.

The high enthusiasm for biofuel land deals and the debate that ensued were informed by the goals set by governments/countries on the proportion of fossil fuels to be replaced by biofuels at stipulated timelines and the sustainability criteria laid down to mitigate potentially negative outcomes (European Commission, 2009; Ajanovic, 2011; Langeveld et al., 2014). The provision of funding by governments and donor partners for research and development of biofuel policy guidelines reinforced the biofuels euphoria (Franco et al., 2010). Many of the global land deals were made under the rubric of biofuel projects. Despite this global euphoria, biofuels production was criticised for causing food insecurity and food price hikes, especially in the developing world (Shiva, 2008; Zoellick, 2008). For example, the conversion of maize to ethanol in the US, partly caused global food price hikes (Piesse and Thirtle, 2009; Lagi et al., 2012) and the consequent social unrest in many developing countries in 2008 and 2011 (Lagi et al., 2011).

Criticism of biofuel land deals often centred on ‘first-generation’ biofuels involving bioenergy production from edible food crops such as maize and palm oil that also require productive land. In a rich, scenario-based analysis, Ajanovic (2011) shows that the global food price hikes in 2007/2008 were caused by a combination of factors such as rising oil prices, adverse weather conditions (e.g. in Australia), crop failures, high cost of agricultural inputs, speculative activities and biofuel production (see also von Braun, 2008; Piesse and Thirtle, 2009; Rathmann et al., 2010). Although many scholars now agree that biofuel production made up only one of the several factors that caused food price hikes, the level of scepticism surrounding food insecurity had a great sway in the ‘food-versus-fuel’ debate. Firstly, it introduced into the debate possible alternative ‘second-generation’ biofuels — biofuels derived from non-food crops and agricultural residues (lignin-cellulosic materials) (IEA, 2010; see also Dutta et al., 2014). Secondly, attention was drawn to specific biofuel feedstock and biofuel technologies that ought to be (or ought not to be) promoted for ethical and political reasons (IMF Survey Magazine, 2007; von Braun, 2008; Rosegrant, 2008).

In the midst of the ‘food-versus-fuel’ dilemma, *jatropha curcas* (hereafter called jatropha) gained global prominence due to the high oil content of its nuts (27-41%) and the claimed agronomic and economic viability in marginal areas. The characteristics of jatropha appeared to offer a promising alternative to the setbacks of biofuel initiatives. Some examples of the

positive representation of jatropha include; *Multipurpose oil seed crop* (Kumar and Sharma, 2008), *Jatropha biofuel has the potential to reduce hunger and to fight climate change* (Jatropha Alliance, 2009) and *Jatropha: A Smallholder Bioenergy Crop* (Brittaine and Lotaladio, 2010). A total of 900,000 hectares of jatropha plantations had been established by mid-2008; 85% in Asia (mainly India, Myanmar, China and Indonesia), 12% in Africa (mainly Mozambique, Madagascar, Zambia and Ghana) and 2% in the Americas (mainly Brazil and Mexico) (GEXSI, 2008). The jatropha euphoria in the global south was founded on claims of potential improvements in rural livelihood and energy provision as well as in GHGs-saving, especially when cultivated on previously idle or degraded land.

Between 2003 and 2006, the Ghanaian government supported jatropha bio-diesel initiatives predominantly based on a small-scale or out-grower scheme (Modern Ghana, 2003; Amoah, 2006; Agyekumhene, 2006). To avoid potential competition between jatropha and food crop cultivation, the government selected 53 districts¹ (see Map 1) in Ghana covering vast areas categorised as ‘idle’ or ‘degraded land’. The project was partly intended to restore vegetation in degraded land areas to improve biodiversity (Amoah, 2006; Agyekumhene, 2006). ‘Districts with large idle or degraded lands will be allowed to develop [jatropha] plantations with respect to land availability. The national programme requires the full participation of all District and Municipal Chief Executives and district directors of Ministry of Food and Agriculture to ensure the success of the programme’ (Amoah, 2006:2). The underlying assumption of the government’s categorisation of suitable areas for the cultivation of *nkanedua*² (i.e. jatropha plant) was that ‘idle’ or ‘degraded lands’ are wastelands or unused lands (ibid.). Although a biofuels technical report indicated that jatropha and oil palm nuts were ideal feedstock for biodiesel production in Ghana, the former was still more preferred on the grounds of its competitive pricing against fossil diesel compared with edible palm oil which is subject to price volatility in the food market (Technoserve, 2007).

The government funded the training of interested out-grower farmers, and further planned to establish a marketing body that would buy jatropha nuts for processing by a Ghanaian bio-chemist, Onuah Amoah, who had pioneered jatropha biodiesel production since 2003. The

¹ The selected districts were officially announced in 2004 in a Biofuel Workshop organized by the Ghanaian government in Mankesim in the Central Region of Ghana.

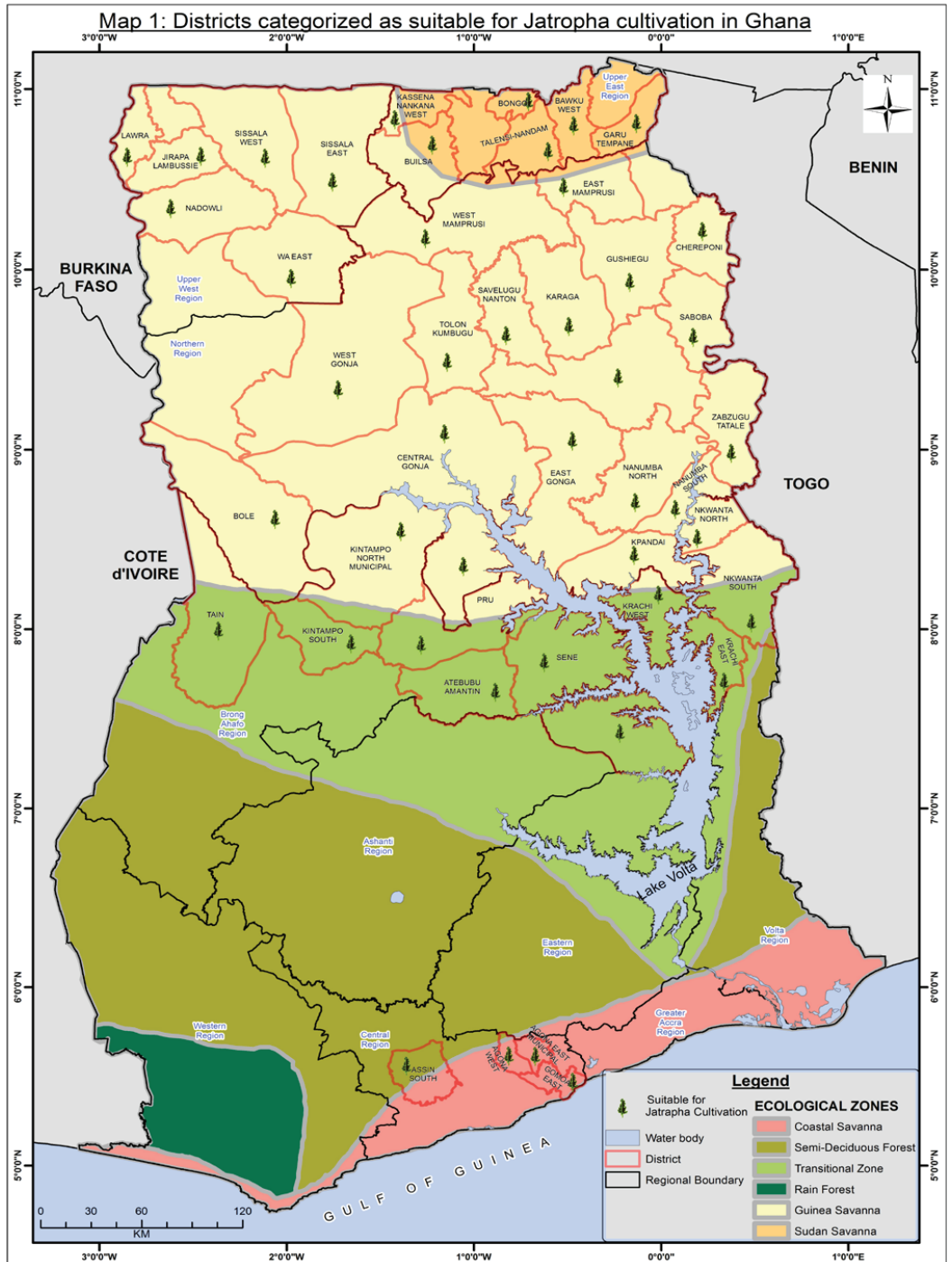
² ‘A plant that produces light’ in the Akan Twi language. Beside its current widespread use, the oil-bearing nuts derived from jatropha plant were used in the olden days in many Ghanaian villages to generate light in the evenings.

jatropha biofuels action plan was fashioned out of the wealth of experience from Ghana's cocoa industry where the government provides logistical support for private farmers in the management and marketing of cocoa beans (Agyekumhene, 2006).

The government's support for jatropha biofuels was partly aligned with the World Bank-funded Ghana Poverty Reduction Strategy (GPRS) and was also a response to the country's high oil import bills, which soared from USD 516.8 million to USD 816.1 million in 2004 (Agyekumhene, 2006; Ghana Energy Commission, 2005). The government tasked the Energy Ministry and Energy Commission to set up a National Biofuel Implementation committee, which eventually produced a draft biofuel policy in 2005 (Ghana Energy Commission, 2005; Amoah, 2006; Brew-Hammond, 2009). The draft policy recommended, among others, that all government vehicles using diesel should switch to 20% biodiesel blends with fossil diesel (B20) (Brew-Hammond, 2009). A revised policy document recommended replacement of national fossil diesel consumption by a mandatory 5% biodiesel blend (B5) in 2010 and 10% (B10) in 2015 (Ghana Energy Commission, 2006; Brew-Hammond, 2009).

The government, however, lost interest in biofuels as a result of the discovery of oil and gas in Ghana in 2007, which also coincided with the death of the inspirational biofuel pioneer Onua Amoah, though it encouraged private investments in biofuels. Meanwhile, trade liberalisation in Ghana made the population susceptible to global food price hikes and increased transportation fares (ISSER, 2009, 2010), particularly when a barrel of oil soared to USD 135 in May 2008 (*Daily Guide*, May 2008) and eventually reached an all-time high of USD 147 in July 2008. According to the Ghanaian government, the oil price hikes increased the country's oil import bill from USD 500 million to 2005 USD 2.1 billion in 2007 and almost USD 2.5 billion in 2008 (*Daily Guide*, May 2008). As a result, the Ghanaian President at that time – John Kufuor – removed excise duty and debt recovery levy on gas oil, kerosene and Marine Gas Oil in order to reduce economic hardships. Import taxes on rice, wheat, maize and vegetable oil were also removed.

The government further introduced subsidies for fertiliser and tractor services to incentivise food crop production and to insulate the population against the effects of the global economic crises. The oil price hikes, and food price hikes and riots, especially in 2008 and the preceding years, added vitality to the jatropha biofuels hype in Ghana.



Sources: (Government of Ghana, 2004; Dept. of Geography, University of Ghana).

Despite the Ghanaian government's withdrawal from jatropha biofuel initiatives, almost all private biofuel investors in Ghana continued to focus on jatropha cultivation. The previous use of jatropha in Ghana merely as a living fence between land areas or to deter livestock further added credibility to claims about the plant's ecological adaptability in wasteland areas compared to edible biofuel feedstock, as with the case of oil palm in Malaysia and maize in the USA. According to Schoneveld et al. (2010), 13 out of a total of 17 biofuel investments in Ghana centred on jatropha cultivation by August 2009. The original idea to promote jatropha cultivation on marginal land continued, though no formal demarcation of so-called 'idle' and 'degraded' land areas had been carried out in terms of the different agricultural land use forms in the 53 selected districts. Neither were there comprehensive guidelines for biofuel land deals (Ghana Lands Commission, 2012). Provisions on biofuel development clearly outline the role of state institutions in the issuance of licenses for prospective investors, blending mandates and the marketing of biofuels. The documents however do not mention the critical issue of land acquisition procedures and rural livelihoods, which were decidedly central to the jatropha biofuel initiatives in Ghana (see sections 41-43 of Ghana's Renewable Energy Act, 2011). Meanwhile, Schoneveld et al. (2010) show that the 17 biofuel companies collectively acquired land areas of 1,075,000 hectares in Ghana, of which 730,000 hectares (67%) were located in the semi-deciduous and transitional ecological zones (see Map 2) which constitute the hub of food crop production in the country.

The urgency to find a solution to fuel challenges through developing Ghana's newly-found oil and gas resources marked the state's gradual retreat from biofuels and the gradual domination of private actors in the biofuel sector. Land for jatropha projects was mainly allocated by Ghanaian chiefs. As such, Ghana has an entirely different experience of biofuels than several other African countries (and some Asian countries), where the state or governments directly facilitate land deals (Ariza-Montobbio et al., 2010; Carmody, 2011; Matondi, 2011; Evers et al., 2013; Baka, 2013; Quist-Wessel et al., 2014; Simandjuntak, 2014) or collaborates with NGOs in the promotion of small-scale jatropha cultivation, such as in Kenya (Hunsberger, 2010, 2014). In sharp contrast, chiefs have solely negotiated and allocated many of the recent biofuel land deals, even though about 80% of the land areas in Ghana are customarily held by other entities such as families or clans and other primordial groups whilst the remaining 20% is held by the President (on behalf of the state) and private landowners. Moreover, formal land

demarcations rarely exist between family land, stool land³ and state land, yet chiefs count on their own rendition of custom to define boundaries (Berry, 2001; Yaro, 2012). The re-invention of custom by chiefs involve references to the heroic acts of chiefs in warfare over territories in the pre-colonial era and by telling narratives of family ancestry of particular individuals and groups in order to re-define resource entitlements (Berry, 2001; Boni, 2005; Amanor and Ubink, 2008). This leeway to re-invent custom is facilitated by Ghana's constitutions which put traditional authorities in charge of the management of stool land. Article 267(1) of the 1992 constitution, for example, states that, 'all stool lands in Ghana shall vest in the appropriate stool on behalf of and in trust for the subjects of the stool in accordance with customary law and usage'.

While the Ghanaian government set up initial compelling politico-economic contexts for jatropha biofuel agribusiness, chiefs largely determined subsequent procedures for jatropha land deals, which complicated matters. For example, documented consent between prospective investor(s) and customary land owner(s) or chiefs constitutes a fundamental prerequisite for large-scale land allocations (see Ghana Lands Commission Act 767(21)). Hence, the involvement of state institutions for the approval of land deals is often a mere formality and inconsequential once a documented consent is provided by both the land grantor (often called the lessor) and the land grantee (often called the lessee). Although customary law defines chiefs as trustees of land, chiefs have claimed the status as land owners – often contrary to the will of the people they represent. For example, a Ghanaian chief of a biofuel project area expressed, 'we have vast areas of *mfofoa* [marginal land] suitable for jatropha cultivation' (interview, 2012) whereas a leader of an activist group in the same community contended, '... we won't allow *Akwasi Broni* [Europeans] to take our land again' (interview, 2012).

The expressed scepticism by other customary landholders such as family heads and primordial groups regarding the way in which chiefs in recent times allocate land displays the symbolic role of land as an important livelihood capital and as a relic of custom, source of political authority and of social identity in the Ghanaian society. Chiefs and family heads are entreated to protect land for and on behalf of primordial groups of a polity in order to ensure

³ Land areas directly controlled by stools. Stools, also called skins in Northern Ghana, represent the seat of authority of traditional heads of communities. Stools constitute a council known as the Traditional Council, headed by a Paramount Chief (*Omanhene*). Land areas owned by individuals and families are in principle not part of stool land though this may be contested by chiefs (see Berry, 2001; Ubink, 2008).

continuity of custom and traditions (Busia, 1951; Aryeetey et al., 2007). As later sections will show, the contestations surrounding contemporary land deals in Ghana have strong historical undertones. One classic example was when chiefs of southern Ghana together with educated elites successfully resisted the Crown Land Bills introduced by the British colonial administration in 1894 and 1897, which sought to vest in the Crown so-called ‘unoccupied land’ or ‘waste lands’ in the country (Wardell, 2005; Aryeetey et al., 2007; Brempong, 2007; Fold and Whitfield, 2012). Given that certain social institutions have evolved around communal solidarity to prevent land losses to ‘foreigners’ or ‘strangers’, as exemplified in Ghana’s national anthem and enshrined in its post-independence constitutions, the frontline role of chiefs in the facilitation of the recent large-scale land deals is conflictual, at least based on precedent.

Nevertheless, the livelihood impacts of the recent land allocations are not straightforward, given the mediating role of social institutions in resource access through group affiliations in Ghana. Berry (1989, 1993 and 2001) argues that access to productive resources such as land, labour and credits is constantly negotiated by investing in social networks within and across polities in Ghana. The negotiability and fluidity of land resource access based on reciprocity renders customary relations into a state of constant flux, and consequently institutionalised resource access manoeuvring avenues (Berry, 1993; Ubink and Amanor, 2008). Bridget O’Laughlin (2012:15-16), for example, emphasises that when researchers are concerned with the analysis of well-being, individuals cannot be simply conceptualised as ‘islands’ in the sharing and production of resources when they are part of particular social cohorts based on common history, co-residence or inextricably connected to networks founded on kinship ties. This study places greater emphasis on groups of persons mobilising and pooling together resources to earn a living (hereafter called *households*) in order to examine the different forms livelihood capital take and the avenues through which they can be accessed by different individuals and social groups. Furthermore, by comparing livelihood impacts of specific land-based projects on households in specific polities with constantly evolving socio-political institutions, I aim to illuminate the processual and relational contexts of livelihood creation.

Given the background above, the study will focus on five central issues that feature prominently in the jatropha biofuel debate in Ghana. These include: the motivation and power of chiefs facilitating jatropha projects; the economic value of so-called idle or wasteland areas; notions of resource entitlement; units of analysis of livelihood impacts, and; the terms of biofuel land contractual arrangements. A thorough and holistic examination of the

livelihood impacts of biofuel projects also requires analysis of the discourses that are used in the representation of outcomes of biofuel land deals.

In the biofuel debate in Ghana, different discourses are used by NGOs/civil society organisations, chiefs, the media, government agencies and biofuel investors to represent potential outcomes of jatropha land deals, often in the form of textual and audio-visual activism. Svarstad (2002:68) defines a discourse as ‘a shared meaning of a phenomenon, which may be small or large; the understanding of it may be shared by a small or large group of people on the local, national, international or global level’. The implied element of *delimitation* of knowledge shows that discourse partly produces the social world, which includes meanings, identity formation and social relations (Jørgensen and Phillips, 2012). A central feature of discourses is that established meanings simultaneously occlude or subvert alternative meanings (Mouffe and Laclau, 1985). I find that representations of biofuel investment projects are underpinned by two mainstream discourses: the *win-win discourse* and the *critical discourse*. The *win-win discourse* emphasises promising consequences for investors, rural communities and governments in terms of improved energy provision, food production and employment creation, especially in regions with ‘marginal’ or ‘under-utilised’ land and where farming is not lucrative and alternative livelihoods almost non-existent. The *critical discourse* emphasises potentially negative livelihood impacts of land deals, especially in regions characterised by weak land governance and in ecological zones that support intensive agriculture.

Although proponents of the two polarised discourses claim to express potential outcomes of biofuel investments coherently, careful observations reveal many contradictions and uncertainties and so warrant a thorough examination. The global contexts that prompted the initial biofuels euphoria have changed (and are changing) as is the situation in Ghana and other biofuel ‘hotspots’ in Africa. Firstly, despite successful experimentation on the use of jatropha biofuels in Ghana and elsewhere (e.g. Mali and Zambia), the dependence on fossil fuels continues. Secondly, the peak oil price of over USD 140 per barrel in July 2008—which partly prompted biofuel investments—fell to USD 34 by December 2008, rose again to USD 75 in December 2009 and remained steadily over USD 100 until falling to USD 80 recently (as of November 2014) (see US Energy Information Administration’s webpage)⁴. Studies

⁴ Europe Brent Spot Price FOB (Dollars per Barrel). Petroleum and other Liquids. Last accessed on 15 November 2014. Available: <http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=RB RTE&f=D>

show that competitive pricing of jatropha, particularly jatropha biofuel, would depend on a steady upsurge in fossil fuel price, least-cost production of biofuel feedstock and related by-products, and government support (Openshaw, 2000; IEA, 2008). Other studies show that jatropha biofuel would be better suited for small-scale community-based plantation models in remote rural areas where energy supply is erratic and fossil-based fuel prices are more expensive (Achten et al., 2010). Thirdly, many highly optimistic biofuel investors have abandoned their projects or switched to (or switching to) food crop production. Finally, the carbon-saving potential of biofuels has been repeatedly questioned by recent studies. According to German et al. (2013), in countries such as Ghana, Zambia and Mexico where cropland and pasture are often cleared for jatropha cultivation, ‘carbon debts’ are only repayable over a term of half a century. Studies have reported high jatropha yields mainly from predominantly productive land areas, thus questioning its agronomic viability in so-called wasteland areas (IEA, 2008). These revelations are reflected in recent reports showing ambivalence towards jatropha biofuels. Common examples include: *The Jatropha Craze* (Agrimoney.com, 2010), *Drivers and Consequences of the Boom and Bust of a Wonder Crop* (Amsalu and Zoomers, 2014) and *A pro-poor biofuel?* (Kuntashula et al., 2014).

The biofuel debate has not come full circle. Uncertainties and the changing circumstances surrounding biofuels projects warrant analysis of the implications of land deal representations. For example, until recently when a few scientific studies showed nuances in the analysis of impacts (see Matondi et al., 2011; Hunsberger, 2010, 2013; Hunsberger and Ponte, 2014; Amsalu and Zoomers, 2014), knowledge on jatropha biofuels was often based on media discussions or on anecdotal observations. Land deal representations therefore encapsulate a potpourri of scientific findings and snap-shot reports, often framed to achieve a particular agenda. Such representations can be particularly influential when they involve the use of visual images and activism to communicate potential outcomes of land deals. This is not the least often the case in Africa where people have developed strong emotional, economic and socio-cultural attachments to land due to the predominance of agriculture-based economies and mixed experiences with large-scale land deals during both the colonial and post-colonial periods.

Agreeably, there seems to be many striking similarities between the recent land deals and what is often called the *Scramble for Africa* in the 19th century, but there are also differences. One major difference is the nature and modes of representation of land deals. The proliferation of media discussions, conference presentations and academic publications about

land deals through the internet and improved transport systems during the last decade have correspondingly provided platforms for a more effective representation of the recent land deals. The turn to constitutional democracy during the past few decades has also facilitated social and political activism in Africa and consequently provided avenues for the articulation of interests and concerns of civil society. These developments are noteworthy in the current debate on land deals. This is clearly illustrated by calls for public consent in land deals as a way of ensuring sustainable land-based investments and peace in host regions. My focus in this thesis is therefore not solely on comparing livelihood impacts of jatropha biofuel land deals at the household level but also on illuminating land deal representations and their implications for the trajectory and outcomes of biofuel investments in Ghana.

This thesis, then, examines the overarching question: *How do specific biofuel investments impact on the livelihood of different individuals and social groups in specific locations?* I take a political ecology approach and make use of the sustainable livelihoods framework to address this question by examining the following specific research questions:

1. *What are the chiefs' motivations for sanctioning large-scale land deals? Why do those motivations influence land access for different individuals and social groups?*
2. *How do different individuals and social groups utilise social institutions to gain livelihood capital? What role do social institutions play in sustaining household livelihoods during the implementation of jatropha biofuel investments and what are their implications for social and economic relations?*
3. *How and why do representations of large-scale land deals influence the trajectory and outcomes of jatropha biofuel investments?*

Each of the three research questions are discussed respectively in each of the three papers of which the thesis comprises.

Table 1: Overview of the three papers.

Paper #1	Authorship of Festus Boamah	Key concept(s)
Boamah, F. (2014) How and why chiefs formalise land use in recent times: the politics of land dispossession through biofuels investments in Ghana. <i>Review of African Political Economy</i> , 41(141), pp. 406-423.	Sole Author	Local citizenship, notion of entitlement, land dispossession.
Paper #2		
Boamah, F. & Overå, R. (Forthcoming) Manoeuvring to (re)gain resource access: Rethinking livelihood impacts of biofuels land deals in Ghana. <i>Development and Change</i> (revised and resubmitted).	Main Author	Manoeuvring, patron-client relationships, livelihood capitals, social institutions.
Paper #3		
Boamah, F. (2014) Imageries of the contested concepts ‘land grabbing’ and ‘land transactions’: Implications for biofuels investments in Ghana. <i>Geoforum</i> , 54, pp. 324-334.	Sole Author	Discourse, biofuel governance, governmentality.

Paper #1: Contrary to the usual focus on investors as ‘land grabbers’ in the biofuel land deals debate, chiefs who are customarily custodians of most land areas in Ghana have capitalised on the recent demand for land to re-establish authority over stool land. Consequently, groups and individuals recognised by chiefs often do not face land dispossession whereas those lacking recognition by chiefs on the grounds of alleged evasion of agricultural tributes face dispossession regardless of ethnicity or local citizenship status in the project areas. By simultaneously exposing the roles played by chiefs and biofuel investors in causing land dispossession, the paper challenges a one-sided focus on agricultural investors as ‘land grabbers’, which obscures the crucial role played by local actors in the facilitation of land allocations. I therefore argue that a focus on how social institutions and local politics mediate investment in land can enrich and add refinement to the analysis of processes of land dispossession resulting from land commercialisation.

Paper #2: The paper examines the often simplistic discussion of livelihood impacts of biofuel land deals in the biofuel literature, whereby livelihood creation is assumed as a one-time event. Based on extensive ethnographic fieldwork, the paper shows that residents who sustained their livelihoods in the aftermath of two different biofuel projects were those who successfully utilised social institutions of reciprocity and communal solidarity to gain project employment or circumvent negative impacts of land dispossession. With a focus on the concept of *manoeuvring*, the paper shows livelihood creation as an ongoing process, demonstrates how new social and economic relations emerge from land deals and elaborates on why particular social groups and individuals end up as losers or winners in that process.

Paper #3: The paper presents the *win-win* and *critical* discourses underpinning the *land transaction* and *land grabbing* concepts respectively and their implications for biofuels investments. The paper makes use of discourse analysis to discuss how the choice of framings and concepts used in the representation of outcomes of biofuel investment projects interacted with local narratives surrounding large-scale agriculture in Ghana. The paper argues that in the context of weak land governance and ambivalence towards large-scale agriculture, the choice of concepts and framings used to represent outcomes of biofuels influence the trajectory and outcomes of biofuel investments.

The thesis is organised as follows. The first section outlines the theoretical perspectives of the study. This is followed by the methodology section which discusses the background of the study areas and the fieldwork process. The final section recapitulates the rationale of the study, discusses the trajectory of agrarian developments in Ghana (or Gold Coast) and ends with a conclusion on how the three papers coherently address the overarching question of the study. This is followed by the three papers according to the order indicated in the Table 1.

Chapter Two

Theoretical perspectives

2.1 Evolutionary and institutional approaches to livelihood capitals

The sustainable livelihood framework has dominated development discourses during the last few decades in relation to livelihood portfolios for people or social groups. The relevance of this framework in the analysis of livelihoods lies in its emphasis that poverty cannot be reduced solely to mere income insufficiency (Chambers, 1989; Whitehead, 2002). The commitment to integrate non-market elements of economic activities and to examine the outcomes of interaction between individuals and households with the natural environment constitutes a major source of inspiration for livelihood-based approaches, when compared with the former one-sided and static economic models that prioritised income-consumption indicators (Whitehead, 2002). Scoones (1998: 7-8), for example, defines four types of assets or capital (natural, social, human and economic/financial capital) that are required to achieve livelihood outcomes. In this framework, livelihood capital refers not only to tangible resources such as land, water, genetic resources, environmental services, income or credit and labour but also to social networks upon which people draw when pursuing different livelihood strategies that require both individual strategies and coordinated actions. According to Scoones (1998: 5), a livelihood is sustainable when “it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining its natural resource base”. The capability to sustain livelihoods in a given vulnerability context draws attention to adaptive or coping strategies (Chambers, 1989; Davies, 1996).

This has often featured in the study of livelihoods as the capacity of individuals and groups to put large land areas into use (extensification), increase output by increasing capital or labour investments (intensification) or sell labour services elsewhere through migration or a combination of diverse livelihood portfolios (Scoones, 1998:9). In many areas of the developing world, where dependence on natural resources has been erratic and market forces

ineffective, the capability to simultaneously engage in both on-farm and off-farm livelihood activities to sustain livelihoods or pre-empt loss of livelihood is often viewed as an indicator of effective coping or adaptive capabilities (Ellis, 2000, 1998, Barret et al., 2001). The substantial emphasis on diversified livelihoods and livelihood strategies as a decisive factor for livelihood sustainability is premised on the idea of risk-spreading or risk-reducing possibilities, which reduces vulnerability or potential vulnerability (Chambers, 1989, Bryceson, 2002; Yaro, 2006; Bryceson and Jamal, 1997). Many poverty policies have therefore sought to increase or improve poor people's assets and/or their asset-holding capacities in order to reduce vulnerability (Barret et al., 2001).

A major strength of this typology lies in its focus on the relationship between varied activities that constitute household livelihoods and its aim to understand these in a dynamic and historical context (Murray, 2000). However, there is a weak treatment of the asymmetrical power relations and hence the institutional arrangements that mediate resource access for different individuals, households and communities given its aim to simultaneously conceptualise and integrate market and non-market elements of household livelihoods within a single framework (Murray, 2000; Whitehead, 2002). According to Whitehead (2002), viewed from the perspectives of sociology, anthropology and political economy, assets are relational because systems for access and distribution and systems of exclusionary access constitute their integral parts. However, their relational contexts and processual elements are often lost when livelihoods are explored within a neo-classical economics tradition (*ibid.*).

Murray (2000:117-118) therefore questions the use of the adjectival qualifier 'sustainable' in the framework, as its definitional criteria lack clarity in terms of who gains it, whether it is gained on a short-term or long-term basis and the fact that increased 'well-being', though desirable, is not synonymous with livelihood 'sustainability'. The capability to achieve a 'sustainable livelihood' is assumed as pre-given and thus little emphasis is placed on norms and social practices that mediate resource access in place-specific and context-specific ways. This is particularly striking when the engagement of households and individuals in livelihood portfolios may not be intended to increase 'well-being' only in the short-term but also over a long period of time and/or their pursuits are driven by other considerations often not immediately discernible (Chambers and Conway, 1991; Whitehead, 2002; Chambers, 2006). Bebbington (1999) advocates a conceptualisation that emphasises resources that people need to access in the process of creating livelihood portfolios, particularly in contexts where people's livelihoods shift from being directly dependent on natural resources to the

dependence on a range of assets – income sources, products and labour markets. His framework defines capitals not simply as resources that people use in the creation of livelihoods but rather assets that give people the capability to be and to act. According to Bebbington (1999), ‘access’ and ‘social capital’ ought to take centre-stage in the livelihood framework because these concepts allow analysis of relationships and transactions between household members and other actors (such as the state, the market and the society), which are essential conditions for the determination of livelihood outcomes.

Conundrums surrounding the conceptualisation of ‘sustainable livelihoods’ and of human agency call for an exploration into capital entitlement in context-specific ways that shed light on who achieves which livelihood outcomes under what institutional landscape. Moreover, analysis of the various forms livelihood capitals may take —tangible and intangible forms — provide promising avenues for the discussion of the fluidity of the ‘sustainable livelihoods’ concept. The ideas of Pierre Bourdieu, Robert Putnam and James Coleman provide entry points for the discussion of the various forms capital may take at the individual, familial (or group) and communal/regional levels. In *The Forms of Capital* (1986), Bourdieu expatiates, “capital can present itself in three fundamental guises: as *economic capital*, which is immediately and directly convertible into money and may be institutionalized in the form of property rights; as *cultural capital*, which may be institutionalized in the form of educational qualifications; and as *social capital*, made up of social obligations (‘connections’), which is convertible, in certain conditions, into economic capital and may be institutionalized in the form of a title of nobility” (1986:243). Bourdieu’s focus on the conversion of capital challenges economic theory that limits the universe of exchanges to mercantile exchanges. Such a limited focus of economic theory makes it impossible to account for the structure and functioning of the social world because it only prioritises money (or profit maximisation) as ‘self-interested’, and conceptualises other capital existing in immaterial forms as ‘noneconomic’ and therefore ‘disinterested’ (Bourdieu, 1986:242).

Bourdieu (1986) shows that economics alone cannot adequately explain the functioning and structure of the social world as expressed in his definition of social capital:

Social capital is the aggregate of the actual or potential resources, which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance and recognition – or in other words, to membership in a group –

which provides each of its members with the backing of the collectively-owned capital, a ‘credential’ which entitles them to credit ... (ibid: 248-249).

Resources – social capital – possessed by individuals in the form of exchanges are activated and usable through connections – social networks – to groups (families and those not based on kinship ties). Since ‘connections’ or ‘symbolic exchanges’ constitute the *sine qua non* of access to social capital, the establishment and maintenance of social capital is not solely limited by physical space or even economic and social space. The volume of social capital possessed by agents depends on the size of the social networks they can effectively mobilise, on the solidarity of the network and on the volume of economic and cultural capital possessed by members of the network. According to Bourdieu, the existence of these social networks is not naturally or even socially given and neither is it a one-time event; it is rather a dynamic process. “[social networks] is the product of investment strategies, individual or collective, consciously or unconsciously aimed at establishing or reproducing social relationships that are usable in the short or long term” (ibid:249). The social relationships are maintained through durable obligations subjectively felt — feelings of respect, gratitude, friendship — and can be continuously reproduced through exchange of gifts and words in order to engender mutual knowledge and recognition. Despite Bourdieu’s emphasis on distinct social fields – i.e. the settings where capital is derived or transmuted –, his mapping of different forms of capital dissolves the strict borderlines between what are often considered ‘economic’ and ‘noneconomic’ and unveils how social inequalities are (re)produced.

In *Social Capital in the Creation of Human Capital* (1988), James Coleman examines social capital as a conduit for imparting knowledge and skills for the benefit of all, including poorer social groups. For Coleman, social capital results from changes in relationships among persons that facilitate collective action, which in turn generates human capital. Coleman and Bourdieu refer to social capital as resources, though different terms such as ‘connections’ and ‘social structure’ (Coleman’s term) are used to express the means through which individual members access collectively-owned resources (Winter, 2000). Coleman is however interested in how individuals draw upon social capital to achieve mutual benefits within family and community networks. According to Coleman, social structure consists of both expectations and obligations, which are strengthened by norms of reciprocity.

*If **A** does something for **B** and trusts **B** to reciprocate in the future, this establishes an expectation in **A** and obligation on the part of **B**. This obligation can be conceived as*

a credit slip held by A for performance by B. ... In some structures, it is said that “people are always doing things for each other” (Coleman, 1988:102).

Robert Putnam (1993, 1995) works within a similar theoretical perspective of social capital as Coleman and Bourdieu, but takes the discussion to a much broader social scale, i.e. economic and political developments at regional and national levels. Putnam (1995:67) defines social capital as “features of social organization, such as networks, norms, and trust that facilitate coordination and cooperation for mutual benefit”. According to Putnam, the capacity of social capital to bring about differences in regional or national political and economic development depends on the norm of generalised reciprocity that reinforces social trust. This is the trust held by community members so that their short-term, altruistic actions that contribute to the welfare of others will be reciprocated in the future; and, alternatively, non-conforming behaviour is punished (Winter, 2000). Criticisms levelled against Putnam’s idea revolve around the application of the concept of social capital on a broader social scale (e.g. national level), representing many more differences than at a smaller scale such as family and smaller associations, as with Bourdieu and Coleman (Harriss and De Renzio 1997; Putzel 1997; Winter, 2000). Participation in voluntary associations does not, for example, automatically engender the trust and reciprocity that are supposed to generate mutually beneficial outcomes (Harriss and De Renzio 1997; Putzel 1997). The generation of positive outcomes for particular groups and negative or potentially negative outcomes for others is what James Putzel calls the ‘dark side’ of social capital. In Bourdieu’s formulation, the ‘dark side’ of social capital can be described as affecting those without ‘connections’ or those who have weak ‘connections’.

Despite the diverse conceptualisation of social capital (and its relationship with other capitals), the ideas of Bourdieu, Coleman and Putnam draw attention to a fundamental principle of *resource access barriers*, which are created not by scarcity per se but more importantly by social norms and social processes that govern group membership and notions of entitlement. How effective and beneficial group affiliations can be and the limitations on productive resource access are contingent upon institutional arrangements set out in a polity (Lund, 2011a, Sikor and Lund, 2009; Berry, 1989, 2001; Boni, 2005, 2008). According to Sikor and Lund (2009:2), “[t]o investigate how competition for society’s vital resources is organized and structured is to investigate not only how wealth is distributed and how classes of ‘haves’ and ‘have-nots’ are made; it is equally to investigate how polities emerge, consolidate and recede through processes of legitimization, inclusion, exclusion and

violence”. By implication, entitlement to resources on one hand and exclusivity on the other are defined by evolving institutional arrangements of a place. For example, references to migration history or ancestry are re-invented, contested and legitimated by the state or chiefs in people’s quest to gain a sense of belonging to a place—often called ‘local citizenship’—which grants resources access (Boni, 2006; see also Ubink and Amanor, 2008). “People who claim membership of a local community call themselves ‘citizens’—as distinct from ‘strangers’—suggesting that local belonging conveys rights of participation and entitlement analogous, if not equivalent, to those of citizenship in the nation” (Berry, 2008:44). Inasmuch as the constructions of identity to legitimate or question resource claims depends on the legitimising authority (Berry, 2008; Boni, 2008; Lund and Sikor, 2009), the sustainment of livelihoods to a large extent becomes contingent upon the capability and possibility to utilise evolving institutions that mediate resource access in a polity.

In *No Condition is Permanent*, Berry (1993) relates the negotiability of resource access based on social practices of generosity, patronage and conformity to societal norms that mediate access to productive resources such as labour, credit or loans and land. Since reverence for social institutions is regarded as fundamental to the continuity of communitarian societies, culturally acceptable behaviour induces recognition and trust permit persons to *manoeuvre* to achieve productive resource access. In her discussion of ‘investments in social networks’, Berry (1993:160) asserts that, “people’s contributions to such ceremonies [funerals, marriages, naming ceremonies, etc.] may serve, in turn, to reaffirm or advance their status within their families and communities and their ability to draw on resources or support of the group in negotiating their claims to productive resources.” This viewpoint aptly corroborates modes of ‘conversions of capitals’ expressed by Bourdieu:

[T]here are some goods and services to which economic capital gives immediate access, without secondary costs; others can be obtained only by virtue of a social capital of relationship (or social obligations) which cannot act instantaneously, at the appropriate moment, unless they have been established and maintained for a long time ... and therefore outside their period of use... (Bourdieu, 1986:252).

Indeed, economic capital constitutes the root of all other capital but can take disguised forms when transformed (over time or in relationships), and hence it is worthwhile to explore the conversions of different forms of capitals as well as the associated costs (ibid.). Greater emphasis on social capital in resource access manoeuvring is predicated on the fact that it

encapsulates essential conditions and relationships that allow access to other livelihood capitals, and it is also the least tangible and hence the least understood (Bebbington, 1999). It is worth mentioning that although the possibility to negotiate resource access can allow less privileged groups—e.g. migrants, persons without ‘connections’—to access resources exclusively meant for privileged groups, e.g. local citizens, (Berry, 1989, 1993), there are certain structural constraints to ‘access’ such as citizenship status which cannot be simply overcome by mere possession of social capitals. The *agency* to translate the value of one’s *social capital* into achieving certain livelihood outcomes can sometimes effectuate only within certain *limits*, which Ragnhild Overå (2003) calls ‘manoeuvring spaces’. The term ‘sustainable livelihoods’ thus remains amorphous until a person’s manoeuvring efficiency and manoeuvring spaces are expatiated within a specific institutional landscape. The papers #1 and 2 use *manoeuvring* and *local citizenship* concepts to examine why the projects had differentiated impacts on the livelihoods of particular individuals and social groups.

2.2 Poststructuralist approach to representation of reality

Representations of real world phenomena take place through a discourse, which is rooted in a post-structuralist premise that knowledge of reality does not exist independently of mindsets. Poststructuralists and structuralists agree on the idea that signs derive their meanings based on their difference from others, but the former contends that signs can be positioned or re-positioned in different relations to one another in particular contexts to acquire new meanings (Laclau and Mouffe, 1985; Jørgensen and Phillips, 2012). Languages and their meanings are products of social processes, but not pre-given as espoused by structuralists (Jørgensen and Phillips, 2012). Discussions of discourse and discourse analysis revolve around language formation, its use and the role of subjects/actors in that process (Svarstad, 2002; Jørgensen and Phillips, 2012). Since the pioneering works of Michel Foucault, the term discourse has been defined differently to mean different things (Jørgensen and Phillips, 2012) and has often been poorly defined to mean next to nothing (Svarstad, 2002).

A simplified definition by Jørgensen and Phillips (2012) and Svarstad (2002) will be given to provide an entry point to the discussion of how discourses is constituted, and are used to establish hegemony in the (re)production of the social world. Jørgensen and Phillips (2012:12) define a discourse as “a particular way of talking about and understanding the world (or an aspect of the world)”. Although the term has been variedly discussed and defined by scholars, the fundamental concern is that the representation of the world, identities and

social relations cannot be neutral but rather actively contributes to creating and changing them (ibid.). In *Truth and Power*, Foucault (1980) opines that power is not concentrated within particular individuals or groups, not always destructive but rather constitutes a discourse, produces knowledge, bodies and subjectivities. In expressing the impossibility to gain a universal truth of the world, Foucault advocates a focus on how the effects of truth are created in discourses, i.e. analysis of the discursive processes through which discourses are created to give certain representations either as false or true (Jørgensen and Phillips, 2012:14). Foucault's proposition of inextricable links between discourse, power/knowledge and truth overlap the poststructuralist premise that knowledge of reality is discursively constructed (ibid.). Contemporary discourse analysts depart from Foucault's inclination to the view that one dominant discourse dominates a given epoch, and contends that there are multiple discourses co-existing and struggle over the definition of truth.

The existence of rival discourses opens up arenas for struggles for hegemony over meanings of language, which Laclau and Mouffe (1985) call discursive struggle. Hegemony can be simply cast to imply fixing the meaning of a language in order to dominate alternative perspective(s) of reality (Jørgensen and Phillips, 2012). In *Hegemony and Socialist Strategy*, Laclau and Mouffe (1985: 105-114) outline concepts that are important in the fixing of meanings to establish hegemony in discourses. Four of these—*nodal points*, *field of discursivity*, *articulation* and *closure*—are explored. Laclau and Mouffe's discourse theory clearly overlaps the poststructuralist premise of social construction of reality. Emphasizing the mediating role of discourse in the representation of reality, *Laclau and Mouffe (1985:108)* assert:

The fact that every object is constituted as an object of discourse has nothing to do with whether there is a world external to thought, or with the realism/idealism opposition. An earthquake or the falling of a brick is an event that certainly exists, in the sense that it occurs here and now, independently of my will. But whether their specificity as objects is constructed in terms of 'natural phenomena' or expressions of the wrath of God', depends upon the structuring of a discursive field.

Laclau and Mouffe argue that since it is impossible to achieve fixity of meanings, there needs to be partial fixations in order to establish a discourse (1985: 112). The privileged discursive points or signs around which the discourse is established are referred to as *nodal points*, and other signs derive their meaning from their relationship to this point. All the signs in the

discourse that are articulated are called *moments*, whereas those that are not discursively articulated are called *elements* (Laclau and Mouffe, 1985:105). The totality of a discourse is therefore a composition of signs that are fixed as moments based on their relationship with others (Jørgensen and Phillips, 2012). The unity of meaning established by the discourse hinders or subverts alternative meanings of the signs through articulation – that is the practice of establishing relations between moments that eventually modifies their identity as a result of articulatory practice. The other possible meanings of the same signs in alternative discourses are called the ‘field of discursivity’ (Laclau and Mouffe, 1985:111). They expressed this as follows:

We have referred to a ‘discourse’ as a system of differential entities – that is, of moments. But we have just seen that such a system only exists as a partial limitation of a ‘surplus’ of meaning which subverts it’ (ibid.).

The unity of meaning established in the particular discourse has the potential to be undermined by meanings that the signs may acquire when their meanings are fixed in different ways in alternative discourses (Jørgensen and Phillips, 2012). Although the use of discourse to establish a unity of meaning creates ‘closure’ – a temporary cessation to the fluidity of signs with meanings—such a mission is never definitive and impossible to be fully fulfilled (ibid.). According to Laclau and Mouffe, since elements may have multiple meanings, a discourse cannot be entirely insulated against subversion and multiplicity of meanings in the field of discursivity. Alternative possible meanings of signs, which are ignored or excluded in particular discourses, constitute what may be logically referred to as *rival discourse(s)*. Establishing and perpetuating the meaning of signs in discourses therefore becomes a function of articulation, in order to constantly modify elements into moments by assigning different meanings to the elements as floating signifiers. The floating signifiers represent the signs that different discourses struggle to invest with meaning in their own particular way in order to gain and solidify hegemony. Emphasizing the prominence of language and its usage in the ascription of meaning, Laclau and Mouffe define discourse as “the structured totality resulting from the articulatory practice” (1985: 105).

For Norman Fairclough (1995), however, discourse use is consciously or unconsciously interlinked with certain ideological orientations which are embedded in texts. Hence, Fairclough provides a toolbox for systematic analysis of discourses by focusing on texts and their usage in daily conversation and representations. In *Critical Discourse Analysis*,

Fairclough outlines the cardinal features of a discourse. According to Fairclough, discourse is both constitutive and constituted. In other words, a discourse does not only constitute the social world but is also constituted by broader social issues. Discursive practices are used in the creation of social identities, and power relations in the society are in turn shaped by social structures (see also Jørgensen and Phillips, 2012). Fairclough (1995:25) emphasises that inasmuch as discursive practices can either sustain or undermine power relations, texts have an ideological impact. Texts embody ideology through vocabulary and metaphors, grammar, presuppositions, speech-exchange systems, generic structure and style. Although Fairclough adapts the Foucauldian idea of power—i.e. its productive force (Jørgensen and Phillips, 2012:63), a more concrete definition of the form and manifestation of power in the struggle against domination and oppression is provided by focusing on linguistics.

Power is conceptualized both in terms of asymmetries between participants in discourse events, and in terms of unequal capacity to control how texts are produced, distributed and consumed (and hence the shapes of texts) in particular sociocultural contexts (Fairclough, 1995:1-2).

Furthermore, texts (speech/interviews, visual images, writing) should therefore be empirically and critically analysed within particular social contexts. To demonstrate the sensitivity of discourses to their social contexts (and vice versa), Fairclough elaborates that every social situation has its own order of discourse. Fairclough defines an *order of discourse* as “the ordered set of discursive practices associated with a particular social domain or institution, (...) and boundaries and relationships between them” (1995:12). Text types convey and embody configurations of genres and discourse which have developed over years, and have thus become the normatively prescribed method of representing particular social activities in particular types of social settings. Fairclough’s motivation for advocating a *critical analysis* of discourses is based on the mission to unearth what he calls background knowledge – often taken for granted – existing as ideological representations but appearing ‘naturalised’ and thus accepted as non-ideological common sense (ibid:28). A critical effort illuminates the social determination and social effects of discourse to which people are often oblivious. Fairclough (1995:14) therefore simply defines a discourse as a “way of signifying a particular domain of social practice from a particular perspective”.

Returning to the discourse definition by Jørgensen and Phillips — a particular way of representing the world (or parts of the world) — the limits for discourse are found where the

elements are articulated in a way that is no longer compatible with the terms of the discourse. “ ... discourses, by representing reality in one particular way rather than in other possible ways, constitute subjects and objects in particular ways, create boundaries between the true and the false, and make certain types of action relevant and others unthinkable” (2012:145). For Svarstad (2002), it is important not only to describe social constructs such as discourses, but also to gain a picture of the actors involved in the constructions and re-constructions as well as in the practices since there is a certain reciprocal relationship between people and discourses.

The different approaches to the meaning and understanding of discourse are illustrative of contestations surrounding definitions of truth or falsity and the instability of language use. In all social constructivist approaches, the contingency of ‘truth’ or definitions of ‘objective reality’ out there and the different ways of resolving this constitute the major conundrums (Jørgensen and Phillips, 2012). Laclau and Mouffe’s discourse theory, for example, discusses the world and its mechanisms as if they are objectively given (ibid.). Similarly, Fairclough sought to liberate himself from the dilemma by recommending the need for distinction between ideological and non-ideological discourses, but fails to address the question of *how* to draw borderlines between ideological and non-ideological discourse as well as the question of *who* is sufficiently liberated from the discursive construction of the world to make this distinction. These conundrums exist by virtue of the fact that discourse analysts are part of the culture of a study, and share many of the ‘taken-for-granted’, ‘common-sense’ understandings which simultaneously constitute the very issues to be investigated (Jørgensen and Phillips, 2012:21). This, nevertheless, does not suggest a dead-end for poststructuralist approaches to the study of the world. As Jørgensen and Phillips put it, an explicit admission and show of a researcher’s role and position in relation to knowledge production within particular cultural and social contexts provides one way out of this dilemma.

2.3 Discursive practices and the field of political ecology

The field of political ecology is in a state of perpetual flux in terms of scope, scales and styles of analysis and of representation of information and methodology, due to diverse and contested understandings of environmental resource access and knowledge of the ‘environment’ or ‘nature’ (Darier, 1999; Robbins, 2004, Neumann, 2005; Castree, 2005). Discourse analysis and narratives are central to political ecology research. The tendency to establish a unity of meaning in order to stabilise a discourse through articulatory practice, as

Laclau and Mouffe (1985) would put it, or the existence of a dialectical relationship between social interpretation of texts and properties of texts in a discourse (Fairclough, 1995) bring to the fore the concept of *framing* in political ecology research. The concept of *framing* denotes specific ways in which particular actors want certain processes, practices and events to be categorised and understood or reified in order to create and legitimise *difference* or *designations* (Aitken, 2010; Ariza-Montobbio et al., 2010; Baka, 2014), generate *technical* and *scientific* knowledge (Fairhead and Leach, 2005; Li 2007; Forsyth, 2011; Ponte, 2014) and to induce *recognition* and *authority* (Sikor and Lund, 2009; Lund, 2008). The use of framings to press claims, or achieve particular ends is evident in various discursive practices.

In his discussion of ‘Discursive spatial practice’, Aitken (2010) argues that power, inequality and politics come into play in the creation of difference and, consequently, certain individuals or groups are excluded or included, oppressed or liberated and so forth. According to Jørgensen and Phillip (2012), representation constitutes a salient element in the processes of group formation. Inasmuch as groups are not socially predetermined, they do not exist until they are constituted in discourse or talked about (ibid.). The choice of framing in a discourse determines the delimitations or *closures* that may be created in knowledge generation or the pursuit of particular actions. Lund (2011a, 2011b) shows the inextricable connection between property rights and citizenship in order to emphasise that legitimate access to resources is contingent upon membership, defined according to recognisable labelling and *practices or precedents* in a polity. Entities labelled or recognised by a certain legitimate institutional actor(s) gain membership into particular privileged groups and consequently gain access to resources collectively owned by the group (Lund, 2011a, 2011b). References to particular practices or precedents and labelling induce authority on one hand and authorise resource access on the other, in the context of multiple and overlapping – and rival – claims whereby actors aim to gain recognition at the expense of others (Lund, 2008, 2011a; Berry, 2001).

Framings may also involve delineating spaces (or territory) based on references to ‘past events’ (Lund, 2006, 2008) as a way of either undermining or upholding claims by particular persons. Framing of identity and belonging then becomes an essential condition for resource (dis)possession, and consolidation or loss of authority (see Ubink and Amanor, 2008; Hall et al., 2011). The framings of a ‘territory’ or ‘space’ as a pre-given materiality suggest particular representations and ideological closures (Aitken, 2010). Inasmuch as texts or discursive practices have ideological effects (Fairclough, 1995), the choice of framing used in a discourse does not only define subjectivities and power relations in a polity but also

determines environmental resource access or property rights (Lund, 2008; Ubink and Amanor, 2008). As discourses struggle — through diverse discursive practices — to establish and legitimise meanings, certain discourses dominate thinking and development practices more than others (Overå, 2011; Benjaminsen and Overå, 2011). When the most dominant discourse is translated into institutional arrangements, it becomes hegemonic (Adger et al., 2011) or a leading discourse (Svarstad, 2002).

Discourses are often expressed in the form of a narrative. Narratives have the common characteristics of a story — “a beginning, middle, and end (or premises) . . . and revolve around a sequence of events or positions in which something happens or from which something follows” (Roe, 1991: 288). Although narratives may be too normative and quite misleading (Overå, 2011), the ability to simplify the complex social, economic, ecological phenomena in narratives affords them persuasive power in defining problems as well as solutions, even if their value-laden premises have been repeatedly questioned (Leach and Mearns, 1996; Cornwall et al., 2007). Narratives developed over years and translated into a conventionalised way of representing truth or what Berry (2001:174-176) calls ‘permissible hearsay’ can establish basis for disputing alternative forms of truth. The representation of reality based on competing discourses and narratives creates contested definition of concepts, of legitimacy of actions and of knowledge of the environment. As Escobar (1999) expresses, the ways in which environmental problems are conceptualised do not involve ‘absolute truths’ about the environment but rather displays of values, specific backgrounds and positions of power. Papers #1 and 3 examine the discourses, framings and narratives used in the representation of particular symbolic meanings ascribed to the control over land and of outcomes of biofuel investments in Ghana.

2.4 Biofuel (or ‘Green’) governmentality and globalisation

The thinking around modes of resource governance or execution of projects that require mobilisation of people is tied to uncovering how society is rendered governable. Michel Foucault (1991b) uses the term ‘governmentality’ to express the state’s relationship with its subjects, whereby the former applies certain processes, standards and rules to regulate the conduct of the latter. The state sets standards for appropriate behaviour to be adopted and internalised by its citizenry on one hand (Foucault 1991a, 1983) and to achieve projects deemed beneficial to the citizens on other hand (Dean, 1999).

Lemke (2001) emphasises two points central to Foucault's notion of governmentality. Firstly, governmentality demonstrates Foucault's working hypothesis on the reciprocal constitution of power techniques and forms of knowledge. The semantic linking of the French words *gouverner* (governing) and *mentalité* (modes of thought) from which the term governmentality emerged indicates that it is impossible to study the technologies of power without an analysis of the political rationality underpinning them. In other words, the art of governing involve defining a discursive field in which exercising power is 'rationalised'—such as providing justification for actions, drawing boundaries and creating subjectivities. The phrase *the art of government* denotes that, 'governing is an activity that requires craft, imagination, shrewd fashioning, the use of tacit skills and practical know-how, the employment of intuition and so on' (Dean, 2010:28). Such an art eventually shore up what is counted as a problem and offers the best way to resolve it or vice versa – i.e. it structures *intervention* (Lemke, 2001:191). To render objects and subjects of a polity governable therefore involve the application of particular strategies and technologies about how a particular problem can be resolved and simultaneously requires structuring of specific 'necessary' *interventions* (ibid.).

Secondly, Foucault underlines that up to the eighteenth century, the problem of government was placed in a more general context in order to signify both the control and management by the state or the administration, and problems of self-control, guidance for the family and for children, management of the household and directing of the soul. This aptly captures Foucault's definition of government as the 'the conduct of conduct' (Dean, 1999:10). Government in essence involves attempts to deliberate on and direct rational human conduct towards specific ends (ibid: 11). The term 'rational' refers to any form of rationality relating to the calculation of how to govern (ibid.). This implies both 'governing the self' and 'governing others' (Lemke, 2001; Dean, 1999, 2010). Through his genealogy of 'governmentality', Foucault sheds light on the fact that the modern sovereign state and the modern autonomous individual co-determine each other's emergence (Lemke, 2001:191). Such a focus by Foucault refreshes the above, and an all-encompassing meaning of government and governing that are not strictly tied to the nation-state per se, and somehow becomes obscured by the emergence of the liberal constitutional national state and its identification with the body that claims supreme authority within a defined territory and its various apparatuses (Dean, 1999:2-3). Rather, particular emphasis is given to the governing of

human conduct in all contexts by various—and often different—authorities and agencies invoking particular forms of truth and using definite resources, means and techniques (ibid.).

By focusing on how individuals or other non-state actors relate to the state in the governance of modern society, the notion of governmentality draws attention to reciprocal relationships or struggles in the exercise of political authority. Lund (2011b) posits that sovereignty can be described in terms of ‘degree’ when the concept is applied to internal issues of state formation, and focus on ‘de facto’ power to determine political subjectivity and property. For Lund, governance is not the preserve of governments in post-colonial political landscapes due to the existence of a plurality of institutional actors in this enterprise often applying the language and idioms of state. This is what Lund (2011b:887) refers to as ‘fragmented authority’ or ‘sovereignty’ or what Donald Ray (1996) calls ‘divided sovereignty’. This may take the form of struggles to establish norms by precedent in instances of rival claims, say over property, in order to gain legitimacy or state quality (Lund, 2008, 2011a). Such circumstances are created by recurrent plurality of rules – both formal and informal, often called legal pluralism. According to Lund (2011b: 887), ‘when an institutional actor is able to define and enforce collectively binding decisions on members of society, it has state quality or sovereignty’. Ghanaian chiefs have had a great sway over the control of land and have gained leeway by re-inventing custom to allocate land for biofuel investment projects during the last decade. In this sense, ‘state quality’ in connection with land governance may not lie with Ghanaian governments per se but rather with the chieftaincy institution.

On another scale, the deepening processes of globalisation in modern societies have given rise to the exercise of authority that goes beyond the remit of the state or sovereign governments (Strange, 1996; Herod, 2000; Swyngedouw, 2004; Haarstad, 2009). Trade liberalisation and flows of investment capital across regional or national borders are facilitated by increased information flows as a result of improvement in transport systems and ICT (Overå, 2006; Haarstad, 2007), and by government programmes intended to create economic opportunities for the population by signing up to international treaties or opening up to foreign markets. The renewed discussions about significant greenhouse gas emissions and their impact on climate change have generated diverse ‘green’ visions pursued by different actors and networks across the world, beyond sovereign governments or states (Mol, 2007; Widengård, 2011, Ponte, 2014). Biofuel governmentality has involved pursuing policy initiatives and rationales, prompting a shift from the dependence on fossil fuels to ‘green’ energy that addresses rural development, global ecology sustainability and energy security (Widengård, 2011,

International Energy Institute [IEA], 2009). The rationales for the biofuel development hinged on an assumed energy crisis which ought to be addressed, an emerging profitability frontier for capitalist investors in the era of financial crisis and the need to diversify energy use patterns to address environmental problems (Borras et al., 2010). The biofuel revolution generates what Borras et al. (2010) calls a ‘biofuels complex’ – involving complex relationships between the state, private actors and finance, with different degrees of connections across places and generating multiple impacts. The governance regime therefore takes the form of strategic packaging of biofuel initiatives by using particular techniques, framings and mechanisms that assign responsibilities to particular actors and make designations that legitimise biofuel developments (Ariza-Montobbio et al., 2010, Widengård, 2011; Baka, 2013; 2014).

Expatriating governance as a thoughtful activity, Widengård (2011) traces the changing rationales underpinning the biofuel development trajectory from the time of the two World Wars, through to the 1970 oil crisis and to the oil crisis in the last decade. Initially regarded as a means of addressing oil scarcity, biofuel development was extended to become an engine of economic development and rural development, then subsequently energy security and lately promoted as a means of addressing climate change (ibid:47). Recently, the environmental concerns expressed as the rationale behind biofuel development has meant that biofuels and their related impacts are no longer solely a local or specific national issue but also a matter of global concern (IEA, 2009, 2010; Widengård, 2011). Biofuel governmentality has evolved to a higher spatial scale involving and requiring local-global alliances, networks and other complex web of collaborations, though with different—often conflicting—interests and motivations (Hunsberger, 2010, 2013; Borras et al., 2010; Widengård, 2011). Biofuel governmentality suggests, “hybrid governance in which ‘green-washed’ neoliberal mentalities mesh with localism, ecocentrism, and so on, to create regimes of practice that surrounding the fuel in each particular case” (Widengård, 2011:46). The ‘environment’ or ‘nature’ is rendered governable by adhering to certain ‘immaculate standards’ to achieve particular localised aims (e.g. economic development and energy security) and simultaneously actualise ultimate global goals (e.g. climate change mitigation) (IEA, 2009; Borras et al., 2010; Widengård, 2011).

The actors involved in such ‘hybrid governance’ include politicians or political actors seeking to gain political capital by demonstrating commitment to climate change mitigation (e.g. Al gore’s global warming claims) or governments pursuing particular development visions to

ensure energy security and poverty reduction by establishing blending mandates and designating particular land areas as suitable for specific biofuel feedstock cultivation. The actors also include international bodies that provide biofuel certification and sustainability criteria in order to incentivise biofuel production and mitigate potentially negative impacts (e.g. EU Renewable Energy Directive). Others include (trans)national companies seeking to make profit and contribute to climate change mitigation by investing in ‘green’ energy; NGOs and civil society organisations either promoting biofuels as a pro-poor development strategy or acting as watch-dogs over the activities of biofuel investors; farmers or land owners and chiefs seeking to participate in such ‘green’ initiatives or allocate land for ‘green’ investments with the hope of gaining certain benefits. Hence, the hybrid governance regimes evolve when different governmentalities intermesh (Widengård, 2011). Biofuel governmentality has effectively legitimised large-scale land enclosures (Corson, 2011; Evers et al., 2013) or land deals for green initiatives referred to as ‘green grabbing’ (Fairhead et al., 2012) or even other land-based activities outside of green economy developments (Matondi et al., 2011; Baka, 2013) unlike the situation in the preceding decades.

The inevitable intermesh of the multiple actors associated with biofuel (or green) governmentality draws attention to continued conundrums within biofuel governance, especially in the global south characterised by fragmented authority. That is, which actor(s) *ought to* (or *ought not to*) play decisive roles in biofuel governance versus which actor(s) *actually* play such decisive roles and *which* actor(s) expect *what* from biofuels. Such conundrums may be reinforced, given the amorphous biofuel governance driven by different and often constantly changing rationalities. The asymmetrical power relations resulting from that intermesh are utilised as a framework to examine the nature of biofuel governance in Ghana and with reference to other biofuel hot-spots in the global south.

Chapter Three

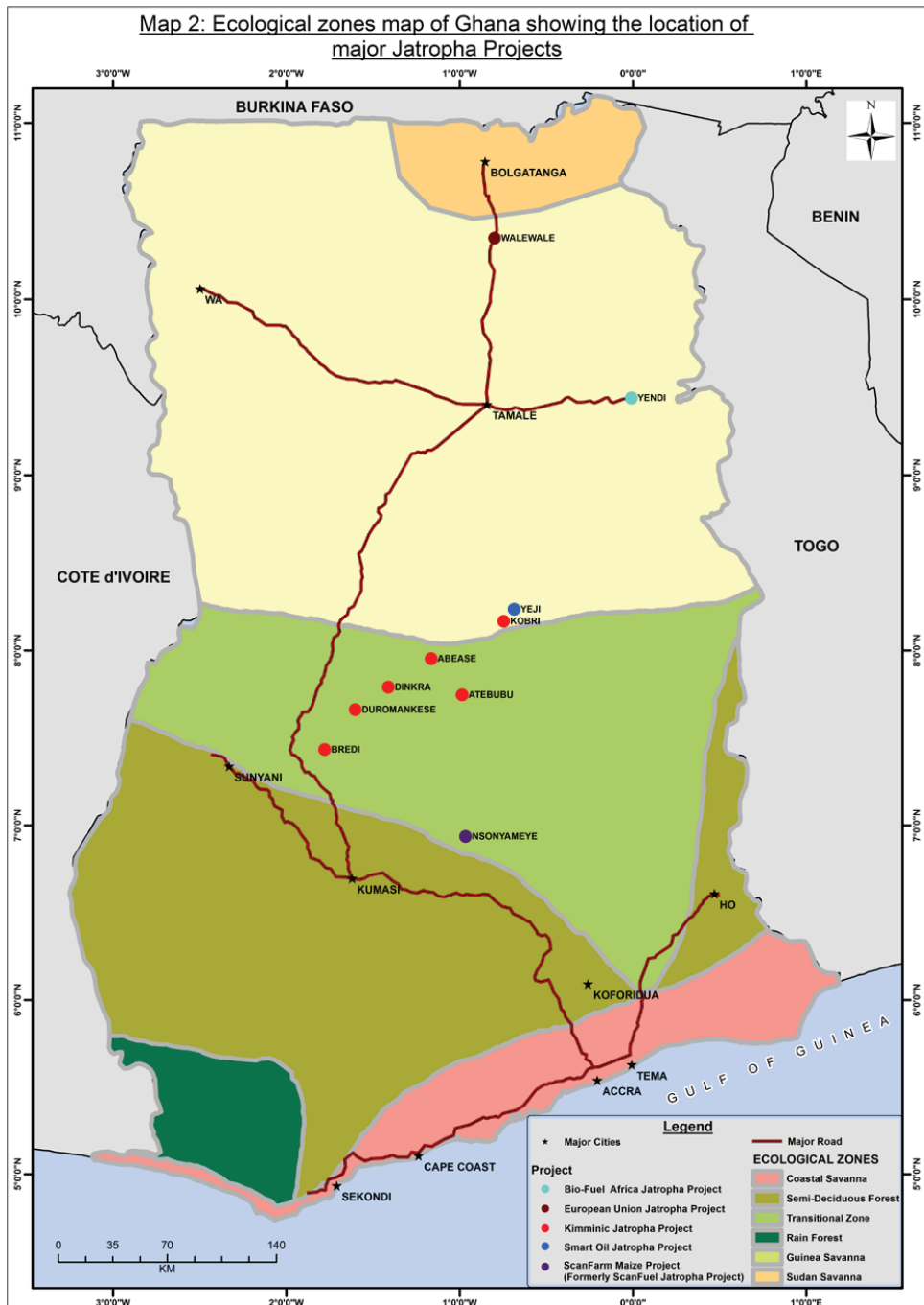
Study areas and methodology

3.1 Justification for the study areas and the selected cases

The main fieldwork for the study was preceded by visits to many biofuel projects in Ghana in order to select suitable cases to focus on. As expatiated earlier, ecological concerns and livelihoods featured prominently in the jatropha biofuel hype, both at the global level and in Ghana. Concerns were also expressed about the terms of land contractual agreements involved in biofuel projects. The study therefore compares the livelihood impacts of two jatropha projects (Cases I & II) located in the forest ecological zones of southern Ghana, which support intensive food crop production and related livelihood activities such as firewood collection, charcoal production and petty trading. Land allocations for both projects were made by chiefs but involved different land contractual agreements — a lease agreement and a joint venture agreement. The choice of study areas is based on the fact that almost all jatropha projects in Ghana involve lease agreements and are located in different ecological zones (see **Map 2**) and two contrasting cases were thus selected for comparative purposes. The two main projects examined in this comparative study involve large-scale plantation models located in similar ecological zones but with different land contractual agreements.

The Kimminic project involved a 40-year joint venture land deal with six traditional councils in the Brong-Ahafo region of Ghana for the cultivation of jatropha for biofuel production. The entire project involved a land area of 65,000 hectares. This case (Case I) focuses on the village of Bredi near one of the Kimminic project areas in the Nkoranza Traditional Council (henceforth referred to as the NTC) covering land areas of 13,000 hectares. Although land negotiations and experimentation with jatropha cultivation started in 2007, the first jatropha plantation was established in April 2008. The project area which is located in a forest ecological zone of Ghana (see **Map 3**) has productive lands and thus supports a year-round

intensive agricultural production. Funding for the Kimminic project came from Canadian investors and Ghanaian residents in Canada.



Sources: (Government of Ghana, 2004; Dept. of Geography, University of Ghana).

An annual profit-sharing allocation of 75% and 25% for Kimminic and the NTC respectively was agreed upon. As a joint venture, whereby the project village is a partner, the Ghanaian investors together with chiefs of the NTC advocated the protection of certain land areas cultivated by residents of the project village, especially the land areas cultivated by persons considered as local citizens (*kuromafo*) (see Figure 1).

Figure 1: Example of farmlands in the jatropha plantation that were protected by Kimminic.



Source: Fieldwork, 2012-13

Moreover, the company adopted a mixture of labour-intensive and capital-intensive production models in order to generate a large number of employment opportunities, also in favour of the *kuromafo*. In fact, by the first quarter of 2012, Kimminic had employed a total of between 300-450 workers, whom 250 were permanent workers. Furthermore, the Kimminic Welfare Association was formed to address the welfare of the employees, providing services that included accessing group loans from banks and provision of financial support for bereaved employees. The company also intercropped maize and occasionally yam on the jatropha plantation. Although a large amount of the maize yields were sold outside the project village (see Figure 2), chiefs and elders of the NTC received free bags of maize from Kimminic after every harvesting season. Kimminic implemented these Corporate Social Responsibility (CSR) measures in order to maintain a cordial relationship with the project village (see Kimminic, 2012). By mid-2012, land areas of approximately 4,500 hectares had been cultivated by Kimminic. A jatropha biodiesel processing factory was near completion at the time of the fieldwork but Kimminic has suspended operations since May 2012 due to financial problems.

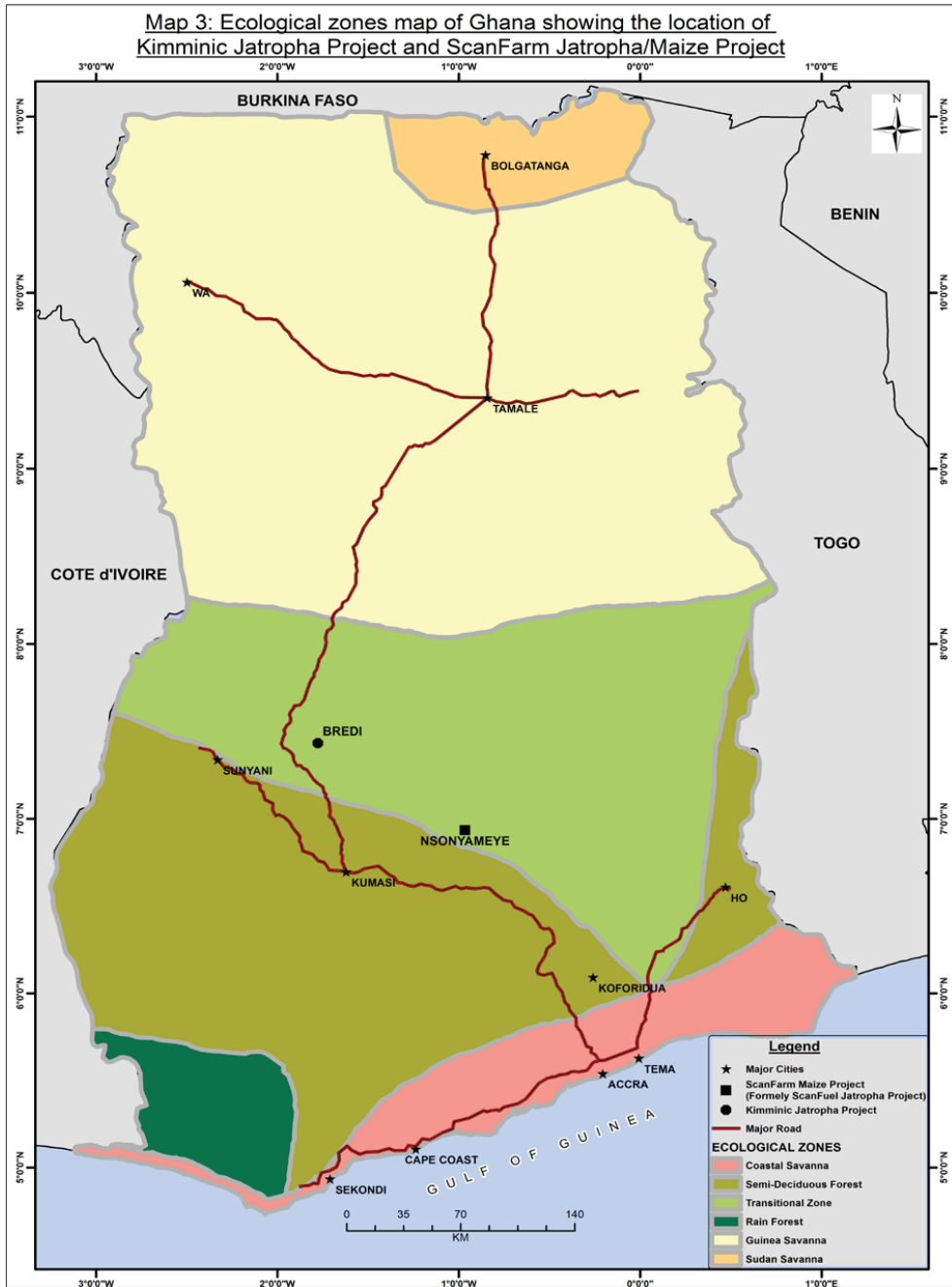
Figure 2: Maize yields from Kimminic Jatropha plantation supplied to World Food Program, Ghana.



Source: Fieldwork, 2012-13

Case II focuses on the village of Nsonyameye near the ScanFarm project area. ScanFarm Ghana Ltd (formerly called ScanFuel) is an affiliate of a Norwegian company, ScanFuel AS. The project initially involved a 50-year (13,000 hectare) lease agreement with the Agogo Traditional Council (henceforth referred to as the ATC) in 2008. The jatropha plantation was established in the 2008-2009 period. The company's aim was to take advantage of the soaring oil prices in the 2007-2008 periods by producing biodiesel from jatropha nuts (interviews with ScanFarm management, 2011-2012). However, ScanFarm management's expectations of quick profit-making from jatropha were not realised, as the company claimed a limited market for the harvested jatropha nuts. ScanFuel therefore switched to maize production in 2010 prompting the change of name from ScanFuel to ScanFarm. The project village is also located in a forest ecological zone (see **Map 3**), which supports the production of food crops and fruits from oil palm and mango trees. The village residents also depend on forest products such as firewood collection, charcoal production and the collection of fruits.

ScanFarm adopted a purely mechanised production method. In spite of the villagers' high expectations of employment opportunities at the incipient stages of the project, a maximum of 80 workers were employed. Of the 80 workers, 50 were mere casual or unskilled workers recruited from the project village whereas the remaining 30 skilled or permanent workers were recruited from nearby cities and towns. ScanFarm implemented a CSR measure which allowed nearby villages to collect maize leftovers for free in the plantation after the combine-harvester had completed the harvesting of maize from each farm field (see Figure 3).



Sources: (Government of Ghana, 2004; Dept. of Geography, University of Ghana).

However, by the end of the farming season in the same year (i.e. 2010), ScanFarm had banned free collection of maize on the grounds of ‘increasing incidences of theft’ in the plantation site. The project is still on-going.

Figure 3: Free maize collection policy by ScanFarm which was abandoned at the end of 2010



Source: Preliminary visit to ScanFarm project site before the PhD study, July 2011

In addition to the two main cases, the cases of two other biofuel projects are included in this study to shed light on the trajectory of biofuel investments in Ghana (see paper #3). I had earlier studied a jatropha project in Northern Ghana which collapsed within two years after its inception (see Boamah, 2011). I followed up on this earlier study to document events that ensued after the failure of the project. During the main fieldwork, I also paid a three-day visit to an EU Jatropha project in Northern Ghana—which had been labelled as an ‘Aid project’—to examine its impact on the livelihood of some village residents. As subsequent sections will show, the decision to focus on these cases was to gain a fair idea to examine the overarching question of the study.

3.2 Fieldwork and methodology

The study combines qualitative methods such as interviews, case studies and observations with household surveys. Joseph Maxwell (2013) distinguishes between quantitative and qualitative approaches with reference to ‘variance theory’ and ‘process theory’ to explain these approaches. Whereas quantitative approaches focus on explanation of world phenomena as a demonstration of observed statistical relationships between different variables, qualitative approaches using process theory see the world in terms of people, situations, events and the processes connecting them, and offer explanations of how and why certain outcomes are produced (ibid.).

Joseph Maxwell (2005) identifies fundamental goals that make qualitative research useful and three of these form the background for the study’s methodology. Firstly, qualitative research should aim at making causal explanations. Secondly, qualitative research aims to understand the meaning of events, situations and actions in the study community, how the sampled population interpret these and how the events, situations and actions in turn influence their behaviour. Thirdly, qualitative research aims to understand, identify and examine processes that lead to particular outcomes. As expatiated earlier, this study examines not only the livelihood impacts of biofuel land deals but also the discourses used in the representation of potential outcomes of biofuel projects. Hence, the study involved interviews and informal discussions with Ghanaian chiefs, government officials, NGOs and other civil society organisations, biofuel investors and residents of the selected study areas in order to investigate how socio-political institutions mediate resource access and how discourses constitute and are in turn constituted by the social world.

3.2.1 Fieldwork process and ‘situatedness’

To make the research process systematic and less challenging, the fieldwork was divided into two major parts: preliminary fieldwork and major fieldwork. The PhD research involved a two-month period of preliminary fieldwork (April-June, 2012), followed by a six-month period of fieldwork (August, 2012- January, 2013) which cover the cultivation and harvesting periods of two major farming seasons in southern Ghana. Since familiarity with the settings of a study is an important step in qualitative studies, the preliminary fieldwork predominantly involved key informant interviews, analysis of oral traditions, focus interviews and review of biofuels and land literature in Ghana. Communities that depend on natural resources operate

within a context that is broadly defined by a host of interlinked factors — biophysical, demographic, cultural, technological, political, market-related issues; state agencies, policies and strategies; legal and institutional settings and historical processes (Agrawal and Angelsen, 2009). As Lund and Sikor (2009) argue, to understand how vital resources in societies are structured and how competition over resource access occurs, it is important to investigate the origin of a polity. Since social beings bring experiences into research inquiries, researchers, however, must be conscious of ‘social situatedness’ in order to enhance the rigor or the validity of research (Jensen and Glasmeier, 2010). ‘Social situatedness’ refers to “the perspective of the problem [an issue to be investigated] by the researcher and the positionality of the investigator relative to the problem” (ibid: 82). The researcher’s positionality involves identifying his or her many ‘selves’ who are relevant to the research based on dimensions such as gender, race, ethnicity, work and life experience (Andres, 2012:18). This does not simply imply tying oneself to ‘insider/outsider’ status dichotomies, whether permanently or momentarily. Rather, it requires the researcher to continually weigh the benefits and the constraints associated with each of the statuses and then shift depending on the stage of the research, the nature of interaction in specific contexts and the power relations between the researcher and the research participant (Mullings, 1999; Andres, 2012).

Being conscious of ‘social situatedness’ thus involves the researcher’s active engagement with the study community by way of familiarity with the history, culture and social issues of the place of study on one hand and the implications of the researcher’s positionality (Jensen and Glasmeier, 2010). These forms of social engagement at least reduce the challenge of ‘privileged knowledge’ claims, which seldom address the needs and concerns of people, and make room for ‘situated knowledge’ (Aitken, 2010). Situated knowledge is “embedded in local areas, conditioned through time and embodied in people and their actions” (ibid: 54).

Reports of jatropha biofuel land deals had already generated heated debate in the media and conference deliberations in Ghana before I started this study. To keep myself abreast with the project implementation and social and geographical settings of the project areas, I gathered relevant accounts of the study areas using diverse methods, particularly ethnographic approaches. According to Aitken (2010:59), approaches aiming at examining distinctions among and between individuals and groups can be problematic because it is difficult to discern how axes of differences such as race, ethnicity, class and gender coalesce to provide opportunities or create constraints. Moreover, these differences are dynamic and not pre-given

categories of existence (ibid.). Overcoming these methodological dilemmas does not simply involve mapping patterns of difference but also the varied processes that generate difference and how the observed processes are embedded in power relations. Gathering contextual information about the study areas was thus vital. The contextual information involved the ecological conditions of the study areas and history of migration, accounts of family ancestry or genealogy of the different individuals and social groups and other societal norms that underpin notions of resource entitlement. Narratives of migration history were mostly provided by older generations and chiefs in the form of folklore, and were often recorded using electronic devices upon permission. Archival records obtained from law courts, Survey departments, Ghana's leading newspapers and the offices of chiefs provided insight into issues relating to land disputes, local politics and the inception of the projects (see Appendix V). This ethnographic approach provided information about the customary criteria that define individual statuses in social units or membership in group affiliations in relation to resource access. The source of power of chiefs, family heads and other traditional political office-holders, who customarily serve as trustees of land, was examined. The preliminary fieldwork provided useful contextual information in preparation for the major fieldwork. Particularly important was the foreknowledge gained about the various forms of livelihood capital available in the study areas in order to design the survey for the main fieldwork.

3.2.2 *(Re)negotiating research relationships: challenges and lessons*

Since a researcher and research participants constitute an important component of a research process, building relationships in the form of face-to-face interactions and data collection has far-reaching effects on the entire study (Maxwell, 2005, 2013). This relationship building is not a one-time event but rather an on-going process which involves conscious reflection of the fact that the researcher influences the social world he/she studies (Maxwell, 2013). This is called reflexivity (Hammersley and Atkinson, 2007). Reflexivity also involves considerations of the power relations between researcher and informants – i.e. a researcher overcoming privileged knowledge by placing his or her own accounts on the same level as that of research participants and their accounts (Jørgensen and Phillips, 2012; Burr, 1995).

Due to the strong emotions attached to land issues in Ghana and the extensive media headlines about jatropha biofuels before the fieldwork, it was challenging to make contact with the biofuel investors and chiefs of the project areas. I can mention one example of this: I had earlier (June-July, 2011) assisted a Norwegian researcher in the ScanFarm project before

commencing this PhD study. This afforded me the opportunity to make a few contacts and keep myself abreast with issues relating to land politics in Agogo and ScanFarm's jatropha and maize projects. The management of ScanFarm, some village residents and chiefs we interviewed associated me with the Norwegian researcher's project. The subsequent publication of the researcher's study findings, which were critical of the ScanFarm project, affected my relationship with ScanFarm's management at the incipient stages of the preliminary fieldwork. In addition, my relationship with the company was affected by media criticism and NGO publications of 'land grabbing' and other reported exploitative deals by ScanFarm. As a result, ScanFarm Management initially declined my request for field data and interviews with its workers until a period they claimed they would be 'less busy' (e-mail communication with the Board Chairman of ScanFarm). Despite this initial challenge, I gained access through previous familiarity with some employees and the management of ScanFarm after I had purged myself of any suspicion of affiliation with the Norwegian researcher, NGOs or activist groups and media bodies. Nevertheless, ScanFarm's scepticism towards the advocacy works of NGOs and community-based activist groups prompted me to follow up on how these bodies were influencing the project implementation.

Similarly, I had earlier had contact with the management of Kimminic before the PhD study, but I was asked to declare my intentions and identity during the fieldwork before gaining access to the jatropha plantations. This was also due to earlier advocacy works of NGOs which had made the company suspicious of visitors to the project areas. Cordial relationships with key informants, chiefs, activist groups, Kimminic employees and management were developed after I had made my student status known to the research participants. Although I gained an easier access into the Kimminic project area, the challenging experience in the ScanFarm area prompted me to establish the necessary rapport with the research participants whenever I observed any possible suspicion in the research process. Seidman (1998) and Maxwell (2013) emphasise that though building rapport with research participants facilitates a rigorous research, the crucial issue is the type and amount of rapport one establishes.

In order to follow-up on local land politics and the operation of the ScanFarm project, I developed a rapport with many village residents who often served as research assistants, informants and drivers (on motorcycles) to the study villages. I aimed to achieve the rapport building with the research participants by assuming different statuses that would facilitate access to data. Being an Asante (*Asanteni*) and a native of a town (called Kumawu) adjacent to the Agogo town, whenever I observed suspicion on the part of chiefs and key informants, I

made my ethnic identity known as a way of gaining their trust and hence charting a course of commonality during the interviews. I made my ethnic identity even more glaring during the household survey (which will be discussed shortly); especially whenever I observed that the household members were Asantes (i.e. *Asantefoɔ*) or were fluent in the speaking of the Asante Twi language. In instances where the research participants were non-Asantes, officers of state institutions or members of civil society organisations, I pressed on my Ghanaian identity and student status in order to purge myself of any perception of association with any media house or NGO. On the other hand, I strictly stuck to my student status during interviews with the management of the companies, and in particular whenever I met with persons who have once visited or stayed in Norway. An important aspect relating to apt reflections on my positionality was the manner I recorded field data and adherence to research ethics. To retain an assumed status in a particular moment (and hence avoid suspicion), I allowed a free-flow of information and then transcribed the information in the field notebook immediately after the interview. This was quite easy to do due to my ability to understand and write in both the Twi and English languages.

Furthermore, I always sought the consent of the research participants before recording interviews with electronic devices and taking photographs and as well asked questions politely. Also, in order to retain the trust that had been reposed in me, I promised the research participants anonymity and hence their names and the time span of interviews/communications are not included in the thesis (see Appendix I). All in all, adhering to research ethics helped me to retain the hard-won trust the participants had in me. Reflections on positionality issues did not only involve the different statuses that I assumed but also that of my research assistants. Throughout the fieldwork (i.e. both the preliminary and the major fieldwork), I kept changing my research assistants, especially those who (or their relatives or friends) once worked with the company or lost land to the projects in order to avoid a possible conflict of interest in the research process. In a nutshell, I downplayed particular statuses and elevated others in the various facets of the fieldwork when necessary.

3.3 Case study methodology

Disagreements surrounding what ought to be the scope of a case study method of scientific inquiry has generated different approaches to the case study methodology (see Yin, 2009, 2014; Silvermann, 2013). One common contestation concerns representativeness of a sampled population when a case study is used in qualitative research to make generalisations

regarding, unlike quantitative approaches which involve statistical models to establish relationships between variables (Flyvbjerg, 2005; Silverman, 2013). Silverman (2013:145-147) argues that such challenges can be avoided by sampling cases in order to generalise based on theoretical propositions but not on populations (or numbers or frequencies); sampling social relations but not individuals or selecting extreme cases that help test particular theories. For Flyvbjerg (2005), the generalisability of case studies can be increased by the strategic selection of cases. He argues, for example, that if the objective of a study is to achieve the greatest possible amount of information on a given problem or phenomenon, one simple random sample or representative case may not be the most appropriate strategy because it rarely provides insights about causes and consequences of a given problem. Rather, extreme cases or critical cases chosen for validity purposes can be methodologically appropriate. “Atypical or extreme cases often reveal more information because they activate more actors and more basic mechanisms in the situation studied” (ibid: 395).

In *Of what is this a Case?*, Lund (2014) profoundly reminds social scientists that the choice of methods in a study, the choice of concepts and categories used to conceptualise experience and the analytic constructs or frames used in a study are never neutral or ‘facts’ never speak for themselves, contrary to that often claimed by case study researchers. Hence, to reduce possible validity threats often posed by generalisations or universal claims, Lund (2014:227) emphasises the need to reassess the purpose of studying the *case* and the intended *analysis*. Clarity of purpose(s) and delimitation(s) are therefore noteworthy for whatever aim one may want to achieve with a case study. As elucidated earlier, the two projects studied involved different land contractual agreements but were located in similar ecological zones (forest areas) of southern Ghana. The two main cases (Cases I and II) were selected purposely to test the theoretical propositions that specific biofuel projects (in this case jatropha projects) will (or will not) compete with food crop production and livelihoods in specific polities with specific socio-political institutions. Two additional cases (see overview of cases in paper #3, pp. 327) were selected in order to test the theoretical proposition regarding the extent to which the resource governance mechanism has an effect on the outcome of biofuel investments.

The study analyses data on two levels: of the *processes* (i.e. *what*, *how* and *why* questions) of land dispossession and the *outcomes* (i.e. *what* and *why* questions) in terms of livelihood impacts and the trajectory of biofuel projects in Ghana. The strategic selection of the cases was aimed at transferability of the findings, though generalisations were made when theoretically possible. Transferability means that the findings of a study or certain aspects of it

are applicable in other similar settings or in similar contexts if a similar research design is adopted by another researcher (Andres, 2012). In papers #1 and 2, where the analysis of processes of land dispossession and livelihood impacts are based on a total of 80 households sampled from the population of the two different project areas, the focus was not on generalising the study findings to the larger population in the study areas, but rather on transferability. For example, the findings from this study could inform studies on similar issues such as intra-household dynamics, advocacy by NGOs and other civil society organisations, the mediating role played by chiefs, NGOs, the state and biofuel investors in land deals, livelihood portfolios and social institutions in other parts of Ghana which have experienced jatropha biofuel land deals.

Paper #3, which is based on a strategic selection of four projects (of a total of over 17 jatropha projects) for the purpose of illuminating factors that shape the outcomes and the trajectory of biofuel investments in Ghana, comprises both generalisability and transferability of findings. On the issue of generalisation, the paper teases out the factors that are decisive (or potentially decisive) for the outcome and the trajectory of biofuel investments in Ghana. As Silvermann (2013) elucidates, it is possible to generalise case findings according to clearly specified theoretical propositions, or a *carefully* selected case can be used to question existing general understandings (Lund, 2014). Of over 17 biofuel projects in Ghana, the purpose of selecting the cases of the four projects was based on the fact that they bear the mainstream characteristics of biofuel investments in Ghana (see Table 1 in paper #3, pp. 326-327). Findings from the cases could thus be used to make arguments about biofuel governance in Ghana more generally. Moreover, the findings of paper #3 are transferable to other biofuel hot-spots in the global south with similar experiences in terms of agrarian history, colonialism, socio-political institutions and the lack of clarity in terms of the role played by the state and other actors in biofuel governance.

3.4 Are the selected cases comparable?

The basis for comparing the selected cases does not simply mean that the cases present counterfactual evidence. Rather, the basis is that certain similar incidences occurred in almost all the cases or certain features characterised all the cases before their selection in this study. An emphasis is placed on why certain similar outcomes occurred as a result of different actions, motivations and situations and vice-versa. In the paper #1, the cases (Cases I and II) were selected for three main reasons. Firstly, (a), both land deals were sanctioned by chiefs.

Although one project was switched completely from jatropha to maize production (for food but not biofuel), yet the land acquisition was prompted by the jatropha hype. Therefore, the focus is on *jatropha biofuel land deals* (but not merely on the type of crop cultivated). Secondly (**b**), both projects involve large-scale plantation models, although different land areas were acquired and cultivated. Thirdly (**c**), both project areas have a large number of migrants who mostly have temporary land use rights either on family and individual land areas or on stool land. As the focus of these cases was to uncover *processes* of land dispossession, the comparative analysis showed how and why motivations of chiefs in the respective land deals generated different incidences of land dispossession in the two cases.

In the paper #2, four factors were considered crucial. In addition to the three factors listed above (see **a**, **b** & **c**), both projects were located in the forest ecological zones and there was employment creation in both cases. For paper #3, three main reasons formed the basis for the comparative analyses, despite the fact that they differed in terms of feedstock production models, land contractual arrangements and the size of land areas cultivated (see Table 1, in paper #3). Firstly, they cultivated jatropha (or once cultivated jatropha) for the purpose of biofuel production. Secondly, all of them set out the objective to improve energy provision and livelihoods in Ghana. Whereas Case IV (based on an out-grower model) is an ‘aid project’ and hence non-profit-oriented, the other three were profit-oriented. Thirdly, the four projects received publicity about their possible outcomes in the respective project areas and in the Ghanaian media.

3.5 Household surveys, household composition and household characteristics

The study adopted a *sample survey* approach, which delineates and focuses on a smaller sample of a given population (Andres, 2012). Having gained relevant contextual information from the preliminary fieldwork, the major fieldwork involved household surveys. These were carried out to identify various forms of livelihood capital possessed by individuals and households in the project areas in order to examine the livelihood impact of the two projects. The household surveys involved a sample of 40 farming households in each of the cases, making a total of 80 households. The often romanticised definitions of households as unitary and homogenous groups—that maximise well-being for its entire constituents and where one member’s strategy and motive represents the whole—has been challenged especially by anthropologists (Guyer and Peters, 1987; Fapohunda, 1987; Wolf, 1990). It is contended that households are not discrete bounded groups/units such as ‘family’ or ‘tribe-based

organisation’ because people still draw on networks and structures beyond such bounded groupings in order to access resources; they are heterogeneous in structure/composition; and the household is an ever-evolving process instead of being a spatially or temporally fixed entity (Guyer and Peters, 1987; O’Laughlin, 2012). The question of the appropriate unit of analysis, given these polemics, becomes all the more relevant when researchers are concerned with the analysis of ‘well-being’ of individuals knitted together by common life history, kinship ties or co-residence (O’Laughlin, 2012). In that sense, individual well-being is influenced by, and sometimes dependent on, daily relations of resource-sharing and cooperation/conflicts within social networks (*ibid.*). Given this problematic conceptualisation of the concept of ‘household’, Guyer and Peters advocate (1987) a context-specific approach that focuses on unveiling *social units* and *social processes* as evolving in a continuum.

Following Guyer and Peters’ guidelines, an operational definition of household was adopted. The usage of the ‘household’ concept in this study, then, refers to individuals and groups, who to *various degrees*, pool resources (both tangible and intangible) together to earn a living, usually but *not always* sharing kinship ties or a common shelter. This operational definition was adopted because, contrary to viewpoints that household members do not necessarily pool together resources (see Fapohunda, 1987, for example), a ‘household’ constitutes the basis unit for consumption, sharing and production of resources (and risk-spreading) in both study areas where social institutions of reciprocity and communal solidarity are well pronounced. This, however, does not downplay intra-household inequalities regarding access to and control over resources, say between men and women. Neither do I assume equal contribution to overall household welfare by members, i.e. between dependents (children, old-aged, sick people) and active working members. Rather, the focus is on the complementary strategies among persons in order to achieve certain livelihood outcomes. Since individuals are not ‘islands’ in the sharing and production of resources (O’Laughlin, 2012:15), a focus on individuals, rather than households, as units of analysis would veil and downplay processual and relational contexts of livelihoods in the study areas.

Furthermore, this conceptualisation of household takes into consideration the continually shifting boundaries, structure and composition of households and the attendant intra-household dynamics argued by Guyer and Peters (1987). Social identity, for example, in the two study areas as ‘local citizen’—*kuromani* and as ‘stranger’—*ohohoo* is constructed and re-defined over time depending on the nature of relationships with heads of primordial groups

such as chiefs, family heads and other local political office-holders. Household membership is therefore not fixed and not always reduced to kinship ties. Persons who successfully traced their descent to the project areas or gained exclusive land rights, for example, are considered as *kuromani* whereas others are labelled *ohohoɔ*. Still, migrants who have gained exclusive land rights either by virtue of marriage with indigenous people or honest service to chiefs/family or both are considered to have ‘graduated’ to attain local citizenship status. As a result of this complexity, the definition of indigenous citizens or households is limited to possession of allodial land rights, often called exclusive land rights. Finally, some household members have temporary residence because they move back and forth periodically between the study area and nearby settlements according to farming seasons and school vacation holidays. Household membership in this study is not limited to co-residence or the sharing of a common shelter.

Due to the fact that the social constructions of *kuromani* and *ohohoɔ* represented a decisive factor in access to land and other productive resources before and during the projects, the units of analysis in the discussion of livelihood impact focused on indigenous and migrant households. The indigenous households often comprise the husband, wife (wives), children, old-aged parents and sometimes unmarried nephews of the husband. Migrant households often included the husband, wife (wives), children and younger siblings of the husband. The household size in the two types of sampled households ranges from 2 to 12 persons. The migrant-local citizen binary feature prominently in the study because gender is not so decisive of access to land and other productive resources created by the projects.

The study focused on households with sampling characteristics that encapsulate pertinent issues underpinning biofuel land deals and rural livelihoods. The sampled households were all involved in farming but also included household members who made a living from off-farm activities such as charcoal production, firewood collection, share cropping and petty trading. The households were purposively selected based on the criterion that at least one household member was impacted by the projects: whether they were employed by the projects, lost land to the project, or both. Information gathered during the preliminary fieldwork showed that the indigenes or local citizens constitute a larger proportion of the population of both study areas. The preliminary fieldwork also showed that migrants often faced land dispossession as a result of the projects. Moreover, Ghana’s census statistics define migrants and indigenes of a particular place based on ethnic and regional affiliations (i.e. affiliation to any of the ten

administrative regions of Ghana). The sampling distribution was therefore based on insight gained from the preliminary fieldwork in terms of who is considered a local citizen and who stands to benefit or suffer from the projects. Therefore, in both cases, 22 indigenous and 18 migrant households were selected to roughly reflect the proportion of migrants compared with indigenous residents in the project villages. The purpose of this sampling strategy was to examine how social identities influenced livelihood activities of households as a result of the projects.

3.6 Data production instruments, strategies and processes

For survey research design, although solidly grounded in positivist science and associated claims of objectivity, its application in social science research characterised by investigation of subjectivities and objectivities requires flexibility in different facets of the research process (Andres, 2012). The flexibility involves openness to different but complementary data collection and analysis methods not restricted to a tight set of rules or standardised measures that limit the ability to uncover the life-worlds experienced by research participants (ibid.). Given the assemblage of narratives and multiple layers of custom re-inventions that surrounded resource claims in the study areas, the household surveys were conducted in a way that allows data production using a mix of survey instruments (e.g. interview guide and questionnaire) and strategies. Firstly, the study adopted an interviewer-administered survey format. This format allows flexibility and the usual iterative processes in research as it allows the researcher to formulate additional relevant questions based on the interviewee's responses during the interview process (Andres, 2012:36). The items on the questionnaire required both closed-ended and open-ended questions (see Appendix VI). Closed-ended questions regarding the gender, ethnicity, the ages and number of household members, main crop cultivation and harvesting periods, affected persons and beneficiaries of the biofuel projects were formulated based on the insights from the preliminary fieldwork. Open-ended questions complemented close-ended questions by providing detailed information or for clarity purposes. For example, questions asking listings of "five most important household assets?" and "challenges in crop production in the first and second farming seasons" is a combination of closed- and open-ended questions.

My ability to clarify ambiguities or probe controversial questions pertaining to ethnicity, land rights, etc. was facilitated by the rapport I developed with the research participants, my familiarity with the history of the study areas as well as proficiency in the writing and

speaking of the Twi language. There were even instances where household members provided ‘Yes’ and ‘No’ responses simultaneously to the same questions and thereby prompted me to formulate many open-ended questions, when necessary. Closed-ended questions were thus strategically placed as starting points for the open-ended questions. The survey was often interspersed with long conversations, and some household members usually made interjections to clarify issues or express opinion about the outcome of the project. Whenever I realised that the lead respondent or other household members were keen to provide additional information or when pre-empted in the course of data collection, I strategically prompted them with questions such as “so would you want the company to proceed with the project?”, or “what are your views on future projects like this?”

The physical presence or face-to-face conversations associated with interviewer-administered surveys affords the interviewer the opportunity to apply probing techniques such as reading body language and repetition of questions to clarify misunderstood terms in order to elicit complete responses (Andres, 2012:88). This strategy was particularly useful when I asked questions pertaining to the size of farmland areas affected by the projects, compensation payments, wages (or salaries) paid by the investors and the controversial issue of ‘date of arrival in this village’. Public sensitisation activities relating to biofuel land grabbing had featured prominently before and during the fieldwork period (see Figures 4 & 5).

Figure 4: Action Aid-Ghana’s sensitisation of residents of ScanFarm project area against ‘land grabbing’



Source: Preliminary visit to ScanFarm project site before the PhD study, July 2011

Figure 5: Jatropha farms burnt in the Kimminic project area as a result of NGOs sensitisation of village residents



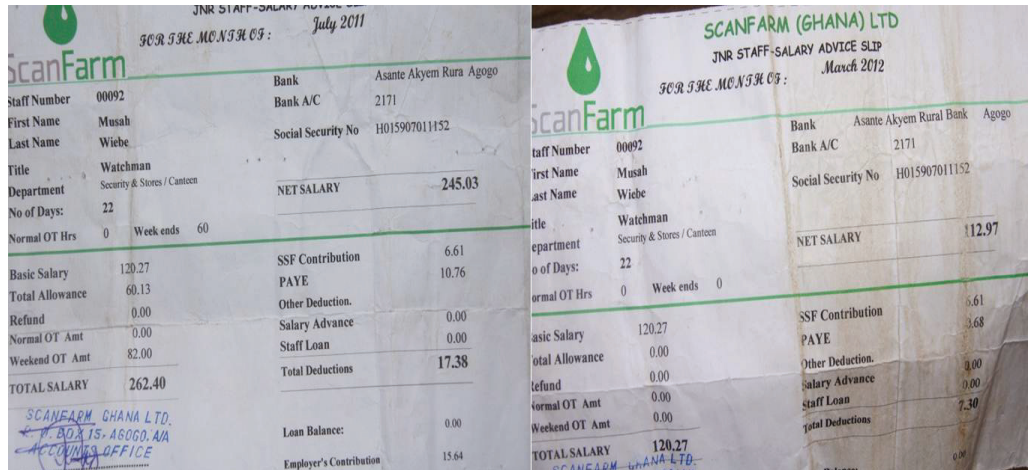
Source: Fieldwork, 2012-13

Survey respondents, especially those employed by the projects, were often reluctant to quote monthly salaries or daily wages since they often mistook my research assistant and me for being an NGO, journalists or associates of the two investor companies. Whenever I encountered such situations, I emphasised my Ghanaian identity (and if possible my Asante identity) and I deliberately repeated questions. I also double-checked information from other household members, often in order to gain the most accurate estimates. This strategy, although irritating, frustrating and time-consuming for me and the respondents, helped me uncover complex issues that are often not immediately discernible. Moreover, interviews with the management of the two companies preceded the household surveys, and the salaries or wages of workers were therefore central. The estimates provided by the respondents were compared with the salary ranges stated by the companies as a double-checking mechanism.

Other respondents could not answer such questions as they were only temporarily employed during the incipient stages of the project implementation, or because their salaries fluctuated according to the number of days they were engaged in the plantation work. In the case of those who could not answer, I sought their consent to inspect available payment vouchers (see Figure 6) or inquire with any other household member(s). Double-checking information was another strategy used in the collection of household livelihood portfolios, especially on issues that require detail and recollection. Since the selected households comprise individuals undertaking different livelihood activities, I sought to gather survey data from the household head plus at least one other member. This was intended to avoid the situation whereby the livelihood activity of the main respondent would veil or gloss over that of the other household members. The same double-checking strategy was applied after asking questions about the

period of arrival in the study villages and of land access. The dates of significant events in Ghana’s history were put forward to engage the respondent and the other household members in the verification of dates.

Figure 6: Payment voucher of a worker at ScanFarm’s plantations



Source: Fieldwork, 2012-13.

Such significant events included the following, in chronological order; before Nkrumah’s regime/independence (i.e. before 1957), Nkrumah’s rule and overthrow (i.e. 1957-1966), Acheampong’s regime (i.e. 1972-1978), Rawlings’ revolution (i.e. 1979-1981), the famous bush fire and famine (i.e. 1983), Rawlings regime (1983-2000), Kufuor’s regime (2001-2008) and Atta Mills’ regime (2009-2012). In addition to the dating of issues based on these historical epochs, the more educated people were able to give precise dates. My original plans for gathering such data were abandoned when references to significant events in Ghana were bandied about by many residents to express the length of their stays in the villages. More striking was the *kuromafo* who often dated the period of their arrival in the village (or that of their ancestors) to *efiri tete* (i.e. since time immemorial) in order to affirm exclusive control over land. New and relevant items were introduced in the course of the interviews whereas certain pre-defined items were expunged from the questionnaire.

Due to the complexities of the study and the iterative processes it required, I administered the survey of 80 households myself. My research assistants only assisted by driving me (on a

motorbike) to the villages, project sites, explaining local terminologies and in the measurement of land areas (see Figure 7).

Figure 7: Tape measurement and GPS device that were used to measure farmland areas



Source: Fieldwork, 2012-13

Another significant part of the household survey was transect walks in both plantations and on farmland areas, conversations with farmers and observations. In the course of this exercise, an impression was made of the conditions and sizes of the new land areas gained by the affected household members. Those who regularly hired labourers to weed farmland and those who usually rented out land were able to provide accurate estimates of farmland or entire land. The cost of hiring tractors or farm labourers provided a specification of amounts spent on every acre of land cultivated. These cost estimates sometimes provided an indirect way of estimating total household farm sizes and land areas lost to the projects.

Although most farmers could not tell the actual sizes of their farmland, they pointed out features marking their land boundaries such as trees, teak stumps and river valleys which were measured with field measurement tapes and a GPS device. Ten household members did not know the size of their farms but gave estimates based on the location of features marking their farm boundaries. Household members who were uncertain about the size of farmland areas depended mostly on stool land and hence are not given fixed farm plots. Rather, they can freely cultivate any portion they wish, provided that right of use or permission is granted by chiefs. Therefore, my initial intention to gather data on the size of entire land areas with cultivated land areas before and after the projects proved quite challenging. This challenge arose because land preparation for the projects without the consent of many farmers, led to the removal of features marking farmland boundaries (see Figure 8). This was predominant in the ScanFarm project area where there are numerous competing claims for the same land areas.

The estimates of dispossessed land areas provided by households whose land boundary marks were contested proved to be simply contentions and non-verifiable.

Figure 8: Example of features (photo in the left side) used by residents to mark farmland boundaries but were removed during the ScanFarm project.



Source: Fieldwork, 2012-2013.

I thus changed the approach and rather focused on gathering data about usual farm sizes cultivated before and during the project implementation and major factors constraining food production in order to examine causal relations between the projects and food crop production (see Table 1, in paper #2). Another challenge was the measurement and conversion of the sizes of land areas into modern measurement units (i.e. acre and hectare). Ghanaian farmers use a measurement system called *ahoma* (measurement rope) or *pole*⁵ (distance between two successive telephone poles) to denote one acre of farmland. The measurement dimensions of *ahoma* (often used in the ScanFarm project areas) and *pole* (often used in the Kimminic project area) ranging between 61.8-63.7m x 61.8-63.7m and 70-75 yards x 70-75 yards respectively are equivalent to the correct dimensions of an acre (i.e. approx. 4,047m² or 4,840 square yards). However, the application of these local measurement systems, which involve marking and measuring farmland, is susceptible to error especially when measuring vast areas interspersed with huge trees, undulating land topographies and river valleys. I made frequent use of a GPS device to calculate farmlands or land areas lost to the projects. I did the measurements using the ‘Area Calculator’ function of the GPS and then walked around the

⁵These were the first telephone poles introduced into the Gold Coast (now Ghana) by the British colonial authorities. The telephone poles were spaced 70 yards apart. A square of the distance between two consecutive telephone poles (i.e. 70 yards square) was assumed to be equivalent to one acre. Nonetheless, in order to compensate for possible measurement errors and hence avoid cheating when hiring farm labourers, farmers instead use 75 yards square to mean one acre.

circumference of farmlands. The results calculated by the GPS were always either below or above the farmers' estimates. Although measurements of land may be completely accurate, they nonetheless provided a fair idea of estimating farmland sizes.

Finally, the period of time until the displaced farmers gained new land was recorded and the condition of the new land areas was also documented. The size of project land areas cultivated by some household members, especially project employees, was also recorded. These activities, undertaken as part of the household surveys, provided a fair idea of the impact of the projects on land use.

3.7 Analysis of field data

The analysis of fieldwork information (or data sets) was guided by fundamentally examining how observed actions/inactions (e.g. activism), activities (e.g. livelihood activity) and certain social practices (e.g. generosity) can be *conceptualised* and *categorised* in particular ways. According to Aase and Fossåskaret (2007), a *concept* is the idea of the existence (or non-existence) of something, whereas *categories* are the actual outcome of that idea at the observational level. Analysing the relationship between these terminologies in daily interpretations is important because the mind is filled with particular prejudices, ideological inclinations and analytical constructions that consciously or unconsciously bundle our description of observations. When we localise observations into categories, we create order in the world, and by so doing we attach different meanings to even similar phenomena and vice-versa (ibid.). Hence, particular conceptualisation of experience defines the kind of categories that are used in the making of observations. In this sense, the interpretation of similar events may not be applicable elsewhere, sometimes not even within the same polity. In order to achieve methodologically sound and empirically-oriented interpretation, Aase and Fossåskaret (2007) recommend four methodical approaches. Firstly, map out the informants or the research participants' categories in relation to a given subject. Secondly, chart how their categories are constituted. Thirdly, clarify the way their categories relate to each other, and finally, their localisation of observations in the respective categories. These provided a useful guide to examine the different forms of livelihood capital, and who is considered an entitled actor in claims over resource access.

3.7.1 Identifying and analysing livelihood capitals (or assets)

Following Aase and Fossåskaret's (2007:1) definition of data as *categorised observations*, the fundamental stage of the household surveys focused on identifying what constitutes assets based on the household members' categorisations. In the case of farmers, much emphasis is placed on *nsaase* (land areas), *mfudee* or *nnɔbae* (food crops, palm trees, mango trees, teak trees and firewood) whereas others engaged in off-farm livelihood activities emphasise *sika adwuma* (often referring to traders/charcoal producers) or *bosome adwuma* (livelihood activity for which salaries are paid at the end of every month). Others place an emphasis on *agyapadee* (assets such as land, livestock, farms and house(s) acquired through personal savings or based on inheritance). The survey shows categorisations that prioritised tangible assets – income, land and crops. In fact, in almost all the sampled households, farmers' categorisations of labourers using the Twi term *apaafɔ* often refer to hired or paid labourers but downplay free (or unpaid) labour services offered by members of either their respective households or social networks in the estimation of assets. For example, in response to items on the questionnaire that required the listing of 'five most important assets', household members, often mentioned resources that generated direct and regular incomes at the time of the fieldwork. This included income from farm(s), charcoal production and land either rented out or under share cropping arrangements. Uncultivated land areas that occasionally provided firewood, mushrooms, fruits or fallow land that constituted a significant part of agricultural production cycles were often excluded in the estimation of assets. This mindset in the villages was one of the reasons given by chiefs for their categorisation of *mfofoa* as marginal land and hence suitable for jatropha cultivation. Even oil palm trees and mango trees which occasionally provide huge incomes and food were often neglected in asset estimates.

Respondents who placed significant value on these items were mostly those whose farmland areas were affected by the projects and had to relocate to uncultivated or fallow land areas or received some compensation payments for the affected trees. New questions such as "how do you make a living when you lose land or during the off-farming seasons" were introduced to inquire about *other assets* that are crucial to household livelihoods as well as the *mechanisms* through which such assets are acquired. This strategy provided a useful avenue for me to gather data on the diverse forms of livelihood capitals possessed by the sampled households. As Bourdieu exemplifies (1986), capital can exist both as goods and services that are directly and immediately convertible into money (tangible assets) as well as in social relations (or

practices) through which such tangible assets can be stored and transmuted into other capital forms. Understanding social capital in the form of relationships such as kinship, trust and reciprocity networks provides researchers with an insight into vulnerability since such relationships often enable people to cope with shock and change (Angelsen et al., 2011). In-depth and semi-structured interviews provide relevant information about how people rely on families and friends when faced with crises, how these networks are constituted and how exclusion from such networks affects resource use and reliance patterns (ibid.). Moreover, livelihoods are affected by trends, shocks and seasonality in economic activities over which people often have limited or even no control. An understanding of people's short-term responses (coping strategies) or long-term (adaptive strategies) responses to economic shocks is thus crucial in order to understand the survey data.

Given these complexities, it was important to operationalise the concept of livelihood capital into measurable and analysable forms. This exercise involves providing the meaning of a concept by specifying and concretising its dimensions in accordance with the proper context of their usage (Andres, 2012). Following the respondents' categories, livelihood capital is conceptualised into visible/tangible and invisible/intangible forms, with the former being the main point of reference. I gathered data on how social practices such as generosity, gratitude, reverence for chiefs and the elderly within the households and other grouping affiliations in the study villages are converted into tangible assets before and during the projects. I also measured participation in *nnoboa*⁶, acts of generosity (or investment in social networks) and reciprocal friendship relationships developed through share cropping (between land owners and tenant farmers), which are often recompensed on a long-term basis but often ignored (or downplayed) in the residents' categorisation of livelihood capital.

I therefore asked farmers who freely accessed labour services and land and related resources (firewood, fruits) through social networks and then placed monetary value about such resources according to prevailing costs in the study village. For example, the cost of clearing one acre of land ranges between GHS 35-50. In cases where farmers gained a free labour service based on social networks for cultivating land areas of, say 3 acres, it was analysed that the savings in labour costs (*apaa sika*) amounted to GHS 105-150, representing a transmutation of social capital into economic capital worth that amount. The same principle of

⁶ The term refers to a practice whereby farmers in a village collectively assist one another in farm work to reduce labour costs. It can be either ethnic-based or purely based on any form of reciprocal relationship.

transmutability of capital was applied to those who gained free access to land and gained employment in the project. I sought to uncover social practices that induce recognition, and cases where sanctions on the failure to observe societal norms could affect resource use by migrants/strangers and indigenous citizens of the project areas. Local citizens, for example, by virtue of their higher social status accorded to them, are exempt from the payment of land rents or tributes to chiefs for cultivating stool land – compared to migrants who are customarily required to do so.

However, honest and compliant migrants who often showed reverence to chiefs by regularly paying tributes, giving gifts especially during festive occasions in return gain more favour from chiefs in the form of gaining bigger and free land later. The same can be said about honest migrant farmers in share cropping arrangements. To analyse the processual dimension of livelihood creation or livelihood loss, I identified how resource access barriers emerge and how investment in social networks in the form of reciprocity, reverence and honesty in share cropping arrangements help overcome such access barriers. This approach helped to shed on the fact that mere possession of social capital does not automatically translate into achieving or sustaining livelihoods. For those who re-gained free land after losing land to the project or who were recruited to work in the plantations, I gathered data about networks used and the procedures they followed. The benefits of re-gaining land and gaining employment were documented. Similar analysis was applied to those who lost land without compensation, and subsequently had to pay higher land rents than before, or could not gain employment in the projects. The difference between land rents paid before and after the projects was examined to show the impact on livelihoods. For example, whereas many local citizens did not pay land rents, migrants paid a tribute of 1-3 bags of maize per acre per farming season before the project. However, after the projects, affected farmers who could not gain free land from their networks had to pay between GHS 50-200 per acre per season, regardless of their status as a migrant or local citizen. The difference between the rate paid before and after the projects was estimated as the economic value of those who had what Bourdieu (1986) calls ‘connections’, transmuted into land value. This provided information on the extent to which the projects had an impact on the livelihoods of different households and different social groups within the context of the lifetime of the project implementation.

Moreover, whilst this processual analysis of livelihood sustainability sheds light on how and when livelihood capital takes varied (and often latent) forms, it elicits a clear empirical and

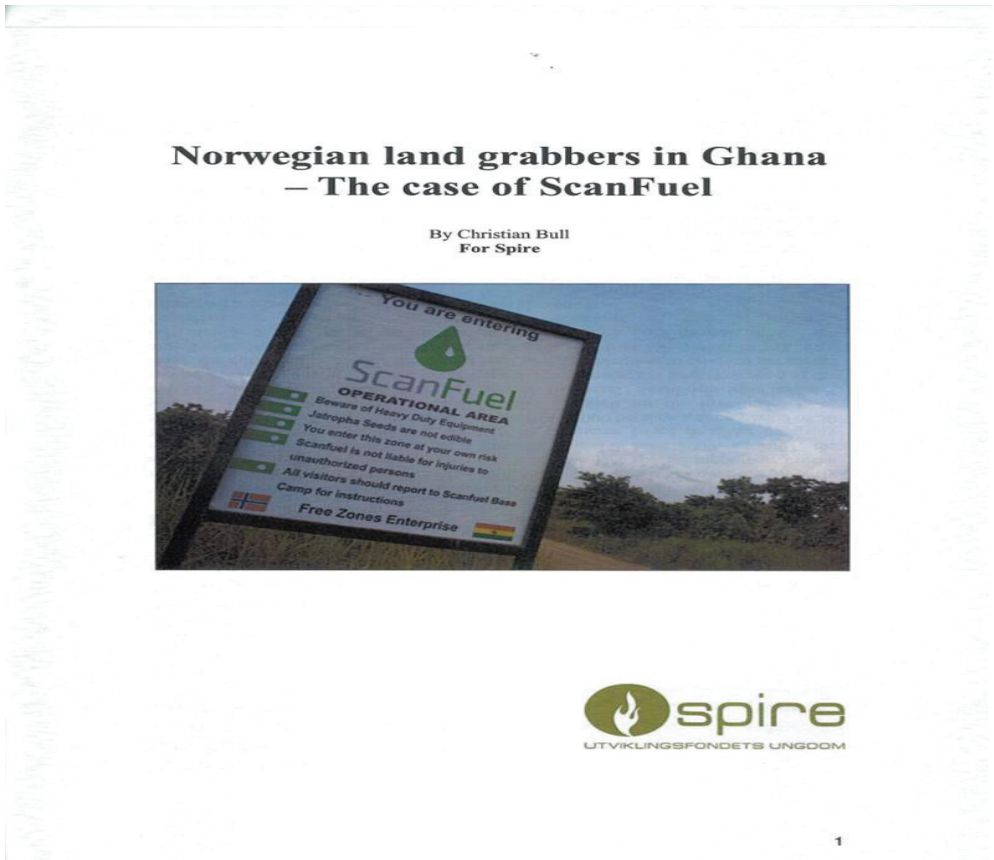
theoretical distinction between the concepts of *social capital*, *agency* and *manoeuvring*. The urgent need to continually make efforts to utilise networks in order to sustain livelihoods marks such a distinction. The manoeuvring concept thus exposes social capital as only a means to livelihood creation but not the other way round. It further shows that *agency* is not limitless. By so doing, the structural limitations of manoeuvring and why such limitations affect particular persons are illuminated.

3.7.2 *Observation and interpretation of photographic materials*

I carried out a lot of observations in the fieldwork in connection with non-vocal or symbolic expressions of sentiments about land, activism and communication of particular messages to the public. These involved taking and analysing photos in the study villages and sometimes comparing them with those that circulated in the media. Based on photographic materials, messages that were unclear to me constituted avenues for the revision of items on the questionnaire and the interview guides. Media publications by a Norwegian NGO, for example, showed a photo of a signpost⁷ depicting perceived illegal and exploitative activities of ScanFarm (see Figure 9). At the time of the fieldwork, this signpost had been replaced by another signpost showing the 'National Best Maize Farmer 2010' awarded to ScanFarm by the Ghanaian government via Ghana's Ministry of Food and Agriculture (MOFA) (see Figure 10). When I showed the photo of the first signpost to key informants, some could only describe its location. However, whilst some informants expressed dissenting views on possible reasons for the removal of the signpost, others claimed to be oblivious to the situation. Follow-up interviews with the management of ScanFarm showed that the second signpost was intended to communicate to the public its contribution to food security in Ghana. Furthermore, ScanFarm emphasised the legitimacy of its operations by proudly making reference to the Ghanaian institutional actors that granted the award, i.e. issued by MOFA and signed by the late ex-President John Mills. A photocopy of the award letter, bearing the signature of the then Ghanaian President, was posted on notice boards at the premises of ScanFarm's office so that visitors could appreciate their 'hard work'.

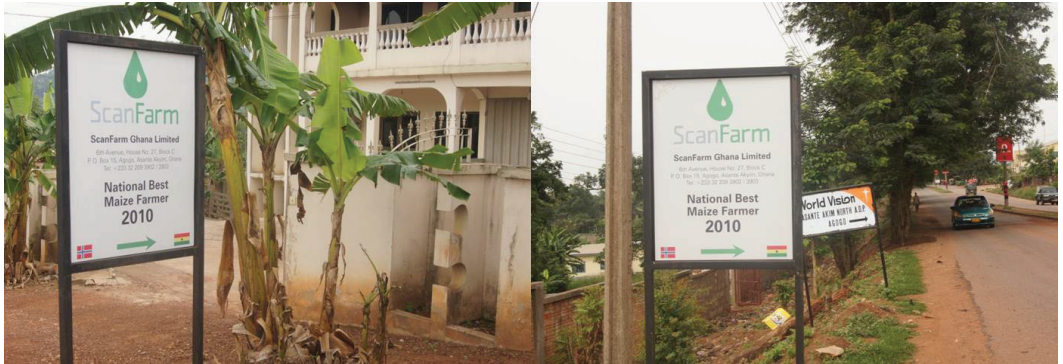
⁷ Inscriptions on this signpost read: 'You are entering ScanFuel OPERATIONAL AREA. Beware of Heavy Duty Equipment. Jatropha Seeds are not edible. You enter this zone at your own risk. Scanfuel is not liable for injuries to unauthorised persons. All visitors should report to Scanfuel Base Camp for instructions' (see Bull, 2010:1).

Figure 9: ScanFarm's first signpost shown on the front page of an NGO publication



Source: Bull (2010)

Figure 10: Current signposts erected along major roads by ScanFarm



Source: Fieldwork, 2012-13

Photo elicitation and interpretation of photographic materials provided insights into the various forms of activism and the residents' impressions about impacts of the projects.

3.7.3 Discourse analysis

One fundamental assumption of discourse analysis is that language profoundly shapes one's view of the world and reality (Hajer and Versteeg, 2005). Fairclough (1995:208-209) emphasises that textual analysis ought to be recognised in discourse analytical frameworks for theoretical, methodological, historical and political reasons. Firstly, texts constitute an important form of social action because social structures are in a dialectical relationship with social action. In other words, the choice of words used in daily interactions are never neutral but rather inform, and are in turn informed by, conventionalised practices and societal norms. Hence, social scientists who are often interested in uncovering social relations cannot do away with textual analysis on one hand and on the other the analysis must be done in relation to other texts and to the broader social context (Fairclough, 1995; Jørgensen and Phillips, 2012). Secondly, texts constitute a major source of evidence for grounding claims about social structures, relations and processes. Evidence for social structures, relations and processes is derived from various materials of social action, which includes texts. Thirdly, texts provide information about ongoing social processes, the constitution of social identities, movement and diversity and hence textual analysis can shed light on social and cultural change. Finally, in a political sense, social control and social domination are exercised, negotiated and resisted through texts. According to Jørgensen and Phillips (2012), *changes* in discourse are a means by which the social world is changed, and that discursive practice partly contributes towards

changing as well as reproducing the social reality. Hence, the purpose of discourse analysis is to uncover ‘naturalised’ assumptions underlying texts or statements and their framings, or the embeddedness of language in practices and why their usage either undermines or legitimises particular actions (Fairclough, 1995; Jørgensen and Phillips, 2012; Hajer and Versteeg, 2005).

Constructs such as *ideological effects of texts*, *ideological closure* or *knowledge delimitation*, *floating signifiers* and *framings* are applied in the analysis of the message communication or vocal expressions used by particular actors to suppress (or pre-empt) dissent, legitimise actions, justify certain categorisations, refresh and activate claims and to appeal to emotions in the biofuel debate. The application of these constructs is not a straightforward exercise. Aase and Fossåskaret (2007) provide three main methodical approaches: analysing the context of text production, the position of the speaker and the connotation of the texts, i.e. the associated or additional meanings of texts beyond their literary meanings. This methodical approach was useful in the analysis of statements and the particular discourse(s) to which they subscribe.

Discourse analysis was performed at two levels: texts produced through *literature review* and through *interviews*.

Review of literature

The review of biofuel literature provided information about the actors involved in the biofuel debate, the narratives and discourses used and the choice of framings used to communicate the outcome of biofuel investments to the public. Ghanaian terminologies which have certain political and economic connotations was analysed to show why the choice of concepts or framings by particular actors becomes hegemonic in the representation of biofuel land deals. Follow-up on media discussions and publications and my participation in academic seminars and conferences on land and agrarian issues, biofuels, ‘green economy’ and so forth (see conferences and workshops in the reference list) provided empirical insights and theoretical tools for the analysis of the intermesh of different biofuel governmentalities.

I reviewed legislations and constitutional provisions, government policy guidelines for agribusiness and reports by the Ghana Lands Commission, Ghana Investment Promotion Center, Ghana’s MOFA and biofuels land deals literature. In addition, media reports, communication documents (letters, evaluation reports), minutes of meetings between chiefs, community representatives and biofuel investors were reviewed. Court verdicts and court

orders on land claims, complaints by affected residents and community-based activist organisations were also reviewed. I scrutinised the land deal agreements in order to gain an insight into the terms of the land deals and particularly certain ambiguous clauses. For example, Article 6 of the Kimminic Joint venture land deal entitled *non-interference* states that the chiefs and the project community ‘SHALL NOT’ interfere with the following decisions of the company: “the cultivation of the Feedstock on the land, the kind of Feedstock chosen to be cultivated on the land ...”. Given the original idea of jatropha cultivation, analysis of these clauses exposes other considerations for the land deal and why a switch to new investments on the same land areas could be rendered legitimate.

Interviews

Based on the interviews conducted (see Appendices I-IV), I analysed the choice of words used to label some social groups as migrants or indigenous citizens, to describe land use categories and the narratives used to legitimate or undermine identities in claim-making processes over resource access. Jørgensen and Phillips (2012:44) emphasise that group formation as constituted in discourses always indicates closures in an undecidable terrain and consequently excludes alternative interpretations or ignores ‘other groups’ as well as the differences within groups. Terms such as ‘they’, ‘theirs’, ‘them’, ‘we’, ‘others’ and ‘ours’ used by research participants to indicate membership in social groups (or group affiliations), social responsibilities and in claim-making processes were analysed in relation to the socio-political institutions and the history of the study areas. I particularly analysed the rationale for the use of possessive pronouns in arguments over resource access claims. Common examples of such statements include; “the land belongs to us [*kuromafo*]”, “they [*ahohoɔ*] have no land here [in this village]”, “none of them [*ahohoɔ*] can use lands without their [chiefs’] permission” and so forth. Some of these statements were responses to probing questions based on photo elicitation. Statements such as “our grandfather is a co-founder of this village”, “the river god here was first served by my parents [*me nananom*]”, referring to ‘past events’ and particular attachment to the study villages were analysed. These statements evoke certain socio-cultural arrangements and hence have an ideological impact on the constitution of discourses of resource access or entitlement.

One important analytical device used in the analysis of texts and discourses was the examination of the choice of framings used by actors such as chiefs, NGOs and social activist groups in the representation of land deals, biofuel investments, food crops, and narratives of

ancestry or genealogy. For example, the terminology *Akwasi Broni* (or *Abrofo*), meaning Europeans in Twi language, is sometimes used favourably to describe excellence in the delivery of services. Chiefs, who are customarily revered as a repository of wisdom, often strategically used to this terminology to express hopes of rural development and related modern infrastructure that may emerge in the project villages based on the premise that the investor companies came from Europe or the western world. Residents, particularly unemployed youth who had hoped for employment creation, expressed optimism in this positive of the projects representation by chiefs. Meanwhile, NGOs and community-based social activist groups framed the same terminology *Akwasi Broni* in a way reminiscent of the colonialism or *Scramble for Africa* in the 19th century, to instigate residents against potential land dispossession and livelihood destruction. To use Laclau and Mouffe's (1985) term, the terminology *Kwasi Broni* can be seen as a floating signifier invested with different meanings in different discourses to promote particular social actions in the villages. It also suggests that texts and the manner of their usage have certain ideological effects as Fairclough (1995) emphasises.

Another floating signifier is the term *mfofoa*. Chiefs and other proponents of biofuels described the potentially positive livelihood impacts around the Twi word *mfofoa*, which is often described to mean marginal land, indicating that it has limited potential for agricultural production. And thus, the use of *mfofoa* for large-scale projects would create economic opportunities. Farmers and NGOs, however, rather describe it as fallow land, indicating its importance in the agricultural production cycle. As Jørgensen and Phillips (2012) indicate, Laclau and Mouffe's floating signifiers serve as an important analytical tool to discover an order of a discourse. The idea that a signifier is floating indicates that a particular discourse has not succeeded in fixing its meanings (or subverting alternative meanings) and that other discourses are struggling to appropriate it (ibid: 148). In this study, I can identify an order of discourse of biofuel land deal discourses and the proponents of the *win-win* and *critical* discourses struggle to establish certain hegemonic meanings about livelihood impacts of biofuel projects by filling the various floating signifiers with particular compelling meanings.

Moreover, I also analysed which signs constitute the nodal points in the various rival discourses surrounding the biofuel land deals. The word *mfofoa*, emphasising this land category as being marginal, and 'rural unemployment' constituted the dominant nodal points in the win-win discourse used by chiefs and the investor companies. At the same time, the symbolic meaning of exclusive rights over so-called *mfofoa*, emphasising this land category's

value as rather fallow land, dominated arguments by NGOs and research participants who were critical of the projects' impacts. According to Aase and Fossåskaret (2007), sometimes categories possessed by the same group of people can vary within and between cultures, generations and often result in divergent interpretations and understanding of similar issues. Informal conversations with key informants showed that the terms *mfofoa* and *kuromafo/ahoho* had though been common in use for decades to categorise land types and social identity, but that much greater emphasis was placed on their use during the period of project implementation on matters relating to land entitlements. I further enquired about the rationale for the choice of the categorisations often invoked by chiefs to distinguish between those persons who are customarily (and therefore legitimately) entitled to land and the affected persons who are disabled in the pursuit of land claims. Besides the face-to-face conversations, I made use of phone and e-mail communications with research participants, especially chiefs, key informants and the management of the two companies (see Appendix I). This provided an important avenue for clarifying misunderstood statements in recorded data or for following up on emerging issues in the period of my absence in the study areas, especially after I had concluded the fieldwork and returned to Norway.

The focus on the choice of framings, concepts and categories used by different actors and social groups in pressing claims, legitimating or undermining particular actions helped to demonstrate how discourses are constituted and in turn constitute social reality within the context of the socio-political institutions of the study villages.

3.8 Validity issues and the research design

Silverman (2013:285) defines validity as 'the credibility of interpretations'. Central to *validity* concepts is the concern regarding the 'authenticity', 'credibility', 'accuracy' or 'trustworthiness' intended to determine the worth or the truth value of a study (Creswell and Miller, 2000; Creswell, 2009; Andres, 2012; Silvermann, 2013). However, validity does not imply the existence of 'golden truths' to which explanations of empirical findings and hence conclusions must be compared in order to gain trustworthiness (Maxwell, 2005, 2013). Every facet of a research design has both a direct and indirect effect on the validity of a research project (Andres, 2012). According to Maxwell (2005, 2013), the ability to convince an audience or readers that findings are genuinely based on a critical investigation into the object of the study and of the analysis of field data, and that the conclusion reached cannot be ruined by rival or alternative explanations should be a researcher's priority. Therefore, rather than

seeing preference for particular methods or research traditions as a panacea for validity threats, a thoughtful reflection on the components of the overall research design can contribute to improving the worth of a study (Maxwell, 2005, 2013; Andres, 2012). Having realised widespread information about biofuels land deals and the heated debates it generated and the numerous studies that have been conducted on the subject during the last decade, I kept reflecting on questions such as: did my choice of concepts and categories overlap that of the respondents?, did the overall methodological execution of the research suit the purpose of my study? Or as Lund (2014) would put it, was my analysis of patterns or trajectories of events based on the typicality or rarity of observations, and for what purpose does this case serve? Addressing these potential sources of validity threats involved a combination of diverse but complimentary data collection and analysis methods, strategies and techniques at different facets of the research design and throughout the research process. These included asking relevant questions and making sure that they were clearly understood and correctly answered by research participants, and constantly reflecting on my positionalities, the research participants and my research assistant.

Chapter Four

Findings and discussion

This thesis investigates the overarching question: *how do specific biofuel investments impact on the livelihood of different individuals and social groups in specific locations?* Social identities and statuses that determine access to land and other productive resources before and after the biofuel projects are not pre-given but rather (re)negotiated over time in location-specific ways. Moreover, modes of representations of jatropha biofuel land deals and their far-reaching impacts on livelihood are shaped by the prevailing notions of entitlement and economic philosophies of a polity. The following sections elucidate the history of agrarian developments and land allocations in Ghana and how the three papers coherently examine the overarching question of the thesis.

4.1 Large-scale land allocations in Ghana in retrospect

Before colonialism in Ghana (formerly Gold Coast), land ownership was gained through warfare and struggles for territorial hegemony between chiefdoms and kingdoms and subsequent occupation (Berry, 2001; Fold and Whitfield, 2012). Successful warfare for kingdoms and chiefdoms did not only imply military supremacy and expansion of territorial frontiers but also brought increased revenues from tributary payments and war booties. Regarded as a commander-in-chief during warfare, chiefs (either successors or predecessors along ancestral lines) were extolled as the founders and leaders of the state, its divisions and the satellite villages (Busia, 1951; Brempong, 2007). Chiefs ensured the well-being and peace of their subjects, whereas subjects in return showed reverence by paying tributes, often in the form of foodstuffs (or meat from hunters) and sometimes in token sums of money (ibid.). Land access was gained through negotiation with customary custodians of land — chiefs, clan/family heads and other primordial groups of a polity. The situation changed during the transition to the colonial and post-colonial regimes, which were marked by struggles for sovereignty over land. For instance, land areas currently controlled by the Ghanaian state — popularly called ‘state land’ or ‘public land’, began to be acquired through compulsory

acquisition of land areas once held by chiefs and other primordial groups. Hence, it is important to explore how and why authority land has rotated between the populace, chiefs and the state in the colonial and post-colonial regimes.

According to Larbi et al. (2004), between 1850 and 1957, the British colonial administration adopted two main policy instruments of *expropriation* and *appropriation* as a means of gaining land access in the Gold Coast. Compulsory land acquisitions by the colonial regime were backed by constitutional instruments under the assumption that the acquisitions would serve public interest (Larbi et al., 2004; see also Aryeetey et al., 2007:13-15). The expropriation involved compulsory land acquisition *with compensation* in the colony and Ashanti (now extending from central to southern Ghana) whereas appropriation involved compulsory acquisition *without compensation* in the Northern protectorate, which currently covers the Northern, Upper East and Upper West regions of Ghana. These measures were adopted following the unsuccessful implementation of the Crown Land Bills in the late 1890s (ibid.). The central argument against the Land Bills was that all land areas were owned – be they occupied or not – and held in trust for the people by their ‘natural rulers’, i.e. chiefs (Berry, 2013; Amanor 1999). In this sense, all land areas in the Northern territories were effectively nationalised by the colonial administration whilst the status quo remained in the colony and Ashanti (Kasanga, 2002; Larbi et al, 2004). It is worth mention that, although Asante formed part of the British-ruled colony of Gold Coast, it remained an almost autonomous empire (comprising the present-day Ashanti and Brong-Ahafo regions) – indicating the resilience of its chiefly establishment. In the colony and Ashanti, affected land owners received compensation payments from the Governor after court examination and confirmation of land claims (ibid.). The chieftaincy institution also gained much prominence in the colony and Ashanti in terms of control over land under the Indirect Rule System, which was a corner stone of the British colonial administration (Aryeetey et al., 2007).

Furthermore, the Indirect Rule System somehow granted chiefs the power to define and distinguish between migrants and local citizens in the collection of tributes for the colonial governors (Berry, 2001, 2013; Boni, 2005). This distinction between migrants and indigenes of a polity was based on family ancestry. Indigenous citizens were exempt from payment of agricultural tributes to chiefs whereas migrants were not. Local membership in villages, referred to as ‘local citizenship’, thus grants individuals and groups considered indigenes unfettered access to land in the local community controlled by chiefs. Gaining the status of a

‘local citizen’ does not depend solely on genealogy but also their recognition of chiefly authority over land.

The delegation of powers to chiefs to collect tributes and to ensure law and order in their respective local areas of jurisdiction in the colonial administration marked the beginning of a process of formalising and institutionalising chieftaincy within local government. And the consequences were in two forms. By placing Ghanaian chiefs under the close supervision of district, provisional and chief commissioners and the Governor, the autonomy of the chieftaincy institution and the financial backbone of chiefs were affected compared to the pre-colonial period (Brempong, 2007). Nevertheless, the situation created financial opportunities for certain chiefs, especially in southern Ghana. According to Berry (2013), after the unsuccessful implementation of the Crowns Land Bills, the principle of ‘native’ land ownership in the Ashanti became a central premise of indirect rule and consequently afforded chiefs the leeway to collect substantial land rents from so-called ‘stranger’ farmers who grew cocoa for the world market (see also Boni, 2005). The strategies adopted by chiefs to re-invent custom to label certain individuals and groups as either ‘indigenes’ or ‘migrants’ particularly in the forest areas in order to justify the collection of periodic land rents (tributes) after the cocoa boom period of 1930-1940s (Boni, 2005; Berry, 2013) created spaces for (re)negotiation of land rights and therefore of social identities. Ashanti chiefs in the early 20th century, for example, appointed migrants to occupy contested territories or frontier areas in order to secure their control over such land areas (Berry, 2001). Migrants who served as village headmen were treated as agents of stool land, thereby altering their identity into ‘local citizens’ (ibid.).

After the colonial era (i.e. after 1957), post-independence governments equally pursued countless compulsory land acquisitions, mainly in the form of vesting land acquired by previous regimes in the President, in addition to new acquisitions by the incumbent government (Larbi et al., 2004). The main purposes of these land acquisitions included plantation agriculture (rubber, oil palm, forestry and cocoa plantations) and township development/resettlement, as was the case in the colonial era. The total estimated land acquisition by post-independence governments was however higher (104,524 hectares) compared to the figure of 54,383 hectares during the colonial regime (ibid.). Land acquisitions in the post-independence era have generated despondency among the populace due to reported non-payment of due compensation to landowners, destruction of livelihoods, non-utilisation or the diversion of such land from purposes for which they were acquired

(ibid.). Compulsory land acquisition instruments require the state to reverse land to its previous owners if lands are not developed or used for the original purposes of acquisition. This has always been flouted. The acquired areas are usually not formally demarcated and this consequently created incidences of land encroachment and attendant land litigations. The situation is even more widespread in the northern Ghana where the 1979 constitutional declaration for the return of the land hitherto vested in the state to the ‘original owners’, meanwhile government projects had been implemented on some plots without appropriate acquisition instruments (Lund, 2008). The lack of specification of who constitute the original owners created numerous land disputes between chiefs and ‘earth priests’ (spiritual heads of the land) and other claimants over whose land rights were restored (ibid.) and claims over land or compensation for it depended on references to the past legitimised by court verdicts or through political lobbying and networking, etc. (Lund, 2006, 2008, 2013).

The emergence of national citizenship in the post-independence era has not superseded local citizenship, but the authority of chiefs over land was impaired by the state in a number of ways (Berry, 2001, 2013; Rathbone, 2000; Boni, 2005). Radical land reforms introduced by the CPP government under Ghana’s first President Dr. Kwame Nkrumah are classic examples of threats to the chiefs’ authority over land. In *Nkrumah and the Chiefs*, Rathbone (2000) catalogues a series of initiatives by the CPP government ostensibly to modernise local government but aiming to break the hegemony of chiefs. The chieftaincy institution came under intense attack both during the incipient stages of proto-nationalism in the Gold Coast and later in the early post-independence era under Nkrumah due to its reputation as being the remnants of colonial legacies. For example, the British government actively participated in the provisions of the 1957 constitution of Ghana with the intention to safeguard chieftaincy institution in the governance of the country (Brempong, 2007). The constitution advocated the establishment of Regional and National houses of chiefs as advisory bodies to the central governments on matters relating to customary law and usage (Brempong, 2007; see also chieftaincy issues⁸). These provisions which afforded much reverence to chiefs were construed as potential threats to the sovereignty of the CPP government. The CPP government consequently enacted the Acts of 1958 and 1959 which either amended or repealed certain provisions of the 1957 constitution in order to put chiefs under the authority of the government.

⁸ The origins, the powers and functions of the Ghanaian Regional and National Houses of Chiefs can be found here: <http://chieftaincy.org/index.php/chieftaincyghana/7-originshoc>

A significant part of the subversion of chiefs was the breakdown of the very foundation of the chieftaincy institution, i.e. control over stool land and stool land revenues (Brempong, 2007; see also Boni, 2005). The CPP government's attitude towards the chieftaincy institution is encapsulated in what Arhin Brempong (2007:36) calls 'efforts to remove the remaining vestiges of indirect rule'. Chiefs who remained loyal or strategically showed loyalty to the government were however exempt and even gained promotion (Rathbone 2000; Badu 2006; Brempong, 2007; Berry, 2013). The backlash effect of the opposition to chieftaincy was keenly felt when chiefs formed alliances with the National Liberation Movement (NLM) that overthrew the CPP government in February 1966. The NLM sought to liberate chiefs from the repressive acts of the CPP and restore chieftaincy institution to its former status enshrined in the 1957 constitution (Brempong, 2007). To gain support from the masses, other regimes that came to power after Nkrumah sought allies among Ghanaian chiefs (Berry, 2013). The 1979 and 1992 constitutions of Ghana barred subsequent governments from interfering in chieftaincy affairs as had been the case under Nkrumah (Rathbone, 2000; Brempong, 2007).

The different tactics by post-independence governments towards the chieftaincy institution suggest constant ebbs and flows of chiefs' authority over land. However, the numerous compulsory land acquisitions by post-independence governments affected local citizenship and the authority of chiefs. Even though the 1992 constitution provided for mandatory appointment of representatives of the Regional and National Houses of chiefs in the Ghana Lands Commission, it mandated the establishment of the Office of the Administrator of Stool Lands (OASL) for the collection and disbursement of revenues from stool land. The provisions specify that 10% of the collected revenues should be paid into the account of the OASL and the remaining be disbursed according to the constitution formula: 25% for the stool in question, 20% for the traditional council and 55% for the District or Municipal Assembly within which the land is located. The creation of the OASL in 1996 resembles the colonial regime during which the collection of revenue and taxes or levies was closely supervised by colonial authorities.

The above presentation shows that authority over land in Ghana has rotated between chiefs and the state in diverse ways under changing political circumstances, indicating the centrality of land in the Ghanaian politics and agrarian developments. Moreover, it contextualises ongoing land politics in the study areas of Ashanti and Brong Ahafo regions in southern Ghana. The next sections show how Ghana's current agrarian experience is shaped by antecedents of land allocations and the recent neo-liberal thinking.

4.2 *The (dis)continuities in Ghana's experiences of large-scale agriculture*

Ghana's agrarian landscape is dominated by small-scale farm-holdings operated by private individuals. MOFA (2010) estimates that agricultural producers with average farm sizes of 1.2 hectares accounts for a predominant 80% of domestic production. These agricultural activities are usually financed through small and short-term informal sources such as money lenders, traders, and credit associations and in rare cases through formal financial institutions such as banks and microfinance (ibid.). This dominant farming system nonetheless has co-existed with large-scale agriculture from the pre-colonial period until present time, albeit with different facets, production arrangements and driven by different economic and political philosophies. As far back as the early 19th and mid-20th centuries, private business individuals and business associates have invested in large-scale cocoa and oil palm plantations in the forest regions of southern Ghana (Hill, 1961; Amanor, 2006). Despite earlier experience with large-scale agriculture, efforts by the European interests (British, Germans, Dutch, etc.) to promote large-scale agriculture, especially palm plantations, failed (Fold and Whitfield, 2012). This is attributed to internal political instability in the Gold Coast as a result of inter-tribal warfare, and rivalry among the European powers seeking territorial hegemony (ibid.). In addition, negative attitudes towards the plantation system by the British Crown due to fear that it would cause political instability, land dispossession and disruption of the smallholder export production system that prevailed in the colony contributed to the failure of the large-scale plantation system.

The post-independence period was accompanied by striking transformations in large-scale agriculture. With the exception of the Progress Party (1969-1972), the early post-colonial governments of Ghana favoured a state-led social and economic development (Obeng-Odoom, 2012). The policies of the CPP government were quintessential of this post-independence philosophy. Large-scale state farms were developed to boost food production (Hodge 1964; Aryeetey et al., 2007), reduce chiefs' control over land and their exploitation of small-scale tenant farmers (Boni, 2005; Aryeetey et al., 2007). The economic philosophy of the CPP government was underpinned by socialist ideologies, aimed at establishing a centrally planned economy with the state as the sole driver of economic activities (Larbi et al., 2004). After the overthrow of the CPP government, coupled with poor management of state farms, the state-led large-scale agriculture died out. Moreover, corruption among CPP government officials affected the profitability of state-owned enterprises, which eventually plunged Ghana into bankruptcy by the end of 1966 (Obeng-Odoom, 2012). The Sahelian

drought of 1968-1973, rampant bush fires, capital flight from Ghana and increasing inflation further affected the Ghanaian economy in terms of the quantum and volume of exports (Berry, 2001; Bawumia, 2004).

The rapid decline in economic fortunes compelled the Ghanaian government to seek external financial assistance, and the IMF's Structural Adjustment Programs (SAPs) was eventually adopted in February 1983 (Bawumia, 2004; Obeng-Odoom, 2012). The central argument of the IMF and the World bank-SAPs was that structural inefficiencies had been created by state intervention in the provision of services, especially in the poverty-stricken rural areas, and that market opportunities were reduced in terms of household income creation (Konadu-Agyemang, 2000). It was recommended to liberalise the urban sector markets in order to induce technology transfers for competitive local industries (ibid.). The implementation of SAPs was promoted as the remedy to unemployment problems and the widening poverty gap between the rich and poor. Trade liberalisation and market deregulation constituted the centre-stage of the SAPs (Agyemang-Konadu, 2000a; Obeng-Odoom, 2012).

Due to structural changes that resulted from SAPs, the period covering the first decade (1983-1993) of the policy intervention is touted as the "official birth of Neoliberalism" in Ghana (Obeng-Odoom, 2012:91). Indeed, despite the failure of the SAPs to deliver on their original objective of ensuring massive poverty reduction, its footprint of neoliberalism has characterised Ghana's economy since 1983. Increased private sector investments marked the retreat of the state as the main driver of major economic activities (ibid.). One prominent feature of the efforts to stabilise the Ghanaian economy was the promotion of private investments in the agricultural sector, particularly for the production and exportation of agricultural commodities such as cocoa, timber, vegetables and foodstuffs (Konadu-Agyemang, 2000a). Many state enterprises were fully or partly privatised in line with the new neoliberal thinking. The Ghana Oil Palm Development Company (GOPDC), Twifo Oil Palm Plantations (TOPP), Benso Oil Palm Plantations (BOPP) and Norpalm Ghana are all examples of enterprises that were fully or partially privatised between the 1990s and early 2000s (Fold and Whitfield, 2012). The privatisation resulted in almost a take-over by foreign companies by way of majority shareholding (ibid.).

The pro-private investment policy environment in Ghana over recent years further illustrates the deepening and widening reach of neo-liberalism. The reduction in corporate tax rate from 35% to 30% for companies listed on the stock market, the creation of a Ministry to promote

private sector investments (Obeng-Odoom, 2012) and the establishment of the Ghana Investment Promotion Centre (GIPC) all serve to illustrate Ghana's willingness to create an enabling environment for private investments. According to Obeng-Odoom (2012), 2,781 private investments with a total value of USD 1,118 million were registered by the GIPC from 2001 to 2008. These investments encompass manufacturing (28%), services (26%), tourism (11%), building and construction (8%), export trade (4%), agriculture (6%) and general trade (17%), with the investments mainly driven by foreign capital. Since 2008, private investments in the agricultural sector have seen a massive increase. GIPC (2012) estimates⁹ show that a total of 38 agricultural investment projects had been registered between 2009 and 2011 alone, with an estimated total cost of USD 960 million. The Foreign Direct Investment (FDI) component of these project constitutes 94% (ibid.), with the major investor companies often coming from the UK, Netherlands, Norway, Canada, Lebanon, Nigeria, China, India and the USA (GIPC quarterly reports, see www.gipcghana.com).

The liberalisation of Ghana's economy has raised concerns over the spate of agricultural investments that lack comprehensive guidelines to regulate large-scale land acquisitions. In spite of governmental support for small-scale farming, the state has simultaneously demonstrated a strong preference for large-scale farms in Ghana (Yaro and Tsikata, 2014). Ghana's agrarian landscape has been recast in the direction of ambivalence on one hand and a gradual decline of authority of the state in the making of land allocations for large-scale agriculture. The paradox of the recent surge in large-scale agriculture lies in the fact that once consent between chiefs and other political office-holders is achieved, the involvement of state institutions for approval of land allocations becomes automatic, often regardless of the size involved and the people affected (ibid.). As subsequent sections illustrate, this study has reached similar findings to the effect that weak state regulations has created spaces for manoeuvres by chiefs, NGOs and other actors in shaping agrarian configurations in Ghana. The power of the state to negotiate and allocate land for large-scale agriculture has shifted (or is gradually shifting) to chiefs as clarified in the following sections.

⁹ The estimates are based on investment data provided by the GIPC during the fieldwork in Ghana in June 2012.

4.3 The shifting chieftaincy-state power relations and biofuel investments in Ghana

Ghana's return to constitutional democracy since 1992 has increased the prominence of the chieftaincy institution in party politics, and this has had a telling effect on land allocation trends during the last decade. One major transformation in the chieftaincy institution that occurred in Ghana (or the Gold Coast) during both the colonial and post-colonial regimes is the breakdown of the financial base of chiefs and succession disputes (Brempong, 2007; see Tettey et al., 2008, for a discussion of succession disputes in Ghana). A few exceptions are the chiefs in Ashanti and other forest areas, who were able to continue to collect tributes or land rents from migrant farmers. Whilst succession disputes and litigation over land boundaries affected the finances of many stools, the roles played by the colonial authorities and post-independence central government officials in the collection of revenue from land have further weakened the financial backbone of the chiefs (Brempong, 2007). Other sources of revenue for chiefs such as occasional gifts, war booties, taxes on mining gains and other customary dues have disappeared or are inadequate to cover the current administrative tasks due to increased rural out-migration (ibid.). Consequently, chiefs have resorted to commoditising some of the land resources and aligning themselves with political parties or governments in order to create economic opportunities (Brempong, 2007; including my own emphasis). Moreover, chiefs strategically lobby for appointment to national statutory bodies and attract development projects to their respective areas by liaising with state institutional actors or declaring support for particular government programmes and policies (Brempong, 2007). Indeed, clauses 1 and 3 of article 276 of the 1992 constitution explicitly bar chiefs from dabbling in party politics, yet clause 2 contradicts the provisions on the political neutrality of the chiefs: 'a chief may be appointed to any public office for which he is otherwise qualified'.

Many Ghanaian chiefs actively participate in party politics or have strong party political affiliation. Some chiefs have even served as ministers of state, executing government policies and programmes. The power of chiefs in party politics is enhanced by their active involvement in national decision-making processes through the Regional and National Houses of Chiefs (Busia, 1951; Brempong, 2007; Berry 2013). During the past three decades, it has become a convention that politicians supported by chiefs gain advantages in vote-seeking political campaigns. The Ghanaian government distributed four-wheel drive vehicles to

regional houses of chiefs in the run-up to the 2012 general elections, purportedly to facilitate the contribution of chieftaincy in national governance (Ghanaian Chronicle, 2014). An additional 13 pickup trucks were distributed to the National and Regional Houses of Chiefs in July 2014 which became widely discussed in the Ghanaian media (see Daily Guide, 2014; Ghanaian Chronicle, 2014; Metro941.fm, 2014). Whilst the clergy and political analysts decried the decision as "naked politics" and "corruptible gifts", the President of the National House of Chiefs however invoked sections of the Ghanaian constitution to legitimate the decision (Daily Guide, 2014). A press release signed by the President of the National House of Chiefs, Professor John Naa Nabila, states:

Articles 271 and 274 of the [1992] Constitution and Sections 1 and 6 of the Chieftaincy Act 2008 (Act 759) created the National and Regional Houses of Chiefs, just like other bodies of State. It is therefore unfortunate when without any basis it is taken for granted that it is only for political reasons that such assistance is given to the Houses of Chiefs (Metro941.fm, 2014).

Similar reciprocal relationships between chiefs and governments have existed in other democratic regimes in Ghana. Although the participation of chiefs in national politics in Ghana has taken many twists and turns, the phenomenon can still be described as continuities taking different forms depending on the reigning economic and political philosophy. With the current democratic dispensation, politicians have objectified chieftaincy as a source of political capital in terms of vote-seeking whereas chiefs have gained leeway to undertake many controversial land allocations with impunity. Land allocations during the last decade represent significant turning points in the history of agribusiness in Ghana for three main reasons. Firstly, they are contrary to the practice from the colonial and early post-colonial era, when large-scale land allocations were solely sanctioned by the state but rarely involved chiefs in direct negotiations (see also Ghana Land Commission, 2012). Secondly, the land acquisitions have been dominated by foreign investors and the agricultural products are intended for biofuels and food mainly for export. Thirdly, the reported land deals (over 1 million hectares) occurred within a decade, compared with total land allocations (approx. 150,000 hectares) that occurred over a century during the preceding period.

The continuous struggle for power between Ghanaian chiefs and the state is based on the fact that the two institutional actors derive (or claim to derive) their authority from different sources at different epochs (Ray, 1996). As illustrated above, the claims of authority over land

has become more convoluted during the last decade marked by increasing commercialisation of land in a context land areas are not clearly demarcated and formalised. Hence, it is worth discussing the recent biofuels land deals within the context of the ever-shifting centres of authority over land and their implications for land access for different individuals and social groups.

Paper #1 argues that the increased biofuel land deals coincide with the chiefs' pre-existing motivation to *re-establish* and *retain* authority over land. The main strategies adopted by chiefs are the re-invention of custom to frame and re-define territorial hegemony and the use of terminologies to categorise land use forms and forms of social differentiation. The chiefs justify recent large-scale land allocations by alluding to the marginal land narrative that reinforced the jatropha hype. Furthermore, chiefs justify land deals by claiming that capitalist agricultural investors remain willing to pay royalties and create employment opportunities in project villages—unlike users of stool lands whom chiefs accuse of evading agricultural tributes. Individuals and groups recognised by chiefs by virtue of regular payment of tributes or showing reverence to chiefs, or persons who resorted to court action to defend land use rights based on their local citizenship status successfully circumvented land dispossession. Conversely, individuals and groups lacking the social capital and the capability to do so faced land dispossession, sometimes even regardless of ethnicity or 'citizenship' in project villages. The creation of social and legal spaces for (re)negotiation of land rights based on labelling and self-labelling either as migrant or local citizen (indigene of the project villages) renders local citizenship more fluid than the period before the projects. The eligibility criteria for gaining land access, for example, became dependent not only on genealogy that grants one-time citizenship status but is also upon relationship with chiefs and other influential people or on petitioning law courts to protect land rights.

Since continuous payment of tributes depends on legitimate authority, chiefs' active involvement in the making of land allocations inherently accentuates the motivation to re-establish and retain authority not only over land but also labour. The ability to sustainably achieve both depended on the ability to clarify, formalise and legalise otherwise ambiguous land boundaries, which often caused land disputes and loss of stool land revenues. Although both projects created land dispossession in the sampled households, a close reading of the motivation of chiefs in allocating land for the respective projects exposed crucial factors that determine land dispossession. As illustrated in the cases I and II of paper #1, both chiefs of the NTC and ATC had a similar motivation: i.e. to re-establish authority over land in order to

create development opportunities and formalise land boundaries against potential future litigations. The ATC opted for a lease agreement with the primary aim of formalising the boundaries of vast land areas customarily co-owned with neighbouring traditional councils. The ATC's motivation to re-establish authority over land at the expense of neighbouring traditional councils affected most households in the sample. However, the NTC's central concern to make the project beneficial to the village population, particularly the local citizens, by opting for a joint-venture land deal comparatively reduced incidence of land dispossession in the sampled households. This does not simply denote that the different land contractual agreements made the difference in incidences of land dispossession in both samples. Rather, the similar motivations engendered quite different incidences of land dispossession in the sampled households largely due to the socio-political dynamics in both polities.

The politics of the current land deals is shaped by ebbs and flows of authority over land between chiefs and the state since the colonial era. The backlash effects of the fragmented authority over land which persisted after the colonial era is profoundly transposed to the local level in the form of ongoing (re)negotiation of land rights and social statuses and identities. The labelling and 'self-labellings' in the processes of making of land claims in law courts, and at the offices of Ghana Lands Commission and chiefs after the projects are cases in point. The struggles to gain (or retain) land use rights and political recognition draw attention to the need to examine land dispossession not only in the light of the activities of biofuel investors but also notions of entitlement and ongoing local politics. This lack of thorough treatment of the workings of social institutions is one dimension of what I call *disconnects* in the biofuel land deals debate. A one-sided focus on the role of biofuel investors in land dispossession not only conceals the social identities of the dispossessed individuals and groups but also the circumstances that initiated and reinforced dispossession. This conclusive assertion should not be misconstrued as attempts to indict chiefs, biofuel investors or the state in the making of land deals. Neither do I downplay the global economic forces nor the demands that prompted biofuel land deals. Rather, by cataloguing the politics of land acquisitions in Ghana and the history of the study areas, it emerges that land dispossession resulting from large-scale land deals is *structural* and thus one can show nuances in the land deals debate by expiating the role of social and political institutions in the process. More broadly, chiefs' references to constitutional provisions to draw attention to being a state institutional actor and the various framings used to legitimise land allocations in recent times suggest sets an agenda intended to

consolidate their authority which has starkly existed in fragments in different epochs in Ghana.

While paper #1 sets out the crucial role played by chiefs in the determination of local citizenship and hence persons considered as entitled to productive resources, paper #2 examines local citizenship status and how it influenced access to livelihood capitals during and after the projects.

4.4 Examining an ongoing event instantaneously: complexities in the analysis of livelihoods impacts of biofuel land deals

Paper #2 unveils the livelihood impacts of the biofuel land deals by showing the various forms in which livelihood capitals are activated before, during and in the aftermath of the projects within the context of social institutions. The study's hypothesis for comparing livelihood impacts of the two projects was based on their location in the forest ecological zones, which support intensive food crop production and related livelihood activities and the different land contractual agreements. Indeed, the different contractual arrangements had different livelihood impacts in the sampled households in terms of incidences of land dispossession and rates of employment creation. The processes through which these factors had differentiated impacts on livelihoods for different individuals and social groups are complex and context-specific. Numerous studies on biofuel land deals, for example, are often undertaken immediately after the media have headlined news on large-scale land deals. Livelihood impacts are often discussed with a particular emphasis on individuals and polities (countries, regions, villages/communities, etc.) as units of analysis. Moreover, much emphasis is placed on tangible capital such as land, water, incomes and social infrastructure provision, but with a limited focus on social processes and long-term reciprocal relationships that determine the longevity of resource access for different social groups and individuals. The emphasis on individuals—either dispossessed of land or beneficiaries of project implementation—in the discussion of livelihood impacts indicate that individuals and groups are conceptualised as islands, stripped of their *agency* to draw upon networks in resource access (see O'Laughlin, 2012). Alternatively, the focus on spatial scales such as villages, regions or countries as units of analysis denote assumption of homogeneity of otherwise socially and culturally differentiated groups. In either way, the creation of livelihood portfolios is portrayed as a one-time event and individuals and social groups are represented homogenous entities. A focus on *households* as a unit of analysis instead allowed a nuanced

examination of adaptive capability and agency of residents in project areas in the analysis of livelihood impacts.

The evidence from the sampled households shows that individuals and groups who efficiently manoeuvred resource access could sustain their livelihoods in the aftermath of the projects. Manoeuvring efficiently means working to gain or maintain the status of local citizenship or to be affiliated to ‘local citizens’ who customarily are considered as entitled to land and other productive resources as a result of the projects. Sustaining livelihoods in the aftermath of the projects became dependent on the status and identity of individuals and groups in relation to local citizenship criteria, which is primarily defined by chiefs and family heads. To maintain or gain local citizenship status, individuals and groups in both Cases I and II had to cultivate continuous and long-term reciprocal relationships with chiefs, family heads and other influential persons. Those who lacked such networks suffered adverse impacts on livelihood activities and the overall livelihood of their respective households.

Furthermore, local citizenship status cannot be fully defined in absolute terms but rather in ‘degrees’. Contrary to the usual strict binary construction of residents’ identity as either indigenes or migrants (see paper #1), the ability and possibility to work for citizenship status shows a ‘graduation’ process, beginning from a lower echelon of ‘pure’ migrant through to the apex of a ‘pure’ local citizen. Alternatively, persons considered to be local citizens can slide down the local citizenship hierarchy should they fail to comply with established norms or do not utilise social institutions efficiently. Individuals and social groups therefore occupy liminal positions in the local citizenship hierarchy and hence in access to productive resources. Indeed, non-conformity to norms of reciprocity, contempt towards local resource brokers and non-observance of other conventionalised practices decidedly placed limitations of manoeuvring processes. However, there are certain structural limitations in resources access that could not be simply overcome by one’s manoeuvring efficiency. Some affected persons were not successful in efforts to make claims of land dispossession; others were not recruited to work in the plantation due to their social labels as *ahohoɔ*. Some *kuromafo* who were initially affected by the project invoked custom—as entitled actors—to make land claims and their petitions were upheld by law courts. Nonetheless, the fact that differences in incidences of land dispossession in cases I and II (see paper #1) did not engender any noticeable differences in the livelihood impacts of the projects in the sampled households draw attention to the importance of manoeuvring efficiencies.

Two issues are noteworthy. Firstly, local citizenship status, which determines entitlement to productive resources, is largely decisive of livelihood sustainability. The fluidity of the local citizenship status presupposes that the processes of creating, sustaining or losing livelihoods cannot be a one-time event. This further shows that ‘losers’ are not merely residents who lost land access immediately after project implementation. Neither can the ‘winners’ be described as individuals and groups who gained temporary jobs in the plantations. Secondly, the ability to sustain livelihoods by way of diversifying livelihood portfolios or increasing the quantum of livelihood capitals as espoused by sustainable livelihood approaches depends on the possibility and capability to *create* and *maintain* social ‘connections’ that grant resource access. Bebbington (1999) correctly argues that social capital ought to occupy a centre-stage in livelihood debates since, albeit often least understood and least tangible, the concept allows access to other livelihood capitals and interactions between households, the state, the market and the entire society. This view echoes Bourdieu and Coleman’s perspectives on social capital as resources that can be utilised in different and various forms. The relentless efforts required to convert social capital into usable forms suggest that possession of social capital is a *necessary* but not a *sufficient* condition in livelihood creation. As shown in the sampled households, social capital is a means to an end but not an end in itself. The use of the *manoeuvring* concept to examine livelihood sustainability indicates *agency* and utilisation of *social capital* within certain structural limits defined by evolving social institutions in a polity. Manoeuvring capabilities and possibilities create opportunities for particular persons whereas constraints to manoeuvring simultaneously occlude or limit others. In either situations, patron-client relationships or the associated social inequalities is inevitable. Similar outcomes can result from similar jatropha biofuels land deals in other areas of Ghana where chiefs and other traditional political office-holders have had great sway in defining local citizenship and where social institutions of reciprocity, respect for social differentiation and solidarity induce recognition and as well serve as safety nets for well-being.

Given these complex and interlocking social processes mediating livelihood creation, biofuel studies can show nuances in the analysis of impacts by undertaking extensive fieldwork, preferably interspersed with periodic follow-ups. For example, conventionalised practices such as reciprocating culturally acceptable behaviour are rarely immediately discernible and measurable in livelihood studies involving short-term fieldwork. This illustrates that a rich analysis of the livelihood impacts of biofuel land deals require research work that allows rigorous examination of social units within which resources are accessed, shared and used—in

various degrees and in different forms—over time. As Bourdieu (1986) asserted, a thorough account of the functioning and structure of the social world can fully be expatiated when capitals are discussed in all their forms and ways of combining different capitals. As illustrated above, livelihood impacts of biofuel projects has more to do manoeuvring spaces and social institutions than with the ethnicity and the ecology of the project areas. The methodological execution and analytic frames of snap-shot studies constitute yet another *disconnect* in the land deals debate because it strips people off their agency, it downplays resource manoeuvring processes, it assumes that projects are implemented in a vacuum and consequently extinguish the processual and relational contexts of livelihoods creation.

4.5 Ambivalence in settings of hybrid biofuel governance

As expressed in the previous sections, one striking difference between the recent land deals and those during the 19th century is the mode and platforms of representation. Improvements in information and communication technology (ICT) in the form of media discussions, conference and seminar presentations and transport systems have reduced physical, economic and political barriers between places. The unrestricted flows of information have facilitated capital flows between places and activism, which is reinforced by freedom of speech in the recent democratic dispensation. The increased interconnectedness of places through globalisation has meant that, the state's authority in terms of exclusive control over economy, decision making and territorial resources is at least shared with other non-state actors in diverse and often in invisible ways (Strange, 1996; Herod, 2000; Haarstad, 2009). During the last decade, expressions of euphoria, scepticism and ambivalence towards biofuels are wrapped up in specific discourses, concepts and framings in different platforms in such a globalized world. In *boundless biofuels?*, Mol (2007) emphasises that the deepening globalisation processes and the quests to regulate global biofuel market through various standardisation and certification schemes is gradually decreasing state controls but rather empowering multinational corporations and increasing transboundary flows of biofuels. The rationalities underlying different representations of biofuels and the sustainability criteria defined by multiple actors generate 'hybrid governance' (Mol, 2007; Hunsberger, 2010; Widengård, 2011; Ponte, 2014).

Paper #3 discusses biofuel governance in Ghana. It presents the 'critical' and 'win-win' discourses underpinning the 'land grabbing' and 'land transaction' concepts respectively and

their implications for biofuel investments. Since hegemonic or ‘leading discourses’ dominate thinking and inform certain courses of action at particular periods (Adger et al., 2001; Svarstad, 2002; Jørgensen and Phillips, 2012), alternative knowledge systems and actions are pre-empted or subverted (Laclau and Mouffe, 1985). The paper uses discourse analysis to discuss how the choice of framing and concepts used in the representation of biofuel investment outcomes interacted with local narratives surrounding large-scale agriculture in Ghana. The discussion brings out the circumstances that make particular representations of jatropha biofuels in Ghana more elegant and compelling and vice-versa.

Issues raised in the paper draw upon Ghanaians’ historical experience with large-scale land acquisitions and of plantation agriculture. Mixed impacts of land deals resulting from agrarian history have left lasting imprints in the form of two main rival narratives amongst the population. One narrative that shows large-scale agriculture as a recipe for land dispossession and another that expresses a win-win situation for the populace and investors. This ambivalence is reinforced by different biofuel governmentalities in Ghana. The NPP government and many Ghanaian chiefs used ‘wasteland’ narratives to promote jatropha biofuels in Ghana, with a vision of gaining improved and efficient energy supplies as well as creating economic opportunities in rural areas. However, the NPP government’s loss of interest in jatropha biofuels, without making any comprehensive biofuels regulations left the fate of the burgeoning industry in the hands of chiefs, private biofuel investors, NGOs and other actors. The immediate successor government (NDC) mainly expressed support for biofuel investments that prioritised *food crop production*, which was premised on the dominant food insecurity narrative, i.e. potential competition between jatropha and food or local livelihoods. This narrative was strongly shared by many NGOs and other civil society organisations who frequently used the land grabbing concept and framings reminiscent of neo-colonialism or that portrayed possible livelihood destruction. The platforms and modes of articulation of these concerns ranged from sensitisation workshops, media publications and discussions and public demonstrations and in-house mobilisation of residents of the project areas. Similarly, chiefs, biofuel investors and a few local actors used land transaction concept to show potentially promising livelihood impacts of biofuel investments. The different representations of biofuels by different actors suggest unstable rationalities and visions underlying biofuels and hence the *interventions* justified as necessary to render biofuels governable.

The effectiveness of the polarised and politicised representations results from the fact that they are aligned with pre-existing local narratives. A recap of the arguments expressed in the papers #1 and 2 sheds light on the implications of this dilemma. As illustrated in the paper #1, the one-sided focus on biofuel investors as the main agents of land dispossession and a limited focus on the role of chiefs who actually sanction the land allocations result in a general impression of neo-colonialism. This is especially so when the role of the investors, often foreigners, is linked to neo-colonialism which has negative connotations. Moreover, as shown in paper #2, ‘snap-shot’ studies of biofuels projects usually capture momentary events—whether land dispossession or employment opportunities at the incipient stages of the projects—and often without clarity on the unit of analysis of livelihood impacts. Given the incompleteness of ‘snap-shot’ studies in terms of their methodological execution and overall research design, public actions or policy decisions founded upon representation of their findings are often misleading. Two other biofuel projects (see cases in paper #3) equally illustrate this dilemma.

The use of the land grabbing concept has thus hampered the development of some potentially promising projects labelled as land grabbing, whilst problematic projects labelled as land transactions have continued to be promoted. The paper neither reduces the outcomes of jatropha biofuel investments solely to the choice of concepts used to represent them nor to the modes and platforms of such representations. A number of factors, such as a subsequent analysis of the biofuel market/production chain, funding problems, technical and agronomic challenges and limited political will, have all equally contributed to shaping the outcome of biofuel investments in Ghana. However, the paper focuses on land deal representations due to the centrality of land issues in the social, economic and political life of Ghanaians since the pre-colonial, colonial and post-independence periods, and how this is transposed into the current political debates. I argue that the choice of framings and concepts used to express potential outcomes is effective in Ghana; the land grabbing concept creates space for a more effective social and political activism. The users of the land grabbing concept (usually NGOs, media, etc.) attract a large following in the context of tenuous land rights, loss of trust in the state’s capacity to protect land rights and the possibility to evoke imageries of (neo)-colonialism through modern information communication platforms and channels. For example, the use of the land grabbing concepts and framings in the media keenly influenced small-scale farmers already sceptical of the livelihood impacts of the projects. Such representations equally influenced local citizens—who are often suspicious of chiefs in the

making of land allocations—to demand urgently transparency and community participation in the projects.

Consequently, the actors producing and controlling the critical discourse—underpinning the land grabbing concept—are more powerful than the proponents of the ‘win-win’ discourse. To gain public appeal or pre-empt public criticism and scepticism, biofuel investors in Ghana whose project are labelled as ‘land grabbing’ have either switched to food crop production or included food crop production partly to satisfy the emergent ‘biofuels visions and rationalities’ *even if* land dispossession and livelihood destruction persist in many disguised forms. Others advertise in the media CSR measures purportedly aimed at protecting the land use rights of small-scale farmers, preventing competition between jatropha and food as well as publicising contributions to food security in Ghana primarily to fend off public criticism and scepticism.

This clearly shows that in the context of weak land and biofuel governance, land deals representations by actors producing and controlling dominant discourses constitute an alternative governance mechanism. This governance mechanism is not founded upon impacts of biofuels on energy provision, land tenure and livelihoods per se but rather on the dominant framings and concepts used by powerful actors. The fact that discourse constitutes, and is turn constituted by, social practices and structures (Fairclough, 1995; Jørgensen and Phillips, 2012) suggest that, analysis of representations of biofuels cannot thoroughly done within reference to the socio-political institutions of a particular polity. This is another crucial *disconnect* in the debate about biofuels land deals, particularly in countries with weak state institutions. In such contexts, the intermesh of different biofuels governmentalities makes the biofuel industry either completely ungovernable or powerful actors determine the governance mechanisms based on their interests and motivations, which are incongruent with the original mentality, vision and rationality that underpinned the biofuels hype.

The Ghanaian experience differs from Kenya’s out-grower-based jatropha projects, which was quite compatible with the predominant small-scale farming system and thus raised no issue of ‘land grabbing’, yet biofuels governance question brings out striking lessons. The Kenyan government’s jatropha biodiesel vision rolled out in 2008 without a practical action plan afforded NGOs the leeway to attract funding ostensibly to promote pro-poor Jatropha projects that paradoxically generated no economic benefits to participating farmers (Hunsberger, 2010). The failure of jatropha projects in Kenya was partly caused by a weak

biofuels regulation which gave donor-funded NGOs the leeway to lobby and assume a lead role in the promotion of jatropha activities (ibid.). The Kenyan NGOs were not obliged to repay donor funds and neither were they required by donors to make profits from jatropha projects. As a result, the NGOs continually encouraged farmers to cultivate jatropha and sold jatropha seeds/seedlings to small-scale farmers, raising hopes of improved energy provision and rural livelihoods even in the face of poor yields and non-existing markets. Similar governance issues have equally generated negative outcomes in Zambia, Zimbabwe Tanzania and India where jatropha biofuels were promoted without well-developed market-supply chains and clear-cut roles to be played by the state and other actors (Ariza-Montobbio et al., 2010; Widengård, 2011; Havnevik and Haaland, 2011; Matondi, 2011).

4.6 Amorphous biofuel governance, does a strong state system offer a viable alternative in the global south?

The Jatropha biofuel euphoria initiated by the Ghanaian government, private investors and the Ghanaian population was not correspondingly translated into practical regulatory measures in terms of safeguarding rural livelihoods, land tenure and the profit-making aim of investors. The symbiosis that creates positive outcomes for actors involved in biofuel projects was either overlooked at the outset or was at best an afterthought. As Lund has expressed in his seminal writings (2008, 2011a, 2011b), the involvement of institutional actors in settling disputes and controversies surrounding resource access is motivated by quests to establish (or increase) legitimacy and set norms by precedent. The absence of regulatory measures at the incipient stages of the jatropha hype in Ghana gave actors such as chiefs, biofuel investors, NGOs and other civil society organisations the leeway to determine biofuel governance in ways that satisfied a certain agenda. The fact that different biofuel governmentalities intermesh by necessity but on uneven play fields or according to the shifting of different—and often conflicting—biofuel rationales exposed by Widengård (2011) presuppose that biofuel governance would continually remain amorphous. The negative backlash effect of such an intermesh may be felt not only by so-called vulnerable small-holder farmers as reported by some studies (Montobbio et al., 2010; Hunsberger, 2010, 2013) but rather any other player in the biofuel industry who may lack representation or whose interests will be extinguished at certain points in the process. Widengård (2011:57) expresses a quandary about biofuel governance: ‘can biofuels achieve ‘everything’, or would a single objective (...) be easier to achieve if actors shared the same thought or vision?’

It is simply unthinkable to dream of a one-objective-satisfies all situation in what Borrás et al. (2010) calls the ‘biofuel complex’ largely because fragmented state authority in many post-colonial regimes coupled with deepening globalisation processes opens up unregulated spaces for the pursuit of particular interests by more powerful actors at the expense of the weaker ones or those who lack representation. According to Mol (2007), the increasing power of multinational corporations and the decreasing control of states as biofuel production and consumption globalise, may affect the interests of the poor and small-scale farmers in the developing world. The existence of an institutional actor that would protect the interests of different actors in such an evolving but uneven biofuel landscape is crucial. For example, the crude oil price fluctuates between USD 80-110 per barrel (during the last 12 months) whilst Ghana continues to face erratic energy supply despite its newly found oil and gas resources. This is reviving the renewable energy debate in the Ghanaian media as was the case in the 2006-2007 periods. At that time, similar circumstances facilitated the jatropha biofuel hype and the consequent large-scale land deals in Ghana. The Ghanaian governments’ retreat from jatropha biofuel after the oil and gas discovery, which suddenly raised hopes of improved energy provision, does not seem to have yielded results. Do a *strong state system* then offer any hope for biofuel governance? The final section examines some lessons learnt from this study and studies in other biofuels hot-spots in the global south.

The use of evolutionary and institutional perspectives in the discussion of the study’s findings have helped to pull together the major *disconnects* in the biofuel land deals debate and the analysis sheds light on the fact that livelihoods and specific agrarian developments are largely preconditioned by both the past and evolving socio-political institutions in specific locations. Moreover, these perspectives highlight issues considered crucial in the food-versus-fuel debate. As elucidated earlier, a fundamental concern with ecological conditions underpinned the selection of districts categorised as suitable for jatropha cultivation in Ghana. However, outcomes of biofuel projects are not simply shaped by the ecological conditions in project areas. Neither are the outcomes simply determined by the type of biofuel feedstock cultivated—whether jatropha or edible food crop; by the origin of the investors involved—whether foreign or national elites; or by the size of the land areas involved. Rather it is about context-specificities in terms of evolving social and political institutions and resource governance regimes in particular polities.

The Kimminic biofuel project which involved a joint-venture land deal agreement had a quite promising outcome in relation to land tenure and local livelihoods in the sampled households,

at least until the project was suspended. However, it is simplistic to recommend a joint-venture plantation model, at least in economic sustainability terms. Kimminic employed many workers (300-450) – raising its labour bill, in addition to other costs incurred in the provision of its CSR measures. Since the company had not yet started jatropha biodiesel production, but paid its workers for more than three years, the suspension of the project on the grounds of financial problems can be partly attributed to profitability reasons. The ScanFarm project, which involved a lease agreement and had limited CSR measures, presented a different case. ScanFarm employed a smaller number of workers (50-80) compared with the Kimminic project and thus had a much lower labour bill. Nevertheless, despite higher incidences of land dispossession created by the project and the resultant fierce public opposition, ScanFarm’s continuous existence suggests that its profitability or business-minded logic is beneficial for the company’s economic sustainability. The Biofuel Africa project presents another dilemma. This project involved a lease agreement and a large-scale plantation model, yet its CSR measures improved local livelihoods, at least until the project collapsed on the grounds of financial problems. Evidence of jatropha projects based on small-scale or out-grower schemes even show many contradictions. The EU jatropha project based on an out-grower scheme represented as ‘pro-poor’ did not cause land dispossession, yet the livelihood of most participating farmers were adversely affected due to inefficient (or non-existing) markets for jatropha (see paper #3).

The experiences of Ghana’s biofuel projects can be compared with the disappointing outcome of Kenya’s small-scale/out-grower jatropha biofuel scheme. The success story of coffee and tea agribusiness in Kenya was due to policy frameworks that integrated their production into existing markets but such a policy framework was lacking (or weak) in connection with the jatropha biofuel initiatives (Hunsberger, 2010). The same can be said of Ghana’s cocoa industry in which the government (through its Cocoa Board) sets guaranteed prices and manages markets for cocoa products, provide technical assistance to farmers in terms of disease-controls and quality controls for product certification purposes. The success story in the cocoa industry seems to suggest that a state-led agribusiness model similar to the role of Ghana’s Cocoa Board could be a promising framework for jatropha biofuel in order to create equitable outcomes for farmers, the state and other actors that may be involved in the biofuel production chain. The setting up of multi-stakeholder committees involving chiefs, community representatives, media groups, biofuels (prospective) investors and state institutions to formalise the entire biofuels production chain would systemise the different

biofuel governmentalities into a coherent biofuel regulation. A regulation that clearly outlines specific role(s) to be played by the state (or state institutions) and other actors in the biofuels industry in terms of; mechanisms for the evaluation of biofuel projects; guidelines for demarcation of biofuel project areas and compensation payments; scrutiny of financial sustainability of biofuel projects and of biofuel market and supply chains.

This argument does not simply suggest that a strong state automatically guarantees positive outcomes of biofuel projects. Weak state regulations in connection with biofuels governance partly contributed to the disappointing outcomes of biofuel projects in countries such as Ghana, Kenya and Tanzania. The Indian experience presents a paradox. The enthusiasm of the strong Indian state in the adoption of jatropha to ensure ‘pro-poor’ development, marginal land reclamation and improved energy provision was implemented as clearly outlined in its National Biofuel Policy. The wasteland framing intended to promote jatropha cultivation, however, hanged on a colonial categorisation of land which principle veiled rather productive land that support a range of livelihood activities (Ariza-Montobbio et al., 2010; Tompsett, 2010; Baka, 2014). The state-led biofuel vision based on the wasteland framing paradoxically affected the livelihood of poor farmers (Ariza-Montobbio et al., 2010), produced no positive results in energy provision (Baka, 2014) and facilitated land acquisition for real estate developments instead (Baka, 2013).

The context-specificity’ argument involves both continuities and discontinuities of agrarian development. This is particularly important in terms of the relationship between the state and non-state actors concerning resource governance. Colonial experiences shed light on this. The British colonial government’s loose definition of wasteland in India as land areas that generated no revenue (Gidwani, 1992: PE-40) led to political malleability of the concept of wasteland to justify development programmes such as forest, food security and jatropha biofuel from the post-colonial period to the present (Ariza-Montobbio et al., 2010; Baka, 2013, 2014). The persistence of the wasteland discourse to legitimise land-based projects can be attributed to the fact that in both the colonial and post-independence regimes, the term wasteland was not (or has not been) *successfully* contested by the population. This sharply contrasts Ghanaians’ successful opposition to a similar land categorisation by the British colonial administration and currently NGOs’ opposition to chiefs on similar grounds.

Furthermore, while the British colonial administration had a relatively smooth establishment of large-scale plantations in Malaysia, local politics and the predominant small-scale

landholdings made such investment projects difficult in Ghana (or Gold Coast). Although both countries gained independence in 1957 from the same colonial powers, the British-controlled Malay land-owning estates laid foundations for the establishment of palm plantations and have been a major global palm oil producers and suppliers to the present (Fold and Whitfield, 2012; see also USDA, 2011). Moreover, contrary to the Ghanaian context where oil palm serves as a frying medium in food preparation and a range of household diets, palm oil primarily serves industrial purposes in Malaysia (Fold and Whitfield, 2012). Malaysia's palm oil-based biodiesel industry has thus been successful largely because the continued production of the feedstock does not affect the domestic food (or feed) production which would likely have caused activism on grounds of 'land grabbing' (Langeveld et al., 2014). Indeed, currently, the Malaysian biodiesel industry is hampered by the rise in palm oil prices and a fall in palm oil production due to declining land availability, unfavourable weather conditions, shortage of skilled labour and so forth (USDA, 2011; Langeveld et al., 2014). The biodiesel industry is likely to face further challenges in palm oil supply due to the intense pressure on the Malaysian government to halt or slow down oil palm plantation expansion due to environmental concerns (see USDA, 2011:1). These factors, however, have nothing to do with activism in the country centred on the 'food-versus-fuel' debate as it has been the case for Ghana's *jatropha* biofuel and which would probably have been the case for oil palm-based biodiesel too.

It is evident in the discussion that the different types of state systems and the different rationalities used to promote biofuels do not simply determine whether or not biofuel projects will generate equitable outcomes for the various actors involved. In the case of Ghana with weak state authority, not the least when it comes to issue of land governance, the role of chiefs to some extent provided safety nets for particular individuals and groups during the implementation of biofuel projects. This contrasts with the Indian case—with a strong state system—where biofuel land deals benefited the well-to-do economic class at the expense of the poor. The 21st century's hallmark of globalisation has created new forms of governance spaces for different actors via alliances and networks often beyond the remit of even sovereign states. Consequently, the evolving relations between the state and non-state actors in connection with resource governance in particular polities cannot be downplayed when analysing outcomes of biofuel projects. The historical undertones of contemporary agrarian developments and the evolving socio-political institutions in particular polities are crucial in shaping outcomes of specific biofuels investments. I therefore argue that one way out of the

current amorphous biofuels governance regime would require efforts to regulate the intermesh of different biofuel governmentalities and simultaneously remaining sensitive to how and why the *past* and *present* diverge and converge in *specific polities* in particular ways.

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Appendices

Appendix I: List of interviews and other communications

- Former Manager of ScanFuel/ScanFarm Ghana Ltd. Both face-to-face interview and e-mail communication.
- Board Chairman, ScanFarm AS and ScanFarm Ghana Ltd. E-mail communication.
- Management Member of ScanFarm Ghana Ltd. Both face-to-face interviews and phone & e-mail communications.
- Management Member of the Kimminic Estates Ltd. Both face-to-face interviews and phone & e-mail communications.
- Project Representative, European Union Jatropha Project in Northern Ghana. Both face-to-face interview and phone & e-mail communications.
- Some employees of Kimminic Estates Ltd.
- Some employees of ScanFarm Ghana Ltd.
- Chiefs of the Nkoranza Traditional Council (NTC).
- Chiefs of the Agogo Traditional Council (ATC).
- Agricultural Extension Officer and Management member of Kimminic Estates Ltd.
- Officers at the Renewable Energy Section, Ghana Energy Commission.
- Officers at the Ashanti Regional Lands Commission, Ghana.
- Officers at the Environmental Protection Agency (EPA), Ghana.
- Officers at the Ghana Investment Promotion Center (GIPC). Accra, E-mail interview.
- Leading members of the community-based activist organization, ‘Concerned Citizens of Agogo’ (*Agogomanmakuo*).
- The Head of the Obuor family in Agogo.
- Member of the Obuor family in Agogo and of the ‘Concerned Citizens of Agogo & Agogo Youth Organisations’ (*Agogomanmakuo*).
- Officers at the Agogo Traditional Council (ATC).

- Officers at the Nkoranza Traditional Council (ATC).

Appendix II: Interview guide: Chiefs (or Spokespersons of chiefs)

- The first settlers or founders of the project village
- The means through people gain access to land in the project village
- The functions of the traditional council in the project village?
- How did the investor company contact the traditional council for land?
- The chiefs' or the traditional council's motivation for allocating land for the project
- The terms of the land allocation
- The category of people who used the land areas before the land allocation
- Chiefs or the traditional council's expectations from the project
- The sources of revenues to traditional council beside land resources
- The village residents' impression about the project
- Chiefs or the traditional council's overall assessment of the project: challenges and lessons learnt so far

Appendix III: Interview guide: Management of the projects

- The background of the investor company
- Land acquisition for the jatropha project
- Motivation for the project: the choice of location, crop(s) cultivated and expectations
- The condition of workers, recruitment procedures and corporate social responsibility
- Relationship with chiefs and the project community
- Overall assessment of the project: challenges and lessons learnt

- The current and future plans of the company and the entire project

Appendix IV: Interview guide: Key informants

- The crop cultivation or production patterns in the project village
- The predominant livelihood activities in the village
- Constraint to farm work in the project village
- The history of the jatropha biofuel project in the village
- In what ways have this village benefited from the project?
- The project village's expectations from the project
- How do people gain land access to land in this village?
- Chiefs motivation for allocating land for the biofuel project
- Are you satisfied with the terms of the land allocations and why?
- Individuals and social groups mostly affected by the land allocation
- Efforts made to address the plights of those affected by the project
- The residents' impression of the project implementation
- Overall assessment of the project

Appendix V: Archival records

Archive	Source of the archive	Dated
Kwame Afram (Agogo) Vrs. ScanFarm (GH) Limited Agogo.	Circuit Court of Justice, Juaso-Asante Akim.	3 July 2012.
Edmond Osei Buor (suing on behalf of Obour family of Agogo) Vrs. ScanFarm (GH) Ltd Agogo.	Circuit Court of Justice, Juaso-Asante Akim.	3 July 2012.
Farmland belonging to the Obour family of Agogo.	DJABANOR & Co. (A Law Firm).	20 July 2012.
Lands Commission Act 2008 (Act 767).	Ghana Lands Commission.	4 December 2008.
Notice of Destoolment of Nana Akuoko Sarpong as <i>Omanhene</i> of Agogo Traditional Area.	‘Concerned Citizens of Agogo & Agogo Youth Organisations’ (<i>Agogomanmakuo</i>).	9 January 2012 (A revised version of an earlier petition submitted in December 2011).
Application for injunction on land allocations by the Agogo Traditional Council (ATC).	High Court of Justice (Land Division) — Kumasi.	26 October 2011.
Minutes of a meeting between Farmers, ScanFarm Ghana Ltd and ATC: Revising the terms of the ScanFarm/ScanFuel project.	ATC and ScanFarm records.	19 January 2011.
Plan of Land for ScanFuel Ghana Limited.	Director of Surveys, Regional Surveyor-Ashanti Region.	10 February 2009.
Announcement: Proposed Jatropha & Oil Palm Plantation Project, Asante Akim North District.	Environmental Protection Agency (EPA) & Daily Graphic (Newspaper in Ghana).	4 August 2008.
Letter to Ashanti Regional House of Chiefs, Kumasi: Request for support to Redress Rural Livelihood and Food	Food Security Policy Network (FoodSPAN) with Action Aid-Ghana.	4 June 2011.

Security Challenges in the Agogo Traditional Area.		
Joint Venture Agreement (between Kimminic Estates Ltd and Project Communities).	Abease Traditional Council, Brong Ahafo Region.	25 July 2008.
Action Aid internal biofuels newsletter: Input from Action Aid-Ghana for November 2010.	Action Aid-Ghana	November 2010.
Action Aid-Ghana Biofuel Update – December 2010.	Action Aid-Ghana.	December 2010.
Action Aid-Ghana Biofuel Update – January 2011.	Action Aid-Ghana.	19 January 2011.

Appendix VI: Household survey

A). Household characteristics and livelihood activities:

No. :

1. Location/Project Area:

2. Marital status.....

3. Ethnicity of respondent..... and spouse.....

4. Place of birth

5. When did you or your first family settle here.....and
who?.....

6. Source of land use right.....through
whom?.....

Appendices

Household members	Age	Livelihood activities	Farming period or season	Income from the livelihood activity	Expenditure on the livelihood activity

Appendices

Household members	Educational level	Skills or training gained outside formal education

B). Household Assets:

Five most important assets	Importance	Source of the asset	How do men use/access it?	How do women use/access it?
1				
2				
3				
4				
5				

6. Do you sometimes hire labour?.....

7. If yes,

- What kind of labour?.....

- How much do you spend?.....

-What do you do in case you do not have money to hire labour?.....

8. Do you or any household member belong to any community activist group/civil society organizations in this village?.....

9. If yes,

- Name them.....

-How do you or any household member benefit from such organizations/groups?.....

C). Household Income:

1. Do you have any other income source other than those mentioned initially?
.....

2. If yes, are they spent on general upkeep or reserved for specific purposes?.....

3. Which time(s) of the year do the household experience reduction in income sources?
.....
.....

4. What causes such situations?.....

5.How do the different household members cope with such situations?.....

.....

D). Assets situation as a result of the project implementation:

1. Have there been changes in access to the above-listed assets as a result of the project?

.....

2. If yes,

-Name such assets and describe the changes in access after the project.....

.....

Five most important assets gained from the project.	Importance	Use or access by men	Use or access by women
a			
b			
c			
d			
e			

The range of farm size (acres) cultivated by the entire household before the project.

First farming season:.....

Second farming season:

The range of farm size (acres) cultivated by the entire household after the project.

First farming seasons.....

Second farming season.....

Most important factors that constrain the size and type of crops cultivated before the project

First farming season:.....

.....

Second farming season:

Most important factors that constrain the size and type of crops cultivated after the project.

First farming season.....

.....

Second farming season.....

.....

4. What is the average fallow period?.....

5.Do you have the same fallow period as the period before the project? Explain

.....

.....

6. Do you cultivate the same crop(s) as before?.....

.....
.....

7. If not, describe the changes in crops cultivated.....

.....

8. Which of the farming seasons is more promising in terms of?

- Crops that can be cultivated.....

- Yields per acre.....

- Incomes accrued from the sale of farm produce.....

- Costs incurred.....

9. If you or any household member lost entire cultivable land following the project implementation,

- Have you or the household member(s) obtained new land?.....

- If yes, how did you or the household member(s) obtain the new land?.....

.....

- Was any person(s) or organization(s) important for the access to the new land?.....

.....

10. How different is the new land in terms of:

- Conditions (proximity to home, slope of the land, etc.).....

- Quality (soil, water, etc.).....

11. After the project, are there livelihood activities you are no longer engaged in anymore?.....

12. If yes, name them

.....

13. Have you found any new livelihood alternative after the project?.....

14. If yes,

- Name them

.....

- Who assisted you to gain that new livelihood alternative?.....

15. How different is the new livelihood alternative(s) in terms of:

- Average income.....

.....

-Seasonality or term of employment.....

.....

16. What is your overall impression about the project?.....

.....

.....

The three papers

Paper #1

How and why chiefs formalise land use in recent times: the politics of land dispossession through biofuels investments in Ghana

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In the current land deals debate, land dispossession is often attributed to exploitative acts of agricultural investors. However, the role of equally active actors in the making of land deals such as chiefs, who customarily are custodians of land, does not feature prominently in the debate. The paper shows that the recent surge in large-scale land deals in Ghana corresponds with chiefs' pre-existing motivation to re-establish authority over land for two reasons: firstly, to formalise the use of 'stool land' to create rural development opportunities; secondly, to formalise boundaries of 'stool land' to avert potential future land litigations. Social groups lacking recognition from chiefs therefore often lose land, whereas land areas of those persons recognised by chiefs are protected, sometimes even regardless of their 'citizenship' identity in project villages. The author argues that an understanding of how local social institutions and politics mediate investment in land will enrich analyses of processes of land dispossession.

Keywords: chiefs; citizenship; land deals; entitlement; Ghana

[Comment et pourquoi les chefs formalisent l'aménagement du territoire ces dernières années : la politique de l'expropriation foncière à travers les investissements dans les agrocarburants au Ghana.] Dans le débat autour des accords fonciers actuels, l'expropriation des terres est souvent attribuée à des actes d'exploitation par des investisseurs agricoles. Cependant, le rôle d'acteurs autant actifs dans l'élaboration de ces accords fonciers tels que les chefs, qui de manière coutumière sont les gardiens des terres, ne figure pas clairement dans le débat. L'article montre que la recrudescence récente d'accords fonciers à grande échelle au Ghana correspond à une motivation préalable des chefs de rétablir leur autorité sur les terres, pour deux raisons : premièrement pour formaliser l'utilisation de « terres de clans » ('stool land', zones qui sont sous la tutelle des chefs de clans) pour créer des opportunités de développement rural ; et deuxièmement, pour formaliser les frontières de ces « terres de clans » afin d'éviter des litiges potentiels futurs liés à ces terres. Les groupes sociaux qui ne sont pas reconnus par les chefs perdent donc souvent des terres, alors que les terres des personnes reconnues par les chefs sont protégées, parfois même indépendamment de leur identité de « citoyens » dans les villages des projets. Je soutiens qu'une compréhension de la manière dont les institutions sociales et les politiques assurent la médiation des investissements fonciers permettra d'enrichir les analyses des processus d'expropriation des terres.

Mots-clés : chefs ; citoyenneté ; accords fonciers ; droit ; Ghana

Introduction

The recent surge in large-scale land deals for agricultural investments has dominated political economy literature, media discussions and conference debates. Public attention to

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the land deals debate is driven by the analysis of potential outcomes and the intents of the actors involved. The actors often involved in the recent land deals are governments or government-backed companies, national and international companies, individuals etc. and their involvement is driven by commercial considerations (Food and Agriculture Organization [FAO] 2012). These actors are often labelled 'land grabbers' due to perceived exploitative acts in host regions and the potential negative impact on livelihoods and on land tenure (von Braun and Meinzen-Dick 2009; Bull 2010; Wisborg 2012). The term 'land grabbing' has thus been used in the land deals debate to denote 'unfair practices' often perpetrated by investors (FAO 2012).

Moreover, the land grabbing debate often portrays local resource users as homogenous groups who are equally denied land access as a result of large-scale land deals (Bull 2010; Noe 2013). This 'land grabbing' label at times comprises a state's complicity in land deals by creating enabling environments for land appropriation by corporate entities in seemingly legitimate ways, but to the detriment of local land users (Grajales 2013; Huggins 2013; see also Evers, Seagle, and Krijtenburg 2013). These assertions overlap other propositions that most large-scale land leases occur in state-owned land tenure regimes (Cotula 2012) and hence pinpoint 'weak governance' (Arezki, Deininger, and Selod 2011) or 'coercive land governance' (Huggins 2013) as decisive factors for land dispossession. The proposed recommendations therefore include the payment of due compensation to those persons affected, and the making of effective land contractual arrangements or suspension of large-scale land deals in order to prevent land use rights abuses in host countries (von Braun and Meinzen-Dick 2009; Cotula 2011; ActionAid International 2012). The debate clearly indicates 'what ought to be' the procedure and outcomes of land allocations but focuses one-sidedly on the role of investors and state institutions.

Notwithstanding the seemingly incontrovertible logic underlying such arguments, clarity is lacking in the debate, especially on predominantly customary land tenure regimes such as Ghana, where most recent land allocations have been sanctioned by chiefs who customarily hold land in trust for community members. This customary role of chiefs as trustees of land is upheld by Ghana's constitution (see Ubink 2008). The issue is complicated by the fact that formal records of the location and size of stool land¹ rarely exist, yet chiefs confidently claim to know their boundaries (see Berry 2001). Although studies have highlighted the active involvement of national political elites, civil servants, professional farmers etc. in land acquisitions in their home countries (Zoomers 2010; Hall 2011; Cotula 2012), the mediating role of local social institutions in land deals seldom features prominently. Fold and Gough (2008), for example, demonstrate the establishment of large-scale farms by multinational companies in Ghana and the consequent loss of smallholder farmers' access to customary land. The mediating role of customary institutions in land dispossession however does not feature prominently in their analysis. Inasmuch as customary institutions define resource access (Berry 1989, 2009; Lund 2011a), discussions of dispossession cannot be detached from the power of persons who interpret and administer custom (Berry 2001; Yaro 2012). Consequently, this paper does not limit itself to an evaluation of the role of investors or state institutions in land deals but extends the debate by assessing the power and the motivation of chiefs when they are involved in the making of the recent land deals.

The paper argues that, instead of a one-sided focus on investors' role in causing land dispossession, an understanding of how local social institutions and politics mediate investments in land will enrich analyses of processes of land dispossession. The entry point for this argument is set out around three central issues. The first section discusses the fluidity of property rights and citizenship concepts. The next section discusses the new wave of

large-scale land deals in Ghana and the role of chiefs in the land deals. In the final section, I analyse the motivation of chiefs in land allocations for two biofuels investment projects in Ghana and their implications for land access by indigenes and migrants in the project areas. This is followed by a discussion and a conclusion.

Conceptualising land property rights and citizenship

A fundamental route to achieving property rights begins with claims and claim-making processes mediated by established rules in a polity (see Berry 1989; Sikor and Lund 2009). For instance, since land claims are partly defined by social identity, and social identity partly defined through rights to land (Sikor and Lund 2009), legitimacy of claims exists alongside the constitution of authority in a society (Lund 2011a). Environmental resource use and control therefore operate within the context of political authority. This constitutes the field of political ecology, which encapsulates how power and politics influence understanding of the environment and of environmental resources (Escobar 1999; Robbins 2004). Of particular relevance for this paper is the influence of post-structuralism on political ecology, especially social construction of ethnicity or identity (Neumann 2005). These constructions have necessitated an exploration into the symbolic meanings ascribed to environmental resources and how they correspondingly overlap conflicts regarding access to and control of material resources (*Ibid.*). Competing symbolic meanings ascribed to environmental resources denote attempts to legitimise (or undermine) social identity or social claims.

In order to investigate how competition for vital resources is organised and structured, it is therefore important to examine 'how polities emerge, consolidate and recede through processes of legitimisation, inclusion, exclusion and violence' (Sikor and Lund 2009, 2). Unlike traditional political theories that seek legitimacy from state institutions, state formation rather emerges from property rights and citizenship (see Sikor and Lund 2009; Lund 2011a). Lund (2011a, 71) expresses the inextricable relationship between property and citizenship by the definitions 'what we have' and 'who we are', respectively. A fundamental element of both terms is 'recognition' (*Ibid.*). Social identity thus determines whether or not one can legitimately access particular resources collectively owned by a group. Access to particular resources can usher people into citizenship status and vice versa. In this context, 'citizenship' does not merely denote nationality but also an identity of belonging to a group which can be achieved by fulfilling particular local conditions. Rules of succession or inheritance, for instance, defining potential heirs to property or office, may grant access to resources (Berry 1989) and consequently grant 'citizenship' rights. However, 'strangers' may be granted similar access by virtue of gaining permission or joining local resource-owning groups through marriage, fostering, capture or by living under the protection and authority of its leaders (*Ibid.*, 42). The conditions of integration into 'local citizenship' hence mediate strangers' access to land (Chauveau and Colin 2010, 99). Such determinations are made by the institutions or actors recognised by subjects as legitimate, who in return recognise subjects as entitled actors (Lund 2011a).

By implication, entitlements to resources may be lost, gained or even bought and this is a clear indication of highly fluid situations when analysing property rights. 'Citizens' may lose their entitlements whereas 'non-citizens' may gain access to resources which are otherwise impossible. 'Labelling' and 'self-labelling' hence become important strategies employed in the legitimisation and delegitimation of resource claims. For Lund (2011a), the way people acquire and secure land rights may seem like a simple process. However, this process can often become complex when several competing normative orders may

be brought to bear to legitimise specific claims, and several actors may at the same point in time compete for the authority to settle disputes and set norms by precedent or practice (*Ibid.*, 72). In the context of institutional pluralism, the institution or institutional actor that is able to enforce and define collectively binding decisions on members of a society has 'state quality' (Lund 2011b, 887). With reference to Lund's analytical construct and the prominence of chieftaincy institutions in terms of authority over most land in Ghana, such state quality lies with chiefs. Chiefs' authority over land is almost unquestionable in Ghana, especially in instances when chiefs dabble in partisan politics or have strong party-political affiliations, even though the country's constitutions (1979 and 1992) prohibit this practice. Persons who acknowledge the authority of chiefs in return gain access to land resources controlled by chiefs. A break in this reciprocal relationship either undermines chiefs' authority or affects residents' access to land. In this study, the concept of 'citizenship' is used in the discussion of land dispossession during the implementation of two biofuel investment projects.

Jatropha biofuel investments and the new wave of land deals in Ghana

Ghana has a predominantly customary land tenure regime with about 80% of land in Ghana held by customary landowners, mainly families, clans and stools² (Kasanga and Kotey 2001; Ubink 2008). The remaining 20% of the land is held by private individuals or controlled by the state. Land ownership in Ghana is an embodiment of the rights of primordial groups; villages, stools, families and kinship groups (Aryeetey *et al.* 2007). The heads of such primordial groups, such as chiefs, village headmen and family heads, possess allodial rights over the groups' land, whereas members enjoy usufructuary rights, which confer on them a 'certificate of group ownership' (*Ibid.*, 7). Families or individuals express their allodial title holdings by providing narratives of ancestry and historical events which are difficult to refute or question (Berry 2001, 2009; Lund 2008). The expression of allodial land titles by way of reference to customs based on myths about ancestors 'descending from the sky' to settle on the claimed land, for example, does not only solidify land claims (Berry 2001, 152) but also pre-empts any potential attempt to question the identity of the claimant (Berry 2009, 25). Narratives about land are thus systematically conveyed to descendants in order to protect lands for posterity and to ensure continuity of custom.

Indeed, primordial groups have always devised strategies to protect their allodial land titles. However, the changing customary land tenure system has created uncertainties as the title and responsibilities of land titleholders depend on the interpretation by chiefs and other traditional leaders who administer custom (Yaro 2012). The vague definitions of Ghana's constitution recognising chiefs as allodial landholders have created the leeway for chiefs to reinvent customs to arrogate to themselves the power to own and sell land, often to the detriment of weaker social groups (*Ibid.*). The role of chiefs in the reinvention of customs to the detriment of weaker social groups, especially migrant farmers, are evident in some post-independence governments' land reforms (see Boni 2005). For instance, Ghana's first socialist party, the Convention People's Party (CPP) (1950s–1966), introduced land reforms which were intended to break the authority of chiefs over land, bring economic relief to tenant farmers and eventually increase the state's dominion over land (Boni 2005; Aryeetey *et al.* 2007). Nonetheless, the overthrow of the CPP administration in 1966 led to a repeal of these reforms, which hitherto had weakened the chiefs' prerogatives over land or agricultural tributes (Boni 2005). Another attempt to usurp the authority of chiefs over land resurfaced subsequent to the Land Titling Registration Law of 1986, introduced by the PNDC³ government for reasons similar to those of the CPP government

(Boni 2005; Aryeetey *et al.* 2007). In almost all the post-independence governments' land reforms, chiefs have always manoeuvred to reassert control over tenant or migrant farmers in subtle ways (Boni 2005). In spite of chiefs' resilience to maintain a continuous exercise of authority over land, large-scale land allocations for projects remained the sole responsibility of governments or state institutions (Larbi, Antwi, and Olomolaiye 2004; Ghana Lands Commission 2012).

During the last decade, many Ghanaian chiefs have allocated numerous large land areas to agricultural investors – mainly from Italy, Norway, Israel and Canada – for biofuels⁴ and other agricultural projects in Ghana. Most of these investments involve the cultivation of the jatropha plant for biofuel production as a result of the oil price increases in 2006–07 in Ghana. Noted for a high oil content of its seeds and its perceived economic viability in so-called marginal lands, jatropha was promoted by the government, chiefs and many energy policy institutes in Ghana (Ghana Energy Commission 2005; Technoserve 2007). Overwhelmed by the numerous jatropha investments in Ghana, a Ghanaian newspaper, *Public Agenda*, in November 2010 described Ghana as the 'Jatropha Centre in Africa'. It is estimated that by 2009, 13 out of a total of 17 biofuel projects in Ghana focused on jatropha cultivation (Schoneveld, German, and Nutakor 2010). This is unprecedented in the history of agribusiness in Ghana as investors make direct land negotiations with chiefs, contrary to earlier decades when large-scale land deals for agricultural activities (usually rubber, cocoa and palm plantations) and mining concessions were solely negotiated and sanctioned by the state (Larbi, Antwi, and Olomolaiye 2004; Ghana Lands Commission 2012). For example, a total land area of 158,906 hectares was acquired by both the colonial and post-independence governments of Ghana combined (up to 2001) (Larbi, Antwi, and Olomolaiye 2004), compared with a land area of 1,075,000 hectares reportedly acquired by biofuels investors usually through direct negotiations with Ghanaian chiefs during the last decade alone (Schoneveld, German, and Nutakor 2010).

Although estimates of biofuels land deals are often contentious, it nonetheless suggests that the authority of chiefs in land allocations has increased in recent times relative to that of the state. The involvement of state institutions in land allocations now merely takes the form of confirmation and registration of the agreements reached between chiefs and investors through Ghana Lands Commission and local government officials. In response to these developments, the Lands Commission issued a report in February 2012 to contest chiefs' competence to sanction such large land allocations and consequently ordered that land areas above 400 hectares (1000 acres) must be approved by the National Lands Commission instead of the Regional Lands Commission as was the case before (Ghana Lands Commission 2012). This new regulation is not a novelty but rather seeks to ensure local participation in land negotiations, re-emphasise the importance of environmental impact assessment by appropriate state agencies and the involvement of many stakeholders for deliberations, especially in land deals that involve vast land areas. The need for this regulation confirms that the increased land allocation by chiefs is partly caused by state institutional weaknesses in land governance.

In a country where land, in addition to its economic significance, serves as a source of political authority and as a symbol of social identity, illuminating the new wave of land deals and their implications for land access in project areas is worthwhile.

The two cases and methodology

The paper compares the two biofuels projects Kimminic Estates Ltd (henceforth called Kimminic) (Case I) and ScanFarm Ghana Ltd (henceforth called ScanFarm) (Case II) in

Southern Ghana. The paper compares chiefs' motivations for allocating land for the projects and the implications for land access in the two cases. The cases were selected for three reasons: firstly, both land deals were sanctioned by chiefs; secondly, both projects involve large-scale plantation models; thirdly, both project areas have a large number of migrants who mostly have temporary land use rights either on family and individual land areas or on stool land. The comparative analysis will show why similar strategies and motivations of chiefs in the respective land deals generated different incidences of land dispossession in the two cases.

The research involved a two-month preliminary fieldwork period (April–June 2012), followed by a six-month fieldwork period (August 2012–January 2013). The preliminary fieldwork involved key informant interviews, group interviews and a review of biofuels and land tenure literature. The preliminary fieldwork provided contextual information about social institutions mediating access to land by different social groups in the study areas. The major part of the fieldwork involved household surveys of predominantly farming households, though some household members occasionally engage in off-farm activities such as charcoal production and firewood collection. In each of the two cases, 40 households were purposively sampled making a total of 80 households. A total of 18 migrant households and 22 indigenous households were selected in each of the two cases. After a series of key informant interviews, I gained an impression of a higher proportion of indigenous residents compared with migrant residents and this formed the basis for the sampling of the households. Arguments in this paper are based on the analysis of symbolic meanings ascribed to the control over land and how citizenship identity mediates land claims during the project implementation.

Notions of land entitlement in the study areas

This section provides a background to the land dispossession debate by unveiling customs underpinning notions of entitlement to land by different social groups in the study areas. Interviews and informal discussions with residents of the project areas show the following diverse sources of entitlement to land. Individuals or families own land either by virtue of being first settlers, the first to cultivate cocoa or virgin forests in the project villages or as descendants of these settlers. This is an allodial land right, often called exclusive land rights, though it is customarily prohibited to sell land. This group of residents, called 'indigenes' (*Kuromafo*) by virtue of their allodial land rights, arrived in the villages between 1900 and the early 1950s and made claims to most available land using physical features such as rivers, river valleys and huge trees as land boundaries. Since migration into the villages continued, some indigenes strategically trace their ancestry to 'time immemorial' or label themselves as founders of the villages in order to distinguish themselves from later arrivals in terms of exclusive control over land. These categories of indigenous citizens are usually installed as *Odikro*. Land areas that are not claimed by the *Kuromafo* as well as vacated farmlands (called *atuagya*) constitute stool land which is vested in the village chief in trust for the subjects and the paramount chief (*Omanhene*). Residents who settled in the villages between the late 1950s and the 1970s thus could only access land through negotiation with the indigenes or chiefs. Although labelled migrants by chiefs and indigenous people, these migrants also have allodial land entitlements. These are migrants mainly from Northern Ghana who received land as gifts thanks to their honest service to the host indigenous families or chiefs. Descendants of these first-generation migrants also possess allodial land rights through inheritance. Based on the property rights concept, the first-generation migrants are indigenous citizens of the villages by virtue of their exclusive land

entitlements. It is striking to note that stool land areas are interspersed with family land without formal demarcations. In times of disputes over land boundary, family members resort to narratives of family migration history though often subject to interpretation by the chiefs, who serve as administrators of custom.

Some residents have land entitlement based on marriage or friendship with indigenes or allodial landholders. Apart from those described above, the remaining sources of land entitlements are derived from market transactions. Examples include leasehold and share-cropping agreements. Allodial title holders (usually family heads) can rent out part of their land in exchange for money or something in kind. In share cropping, tenant farmers pay an agreed amount of money or crop yields to their landlords at the end of every farming season. Moreover, indigenes and migrants can use stool land by seeking permission from traditional councils through village chiefs. Whereas payment of initial token sums of money or *Nsa Sika* (money for drinks) and annual agricultural tributes (*afehyiatuo*) to chiefs are obligatory for migrants, indigenes are often exempt due to the 'local citizenship' identity of the latter. Stool land constitutes the most predominant source of land entitlement in the sampled households in both cases. Payment of annual tributes to chiefs in exchange for land is a symbolic acknowledgement of chiefs' authority over land, which in turn assures migrant farmers of legitimate and continuous access to land. Migrants (whether from Northern or Southern Ghana) who gained land use rights either from chiefs, or through share cropping and leaseholds, arrived in the study villages after the 1980s and thus have weaker land use rights compared with the descendants of first-generation migrants. As the subsequent sections will show, notions of entitlement are central in land claims and claim-making processes and cannot be ignored or downplayed in the dispossession debate.

Implications of chiefs' motivation to re-establish authority over land

Historically, chiefs' motivation to collect agricultural tributes from migrant farmers cultivating stool lands is often accompanied by increased land values, especially in Southern Ghana following the cocoa boom from the 1940s (Berry 2001; Boni 2005). In 1996, the Office of the Administrator of Stool Lands (OASL) was established under Ghana Lands Commission to ensure equitable distribution of revenues accrued from stool land for the benefit of all residents. Under this regulation, only migrants cultivating stool land are required to pay annual taxes called ground rents. Whilst ground rents are collected by OASL, the collection of revenues from charcoal producers is reserved exclusively for messengers of traditional councils. Disbursement of stool land revenues followed the constitutional formula: 55% for district assemblies,⁵ 25% for stools and 20% for traditional councils. Despite this regulation, chiefs demand agricultural tributes from migrants cultivating stool land as an acknowledgement of their continued authority over land.

Interviews with chiefs and the sampled households indicated that, during the past few years, migrants cultivating stool land rarely pay agricultural tributes to the stools. This unwillingness on the part of migrant farmers often arises from two dilemmas: firstly, most migrant farmers perceive payment of ground rents as a replacement for annual agricultural tributes collected by chiefs; secondly, chiefs perceive evasion of tributes as threatening to their authority whereas migrants perceive simultaneous payment of ground rents and agricultural tributes as exploitation by chiefs. In response to this, the chiefs allocated large land areas to agricultural investors as a way of re-establishing authority over stool land. Two major issues are worth noting. First, the land deals in the two project areas

Table 1. Households that faced land dispossession^a due to project implementation.

Kimminic project area (Case I)		ScanFarm project area (Case II)	
<i>Social identity of households</i>	<i>No. of households</i>	<i>Social identity of households</i>	<i>No. of households</i>
Indigenous households	1	Indigenous households	15
Migrant households	15	Migrant households	14
Total	16/40	Total	29/40

Source: Fieldwork in Ghana (2012–13).

^aLand dispossession here involves loss of either entire land or portions of farmland. Nonetheless, some affected households later gained new land areas.

involve the transfer of land use rights from previous land owners and land users to the investors, Kimminic and ScanFarm. Secondly, there are no formal demarcations between stool land and family or individual landholdings. The land allocations therefore affected the land areas of some residents of the project areas (see Table 1), and the boundaries of such land were difficult to trace. This led to the adoption of strategies by residents in order to regain land areas they lost to the Kimminic and ScanFarm projects. Reference to identity then became the strategy used by residents and chiefs either to legitimise or to undermine claims based on custom. For example, the presentation of complaints to chiefs and the investors, and of petitions to law courts and the Ghana Lands Commission that were employed by the allegedly affected residents to legitimise their land claims were based on reference to citizenship identity. Residents lacking citizenship identity can only protect their land through the goodwill of the investors. The next section shows how and why chiefs' motivation in the land allocations was a decisive factor for land dispossession as a result of the implementation of the two project areas.

Case I (Kimminic Project)

The Kimminic project involved a 40-year joint venture land deal with six traditional councils in the Brong-Ahafo region of Ghana for the cultivation of jatropha for biofuel production. The entire project involved a land area of 65,000 hectares. This case (Case I) focuses on the village of Bredi near one of the Kimminic project areas in the Nkoranza Traditional Council (henceforth referred to as NTC) (see Figure 1), covering land areas of 13,000 hectares. An annual profit-sharing allocation of 75% and 25% for Kimminic and the NTC respectively was agreed. Funding for the Kimminic project came from Canadian investors and Ghanaian residents in Canada. Since it was a joint venture, whereby the project village is a partner, the Ghanaian investors together with chiefs of the NTC advocated the protection of land areas cultivated by residents of the project village, especially the indigenous citizens.

The NTC is one of the traditional authorities in Ghana endowed with vast land areas. However, successive generations of 'indigenous citizens' are thought to have lost track of the actual size of stool land areas, as non-permanent features (rivers and river valleys) are used to mark land boundaries (interviews, 2012). In the absence of formal boundaries, some migrants are staying on the outskirts of NTC stool land without the permission of chiefs. Moreover, migrant farmers from adjacent traditional councils, especially the Ejura Traditional Council (see Figure 1) in the Ashanti region, are accused of occupying stool land without paying tributes to NTC (interview with the chief of the NTC, 2012). This

accusation does not mean that so-called migrants are ‘non-Ghanaians’ but rather that they do not meet ‘local citizenship’ criteria.

Referring to these observations, the NTC indicated that unclear land boundary demarcations and the gradual influx of migrant farmers into the areas pose potential threats to chiefs’ authority over stool land. The NTC’s responses to the migrants’ alliance with some non-governmental organisations (NGOs) to contest the land allocation for the Kimminic project illustrate this scepticism. ‘We were shocked when migrants from Ejura Traditional Council cultivating our land sought to contest the land allocation for Kimminic’ (interview, 2012). Furthermore, the urge to prevent possible future land contestations was evident: ‘We opted for a joint venture instead of a lease in order to avoid land encroachment. Leases usually lead to occupation by encroachers [migrants] if intended projects are not successful. . . . But reversal of the land to the NTC is possible with the joint venture agreement’ (*Ibid.*). According to the NTC, previous experiences of land leases led to the occupation of their stool by migrants when the project was abandoned midway, but the NTC could not legally regain the land areas until the lease period expired (interviews, 2012).

In order to pre-empt the migrants’ efforts to contest the land allocation, the NTC further sought to strategically challenge the migrant farmers: ‘All migrant farmers were asked to show receipts of payments of ground rent to show observance of custom guiding the use of stool land’ (interview with chief of NTC, 2012). The efficacy of this strategy implemented by the chiefs was evident during an interview with a migrant farmer: ‘Some of us [migrants] pay agricultural tributes every year. . . . But nowadays yields are poor. We were issued receipts for payment of ground rents many years ago but that is no

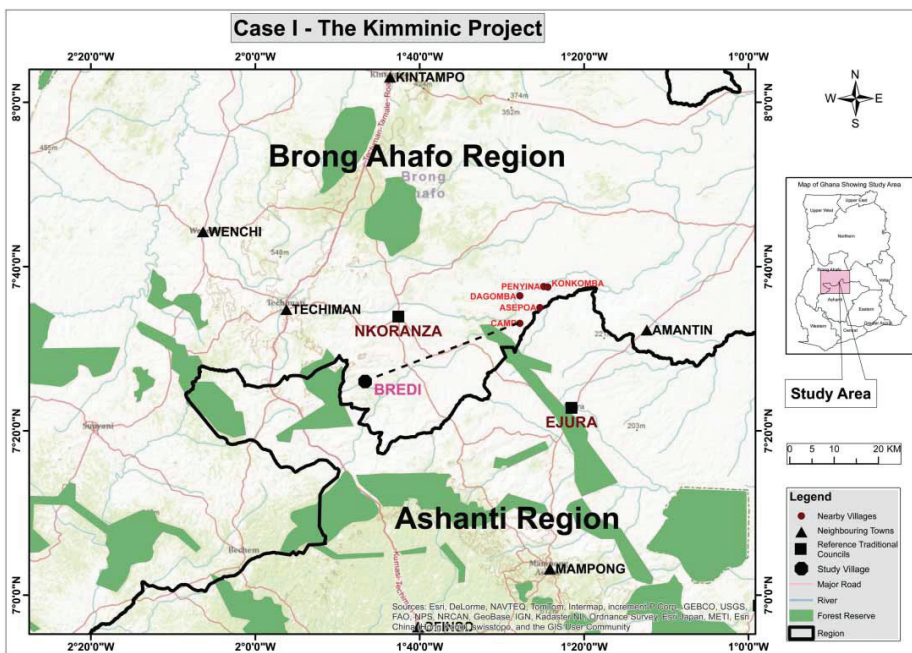


Figure 1. Case I – the Kimminic project (Cartography: Department of Geography and Resource Development, University of Ghana).

longer done' (interview, 2012). This response implies that migrants' inability to provide receipts of payments of both ground rents and agricultural tributes does not necessarily justify the noncompliance accusation made by chiefs. Nonetheless, the accusation prevented affected migrants from protesting over land dispossession. Subsequent interviews indicated that the migrants' identity further denied them the wherewithal to successfully contest the chiefs' land deal, which affected their farmland. According to an affected migrant farmer, 'The village chief who is supposed to lead us [migrants] to the palace of the *Omanhene* [paramount chief] is an employee of Kimminic. He always postpones our proposed meetings but we cannot bypass him' (interview, 2012).

Chiefs' motivation in the making of the land deal was further evident in their justification for the joint venture agreement. 'We gave out the lands to the company so that the youth can secure jobs. Most occupants [migrants] of our land have not paid anything to us lately. . . . It is not a lease, the land areas are not sold out. The local people [indigenes] are also owners of the project' (interview with a chief of the NTC, 2012). The land allocation for the Kimminic project was thought to be the ultimate measure to protect land for the indigenous residents and to create economic opportunities. With the approval of the land deal by Ghana Lands Commission, the NTC expressed the confidence to contest potential future land litigations as boundaries are demarcated and legally formalised.

Indeed, the NTC's preference for the joint venture agreement protected some land areas in the jatropha plantation. However, the NTC strategically placed the land use rights of some residents into the hands of Kimminic. Land access thereafter depended upon 'local citizenship' and the goodwill of Kimminic. It is striking to note that, since the NTC's preference for joint venture was in part intended to re-establish authority over stool land cultivated by perceived noncompliant migrants, the land areas of most indigenous people were not affected. Migrants who cultivated land areas owned by these indigenous landholders were equally not affected. Moreover, migrant charcoal producers and farmers who regularly paid tributes to the NTC or secretly paid bribes to village chiefs were offered new land areas during the project implementation. The fate of other migrant farmers depended on the goodwill of Kimminic. Indeed, Kimminic created reserved land areas for use by residents, including even migrants. The land areas of a few migrant farmers were however affected. The development of the jatropha plantation fields into rectangular shapes and the creation of reserved areas around the plantation (called fire belts) to prevent potential fire outbreaks affected such farmland.

The extent to which the joint venture agreement protected the land areas of most sampled households (as shown in Table 1) clearly shows that the motivation of chiefs in the land deal plays a decisive role in land dispossession.

Case II (ScanFarm Project)

ScanFarm Ghana Ltd (formerly called ScanFuel) is an affiliate of a Norwegian company, ScanFuel AS. The project initially involved a 50-year (13,000 hectares) lease agreement with the Agogo Traditional Council (henceforth referred to as ATC), established in 2008–09 for jatropha biofuel production. However, expectations of quick profit-making from jatropha by ScanFarm management were not forthcoming as the company claimed there was a limited market for the harvested jatropha nuts (interviews, 2012). ScanFuel therefore switched to maize production in 2010, prompting the change of name from ScanFuel to ScanFarm. In 2011, the lease period was reduced to 15 years. Case II focuses on the village of Nsonyameye near the ScanFarm project (see Figure 2).

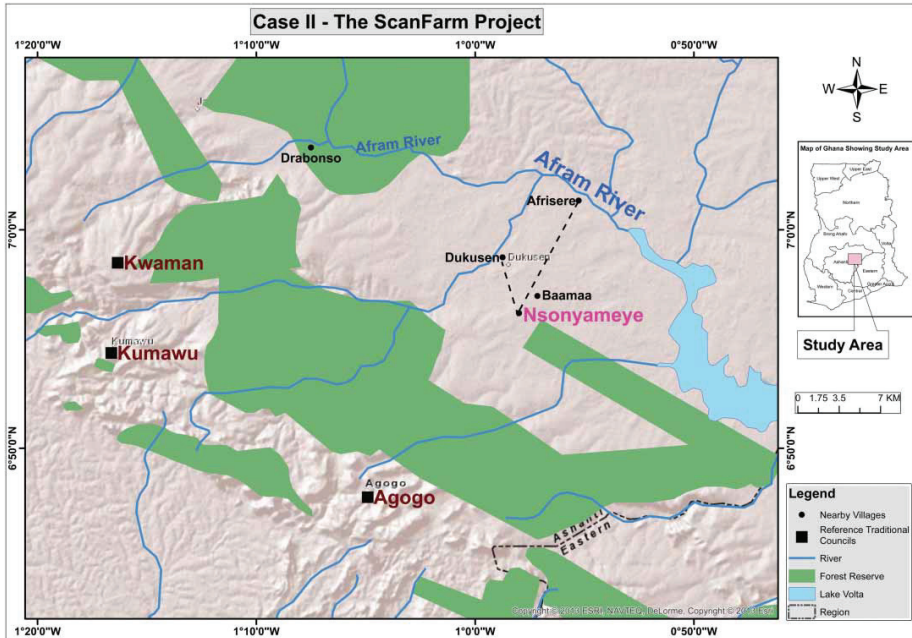


Figure 2. Case II – the ScanFarm project (Cartography: Department of Geography and Resource Development, University of Ghana).

I introduce the discussion of land dispossession in the ScanFarm project area by elucidating the historical backdrop of the current land politics in Agogo. Land ownership in the political history of Ghana was achieved through struggles over territorial hegemony by powerful chiefdoms or kingdoms. Gaining control over large land areas is achieved through displays of supremacy in warfare. Agogo town is adjacent to the towns of Kumawu and Kwaman (see Figure 2) in the Ashanti region of Ghana. The three towns are the traditional capitals of Agogo, Kumawu and Kwaman traditional councils respectively. The political history of the three towns is dominated by their collective efforts to annex the boundary of what elders of Kumawu and Agogo call the ‘oppressive’ and ‘powerful’ neighbouring ruler in the seventeenth century (interviews, 2012; see also Berry 2001, 172–176). After successful annexation, the first three chiefs (descendants of the same clan) of the three traditional councils located themselves at strategic places for defence purposes but made verbal agreements not to draw boundaries between their areas of jurisdiction owing to kinship ties (interviews, 2012). This oral tradition has existed for centuries for successive chiefs of the three traditional councils. In the absence of formal boundaries, an individual who settles or cultivates land in either of the traditional councils correspondingly acknowledges the authority of any of these chiefs. No formal boundaries existed beyond the settlements or farmlands in the three traditional councils though the chiefs refer to rivers and river valleys as superficial boundaries.

The increased demand for land during the last decade has triggered contentions over large-scale land allocations, which are undermining the custom uniting the three traditional councils. Chiefs of the three traditional councils have strategically extended their land rights to adjacent areas with extensive bush or grassland where there are no physical boundary features such as rivers and river valleys. The paramount chiefs of Agogo and Kumawu

have allocated many land areas to investors over the last decade without any form of mutual consent. The Kumawu Traditional Council (KTC) rented out land areas for teak production near a village in the ATC in the early 2000s but no consent was sought from the other two (interviews, 2012). In 2008–09, the ATC also allocated a 13,000-hectare land area for ScanFarm's jatropha project without the consent of the other two. The ATC communicated this land deal to the Agogo residents as an arrangement which virtually covered marginal areas suitable for jatropha cultivation. 'The lease covers only *mfofoa* [marginal land] . . . , farming will not be compromised' (interview with the chief of the ATC, 2012). Meanwhile, since there are no formal demarcations between stool land and family land, the leased areas described as *mfofoa* included farmland and other productive land areas owned by families and individuals. The *mfofoa*, often perceived as marginal land, is usually fallow land which forms a significant part of agricultural production cycles and also serves as a source of firewood, grasses for livestock, fruits etc. for village residents (interviews, 2012).

The ScanFarm land deal was followed by another land allocation to Fulani herdsmen for cattle rearing, which reinforced the residents' scepticism about potential losses of their land areas to migrants (interviews, 2012; Daily Guide Newspaper 2011). It is important to note that the paramount chief who approved these lease agreements is a lawyer and a former minister of the ruling NDC government who has a thorough knowledge of property rights in Ghana.

Public scepticism about land dispossession further increased in 2010 when ScanFarm switched to maize production. This was because from 2010, ScanFarm relocated from predominantly grassland areas used for jatropha in Afirisere and Dukusen villages, towards forested areas near Nsonyameye and Baamaa villages (see Figure 2). The Municipal Chief Executive (MCE) of the ScanFarm project area who had family land in Nsonyameye village became equally sceptical about the land deal. As a result of public agitation and advocacy by NGOs (Bull 2010; ActionAid Ghana 2011), the MCE of the area initiated renegotiation of the lease agreement. In 2011, the lease period was reduced from 50 to 15 years and compensation payments for affected farmers increased from Ghana Cedis (GHS) 15 to 30 per acre per year. The revision of the lease was intended to reduce public discontent.

Nonetheless, the ATC land allocations posed threats to the KTC's authority over land. To prevent future loss of their portion of the jointly owned non-demarcated land, subsequent land allocations by the ATC have been contested by the KTC (interview with the registrar of the ATC, 2012). According to an elder of the KTC, the council has erected pillars on the bank of the River Afram (see Figure 2) north of the three traditional councils to prevent future land allocations by the ATC. The ATC's reactions to agitation by its residents and the KTC revealed their intentions in numerous land deals, as discussed in the sections to follow.

After a series of unsuccessful complaints to the ATC, community-based activist groups in Agogo made public demonstrations to contest numerous non-transparent land deals. The agitation reached a peak with a petition submitted to the King of Asante⁶ to oust the paramount chief of the ATC in order to protect their land and local citizenship identity. The petition states: 'Recalling the Oath of Allegiance sworn before you, . . . , and the entire Asante Nation by [name withheld] to protect the lands our forebears fought for and left behind, and to protect and defend the citizens at all times, he has failed woefully and miserably to honour this Oath and thereby does not deserve to serve you and the people of Agogo.'⁷ In sharp contrast, the spokesperson of the paramount chief of ATC cautioned the feuding residents as follows: 'The Kumawu Traditional Council has sanctioned numerous land deals including an area near Agogo without our consent. The *Kuromanfo* [indigenes]

involved in the demonstrations are naive. . . . Land leases to investors will protect our land for posterity' (interviews, 2012). Subsequent interviews with other elders of the ATC revealed similar accusations directed to the KTC regarding land allocations thought to have been sanctioned without the ATC's consent and hence the need to do the same to secure land for posterity. Based on the above illustrations, the ATC's motivation to sanction large-scale deals for agricultural investments, including the ScanFarm project, is a strategic way of formalising its boundaries.

The ATC further sought to display a highly altruistic disposition in the making of the land allocations by claiming that they could generate development opportunities from so-called marginal lands rather than continuing with the irregular agricultural tributes from alleged noncompliant migrant farmers. While elucidating on expected outcomes of the ScanFarm project, a chief of the ATC said: 'We have vast land areas but we don't benefit from it. Most migrant farmers do not want to pay agricultural tributes. Only charcoal producers honour the payments. . . . There will be employment for our unemployed youth' (interview, 2012). Indeed, during interviews, some migrants confirmed the 'noncompliance' accusation because of previous experiences of multiple payments of agricultural tributes to people who impersonated messengers of chiefs. Other migrants attributed the tribute evasion to unfair treatment in the collection of tributes. According to a migrant charcoal producer, 'Chiefs threaten us so we have to obtain permits from them before we produce charcoal but indigenous charcoal producers evade the permits without punishment.' Despite admissions of evasion of tributes by some migrants, subsequent interviews revealed the ATC's intension to undermine land use rights of migrants by tracing their genealogy. According to the spokesperson of the paramount of the ATC, 'The migrants came here in the 1980s and asked for land from us [the ATC]. . . . Migrants do not own land here; we gave them land for free. They only pay *Nsa Sika* [money for drinks]' (interview, 2012).

In addition to this, the ATC accused some village chiefs of dishonesty in the delivery of the agricultural tributes collected, while efforts to ensure effective collection of agricultural tributes have proven equally futile (interview with the registrar of the ATC, 2012). As elucidated earlier, although chiefs claim to evict only noncompliant migrants from stool land, generate development opportunities and formalise and secure land for the living and unborn citizens, the land areas of many residents, including indigenous residents, were affected. Meanwhile, the leased land areas had been swapped for royalties paid by ScanFarm. The next sections explain the outcome of land claims during the lease renegotiation phase.

A salient feature of the renegotiation phase was that allegedly affected residents were empowered to negotiate directly with ScanFarm without the involvement of the ATC. Indeed, this introduced transparency into the lease agreement. Disgruntled allodial landholders however deemed it an opportune time to strategically increase the size of their land areas. For the allodial landholders, the initial lease agreement reached solely between the ATC and ScanFarm was an affront to their land use rights and thus they made many competing and controversial land claims during the renegotiation phase. Owing to ScanFarm's earlier land preparations, which were undertaken without the consent of the residents, land owners within the leased area were identified and confirmed by neighbouring farmers and village chiefs during the renegotiation phase. There were however three shortfalls in the renegotiation process. Firstly, residents seldom record actual land sizes. Secondly, some land owners were not present in the village during the renegotiation phase. Thirdly, ScanFarm had paid royalties to the ATC for the leased areas. Residents resorted to the following strategies: firstly, they made land claims only after land areas had been prepared by ScanFarm; secondly, others magnified the size of

land areas, having realised that features marking boundaries, such as teak tree stumps and hedge plants, had already been removed without their consent. ScanFarm's strategic responses to these controversial claims were critical in causing land dispossession, as elucidated below.

A resident's ability to invoke customs or provide narratives of family ancestry to claim local citizenship identity was important in the determination of the outcome of land claims. This 'citizenship' identity provided the allegedly affected residents an opportunity to successfully contest the ATC's land deals in law courts, or petition the office of the Asante King. This is evident in a proud statement by an indigenous resident over the unfettered land rights of indigenous people: 'I am *Kuromani* [indigene] of this town, the *Omanhene* [paramount chief] can never take away my land. The . . . court ordered ScanFarm to pay compensation for encroaching on my land and ScanFarm had no other choice' (interview with a successful land claimant, 2012). Successful land claimants either regained land areas, which were usually bigger than the affected land areas, or received compensation from ScanFarm. Migrant farmers who had accessed land from these successful claimants or landlords equally regained land.

Since earlier successful claimants often magnified the size of affected land areas, ScanFarm observed many competing claims and multiple compensation payments for farmlands which were very similar. In response, ScanFarm reduced the sizes of some claimed land areas. Furthermore, ScanFarm rejected several subsequent land claims, even some made by allodial landholders who were not present during the project implementation or the renegotiation phase. ScanFarm's equally strategic responses to perceived incessant claims were based on the assumption that royalties for the leased areas had been paid to the ATC and therefore claims perceived as contentious could not be addressed. According to a member of ScanFarm Management, 'Every day people come here with new land claims but we cannot take the risk of responding to all claims. Royalties [undisclosed] for the leased land are paid to the chiefs' (interview, 2012).

Moreover, the development of ScanFarm's maize farms into rectangular shapes during land preparations affected portions of nearby farmland of residents, but no compensation whatsoever was provided. Tenant farmers whose landlords either accepted compensation payments or lost land claims were faced with land dispossession. Residents who cultivated part of the leased land without the permission of the ATC also faced land dispossession. These were mostly migrants who remained unrecognised by chiefs because of the noncompliance and migrant labels. The migrants lamented over how such labelling by chiefs affected their farmlands during the ScanFarm project. According to a 37-year-old migrant, 'I was born in this village but because my parents are migrants from Northern Ghana, I have no land here. . . . ScanFarm has destroyed my crops and taken over my farmland' (interview, 2012). Paradoxically, migrant charcoal producers who often paid tributes to the ATC were protected against land dispossession by village chiefs during the project.

The motivation of the ATC and the limited expression of goodwill on the part of ScanFarm obviously contributed to land dispossession. The following section discusses the main issues extracted from the two cases to examine which of the actors (the investors and chiefs) have a decisive role in causing land dispossession.

Why similar motivations of chiefs but different implications for land access?

In both cases, references to citizenship identity featured prominently in land claims. Both chiefs and residents invoked the citizenship concept as the canon to protect or undermine social identity in land claim-making processes. As elucidated above, land claims are not

merely aimed at circumventing land dispossession but more importantly at securing citizenship identity. The petition to oust the paramount chief of the ATC over land allocations initiated by residents who labelled themselves ‘concerned citizens’, attests to efforts to pre-empt potential loss of local citizenship identity. Similarly, the NTC’s motivations for undermining migrants’ control over stool land and the preference for joint venture agreement illustrate quests to protect land rights in order to pre-empt any potential loss of local citizenship.

However, the concept of local citizenship remains highly fluid since customs that define land access and hence citizenship identity are interpreted and legitimated by chiefs. Although both the 1979 and 1992 constitutions of Ghana bar chiefs from dabbling in partisan politics, it has become a convention that, owing to the reverence for the chieftaincy institution, political parties strategically lure chiefs into their camps for vote-seeking purposes. This has made chiefs increasingly powerful especially as environmental resource brokers since Ghana was ushered into a democratic regime. This relative increase in the power of chiefs has had a telling effect on the definition of social identity and land access. Individuals – whether migrant or not – who can influence chiefs in turn gain access to resources controlled by chiefs and vice versa. Recognition (or lack of recognition) from chiefs thus has implications for land access.

Referring to the land grabbing debate, ScanFarm evicted many residents from the leased areas, denying them resources which once formed the backbone of their livelihoods. ScanFarm’s contribution to land dispossession is clearly evident in their rejection of land claims even by allodial landholders in order to mitigate multiple compensation payments to other residents. This investment clearly deserves the label ‘land grabbing’. However, the study finds that the role played by the ATC (chiefs), who hold land in trust for residents, is predominant in this so-called ‘land grabbing’. The improved terms of the lease agreement during the renegotiation phase were achieved when the power of the chiefs was curtailed. This presupposes that incidences of land dispossession could have been reduced if proper negotiations and consultations were initiated by so-called trustees of land (chiefs) during the initial lease agreement with ScanFarm. Furthermore, this would have been easier given the legal training and the party-political affiliation of the paramount chief of ATC, who approved the ScanFarm land deal. The ATC’s motivation for a lease agreement in order to re-establish authority over land eventually affected the land areas of many residents, including even some allodial landholders. Conversely, although similar motivations compelled the NTC to allocate land for the Kimminic project, the preference for a joint venture land deal significantly reduced incidences of land dispossession (refer to Table 1). Furthermore, the NTC’s motivation protected the land areas cultivated by many migrants, who have weaker land use rights. The reverse was the case in the ScanFarm project area, where the land areas cultivated by many indigenous households was affected. It is noteworthy that the different incidences of land dispossession in both Cases I and II were largely determined by the different land contractual arrangements decided upon by the chiefs of the respective project areas.

Conclusion

The paper does not dispel evidence of land dispossession created by agricultural investors elsewhere in the world. Instead, it shows that analyses of motivations, strategies and of the power of actors defining land entitlements are equally important as the investors’ strategies in the land deals debate. The empirical evidence suggest that, in instances where chiefs’ motivations in the land deals corresponded with expressions of goodwill and quests to

protect local citizenship identity, the land use rights of residents, whether migrants or indigenes, were protected. Indeed, both investors contributed to land dispossession in the respective project areas, and I argue that the process of land dispossession was largely initiated and reinforced by chiefs' motivation to re-establish authority over land. The different roles played by the chiefs of the NTC and ATC and the corresponding differences in incidence of land dispossession in the respective project areas illustrate the potential capability of chiefs to pre-empt land dispossession during large-scale land deals. This further shows that the causes of land dispossession are often connected to and depend on local sociopolitical dynamics, which leads to situations where similar projects generate different outcomes even in the same country.

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Note on contributor

Festus Boamah is a PhD candidate at the University of Bergen, Norway. His research shows how social institutions and politics mediate resource access. He is particularly interested in how value-laden concepts embedded in the representation of the recent surge in land deals influence environmental resource governance and rural livelihoods.

Notes

1. Land areas that are under the trusteeship of chiefs.
2. Stools (or skins) refer to traditional heads of villages/communities or the seat of authority of chiefs. A village chief is called *Odikro* in Twi. Stools constitute a council called a Traditional Council, headed by a paramount chief (*Omanhene*). Village chiefs are installed by paramount chiefs to oversee land on behalf of traditional councils. *Odikro* collect agricultural tributes on behalf of traditional councils. The terms traditional councils, traditional authorities and chiefs are used interchangeably in this paper.
3. Provisional National Defence Council. PNDC has ruled as a revolutionary party (1981–92) and (1993–2000, 2009 to date) with the National Democratic Congress (NDC) as a successor party since Ghana was ushered into democratic rule.
4. I use the term 'biofuel' instead of 'agrofuel' because most policy documents and debates on renewable energy in Ghana often discuss biofuel as being synonymous with fuel from crop plants.
5. District or municipal assemblies are state institutions established for local administration and development. They are headed by District Chief Executives or Municipal Chief Executives.
6. An ethnic group in Ghana to which the indigenes of Agogo belong.
7. Public notification of a formal petition against land allocations by the paramount chief of the ATC. This petition was made by community-based organisations 'Concerned Citizens of Agogo' and 'Agogo Youth Organisations' in 2011 and 2012.

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Paper #2

Manoeuvring to (re)gain resource access: Re-thinking livelihood impacts of biofuels land deals in Ghana

Festus Boamah & Ragnhild Overå

Abstract

During the last decade, debates about livelihood impacts of large-scale agricultural investments have focused mainly on either employment creation or on land dispossession. The debates rarely consider the mediating role of social institutions and communal reciprocity in resource access manoeuvring processes. This comparative study of two biofuels projects in Ghana shows that households affected by land dispossession shortly gained new productive land areas by switching to fallow farmland or through long-term reciprocal social networks. The livelihoods of households with members employed by the projects improved in terms of increased income and access to cultivation on project land. Not everyone, however, particularly those considered migrants, had the resources and ability to use social networks for job-seeking and land access negotiation. We argue that a context-specific focus on individuals' and groups' abilities to utilise social institutions to sustain their livelihoods during a project's lifetime is crucial in analyses of impacts of biofuels land deals. Such an approach exposes the various forms and uses that livelihood capitals may attain, and how new configurations of social and economic relations can emerge from land commercialization, reinforcing local inequalities.

Key words: social networks; reciprocity; livelihoods; social institutions; manoeuvring; Ghana.

1. Introduction

It is in fact impossible to account for the structure and functioning of the social world unless one reintroduces capital in all its forms and not solely in the one form recognized by economic theory (Pierre Bourdieu, 1986:242).

The surge in land deals for biofuels¹ and other large-scale agricultural investments over the last decade has been accompanied by debates about the impact on land tenure and on rural livelihoods. This study examines two cases from Ghana, which has become one of the major nations for large-scale agricultural investments in Africa. Ghana predominantly has a customary land tenure regime with about 80% of land held by customary landowners, mainly families, stools² and clans (Kasanga and Kotey, 2001; Aryeetey et al., 2007). The remaining 20% of the land is privately owned or controlled by the state. Large-scale land deals in Ghana are often thought to cause land dispossession and loss of social cohesion (Aryeetey et al., 2007; Agbosu et al., 2007; Fold and Whitfield, 2012).

Despite such reservations, many Ghanaian chiefs have allocated large land areas to agricultural investors, mainly from Italy, Norway, Israel and Canada. The investments often involve the cultivation of the oil-bearing *jatropha curcas* plant for biofuel production. Due to the oil price increases in 2006-2007, the *jatropha* nut, noted for its high oil content of 27-40% and its potential to thrive under marginal conditions, was promoted as a wonderful plant by the government of Ghana, Ghanaian chiefs and institutes involved in renewable energy policy for improved energy provision and employment creation (Ghana Energy Commission, 2005; Amoah, 2006; Agyekumhene, 2006; Technoserve, 2007; Brew-Hammond, 2009). By 2009, 13 out of a total of 17 biofuel investments in Ghana centred on *jatropha* cultivation (Schoneveld et al., 2010), and civil society organisations, researchers and the Ghanaian media initiated discussions about potential livelihood impacts of these investments. The discussions centred on the size of land areas involved and on their concentration in the ecological zones of Ghana which support intensive food crop production. According to Schoneveld et al. (2010), 17 biofuel companies had by August 2009 collectively acquired land areas of 1,075,000

¹ We use the term 'biofuel' instead of 'agrofuel' because most policy documents and public debates on renewable energy in Ghana often discuss biofuel as synonymous with fuel from crop plants.

² Stools (also called skins in Northern Ghana) refer to the seat of authority of traditional leaders or chiefs. A village chief is called *Odikro* in Twi. Stools constitute a council called Traditional Council, headed by a Paramount Chief (*Omanhene*). Village chiefs act as messengers or representatives of Paramount Chiefs at the village level. The terms chiefs, traditional councils and traditional authorities are sometimes used interchangeably in this paper.

hectares in Ghana, of which 730,000 hectares (67%) were located in the forest and savannah transitional zones, which are popularly referred to as the 'food baskets' of Ghana. The allocation of such large land areas by chiefs during the last decade sharply contrasts the situation in the preceding decades where such role was the preserve of the Ghanaian state or governments (Larbi et al., 2004; Ghana Lands Commission, 2012). Whereas some studies conclude negatively on the livelihood impact of these land deals in terms of limited land access and possible disruption of land tenure systems (Schoneveld et al., 2010; Bull, 2010; ActionAid Ghana, 2011; Wisborg, 2012; Campion and Acheampong, 2014), positive impacts reported include employment creation, increased food crop production and improved social facilities in rural communities with few alternative livelihoods to subsistence agriculture (Tsikata and Yaro, 2011; Boamah, 2011a, 2011b).

Central to the biofuel land deals debate is the reference to potential impacts on land, labour, income and social infrastructure in host regions. The debate, as illustrated by the above-mentioned studies, seems to suggest directions for policy-making regarding the recent surge in Foreign Direct Investment (FDI) in agriculture in Ghana. However, such 'snapshot' studies are often undertaken shortly after the media has headlined news on land deals and thus capture events at the incipient stages of project implementation. Studies following up biofuels projects in Ghana over time have found that such projects have failed to utilise all of the acquired land, or have collapsed due to financial problems (Tsikata and Yaro, 2011; Boamah, 2011a, 2011b). The temporary nature of the employment opportunities created by the projects is therefore often not captured (Boamah, 2011a, 2011b; Acheampong and Campion, 2014).

Similarly, 'snapshot' studies concluding that farmers are dispossessed of their farmland (Bull, 2010; Schoneveld et al., 2010, 2011; ActionAid Ghana, 2011; Wisborg, 2012) rarely follow up by investigating the size and the quality of new land areas accessed by the affected farmers as well as the various means by which land is regained. Clearly, more long-term empirical research on productive resource access in the aftermath of project implementation is required to capture the agency and adaptive capacity of dispossessed farmers. The premise of research into such land deals is that projects are not implemented in a vacuum but rather in places with pre-existing institutions (norms and customs) regarding how different social groups gain access to land, credit, labour and jobs. As Berry (2001, 1993) has demonstrated, the negotiability of African land tenure systems enables farmers and agricultural labourers to access productive resources such as credit, land and labour through reciprocal relationships. For example, since migrant labour is required for agricultural production in Africa, access to

land for both migrants and local residents is often mediated by local customs (Berry, 1993, Boni, 2005; Chauveau and Colin, 2010).

Southern Ghana has been an important destination for labour migrants for over a century due to the predominance of intensive agriculture and other labour opportunities such as mining (Hill, 1961; Boni, 2005). This was especially so during the cocoa boom in Ghana after the 1930s, when migrants often worked in cocoa farms as labourers (Boni, 2005; Amanor, 2006) or purchased land to invest in cocoa production (Hill, 1961). Migrants who cultivated cocoa on stool land were required by custom to pay agricultural tributes to chiefs, whereas persons who successfully traced their genealogy to founders of the villages, labelled as 'indigenes', were exempt from such payments (Berry, 1997). Ghana's economic crisis in the early 1980s (see Konadu-Agyemang, 2000), compounded by severe drought and bush fires that affected large areas of forest and cocoa farms, especially in 1983 (Berry, 1997), brought about changes in the cocoa agribusiness. For example, some years after the economic and ecological recovery, farmers shifted from cocoa farming to food crop production. Although migrant farmers continued to pay tributes to their landlords or chiefs (ibid.), the level of cultivation over large land areas saw a decrease (Wisborg, 2012). Despite the seemingly differentiated access to land by indigenes and migrants, the latter often manoeuvre to gain continuous access to land based on their long-term reciprocal relationships with chiefs or affiliations to land-owning groups (Berry, 1989, 2001; Amanor, 2006). Such manoeuvres, nonetheless, occur within certain structural limitations, or are in short not limitless.

Land access therefore does not only depend on individuals' and groups' identity as always either indigenes or migrants but also on culturally acceptable behaviour, which makes such a distinction a product of ongoing processes (Berry 2001, 1993). Social institutions that mediate notions of entitlement and resource access avenues for different social groups are important for the analysis of livelihoods. Furthermore, social institutions prompting reciprocal relationships result from the failure of the state to provide welfare, especially for the needy in the Ghanaian society. The institutional arrangements that allow persons to circumvent resource access barriers therefore provide economic benefits on one hand and set certain constraints on the other. There is a rich literature on resource access manoeuvring in a context of local institutions (Berry, 1989, 2001, 2009), on small-scale agricultural systems (Boni, 2005; Chauveau and Colin, 2010) and on new land reforms (Deininger and Binswanger, 1999; Lund, 2008; Amanor and Ubink, 2008). Research on such manoeuvring processes, which requires extensive fieldwork, does not feature prominently in recent studies on agricultural

investment projects. Through an ethnographic study of two biofuel investments in Ghana, we argue that the livelihood impacts of agricultural projects is not solely a question of either land dispossession or employment creation but also about individuals' and groups' abilities to utilise social institutions to sustain their livelihoods during a project's lifetime. This approach contributes to the land deals debate by showing that sustaining or losing livelihoods is an ongoing process and therefore cannot be studied as one event. It also shows that new configurations of social and economic relations often emerge in processes of land commercialisation, influencing who end up as 'winners' and 'losers' in contexts where state regulations on large-scale land allocations is weak.

In the first section of this paper, we discuss the four types of livelihood capital identified by Scoones (1998) and how social institutions mediate access to such capital. The methodology of the study and the characteristics of the two selected cases are presented in the next section. In the final section, Case I illustrates the relevance of manoeuvring in accessing jobs, loans/credits and land. Case II illustrates the relevance of manoeuvring to circumvent or mitigate negative livelihood impacts of projects. The paper ends with discussions of causal inferences drawn from the two cases and a conclusion.

2 Livelihoods and social institutions

Livelihoods are defined as comprising 'the capabilities, assets (including both material and social resources) and activities required for a means of living' (Scoones, 1998: 5). Scoones (1998: 7-8) identifies four types of resources or capital required to achieve certain livelihood outcomes. These are natural, social, human and economic/financial capitals. Natural capital refers to the natural stock of resources (soil, water, genetic resources, etc.) and the environmental services (hydrological cycle, pollution sinks, etc.) which are useful for deriving livelihoods. Social capital refers to social resources such as networks, social claims, social relationships, affiliations and associations, upon which people draw when pursuing different livelihood strategies that require not only individual strategies but also coordinated actions. Human capital refers to the skills, knowledge, good health as well as physical capability that are important for the pursuit of different livelihood strategies. Economic or financial capital refers to the capital base, including the credit/debit, cash, savings and other economic assets such as basic infrastructure, production equipment and technology, which are essential for the pursuit of any livelihood strategy. People achieve livelihoods based on the various capital endowments they have access to and control over (Scoones, 1998). Scoones (1998) describes

a livelihood as sustainable when ‘it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining its natural resource base’ (Scoones, 1998: 5). The sustainable livelihoods framework thus acknowledges that poverty comprises more than mere income insufficiency (Whitehead, 2002). The ability to sustain a livelihood in a certain vulnerability context brings forth issues of effectiveness of adaptive or coping strategies (Davies, 1996; Angelsen et al., 2011). An important coping or adaptive strategy that features prominently in the livelihoods sustainability debate is livelihoods diversification. Livelihood diversification involves the pursuit of diverse constellations of livelihood portfolios both on-farm (multiple crop production) and off-farm activities that are intended to overcome economic shocks and stresses by either reducing or spreading risks (Ellis, 2000; Yaro, 2006).

The effectiveness of adaptive strategies does not depend only on the prowess to diversify livelihoods but also on the ability to negotiate access to resources in the context of existing social institutions (see Berry, 1989, 1993). Since pre-colonial times, Africans have gained access to productive resources such as land, labour and credit through market exchanges as well as through membership and statuses in social units based on genealogy and group affiliations (Berry, 1989, 1993). Local residents, often referred to as ‘indigenous’ people, negotiated access to land through genealogical groups and stools (in the case of Ghana) (Berry, 1993). Strangers to such local groups, often referred to as ‘migrants’, negotiated rights of access to land through payments of money, produce, labour and the acknowledgment of the ‘owner’s’ exclusive land rights in return (ibid.). Strangers were also able to gain resource access by establishing contacts with resource-owning groups through marriage and fostering, or by subjecting themselves to the authority of custodians of resources (Berry, 1989).

The ability to manoeuvre resource access depends on a sense of belonging to a group or integration into a local community, which is referred to as ‘local citizenship’ (Chauveau and Colin, 2010, Kea, 2012). Efficient manoeuvring implies the ability to circumvent resource access barriers by complying with societal norms and practices. For example, when a person, show acts of generosity, social obligations and expectations of reciprocity are activated, this eventually may grant resource access (Berry, 1993; Amanor, 2006; Kea, 2012). Social reciprocity refers to a practice whereby people offer assistance to others with an implicit expectation of gaining favours in return in the future (Berry, 1989, 1993; Amanor, 2006). As Amanor (2006: 5) puts it: ‘Among the matrilineal Akan [of Ghana], land purchasing cocoa farmers had frequently allocated farms to their sons, nephews, and wives in recognition of

services rendered in creating cocoa farms'. Another common example of reciprocity in Ghana is the *nnoboa* institution. *Nnoboa*, in Twi, refers to the practice whereby farmers collectively assist one another in farm work to reduce labour costs. At the community level, expressions of generosity indicate societal moral obligations imposed on rich people to assist those in need, or to protect valuable common pool resources for the purpose of achieving self-gratification in the context of limited welfare provision by the state (Berry, 1989, 1993). According to Berry (1993: 161), 'contributions to community groups and projects help to build networks as well as to enhance an individual's reputation for generosity and public mindedness'.

This insight about transmutability of livelihood capitals in social relationships is reminiscent of Pierre Bourdieu's (1986) formulation of *forms of capital*. Emphasising the convertibility of capitals, Bourdieu (1986: 252) asserts, 'there are some goods and services to which economic capital gives immediate access, without secondary costs; others can be obtained only by virtue of a social capital of relationship (or social obligations) which cannot act instantaneously, at the appropriate moment, unless they have been established and maintained for a long time (...) and therefore outside their period of use'. Despite exclusionary effects of social 'connections', Bourdieu's emphasis on the fact that social capital is not naturally or socially given but is achieved in an ongoing process shows the possibility to overcome resource access barriers. It further draws attention to the socially sanctioned efforts that are required of persons in order to benefit fully from social capitals. In this sense, the value of social capital can fluctuate (i.e. either decrease, increase or even remain redundant) and hence its expeditious utilisation to create livelihood opportunities or mitigate livelihood shocks would depend on individuals' and groups' manoeuvring efficiency and structural limitations of manoeuvring processes. With a focus on the concept of *manoeuvring*, we examine why particular social groups and individuals lose, sustain or improve their livelihoods during the biofuel land deals. As the subsequent sections will show, the concept manoeuvring elucidates not only the agency to utilise social capital to sustain livelihoods but more importantly how and why particular persons were able or unable to (re)gain land access after the projects. The limitations and implications of manoeuvring spaces shed further light on new configurations of social and economic relations resulting from large-scale land commercialisation.

3 Methodology and the two cases

The paper compares the impact on the livelihoods of households in the cases of two projects, Kimminic Estates Ltd (henceforth called Kimminic) and ScanFarm Ghana Ltd (henceforth called ScanFarm), located in Southern Ghana (see Maps 1 & 2). Both projects are located in the forest ecological zones and involve large-scale plantation models resulting in land dispossession and employment creation in both cases. Both projects however involve different contractual arrangements. The study involved a two-month preliminary fieldwork (April-June 2012), followed by a six-month fieldwork period (August 2012-January 2013) which covered the cultivation and harvesting periods of two major farming seasons. The preliminary fieldwork provided relevant contextual information about the study areas through key informant interviews, group interviews and a review of literature on biofuel and land tenure.

The major fieldwork involved a household survey of a sample of 40 farming households in each of the cases, making a total of 80 households. The sampled households were all involved in farming but also included household members who made a living from off-farm activities such as charcoal production, share cropping and petty trading. The households were purposively selected based on the criterion that at least one household member experienced an impact of the projects, whether they were employed by the projects, had lost land to the projects, or both. Based on interviews conducted during the preliminary fieldwork, I gained an impression that local citizens constitute the larger proportion of the population of both study areas villages compared with that of the migrants. Moreover, since Ghana's census statistics define migrants and indigenes of a particular place based on ethnic and regional affiliations, the sampling distribution was based on insights from the preliminary fieldwork. The preliminary fieldwork showed that migrants often faced land dispossession as a result of the project implementation. Therefore, in each of the cases, 22 indigenous and 18 migrant households were selected to roughly reflect the proportion of migrants compared with indigenous residents in the project villages. This sampling strategy was intended to examine how social identities influenced livelihood activities of households during and after the projects. Residents categorised or considered as indigenes refers to persons who successfully trace their genealogy to the study villages and hence could make land claims not contested by chiefs or law court. The ability to trace genealogy to the project villages is based on exclusive land rights, length of stay and being born to or married to descendants of founders of the village. Although some residents boast of local citizenship status to express their eligibility to

ascend to the village stool, the fundamental purpose of such claims is the securing of exclusive land rights. Hence, the usage of the term local citizen (*kuromani*) is limited to persons or households who possess exclusive land rights in the villages.

During transect walks in plantations and farmland areas, conversations with farmers and observations, an impression was made of the soil condition and size of the new land areas gained by the affected households. Those who regularly hired labourers to weed farmland and those who usually rented out land were able to provide accurate estimates of their farmland areas. Although most farmers could not tell the actual sizes of their farmland, they pointed out features marking their land boundaries such as trees, teak stumps and river valleys which were measured with field measurement tapes and GPS device. The period of time until the displaced farmers and charcoal producers gained new land was also recorded. Due to the difficulty of making direct causal relations between livelihood outcomes and land dispossession caused by the projects, the focus was on gathering and analysing major factors that affect or constrain food crop production (see Table 1). These activities, undertaken as part of the household surveys, provided a fair idea of the impacts the projects had on land use.

Table 1: Factors that constrain the size and the type of food crops cultivated by the sampled households before and after project implementation

<i>The situation before the project implementation in the first and second farming seasons</i>							
No. of Households	Common crops cultivated	The range of farm sizes (acres) cultivated in farming season 1	The major constraining factors in order of significance	No. of Households	Common crops cultivated	The range of farm sizes (acres) cultivated in farming season 2	The major constraining factors in order of significance
53 (66.25%)	Maize, cassava, plantain, yam	2-5	1. High labour cost. 2. High cost of agro-chemicals. 3. Poor market for food crops.	61 (76.25%)	Maize, beans, vegetables	1-2	1. High labour costs. 2. Unreliable rainfall.
27(33.75&)	Maize, plantain	3-8 ^{1/2}	1. High labour costs. 2. High cost of agro-chemicals.	19 (23.75%)	Maize	3 ^{1/2} -5	" " "
Total: 80 (100%)				Total: 80 (100%)			
<i>The situation after the project implementation in the first and second farming seasons</i>							
54 (67.5%)	Maize, cassava, plantain, rice	1-3 ^{1/2}	1. High labour cost. 2. High land rents. 3. Land fragmentation ³ . 4. Waterlogged land.	57 (71.25%)	Maize, groundnut, beans	1-3	1. High labour costs, 2. Unreliable rainfall, 3. High land rents, 4. Tight work schedule in the plantation work
26 (32.5%)	Maize, plantain	3 ^{1/2} -5	1. High labour cost. 2. High land rents. 3. High cost of agro-chemicals.	23 (28.75%)	Maize, beans	2-4 ^{1/2}	1. High labour cost, 2. Unreliable rainfall. 3. High land rents.
Total: 80 (100%)				Total: 80 (100%)			

³ This refers to the reduction in farm sizes as a result of sharing with available farmland areas with neighbours who lost their land to the projects. Yam cultivation, which requires land rotation, was thus affected by land fragmentation. Some farmers abandoned yam cultivation whereas others cultivated it primarily for domestic consumption.

4 Local citizenship, land access mechanisms and land categories cultivated by the sampled households.

The most predominant land access avenue for the sampled households is to seek permission from chiefs to use stool land. Whereas payments of initial token sums of money (*nsa sika*) and annual agricultural tributes (*afehyiatuo*) to chiefs are obligatory for migrants, indigenes are exempt due to their 'local citizenship' status. The second most predominant land access avenue is based on family allodial landholdings, often called exclusive land rights. Such households own land either by virtue of being the first settlers, the first to cultivate cocoa or virgin forests, or being descendants of these earlier settlers. These first settlers, referred to as the indigenous people, migrated from different parts of Ghana to the study areas during the period between 1900 and the 1950s. In order to claim exclusive control over land, some residents dated the arrival of their predecessors to *efiri tete* (i.e. since time immemorial) as a way of distinguishing themselves from the *ahohoɔ* (i.e. migrants or strangers) currently settling (interviews, 2012). The notion *kuromani* (indigene) or *kuromafo* (plural) is often invoked by indigenous residents whenever contestations over land rights arise, claiming that their *nananom* (i.e. ancestors) founded the village (interviews, 2012).

Persons who settled after the 1950s are labelled 'migrants' by chiefs and those considered as indigenous people or local citizens – that is *kuromafo*. The labelling of migrants is based on the fact that the *kuromafo* had made claims to most available land areas by late 1950s and thus the later arrivals could only access land by seeking permission from chiefs or from those who by then had become considered as *kuromafo*. It is striking to note that, the category of migrants who arrived in the 1960s and 1970s also gained exclusive land rights. These migrants are mostly descendants of the migrants from Northern Ghana who worked as labourers in cocoa farms. These migrants or their descendants received land as gifts due to their honest service to the host indigenous families or chiefs. As one retired 68-year old migrant farmer expressed, 'my parents and I worked in the cocoa farms of the *Odikro* for many years. The *Odikro* gave us land and a cocoa farm as gifts' (interview, 2012). Some of them later gained even larger land areas from their landlords who gave up farming or switched to small-scale food crop production as a result of the bush fires in 1983 which ravaged many large cocoa farms in Southern Ghana (interviews, 2012; see also Wisborg, 2012). These migrants converted the former cocoa farm fields into food crop farmland, which has now been inherited by their descendants as their *agyapadeɛ* (i.e. inalienable property) (interviews, 2012). Migration into the villages continued after the mid-1980s and land access

by these more recently settled migrants depends on their relationship with earlier settlers or with chiefs.

To be considered *kuromani* therefore is an identity or a status that grants unrestricted land access. Local citizenship can however be described not in absolute terms but rather in degrees, ranging from a ‘true’ *kuromani* to a ‘pure’ *ohoho* depending on the length of stay in the village and relationship with chiefs and persons considered as local citizens. Noteworthy in the process of ‘graduation’ to local citizenship is the recognition gained by virtue of *continuous* display of honesty or acts of generosity. For example, it is on records that, the paramount chief of Agogo (*Agogomanhene*), once installed migrants who arrived in the 1960s as village chiefs (*Adikrofo*) of the villages Dukusen and Afrisere (see Map I) due to acts of dishonesty displayed by previous *kuromafo* village chiefs in the delivery of accounts of agricultural tributes at the office of the ATC (interview with spokesperson of *Agogomanhene*, 2012; interview with the Registrar of the ACT, 2012). The quest to favour persons who would revere chiefly authority highlights the fluidity of the local citizenship status and prompts possible manoeuvres in attaining such a prestigious status and the associated benefits, especially unfettered land rights. As later sections will show, the degree of local citizenship status and hence the exclusiveness of control over resource access is never guaranteed unless conscious efforts are made to sustain it through social networks.

In practice, stool land and family land are the main land categories cultivated in the study areas (see Table 2). However, these have over the years transformed into diverse types of landholdings which are noteworthy in this study. Under share cropping arrangement (sometimes called clientship), a tenant farmer pays an agreed number of bags of maize (or its monetary equivalent⁴) to a landlord for a specific size of cultivated land size. Another land access avenue is leasehold, where allodial holders rent out part of their land for an agreed period of time. Others have accessed land through marriage with allodial landholders, or with those already making a living from stool land as well as through friendships (see Table 2), without rent payments. It is important to note that, migrants married to local citizens do not pay land rents or tributes while those married to fellow migrants are not exempt.

⁴ The price of a 100 kg bag of maize ranges between GHS 40 – GHS 55 in the peak seasons and GHS 60 – 80 in the lean/off-seasons. GHS (New Ghana Cedis) 2 ≈ USD 1 in December 2012.

Table 2: Categories of land cultivated by the sampled households before the projects

Kimminic project area (Case I)		ScanFarm project area (Case II)	
<i>Land categories</i>	<i>No. of households</i>	<i>Land categories</i>	<i>No. of households</i>
<u>Stool land</u>		<u>Stool land</u>	
Stool land only* ⁵	15	Direct stool land only*	14
Friend's land only	4	Friend's land only	2
<u>Private land</u> ⁶		<u>Private land</u>	
Family land only	8	Family land only	10
Share cropping only	3	Share cropping only	2
Leasehold	2	Leasehold only	2
		Friend's land only	1
<u>More than one land category</u>		<u>More than one land category</u>	
Stool land* and family land	4	Stool land* and family land	3
Share cropping and stool land*	4	Share cropping and stool land*	6
Total	40	Total	40

Source: Fieldwork in Ghana (2012-2013).

The difference between 'tenant farmers' and 'farmers' is that the former pay land rents or agricultural tributes to chiefs or private landowners whereas the latter are private landowners whose payments of tributes to chiefs is optional.

The various mechanisms of land access and land categories cultivated described above do not differ significantly from the situation after the projects. The only exception is one affected household that switched to cultivation on the Forestry Department's land. However, as the subsequent sections will show, the major difference lies in the number of those who faced land fragmentation, and those who had to switch to cultivation on private land and pay higher land rents after project implementation. Moreover, some households had access to cultivation on project land without paying land rents or tributes.

5 Household characteristics, livelihood activities and strategies before the projects

⁵ Land categories marked with an asterisk refer to stool land acquired *directly* through chiefs. 'Friend's land' refers to stool land or family land acquired from chiefs *indirectly* through friends.

⁶ The term 'private land' refers to land areas acquired from individuals other than chiefs or traditional councils.

The use of the term ‘households’ in this study refers to individuals and groups, who to *various degrees*, pool resources (both tangible and intangible) together to earn a living, usually but *not always* sharing kinship ties or a common shelter. The focus on the ‘household’ as the unit of analysis does not assume that household members (for example, children and the old-aged) contribute equally to welfare but rather how the active working members complement one another in diverse ways and to different degrees in the pursuit of either separate or joint livelihood activities for the general upkeep of the entire household. By this definition, the central idea ‘the pooling together of resources to earn a living’ involves collectively addressing the costs or losses incurred by other household members. Although the households were sampled in two different project areas, they exhibit many common characteristics. The household size in the two samples ranges from 2 to 12 persons. The indigenous households often comprise the husband, wife (wives), children, old-aged parents and sometimes unmarried nephews of the husband. Migrant households often included the husband, wife (wives), children and younger siblings of the husband. The different compositions of the migrant and indigenous households have implications for land access avenues for household members.

Although spouses in indigenous households occasionally farm together, they more often cultivate separate farmland areas, primarily because they usually have diverse avenues of land access, including land resources owned by their parents or in-laws. Conversely, migrant household members often farm together because husbands are the ones who seek land use rights while other household members assist him or make a living from the same land. The focus on migrant and indigenous households is based on the fact that there are not so much differences between the gender of migrant and indigenous spouses in terms of land access. What matters most is the size of land areas that the indigenous spouse has or can access. Moreover, inter-marriages between migrants and indigenes were uncommon. As later sections will show, although both migrant and indigenous households manoeuvre access to land and other resources, members of the former have a more urgent need to do so.

Food crop production is the main livelihood of the sampled households, whereas charcoal production, livestock rearing and petty trading provide supplementary incomes especially during off-farm seasons. The main farming seasons in the annual agricultural calendar of the study villages cover the periods between March and June (first season) and August to January (second season). Farm produce is mainly meant for household consumption though some amounts may be sold depending on the amount of income needed for the general upkeep of the household. Major crops cultivated include maize, plantain, yam, cassava, beans,

groundnuts, vegetables and rice. With the exception of yam production, which requires yearly land rotation, most households (65-70%) in both samples indicated having cultivated farmland areas for between three to six years before the projects. Continuous cultivation on the same farmland areas is widespread because of the high land preparation costs, which compel most farmers to skip fallow periods or enlarge existing farm fields. Despite the short fallow periods, farmers noted for this practice do not experience declining productivity due to the high soil fertility in the villages. Others alternate usual crop cultivation with beans and groundnut in order to fix nitrogen into soils. These strategies however do not apply to yam production, which requires annual land rotation and the raising of yam ridges, which costs between GHS 80-100 per acre, in addition to the basic farm inputs (see Table 3). For this reason, only a few households cultivate yam.

In both samples, labour costs constitute more than 50 per cent of the overall cost of farming (see Table 3). This compels most farmers either to cultivate small land areas, to rent out part of their land or make share cropping agreements with tenant farmers in order to finance farming. In the two study areas, the period for crop cultivation is determined by rainfall, which is unpredictable. Therefore, farmers' inability to hire labourers and mobilise other inputs ahead of rainy seasons often affects crop yields. Land rents are also a challenge to farming. While chiefs usually require tenant farmers to pay tributes either annually at fixed rates or based on crop yields per farming season, private land-owners require their tenant farmers to pay 1-3 bags of maize for every acre of land cultivated per farming season per year, regardless of crop yields.

Households particularly face economic hardships during the periods of June to July (*kutawonsa*) and January to February when their resources are already invested into farming and they are waiting to harvest crops. *Kutawonsa*, meaning 'hold your hands tight' in Twi, is an advice for people experiencing hardship to avoid the possible temptation of stealing. During these periods of hardship, women engage in petty trading whereas men sell their labour services on other people's farms, or undertake charcoal production. Households also resort to borrowing money from friends or securing loans or buying goods on credit from food traders, whom they reimburse after harvesting.

Table 3: Cost estimates of farming inputs per acre in the two study areas before and during the projects.

<i>Cost elements</i>	<i>Cost range⁷ per acre</i>	Percentage of Lowest costs
<u>Activities requiring hired labour:</u>	<u>Lowest - highest cost</u>	
Initial land preparation*	GHS 35-50	21.47%
Weeding of the farm*	GHS 20-30	12.26%
Spraying of weedicides ⁸	GHS 0-20	0%
Harvesting of crops*	GHS 30-40	18.40%
Sum	GHS 85-GHS 140	52.13%
<u>Other farm inputs:</u>	<u>Lowest- highest cost</u>	
Weedicides (per litre)	GHS 0-9	0%
Fertilizer (50 kg bag)*	GHS 38-55	23.31%
Private land rent ⁹ *	GHS 40-60	24.53%
Sum	GHS 78- GHS 124	47.84%
Total	GHS 163-GHS 264	100%

Source: Fieldwork in Ghana (2012-2013)

Households who have long-term trading relationships with food traders usually gain loans on better terms such as paying back in accordance with the prevailing prices of food crops after crop harvesting. Through *moboa*, households gain access to free labour services and thus reduce labour costs. Residents, especially migrants, strategically show reverence to chiefs or establish reciprocal relationships with custodians of land in order to access land freely or pay minimal land rents.

The above-mentioned livelihood activities and strategies provide information about the socio-economic situation of the sampled households in study areas. As the analysis section will show, certain features such as fallow periods and costs of crop production did not change

⁷ The cost range estimates apply to all the major food crops except yam. The cost elements also exclude transportation costs and the cost of planting materials. If the cost elements marked with an asterisk (*), being the minimum farm inputs, are combined, labour costs account for over 50 per cent of total production cost per acre.

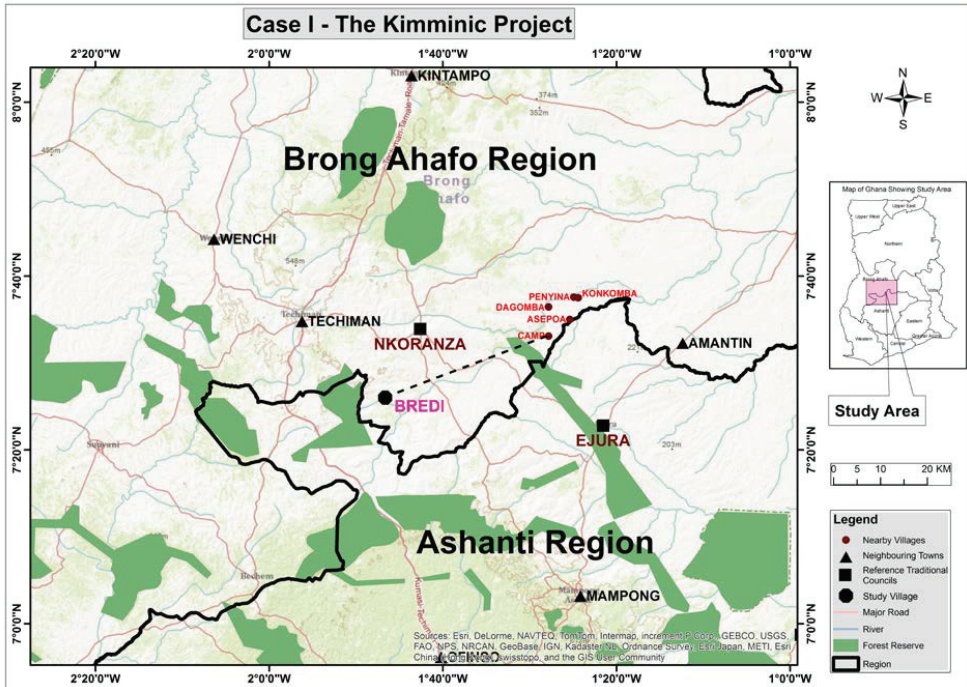
⁸ Farmers who use these inputs do not hire labourers for weeding in their farm. Instead, they buy one litre of weedicide for every acre of land cultivated and pay for spraying costs.

⁹ This estimate for only private land rents is provided because rents for cultivating stool land are often paid per year and it is usually not limited to a specific land size cultivated.

significantly during the project implementation. Nonetheless, subsequent sections illustrate how and why different individuals and social groups were able (or unable) to utilise social institutions either to benefit from new economic opportunities or to mitigate unexpected economic shocks created by the projects and the consequent impacts on household livelihood outcomes.

6 The Kimminic project (Case I)

The Kimminic project involves a 40-year joint venture land deal with six traditional councils in the Brong-Ahafo Region for the cultivation of jatropha for biofuel production. In total, the project involves 65,000 hectares of land. This case focuses on the village Bredi (see Map 1) near one of the Kimminic project which covers 13,000 hectares of land located in the Nkoranza Traditional Council (henceforth called the NTC). Land preparation for the project began in February 2008 and the first jatropha plantation was established in April the same year. Funding for the project came from Canadian investors and Ghanaian residents in Canada. A profit-sharing of 75% for Kimminic and 25% for the NTC was agreed on. As a joint venture, both the Ghanaian investors and the NTC agreed that certain land areas within the plantation should be reserved for use by local farmers, particularly the indigenous population or local citizens. Moreover, the project adopted both mechanised and labour-intensive production methods in order to create employment mainly for persons considered as local citizens (or *kuromafo*), while migrants (or *ahohoɔ*) were less favoured. This was because chiefs used the land allocation as an opportunity to re-establish authority over land areas cultivated by noncompliant migrants, whom they accused of an alleged evasion of annual agricultural tributes (see Boamah, 2014). Plantation workers were encouraged to cultivate food crops in certain portions of the jatropha plantation in order to provide food for their respective households. The official Corporate Social Responsibility (CSR) policy of Kimminic sometimes included spouses and relatives of the plantation workers. The Kimminic Welfare Association was formed by Kimminic to address the concerns of its workers.



Source: Dept. of Geography, University of Ghana.

6.1 Land access in the Kimminic project village

During land preparations for the project, some households cultivating land near the jatropha plantation had to relocate to adjacent areas or give up portions of their farmland. This was partly due to the development of separate rectangular farm fields for the Kimminic jatropha plantation and some areas around the plantation being developed into what Kimminic calls *fire belts*, primarily to insulate the jatropha plantation against potential fire outbreaks. These developments had differentiated impacts on migrant and indigenous households in terms of land access since the project was based on the rationale for the joint-venture land agreement, which aimed to prioritise the protection of the land rights of the local citizens (Boamah, 2014:413-415). Of the 22 indigenous households of the 40 sampled households, only one household lost its farmland to the project.

By comparison, only three of the 18 sampled migrant households, whose farmland areas lay within certain portions of the jatropha plantation protected by Kimminic, were not affected. Thus, as many as 15 migrant households faced different forms of land loss. Some households relocated to new land areas that were smaller in size or had poorer soil and thus could not support their usual crops. A migrant rice farmer for example asserted, ‘my household did not

lose any land, but a fellow Northerner [migrant from Northern Ghana] who cultivated yam [approximately 4 acres] near the jatropha plantation lost his land. I now share my small farmland [$3\frac{1}{2}$ acres] with him' (interview, 2012). Whilst the benefactor farmer reduced the size of his farmland out of generosity, the beneficiary had to switch to rice production which is labour-intensive and often less profitable (interview, 2012).

Although many migrant households were affected by the project, they had after less than two months negotiated new land without missing a farming season. The household survey shows that the highest period of land dispossession occurred during the first half of 2008 when the jatropha plantation had just been established. The new land areas were either fallow farmland or areas belonging to other family members, friends, and spouses as well as stool land and sometimes accessed through leasehold. The research showed, for example that six affected migrant households continued farming without reducing crop yields because only a small portion of their total farmland (2 to 7 acres) had been intensively cultivated before the project due to high labour costs. Describing labour costs as a disincentive to farming, a male migrant farmer said: 'the *Odikro* gave me a big land to cultivate maize and beans ... I cultivated 5 acres during the last farming season when my children were on vacation ... I have cultivated only 2 acres this season. Labourers charge GHS 35 for every acre cultivated' (interview, 2012). This contradicts other biofuel studies (see Campion and Acheampong, 2014), that attribute reduced farm sizes and hence livelihoods to shortening of fallow periods without investigating other considerations (see Table 1). As illustrated earlier, with the exception of yam production, widespread short fallow periods constitute a significant part of the agricultural production cycle.

The dimension of land dispossession worth discussing is the condition of the new land areas, the accompanying land rents and implications for manoeuvring processes. Four migrant households had just settled in the village before the project and thus had not developed any relevant social network of influential people in the village. The livelihoods of these households were affected by the project, as one woman remarked; 'My husband and I came here [Bredi] in 2008. We got stool land through a friend [a fellow migrant] who was leaving the village. When Kimminic started cultivating our land, the *Odikro* said we have never paid any tribute to him' (interview, 2012). The household lost farmland to the project, and had no money to lease equally productive land or social networks to gain new land. The household switched to a nearby waterlogged area, which consequently affected their crop yields. Other

newly settled migrant farmers who had accessed land without the permission of chiefs or indigenous landlords—as custom demands—were also affected by the project.

Similarly, households who had been accused of evading tributes to chiefs were affected but those who regularly paid tributes to chiefs (or bribes for charcoal production) were offered new land areas. Migrant households cultivating stool land, for instance, often paid between GHS 50-200 as annual tributes to chiefs regardless of the size of land areas cultivated. After the project implementation, migrant households who had been accused of tribute evasion could no longer negotiate with chiefs for new land. The migrants' protests over land claims were not successful due to their labels as *ahohoɔ* and henceforth had to lease land areas or make share cropping agreements with private landholders (Boamah, 2014). Meanwhile, private landholders demand higher land rents of 1-3 bags of maize per acre per farming season. This presupposes that individuals who were able to manoeuvre land access efficiently during the project could save at least 25% of the total cost of crop production per annum (see Table 3). This illustrates why conformity to social institutions or reverence for land brokers such as chiefs and family heads or land owners can either sustain or adversely affect the livelihood of a household, whether household members are migrants or not.

6.2 Employment creation in the Kimminic project village

Out of the 40 sampled households, 23 households had at least one member who had been employed by the project, for a period of one to four years. Seven out of the 23 households were migrant households and 16 were indigenous households. The monthly wage range was GHS 88-250. In addition, 34 Kimminic employees from the 23 households obtained loans/credits of GHS 500-1,000. The loans were obtained from Ghanaian Rural Banks¹⁰ and guaranteed by Kimminic. Also, some workers accessed additional bank loans and other financial resources through the Kimminic Welfare Association. When explaining benefits derived from the Welfare Association, one employee said: 'Members sometimes access group loans from Rural Banks and then divide the money for their individual businesses. (...) We also make donations to bereaved members at funerals' (interview, 2012). Moreover, members

¹⁰ Financial institutions in Ghana established primarily for the purpose providing financial services to the rural population of Ghana, especially in the area of agriculture and other rural development projects.

of the Welfare Association lent money more frequently to fellow members than to non-members since monthly wages provided assurance of reimbursement.

Financial resources gained by Kimminic employees were important for their households' livelihood activities such as petty trading and food crop cultivation. Some households used wages and loan facilities mainly for hiring farm labourers and the purchase of weedicides and planting materials to ensure timely cultivation. Also, the households were able to hoard harvested crops until the lean farming seasons when prices became very attractive. Others used wages for payment of school fees, as start-up capital for petty trading and to provide food for their household, but not for farming. Some workers even switched from farming into petty trading. Others invested in capital assets such as chain-saw machine for hire (see **Box 1**). The switch to off-farm livelihood activities by these Kimminic employees was based on their previous experiences of unreliable markets for food crops, crop failures resulting from unreliable rainfall and tight work schedules in the plantation.

The project improved the livelihood outcomes of the 23 households both directly and indirectly. Commenting on such indirect benefits, a wife of a migrant plantation worker said: 'my husband discussed with his work supervisor to employ me in the plantation but there was no job vacancy. (...) The supervisor later allowed me to farm on a land in the jatropa plantation' (interview, 2012). Migrants who neither had household members employed in the project nor had networks with indigenous residents rarely benefited from the employment opportunities. Explaining disappointment with Kimminic's preference for recruiting indigenous people, a migrant job-seeker who had arrived in the village in 2009 lamented: 'the *kuromafo* want their family members alone to work in the plantation (...) Many migrants who had *kuromafo* friends were employed but I knew nobody to help me' (interview, 2012). As friends and kinsmen usually played influential roles in the job-seeking process, project employees had a moral obligation to share benefits of employment opportunities with household members and friends (see **Box 1**).

Box 1: Using social networks to secure employment

According to a 52-year old indigenous resident in Bredi, whom we call Kofi, started working with Kimminic as a tractor operator in 2008. Kofi is the head of a household of seven persons. Kofi's wife is also an indigene of Bredi. Kofi's uncle, a retired *Odikro* of Bredi, was involved in the land negotiation stages of the project in 2007. The uncle was employed by Kimminic as an intermediary between the Nkoranza Traditional Council and Kimminic on matters relating to land. When the project officially started in 2008, Kofi expressed to the uncle his interest in the plantation work. The uncle, who could still use his *Odikro* influence, successfully advocated the recruitment of many indigenous residents, including Kofi, into the project.

Before working with Kimminic, Kofi was a chain-saw operator, assisted occasionally by his oldest son. Kofi's wife periodically engages in maize trade. When Kofi started working full-time in the plantation, he began to hire out his chain-saw to other operators. He also cultivated a 1-acre maize farm in the jatropa plantation. Moreover, Kofi successfully negotiated for the employment of his wife and his eldest son in the project in 2009. Kofi, his wife and his eldest son later accessed bank loans which were guaranteed by Kimminic. The loan facility was put together to buy another chain-saw. In addition, their wages were jointly spent on school fees, payment of medical bills, food provisioning and the general upkeep of the household. Due to the household's limited interest in farming, the main asset derived from the project was the additional chain-saw purchased. Since May 2012, when Kimminic laid off its workers, Kofi has resumed chain-saw operating work whereas his wife and eldest son reverted to farming. In spite of the suspension of the project, the livelihood outcome of Kofi's household improved.

In May 2012, the Kimminic project was suspended due to funding problems. By this time, the workers had not received wages since January 2012. Ex-plantation workers and their households as well as petty traders, who had become dependent solely on the fortunes of the project thereafter, faced economic hardships. Out of the 34 loan grantees for instance, only three had fully finished repayment before the lay-off period. Beside the unpaid salaries, the banks notified the loan grantees of accumulating loan interest. These former workers had to spend their limited incomes on servicing some outstanding bank loans. Most women who started petty trading during the project implementation lost their business capital as payment for items sold to the ex-plantation workers on credit were defaulted. Loans secured from co-members of the Kimminic Welfare Association and relatives in anticipation of wages created further long-term financial burdens for the former workers.

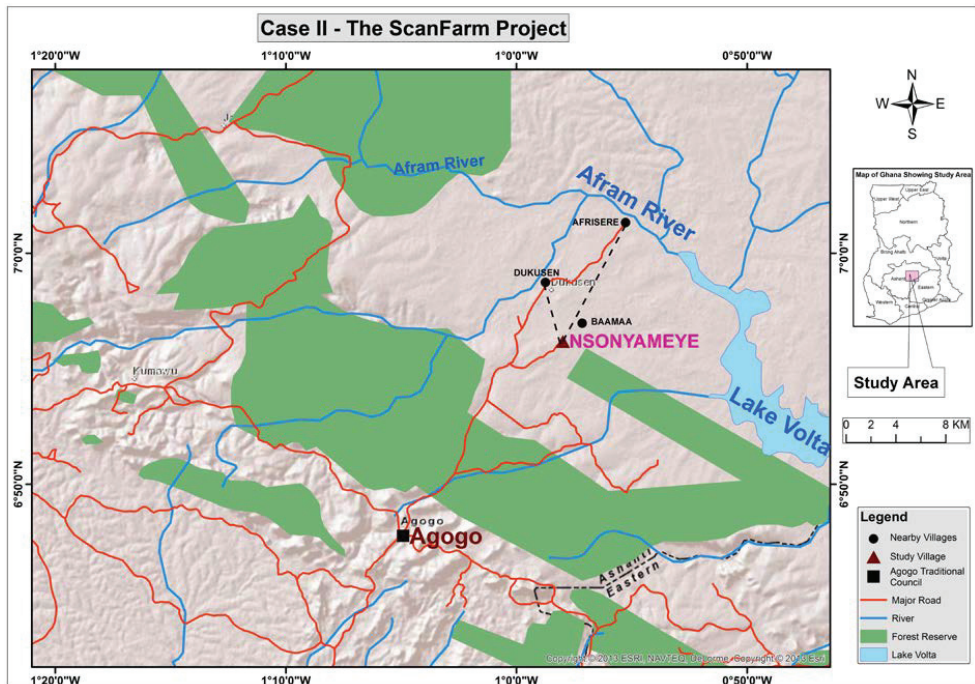
The suspension of the project has indeed created insolvency. Nonetheless, there is neither any strict deadline for reimbursement nor interest on loans obtained from relatives and friends, who were mostly members of the Kimminic Welfare Association. According to an insolvent ex-plantation worker, 'I used my wages to start a cloth sale business for my wife. The

household depends on her business now (...) she repays part of the bank loan every month but loans borrowed from friends will be paid later' (interview, 2012). The diversified livelihoods that resulted from the project were achieved by manoeuvring efficiently through social networks, and economic hardships resulting from the unexpected project suspension were mitigated through similar means. It is striking to note that, although Kimminic's failure to pay outstanding salaries created indebtedness, the loan grantees who 'invested' financial resources in their social networks or in their livelihood activities were able to manoeuvre loan repayment, and vice-versa. This brings out clearly one of the limits of manoeuvring spaces. As illustrated in Box 1, awareness of the need to call on chiefs and other influential people in order to create or sustain livelihood opportunities shows the central role played by social institutions in rural livelihoods. Those who could not manoeuvre were adversely affected by the project.

7 The ScanFarm Project (Case II)

ScanFarm (formerly ScanFuel) is an affiliate of the Norwegian investor company, ScanFuel AS. The project initially involved a 50-year land lease agreement with the Agogo Traditional Council (henceforth called the ATC) in Southern Ghana for jatropha biofuel production. The company began jatropha cultivation in 2008-2009 but switched to maize production in 2010 due to what was claimed as inadequate profits from the jatropha investments (interview with the ScanFarm Management, 2012). This prompted a change of its name from ScanFuel to ScanFarm. Expectations of quick profit from jatropha production by ScanFarm were not forthcoming as it struggled to find a market for the harvested jatropha nuts (interview with ScanFarm Management, 2012). The first maize plantation was established between January and June 2010. At the end of the 2010 farming season, ScanFarm received the award '2010 Best Maize Farmer in Ghana' from Ghana's Ministry of Food and Agriculture (MOFA) (interview with the ScanFarm Management, 2012; see also Wisborg, 2012). The maize plantation was established on a new land area which was more productive than a predominantly grassland area used for the jatropha project. The switch from predominantly grassland areas (Dukusen and Afirisere villages) towards productive land areas (Nsonyameye and Baamaa villages) (see dashed lines in Map 2) raised scepticism about the possible destruction of livelihoods (Wisborg, 2012; Boamah, 2014). In January 2011, after a series of public agitations against the lease agreement, local government officials in consultation with the ATC and ScanFarm called for re-negotiations. Consequently, the tenure of the lease was

reduced from 50 years to 15 years and compensation payments for allegedly affected land-owners were increased from an initial GHS 15-30 per acre per year. Other affected land-owners who did not want to give up their land to the project were told to negotiate directly with ScanFarm for new land areas. ScanFarm welcomed the terms of the lease re-negotiation because it was after 2009 that its Management Board discovered that vast portions of the leased land area were owned by the local citizens and therefore lay outside the control of the ATC (interview with the ScanFarm Operations Manager, 2012). Case II focuses on the village Nsonyameye (see Map 2).



Source: Dept. of Geography, University of Ghana.

7.1 Land access in the ScanFarm project village

Before the ScanFarm project, many households cultivated private or family land, though those cultivating stool land are most predominant (see Table 2). Also, chiefs who approved the lease agreement claimed that the land areas involved were predominantly *mfofoa* and therefore the project would not undermine rural livelihoods (interviews, 2012). *Mfofoa* in Twi refers to land areas that are either not intensively cultivated or fallow land. Most farmland areas in the study areas, whether under stool or family land categories, undergo fallowing. *Mfofoa* thus does not always mean marginal land though it is often perceived as such. Given

the lack of formal boundaries between stool land and family land areas, and the poor community consultation processes before the ScanFarm project, portions of land areas cultivated by some households were affected (Boamah, 2014). This even included indigenous households with allodial land entitlements. Out of the 40 sampled households, five indigenous households (*kuromafo*) lost their family land (7-22 acres) to the project. Oil palm and mango trees which occasionally provided income and food for these households were also affected. Requests for both compensation payments and new land areas were rejected by ScanFarm. At best, ScanFarm used its own discretion to decide compensation payments and this was often smaller than the perceived land values claimed by the affected households. The company's reaction was based on experiences of earlier multiple land claims and multiple compensation payments that had been paid to other residents, especially after the land re-negotiation phase of the project in January 2011. The re-negotiation phase opened the flood gate of many controversial land claims by allegedly affected people who successfully seized the opportunity to expand their land areas (see Boamah, 2014:419). Moreover, claims of land dispossession came up after royalties for the leased areas had been paid to chiefs already and hence ScanFarm was reluctant to undertake CSR measures to mitigate land dispossession. As such, belated land claims were not successful. In 2013, ScanFarm had decided to cultivate approximately only 1,000 hectares of the entire lease area (13,000 hectares) until the issues of multiple land claims on the remaining areas would be addressed through consultations with the Ghana Lands Commission, the ATC and the local citizens or allodial landholders, who had initiated court actions against the project implementation.

The affected indigenous farmers lamented that the village chief who ought to have assisted them in re-gaining their farmland from ScanFarm was reluctant to do so. An affected indigenous farmer who accused a village of complicity in the ScanFarm land deal said, 'I initially went to the palace of the *Agogomanhene* and the Office of ScanFarm to complain about my farmland. ... When I later consulted the *Odikro*, he told me to follow it up myself' (interview, 2012). Since the *Odikro* customarily serve as a messenger or the representative of the *Omanhene* (paramount chief) at the village level especially on matters relating to land, bypassing him or failing to accord him the due reverence in the making of land claims was treated as an affront to the authority of the chieftaincy institution. Such attitudes were described objectionable given the fact that the indigenous farmers are often reluctant to pay tributes or give gifts to chiefs because they are not required by custom to do so (interview with *Odikro* of Nsonyameye, 2012; interviews with informants, 2012). This consequently

delayed the land claiming process by these affected households. The unwillingness on the part of ScanFarm to address belated land claims meant that, the affected households had to lease land themselves in order to continue with farm work. Meanwhile, some allodial landholders had already rented out part of their family land and had to repay the money after such land areas had been cultivated by ScanFarm. Moreover, such households thereafter had to pay land rents. One such case was a farmer, heading a household of six persons, who had rented out 18 acres of an entire 25 acre family land for an amount of GHS 3,200 for four years in 2008. That meant that the lease would cost approximately GHS 45 per acre per year. When the leased land was used by ScanFarm in 2009, the farmer had to repay the money and lease a new land area for farming: 'I paid GHS 800 to the Forestry Department before gaining new land [4 acres] for farming', he said (interview, 2012). Although there is no annual rent payment, this farmer is required by the Forestry Department to plant teak trees as a precondition for gaining new land areas after the fifth year when the trees start growing taller and bigger. By January 2013, the farmer had used the household's savings to pay the tenant while still following up the reimbursement issue with ScanFarm and the ATC. Even in the event that ScanFarm would offer compensation payments, the household would receive GHS 15 per acre per year instead of GHS 45 per acre per year, which is about only one-third of the losses incurred.

Nine migrant households also lost their farmland areas to the project, but the *ahoho* and noncompliant labels used by chiefs undermined their efforts to protest against land dispossession (Boamah, 2014). The size of dispossessed farmlands ranged between 3-6 acres. The dispossessions do not involve only cultivated farmland plots but also potential farmland areas. This is because unlike indigenous households who usually cultivate family land, migrant households can cultivate any size of stool land without limitations once permission is granted by chiefs. Consequently, these affected migrant households, who mainly cultivated yam on stool land, had to switch to maize cultivation on private land which is less profitable. This is attributed to two reasons: Firstly, the private land areas they obtained were smaller than the stool land they once cultivated and they thus had to switch to crops that do not require annual land rotation, as yam does. Secondly, private land owners demand land rents of 1-3 bags of maize per every farming season, which is higher than the annual tributes paid to chiefs for cultivating stool land. Others continued cultivating on unaffected farmland areas of 1-2 acres and complimented this with charcoal production. Although such households stated that charcoal production occasionally generates estimated profit margins of GHS 1,800-3,400,

it requires payments to the ATC of GHS 500-800 for every concession, in addition to the bribes that often have to be paid to Forestry Department officers and village chiefs. The livelihood outcomes of these migrant households were therefore adversely affected by the ScanFarm project.

Among the remaining 26 households, 15 that faced land dispossession gained new free land areas (i.e. without paying rents) after 3 to 5 weeks through negotiations with family members, friends, spouses, switching to fallow land, as well as through social claims based on court actions and petitions to chiefs without missing farming seasons or affecting crop productivity (see [Box 2](#)). The remaining 11 affected households missed the first farming season of 2010, but gained new free land areas in the second farming season of 2010 (i.e. after 2 to 3 months) through their social networks without significant changes in productivity. The small differences in productivity experienced by these 26 households reflect that the difference between the sizes of land area cultivated before the project implementation (2-8^{1/2} acres) and the new farmlands (1-5 acres) (see Tables 1 and 3).

For those who do not have social capital based on kinship ties, reverence for chiefs, family heads and generosity towards neighbours are the alternative spaces for manoeuvring resource access. According to one male migrant farmer, ‘when I arrived in this village in 2001, I assisted many *kuromafo* in farm work for free. ... One of them later introduced me to the *Odikro* to ask for a piece of farmland and another gave part of his land for share cropping’ (interview, 2012). This migrant farmer shortly switched to cultivate a new land area after his previous farmland was used by ScanFarm. For most migrants, the inability to create useful networks upon arrival in destination villages affects access to productive resources. Explaining the importance of cultivating a good relationship with the indigenous population, one migrant who re-gained his farmland from ScanFarm proudly expressed: ‘When I saw the ScanFarm tractor operators clearing my farmland, I phoned my landlord in Agogo. (...) My landlord and other indigenous people erected red flags [signifying danger] on their family lands to stop them [the tractor operators]’ (interview, 2012). The story in [Box 2](#) shows how poor individuals can take advantage of the rich people’s quest for self-esteem in the society to circumvent loss of livelihood capital.

Box 2: A dispossessed farmer re-gaining his land without missing a farming season.

A 41-year old farmer, whom we call Kwesi, is married to a fellow indigene of Nsonyameye. Kwesi cultivated 2-acre maize farm plot out of a 21-acre family land. Kwesi lost entire family farmland, including his 2-acre farm, to the ScanFarm project in March 2010. To avoid missing the first farming season in 2010, Kwesi farmed together with his wife on approximately 5 acres of land while pursuing the land claims together with the other affected indigenous farmers.

After unsuccessful petitions to the ATC, these parties decided to make a legal suit against ScanFarm in a Circuit Court. Whereas the educated and rich contending parties were willing to pursue the Court case, Kwesi and many other poor farmers were discouraged by the costs they might incur in the court case and the fear of the wrath of the ATC. Kwesi communicated this concern to a friend who was a family head of one of the contending parties. This family head agreed to defend the rights of the poor farmers. The family head made a joint suit on behalf of the contending parties, which meant that he would bear the cost of the land litigation alone.

During the court hearings, the lawyer for ScanFarm pleaded for an 'out-of-court settlement'. A letter from the Circuit Court dated 3 July 2012 stated: a) 'That the Defendant pays a total amount in the sum of GHS 2,100.00 (...) to the Plaintiff [the farmers' representative] herein. b) That the said amount ... represents the amount of compensation paid to the Plaintiff by the Defendant herein for having used Plaintiff's farm land at Agogo'.

A follow-up letter from the farmers representative's solicitors dated 20 July 2012 confirmed a successful manoeuvring by the contending parties. It stated: 'Our client instructs us to inform the management of SCAN FARMS LTD that the said Company cannot undertake any farming activities on their farm land (...) in the Agogo Traditional area except with the expressed consent and authority of the family head named hereof'. After re-gaining their land areas, Kwesi and the other farmers expressed their gratitude to the generous family head for successfully representing them in court. A follow-up interview with the family head showed that his generosity towards these needy farmers arose out of the urge to defend the land rights of the *kuromafo* against undue land allocations by the ATC.

It is striking to note that, whereas chiefs were reluctant to assist affected household were either accused of evading tributes or being disrespectful towards chiefly authority, charcoal producers and farmers who often paid tributes to chiefs were exempt. Moreover, it is noteworthy that affected households were mostly made up of residents who could not utilise social institutions in order to manoeuvre resource access; i.e. showing reverence for chiefs or bigwigs in society, being generous towards neighbours, and establishing long-term reciprocal relationships. This means that, in addition to the possession of social capital, people ought to adhere to social institutions in order to insulate their livelihoods against economic shocks.

7.2 Employment creation in the ScanFarm project village

As a result of the ScanFarm project, 22 of the sampled 40 households had one household member or more employed in the project. The work involved occasional land preparation activities in the plantation, which often lasted one to three months. They earned GHS 15-20 per day. The remaining 18 households had limited interest in plantation work because of the temporary nature of the jobs and they also described the wages as ‘exploitation’. Due to the mechanised farming system adopted by ScanFarm, skilled and permanent employees were recruited from towns outside of the Nsonyameye village. As a result, there were limited employment opportunities for the village residents. Social networks therefore had no demonstrable impact in the search for jobs offered by ScanFarm.

A major development which benefited most households was free collection of maize leftovers in the plantation. The free maize collection was, however, abandoned by the end of 2010 due to what ScanFarm described as ‘increasing incidence of theft’ of maize and other items in the plantation (interview, 2012). Moreover, ScanFarm’s promise to rehabilitate an untarred road connecting the village to the nearby town of Agogo, where most agricultural goods are traded, was not fulfilled. A resident of Nsonyameye lamented: ‘ScanFarm promised to develop the road from here [Nsonyameye] to Agogo. The tractor operators cleared our small road but they did not complete it. ... We cannot use the road after heavy rains’ (interview, 2012).

Households who had earlier hoped for improvements in food trading through road rehabilitation expressed disappointments about the difficulty to use the road during rainy seasons. Nonetheless, explaining strategies used to circumvent transport problems during rainy seasons, a maize farmer said: ‘I know many food traders in Agogo who use their own cars. When they come here [Nsonyameye], I reduce the price of every bag of maize [100 kg bag] by GHS 5. (...) Reducing the prices for them is not a problem. (...) They are my regular customers’ (interview, 2012). When trading activities are hampered during rainy seasons, households often strengthened their social ties with food traders in nearby towns through price negotiations by mobile phone. These different responses to different resource access barriers illustrate that the agency and adaptive capacities of individuals and groups depend on their ability to activate social networks. Thus, beside the 14 households whose livelihoods were adversely affected, 26 of the sampled households experienced neither a significantly negative nor positive impact on their livelihoods that may be linked to the ScanFarm project.

8 Discussion of findings from the two cases

Evidence of livelihood impacts in the sampled households in each of the two cases show striking differences in access to resources. Clearly, the relatively positive livelihood impacts in Case I compared with Case II can be partly attributed to the type of land contracts involved in the respective projects. However, evidence from both surveys shows that the ability to manoeuvre resource access is decisive for the sustainability of a household's livelihood. The livelihoods of those who were unable to manoeuvre efficiently were adversely affected.

According to the sustainable livelihoods framework, an individual's ability to achieve a sustainable livelihood depends on his or her capability to recover from or cope with shocks. Sustaining livelihoods, as illustrated in both cases, by way of mitigating economic shocks or diversifying livelihoods do not depend solely on tangible economic assets but even more importantly on the ability to utilise social institutions or networks to activate capitals that are existing in intangible forms such as gratitude, social recognition, and obligation to reciprocate goodwill. According to Bourdieu (1986), the existence of well-established social networks facilitates transmutability of social capitals into usable forms such as accessing to economic goods and services. As shown in both cases, investment in social networks through acts of reciprocity and reverence for resource brokers facilitate manoeuvring processes. To be considered as a local citizen or to maintain such a status depends on the continuous cultivation of reciprocal relationships with landowners, chiefs and other influential people in the project areas. The local citizen status *kuromani*, which determines who can sustain land access or benefit from the opportunities created by the projects, is constantly negotiated depending on individuals' and groups' manoeuvring possibility and efficiency. This phenomenon is consequently reinforcing social and economic inequalities in the project areas.

Indeed, inequalities existed prior to the project implementation in terms of the asymmetrical relationships between land users (or tenants) on the one hand and chiefs and landowners on the other. While some land users paid tributes to their landlords in the form of token sums of money or food crops, mere friendships and assisting landlords in farm work were other forms of relationships. Landowners did not pay land rents and even if they cultivated stool land, paying tributes to chiefs was optional. The situation however changed during the project implementation when monetary inducements from the biofuel investors compelled chiefs to displace groups labelled as migrants and accused of evasion of tributes. Affected local citizens whose land claims were rejected or reduced and could not utilise social institutions to

re-gain dispossessed land henceforth had to pay land rents to other private landowners. This category of affected local citizens can be described to have lost their 'citizenship' status, affecting that of their descendants too. In this sense, we mean the affected local citizens have lost the benefits associated with such status, especially exclusive control over land, which once granted them a sense of belonging to the project village and also exempted them from the payment of land rents. The affected local citizen, for example, who had to switch to cultivation on Forestry Department's land and abide by the terms of the land use, i.e. payment of initial land rents and planting of teak trees, imply a 'demotion' to the status of a migrant. The livelihood of the entire household was consequently affected since the household head had to use the household's savings to mitigate losses caused by the project.

Conversely, local citizens who had to depend on social networks for free new land areas or re-gained dispossessed family land through court action in principle reinstated their citizenship identity or at least escaped the loss of the opportunities associated with local citizenship identity or status. Whereas newly settled affected migrants had to pay higher land rents, the livelihoods of the category of fellow migrants who had maintained long-term reciprocal relationships with chiefs and indigenous landowners were not affected. The possibility for migrants to successfully integrate themselves into local communities and gain access to collectively-owned resources through agrarian clientelism or by mastering local institutions suggest that, local citizenship is a practice rather than a status (Kea, 2012), and by extension a process. By implication, inasmuch as migrants can 'graduate' to become local citizens, there is also the possibility to slide down on that social differentiation hierarchy and lose the associated benefits *if* certain manoeuvring skills are not applied continuously over time.

In terms of employment creation and related project benefits, peoples' 'connections' as Bourdieu (1986) calls it was the deciding factor. As illustrated in Case I, individuals and groups considered as local citizens and their associates were those who were often favoured in the recruitment to work in the plantation and related benefits of the project employment. People's 'connections' were equally important in manoeuvring indebtedness created by the unexpected suspension of the Kimminic project. The increased asymmetrical power relations emerging from the land commercialisation result from the fact that the previously quite flexible local standards and requirements for attaining and maintaining local citizenship status or reciprocal relationships have been raised and become more rigid. After project the implementation, the sampled households had to urgently (re)establish reciprocal relationship with chiefs, landowners and other influential persons in order to attain or maintain local

citizenship status; otherwise their livelihoods would be adversely affected. With a focus on the concept of manoeuvring, it becomes simplistic to discuss livelihood impacts of biofuel land deals within a losers/winners dichotomy or in a short-term basis as studies identifying women and migrants as vulnerable groups based on claims of limited agency in resource access often tend to do (Schoneveld et al., 2011; Acheampong and Campion, 2014). As this study shows, there are other categories of people who are neither losers nor winners, and yet others who gained but later lost (and vice-versa), depending on abilities to manoeuvre resource access within a context-specific institutional landscape.

9 Contribution and conclusion

The paper makes contribution to the land deals literature on methodological, theoretical and empirical fronts. The findings of this study contradict other studies, often based on short-term fieldwork, in which momentary access to land and income-generating opportunities have featured prominently as the reference points of livelihood impact assessment and hence represented livelihood creation as a single event. Through an ethnographic approach, the study has analysed social processes unfolding over time to explain why reciprocal relationships with neighbours, resource brokers such as chiefs and family heads influence access to land, income, labour and other capitals. This has shed light on how and why livelihood capital is gained, re-gained or lost by different individuals and social groups after biofuel projects are implemented. This does not, however, suggest that showing nuances in livelihood impact research is contingent solely on long-term fieldwork but rather that greater emphasis should be placed on exposing social relationships, social processes and their outcomes within a specific socio-political context.

Two important lessons can be learnt from the two cases presented. Firstly, agricultural investors who are oblivious to local land politics or fail to implement projects in ways compatible with local land tenure arrangements may risk hampering their projects and destroying local livelihoods, thus reinforcing inequalities. This is evident by the relative positive impacts of the Kimmnic project, at least on households' livelihoods, and multiple land claims and fierce local opposition faced by ScanFarm. Similarly, the methodological incompleteness of 'snap-shot' studies in terms of the limited conceptualisation of livelihoods and the failure to do a processual discussion of livelihood creation (or livelihood loss) may not give a more nuanced and comprehensive representation of the actual livelihood impacts of biofuel projects. For example, livelihood impact assessment by snap-shot studies that attribute

limited land access or reduced farming sizes solely to the project implementation would downplay other equally determinant factors such as high cost of crop production and unreliable rainfall patterns, especially in the dry seasons (see Tables 1 and 3). The same can be said about the temporary jobs and momentary free maize collection opportunities created by the ScanFarm project as well as insolvency and other hardships created after the suspension of the Kimminic project.

Secondly, the unrestrained powers of chiefs and other political office-holders in the making of land deals coupled with a limited control of state institutions in biofuels projects are complicating social relations. This takes the form of renegotiation of access to land and other productive resources after land deals through diverse manoeuvring processes and hence creating and reinforcing economic dependencies. As residents continuously have to manoeuvre, either to mitigate (or circumvent) negative livelihood impacts, or in order to benefit from new economic opportunities created by land deals, land commercialisation is generating patron-client relationships. For example, although social institutions provided manoeuvring spaces for particular persons to sustain their livelihoods, it equally places a sense of responsibility on beneficiaries to reciprocate the benefactors in order to retain such an economic relationship. Conversely, the necessity to pay regular tributes to chiefs, or give reverence to chiefs, family heads and other influential people, show acts of reciprocity and observe other conventionalised practices after the projects placed a major constraint on livelihood sustainability. Following Bourdieu's (1986:249) representation of social networks as 'the product of an endless effort as institution', livelihood sustainability in this sense is contingent upon how ingrained and durable are peoples' 'connections' depending on their capability to utilise social institutions. This does not suggest that manoeuvring spaces are limitless. Indeed, there exists a structural constraint which cannot be simply overcome by one's manoeuvring efficiency. There are some affected migrants whose efforts to make land claims were undermined by chiefs by virtue of their *ahoho* labels whereas some local citizens successfully invoked their *kuromafo* status to re-gain land based on orders by courts of law, petitions to chiefs, etc.

Having elucidated these, the manoeuvring concept has demonstrated that possession of social capital is a *necessary* but not a *sufficient* condition for livelihood creation. The requirement on the part of individuals and social groups, especially those at the lower echelons of the social hierarchy, to continually and relentlessly invest in social networks or maintain certain socially prescribed relationships with their patrons in order to sustain livelihoods makes social capital

a means to an end rather than as an end in itself. The concept of manoeuvring thus distinguishes *social capital* and *agency* in terms of their potency in livelihood creation within certain structural limits and elucidates how and why large-scale land commercialisation can reinforce social inequalities. Similar large-scale land commercialisation can engender or even deepen patron-client relationships and the related social inequalities in similar post-colonial regimes where local citizenship is in a state of constant flux through ongoing (re)negotiation and struggle (Kea, 2012; see also Ubink and Amanor, 2008) or specifically elsewhere in Southern Ghana where chiefs have consistently shown great resilience in their control over land relative to that of the Ghanaian state (Berry, 2001, 2013; Ubink, 2008; Boamah, 2014).

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Paper #3



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Imageries of the contested concepts “land grabbing” and “land transactions”: Implications for biofuels investments in Ghana



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ABSTRACT

In Ghana, the contested concepts of “land grabbing” and “land transaction” are strategically applied by proponents of critical and win–win discourses respectively to describe outcomes of land deals. Using case study methods and discourse analysis, this paper explores four cases of biofuels investments in Ghana and the implications of the choice of concepts used to represent them. Proponents of the critical discourse use the “land grabbing” concept to invoke imageries of “illegality”, “theft” and “food insecurity” when describing land deals. Consequently, some biofuels investments have been hampered in their potential to generate profit and local employment. The biofuel investors in this study, whose projects have been labeled “land grabbing”, therefore switched to food production to downplay public scepticism. Proponents of the win–win discourse portray biofuels investments as “pro-poor” projects and use the “land transaction” concept to pre-empt possible public criticisms in the media and elsewhere. Such representations of these biofuels investments are therefore mainly intended to pre-empt criticisms or attract public praise. Some projects with potentially promising outcomes have thus been terminated, while others with problematic outcomes have continued to be promoted. In contexts characterized by weak land regulations and ambivalence towards large-scale agriculture, the trajectory and outcomes of biofuels investments are often influenced by land deal representations drawn from global discourses and how they interact with pre-existing local discourses.

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1. Introduction and the argument

The environment and how we acquire, disseminate, and legitimate knowledge about it are highly politicized, reflective of relations of power, and contested (Roderick P. Neumann, 2005, p. 1)

Land acquisitions or land deals have been an important part in the history of most states. At the turn of the 21st century, debates about land deals which seemed to have died out following the emergence of modern sovereign states have flared up again with greater intensity—now re-presented either as “land grabbing” or “land transactions”. These terminologies around land deals are drawn from the competing global “win–win” and “critical” discourses which have underpinned land deals debates at the Food and Agriculture Organization (FAO), International Food Policy Research Institute (IFPRI), International Fund for Agricultural Development (IFAD), United Nations Environment Programme (UNEP) and among Civil Society Organizations at several international fora during the past decade. The “win–win” discourse expresses potentially positive outcomes of land deals for both host regions and investors (IFAD, 2011, 2010), whereas the “critical” discourse

portrays detrimental outcomes for the poor especially in host regions with weak state institutions (von Braun and Meinzen-Dick, 2009; Foodfirst Information and Advocacy Network [FIAN] International, 2010). Proponents of the “critical” discourse use the “land grabbing” concept to describe potentially negative consequences of land deals for food security, land tenure and livelihoods in host countries (von Braun and Meinzen-Dick, 2009; FAO, 2012; Rahmato, 2011). Proponents of the “win–win” discourse however prefer the “land transactions” concept due to what they argue are potentially promising outcomes especially for developing countries (BBC News Africa, 2012; IFAD, 2011, 2010).

Using either the “land grabbing” or “land transaction” term to describe potential outcomes of large-scale land deals creates conceptual dilemmas due to the different imageries they invoke and their political implications. An important contribution of post-structuralism to the field of political ecology has been the introduction of discourse analysis and the importance of exploring and revealing the ways in which the environment and its problems are discursively constructed (Neumann, 2005). Some studies during the past decade illuminate what they describe as “false knowledge” or “myths” produced from value-laden representations of environmental problems and prompt a need for critical engagement with so-called “scientific explanations” to ensure a better formulation of environmental policies (see Forsyth, 2011, 2003;

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Leach, 2007; Guthman, 1997; Fairhead and Leach, 1995). Many recent studies have equally used value-laden concepts to describe possible social, economic and political outcomes of large-scale land deals (see Wisborg, 2012; Matondi et al., 2011; IFAD, 2011; von Braun and Meinzen-Dick, 2009). Land deals representations in these recent studies often involve the use of persuasive value-laden concepts and framings intended to invoke strong emotions, heated debates and reactions, but they seldom highlight the implications of the associated imageries for public perceptions about large-scale agricultural investments. This paper shows how and why value-laden concepts used to describe large-scale land deals influence the trajectory and outcomes of biofuels investments¹ in Ghana, which is largely characterized by ambivalence towards large-scale agriculture amongst the population.

Ghana predominantly has a customary land ownership regime, with about 80% of land held by customary landowners; mainly families, clans and traditional authorities² (Kasanga and Kotey, 2001). The remaining land areas are privately owned or under state control. In this customary land regime, land embodies the rights of “primordial” groups such as villages, stools,³ families and kinship groups (Aryeetey et al., 2007) and radical land transformation are often perceived by small-scale landholders as a recipe for potential land dispossession. For example, the fear of possible land dispossession and disruption of small-holder production systems among Ghanaians during the 1890s by the British Colonial Administration, which aimed to vest in the British Crown all unoccupied land areas, forest lands and minerals, led to resistance (Fold and Whitfield, 2012). The incidences of “forceful” land dispossession in Ghana to develop large-scale plantations by post-independence governments of Ghana are also cases in point (Fold and Whitfield, 2012).

Despite the pre-existing skepticism towards large-scale agriculture among some Ghanaians, many post-independence governments of Ghana, receptive to neo-liberal economic policies in the area of agriculture, have shown continued support for foreign direct investments in land (Fold and Whitfield, 2012; Våth and Kirk, 2011; Technoserve, 2007). The governments’ ostensible motivations in supporting these investments have been premised on possible improvements in employment creation and food security (Brew-Hammond, 2009; Våth and Kirk, 2011). Some chiefs in Ghana have also given out many large land areas categorised as “marginal” or “unused” during the past decade with the aim of creating development opportunities for rural communities (Boamah, forthcoming-a, forthcoming-b; Tsikata and Yaro, 2011). Most of these recent land deals have involved the cultivation of jatropha for the production of liquid biofuels primarily to improve energy provision and the employment situation in Ghana, as well as for export (Ghana Energy Commission, 2005; Schoneveld et al., 2010; Brew-Hammond, 2009; Technoserve, 2007). However, the ambivalence of the general population towards large-scale agriculture draws attention to the co-existence of two competing local discourses in Ghana. Firstly, there is a discourse that identifies land as a means of social cohesion (Aryeetey et al., 2007) and large-scale agriculture as potentially dangerous to pre-existing small-scale landholdings (Amanor, 2001). Secondly, there is a discourse that identifies investments in land as a potential engine of development for deprived rural communities endowed with large areas of “unused” or “marginal” land. These respective local discourses correspond with, or are reinforced

by, the “land grabbing” and “land transaction” concepts, which are now being used to describe outcomes of the surge in large-scale land deals in Ghana during the past decade.

Analyses of the implications of the use of the “land grabbing” and “land transaction” concepts is particularly important in contexts characterized by ambivalence towards large-scale agriculture that simultaneously lack strong land regulations. For instance despite the surge in large-scale land deals for biofuels investments in Ghana, the Draft Biofuels Policy (2005), Renewable Energy Act (2011) and Draft Bioenergy strategy (2011) developed by Ghanaian governments failed to address key issues such as land acquisitions processes, biofuels markets and government incentives that are critical for biofuels development. Similar lapses can be found in a new land regulation developed by the Ghana Lands Commission in 2012 to regulate large-scale land deals for agricultural investments in Ghana (Ghana Lands Commission, 2012). Whilst this new regulation retains the pre-existing land transfer prerequisites of mutual agreement between prospective land grantors and land grantees, and EPA⁴ approval, the only innovation is the referral to the National Land Commission for deliberation for land allocations exceeding 400 hectares. The transfer of land allocation registration from the Regional to the National level is yet to register any demonstrable impacts as it is an extension of usual bureaucratic processes. In this context of weak regulation on biofuels and land transfers, Civil Society Organizations, chiefs, researchers, the media and other non-state actors in Ghana consistently use the “land grabbing” and “land transaction” concepts to describe possible outcomes of land deals for biofuels investment. The author neither intends to indict users of the two concepts nor offer alternatives, but rather to illuminate the imageries associated with the concepts and their implications for the trajectory and outcomes of biofuels investments in Ghana. The trajectory here refers to the changes from biofuel crop to food crop production, whereas the broader outcomes refer to the impacts on energy provision, livelihoods and social responsibility measures in the project areas.

In contexts characterized by weak land regulations and ambivalence towards large-scale agriculture, the trajectory and outcomes of biofuels investments are often influenced by land deal representations drawn from global discourses that correspond with pre-existing local discourses. This argument is elucidated by examining three main issues. Firstly, the conventional criteria for the conceptualization of land deals based on possible outcomes, procedures, the size and actors involved are discussed. Secondly, the polarized representation of biofuels investments by researchers, chiefs, media and NGOs in Ghana is analysed. The final section examines the relative effectiveness of the imageries associated with the two contested concepts in influencing the trajectory and outcomes of biofuels investments in Ghana. The central argument is expatiated by exploring the cases of four biofuels investment projects. Case I is based on an earlier study on jatropha biofuels project in Northern Ghana. Cases II and III are also based on jatropha biofuels projects in Southern and Central Ghana respectively. Cases II and III are based on an on-going PhD study and constitute the main cases in this paper. Case IV focuses on another jatropha project in Northern Ghana which was visited during the main PhD fieldwork. For analytical purposes, although equally contested, the term “land deals” is used throughout this paper as a neutral concept.

¹ Throughout this paper, the term “biofuel” instead of “agrofuel” is used because most policy documents and debates on renewable energy in Ghana often discuss biofuel as synonymous with fuel from crops plants.

² A Traditional Council comprises paramount chiefs, village chiefs and elders of communities. A Traditional Council is headed by a Paramount Chief. Migrants cultivating lands under the trusteeship of traditional councils pay agricultural tributes in return to acknowledge chiefs’ authority over such lands.

³ Stools refer to the traditional heads of communities or villages, usually village chiefs.

1.1. How concepts become contested

Debates are framed, phenomena are represented and ideas are communicated through discourses. Foucault perceived discourses

⁴ Environmental Protection Agency. Its core mandate is to protect and improve the environment in Ghana.

as statements believed to be 'objectively true—and therefore important, worthy of respect and capable of supporting responsible action' (Peet and Hartwick, 2009, p. 205). For Foucault, 'discourses claimed the status of truth to gain power' (Peet and Hartwick, 2009). When a discourse dominates thinking and is translated into institutional arrangements, it becomes "hegemonic" (Adger et al., 2001). To produce authoritative knowledge, narratives are used in discourses. Narratives have the common characteristics of a story—a beginning, middle, and end (or premises) ... and revolves around a sequence of events or positions in which something happens or from which something follows' (Roe, 1991, p. 288). Development practitioners, bureaucrats and policy makers use narratives to simplify ambiguities and uncertainties in development processes (Roe, 1991). The over-simplification of otherwise complex real-world situations in narratives pinpoints their persuasive power in defining problems as well as the solutions (Cornwall et al., 2007).

Narratives involve the use of rhetorical devices such as "metaphors". The essence of using metaphors in representations is to understand and experience situations in terms of other familiar ones (Lakoff and Johnson, 1980). Metaphors however involve the use of words or symbols which convey particular connotations. Connotations are the additional meanings of words or symbols that imply particular associations, beyond their dictionary definitions—denotations (Aase and Fossåskaret, 2007). Representations of phenomena drawn from certain narratives to conceptualize experiences are bundled with ideas about "what ought to be" or "what ought not to be". Certain concepts are therefore legitimized and the alternatives undermined. These different representations of real world phenomena generate contestations over the proper use of concepts. For Collier et al. (2006), the "proper" use of concepts still depends on specific contexts and the normative valence attached to particular specifications employed by both users and analysts. The different framings of competing concepts equally dominate the field of political ecology—how power and politics influence knowledge of and access to environmental resources. For Escobar (1999), conceptualizations of environmental problems are the reflections of values, specific backgrounds and positions of power rather than absolute "truths" about the environment. Neumann (2005) further explains that knowledge about the "environment" and its dissemination are mainly reflective of power relations and is therefore contested. For Robbins (2004, p. 12), political ecology 'stresses not only that ecological systems are political, but also that our very ideas about them are further delimited and directed through political and economic processes'. So-called scientific explanations of "environmental problems" are thus imbued with the ideas generated through the social interest of "science" of the environment and the particular framings of those interests (Forsyth, 2011).

Framings of environmental problems, perceived causes and solutions are underpinned by certain priorities. The use of the "land grabbing" and "land transactions" concepts to describe possible outcomes of large scale-land deals and the calls for "appropriate" interventions (see Roe, 1991) are similarly underpinned by certain narratives. This paper illuminates the imageries associated with the use of the two concepts, the public reactions to those imageries and the implications they have for biofuels investments. The term imageries, which is often called connotations, is used because representations of the "land grabbing" and "land transaction" concepts in Ghana are made through activism; through the use of texts and photos to invoke particular imaginations about possible outcomes of land deals, for example.

2. Selected cases and methodology

The cases of the four biofuels projects (see Table 1) explored in this paper were selected for three reasons. Firstly, they cultivate

jatropha (or once cultivated jatropha) for biofuels production. Secondly, all of them set out the objective to improve energy provision and livelihoods in Ghana. However, whereas Case IV is a non-profit-making investment because it is an "aid project", the other three aimed to make profits from the sale of biofuels both in Ghana and abroad. Finally, the four projects were given publicity about their possible outcomes in the respective project areas.

Case I involved follow-up field visits in 2010 and 2011 on an earlier study (Boamah, 2011a, 2011b; Tsikata and Yaro, 2011) to show the impacts of public representation of the project's possible outcomes. Cases II and III are drawn from a PhD project. The research on cases II and III involved a 2-month preliminary fieldwork period (April–June, 2012) followed by a 6-month fieldwork period (August, 2012–January, 2013). The preliminary fieldwork involved key informant interviews, focus group interviews and reviews of literature on biofuels in Ghana in order to gain the relevant contextual information in preparation for the major fieldwork. The major fieldwork involved a survey of 40 farming households in each of these cases to examine livelihoods impacts of the projects. Case IV involved a 3-day visit to a project village called Kparigu, which was first incorporated into another biofuels project in 2010. A jatropha oil pressing facility was also established in this Kparigu village. During the visit in January 2013, two groups comprising 30 farmers each had been formed in this village. The first group of 30 farmers, who had harvested some jatropha nuts, was interviewed. Out of the 30 farmers, 16 (10 women and 6 men) shared their experiences about the livelihoods impacts of the project. Phone conversations with some of the project partners were also held to follow up on this project after the visit.

All four cases involved analysis of interview texts, public documents, as well as observations in the project plantations and residents' farmland areas. The author analysed public representations of the projects, the choice of concepts and framings used in the representations and consequently how these influenced public reactions towards the projects.

3. Biofuels initiatives, regulations and politics in Ghana

Jatropha plants have been used in Ghana for decades either as hedge plants for protecting more valuable plants or in farms to deter livestock entry due to its ability to form a knitted physical barrier. The jatropha species cultivated in Ghana are perceived as inedible and also thrive in "marginal" land areas. As an inedible plant perceived to be viable in "degraded" or "marginal" land areas, the promotion of jatropha for biodiesel production seemed convincing to many Ghanaians (Technoserve, 2007; Energy Commission, 2005). The jatropha biofuels debate gained momentum in Ghana during the oil price hikes in the 2006–2007 periods. Subsequent debates focused on the strategies to be adopted in order to improve energy provision without undermining land tenure arrangements, food security and livelihoods in Ghana (Brew-Hammond, 2009; Technoserve, 2007; Ghana Energy Commission, 2005).

The pioneering interest in biofuels development in Ghana began in 2003 when Onua Amoah, a Ghanaian bio-chemist and Chief Executive Officer of a biodiesel processing company, Anuam Industries Ltd., announced plans to produce biodiesel from jatropha nuts (interview, 2012; Brew-Hammond, 2009). Amoah called for government support for the cultivation of jatropha, the training of interested farmers and the creation of a market (interview, 2012). After Amoah successfully processed jatropha oil into biodiesel, the government's interest in biofuels increased. Ghana's Energy Commission later set up a Biofuel Committee in 2005 to prepare a National Biofuel Policy to accelerate biofuels development in Ghana (interview, 2012; see also Brew-Hammond, 2009). A Draft

Table 1
The characteristics of the four cases.

CASES	Year started	Crop(s) cultivated	Type of Land deal	Size of land area	Size of area cultivated	Location	Current status
Case I	2008	Jatropha but switched to maize in 2010	Lease agreement	10,696 hectares	400 hectares	Northern Ghana	Collapsed
Case II	2008–2009	Jatropha but switched to maize/soy beans since 2010/2011	Lease agreement	13,000 hectares	Approx. 1000 hectares	Southern Ghana	On-going
Case III	2008	Jatropha and intercropped with maize since 2010	Joint Venture	13,000 hectares	Approx. 4500 hectares	Central Ghana	Temporarily suspended since May 2012
Case IV	2009	Jatropha	Land from the participating farmers	500 hectares	Approx. 450 hectares	Northern Ghana	On-going

Policy developed by the Biofuel Committee highlighted Ghana's plan to promote alternative energy to reduce high import bills from fossil fuels and to reduce poverty (Ghana Energy Commission, 2005). Due to its optimism in private sector investments, the New Patriotic Party (NPP)⁵ government established the National Jatropha Project Planning Committee in 2006 to plan for jatropha biofuels development. The government thereafter offered funding for training workshops under the supervision of the Ministry of Food and Agriculture (MOFA) and the Ministry of Local Government and Rural Development. Jatropha cultivation was expected to be undertaken under an out-grower system where a government marketing board would buy jatropha nuts from farmers for processing by Anuanom Industries Ltd. These efforts led to the selection of areas categorized as "marginal" or "degraded" in 53 districts in the savannah and forest/transitional ecological zones in the country perceived as suitable for jatropha cultivation by interested farmers. The rationale for the selection of so-called "marginal" areas in these 53 districts was to avoid possible competition between jatropha cultivation and food crop production because those areas were categorized by the government as falling outside of the major food production zones (popularly called the "food baskets") of Ghana.

According to an Agricultural Extension Officer from one of the selected districts, training of the interested farmers and jatropha biofuels sensitization workshops started in 2006 (interview, 2012). A few months after the training workshops Amoah died. The death of the inspirational biofuels pioneer and the discovery of offshore oil and gas in Ghana in 2007 reduced the government's interest in biofuels. Consequently, the government announced its withdrawal from biofuel activities but pledged support for interested private investors (interview, 2012). The retreat by the government, together with international enthusiasm for jatropha led to the inflow of foreign biofuels investors into Ghana—including companies from Norway, Italy, Canada and Japan. The NPP government was replaced by the New Democratic Congress (NDC)⁶ government in January 2009. Having discovered oil, this new government welcomed the biofuels idea though was more concerned with the potential competition with food security (Brew-Hammond, 2009; interview with an Agricultural Extension Officer from one of the 53 selected districts, 2012). It is striking to note that, despite the initial efforts by both the NPP and NDC governments to provide policy frameworks for biofuels development, there is no ready market for jatropha nuts in Ghana except those occasionally sold (or bought) for cultivation or oil production on an experimental

basis. The political will to regulate the "infant" biofuel industry in Ghana has also been quite low.

4. Representations of the "land grabbing" and "land transaction" concepts

The increasing commoditization and privatization of natural resources during the last decade has led to a corresponding surge in the activities of Civil Society Organizations advocating equitable access to natural resources (Suárez, 2012). Prominent among them are ActionAid International, via Campesina, Oxfam International, FIAN International and their affiliates across the world. Through their advocacy, in collaboration with international policy institutes—egs. FAO and IFAD, some of their proposals are accepted by governments for environmental resource governance (Suárez, 2012). Central to the natural resource governance debates by Civil Society Organizations, policy institutes and researchers is the surge in large-scale land deals in the global south.

Land deals hailed as inherently beneficial for deprived regions are labeled "land transactions" whereas critics of land deals prefer the "land grabbing" concept. The different conceptualizations of land deals are drawn from the two competing narratives: *neo-colonialism and development optimism*. The *neo-colonialism* narrative emphasizes potentially negative livelihoods and food security impacts of land deals by foreign entities in poor countries and draws attention to possible foreign domination of indigenous land, reminiscent of "colonialism" (Rahmato, 2011; FIAN International, 2010). The *neo-colonialism* narrative prioritizes the "actors", "outcomes" and "size" of land areas involved. This narrative expresses a "critical" discourse. Conversely, the *development optimism* narrative acknowledges the inherent dangers of large-scale land deals but expresses potentially promising consequences for governments and the populace if effective policies are made to improve land administration, institutional capacity of host regions for contract management and to ensure transparency in land deals (Cotula, 2011; IFAD, 2011; FAO, 2012). This narrative focuses mainly on "outcomes" regardless of the actors and the size of land parcels involved, expressing a "win-win" discourse. The criteria adopted in the conceptualization of land deals are illustrated by the definitions below.

'The catch-phrase, "global land grab", refers to the rush for commercial land in Africa and elsewhere by private and sovereign investors for the purpose of growing food and bio-fuel crops for the export market, and, in which, the land deals concluded have gone largely to benefit foreign capital'. (Dessalegn Rahmato, 2011, p. 1)

'... land grabbing is defined as taking possession of and/or controlling a scale of land for commercial/industrial agricultural production which is disproportionate in size in comparison to the average land holding in the region.

(FIAN International, 2010, p. 8)

⁵ This political party prides itself as "property-owning democracy" that supports private sector investments. It ruled between 2001 and 2009.

⁶ This political party prides itself with "social democracy" is inclined to socialist ideologies. Its economic philosophy claims special concern for the poor especially by them against exploitation. It ruled between 1981 and 1992 as a revolutionary party, Provisional National Defence Council (PNDC) and continued (1993–2000 with National Democratic Congress as a successor party when Ghana was ushered into democratic rule (2009 till date).

The definitions above illustrate the *neo-colonialism* narrative. This narrative argues that large land deals, especially by foreign entities, benefit foreign capital and simultaneously limit access to land, which form the mainstay of livelihoods of residents of the host regions. Interventions to streamline or perhaps suspend large-scale land deals to safeguard the livelihoods of host regions are the implied recommendation in this narrative.

'While there is renewed concern about 'land grabbing', the trend is not new. ... Nevertheless, it is important to recognize that not all investments in agriculture by outsiders are illegitimate. Some have followed due process and can provide positive benefits for rural communities'.

(IFAD, 2011, p. 5).

The *development optimism* narrative conversely implies that large-scale land deals, whether by domestic or foreign entities, can have potentially positive impacts for host regions especially when legitimate procedures are followed. This narrative creates hopes of development opportunities and implicitly recommends the formulation of effective guidelines to generate win–win outcomes for all actors involved. The conceptualizations of "land grabbing" and "land transactions" decidedly describe the phenomenon of transfer of tenure rights but express different possible economic and political outcomes. Whereas the "grabbing" imagery qualifies land deals as illegal or possibly undermining livelihoods, the "pro-poor" imagery associated with the "land transaction" concept downplays perceived negative outcomes.

As noted earlier, Ghana has been a major "hot spot" of land deals during the past decade, though characterized by ambivalence towards large-scale agriculture amongst the general population. Each of the two local discourses expressed in Ghana around large-scale agricultural investments can be reinforced or suppressed when they align with powerful global discourses. Users of the two polarized concepts therefore strategically frame perceived outcomes of large-scale land deals in ways that resonate with these two local discourses in Ghana in order to make their respective representations more compelling and persuasive. The next sections illuminate the polarized representations of land deals and the implications of the associated imageries for the trajectory and outcomes of four biofuels investments in Ghana.

4.1. The BioFuel Africa Jatropha project (Case 1)

This project involved a land deal for 23,000 hectares for a jatropha biofuel investment in Northern Ghana by the Norwegian company, BioFuel Africa Ltd (now called Solar Harvest). The EPA Permit for the BioFuel Africa jatropha project involved land areas in the Yendi and Central Gonja districts in Northern Ghana. The company also developed an 850-hectare jatropha test farm in the Volta Region of Ghana. The main jatropha plantation was implemented in the Yendi district in March 2008. The project was in operation for over a year until April 2009 when an area of 10,696 out of the 23,000 hectares was officially registered at the Ghana Lands Commission.

The pioneering opposition to this project, based on claims of possible land tenure and livelihoods insecurity, came from the Ghanaian NGO Regional Advisory and Information Network Systems (RAINS). Its article captioned 'Biofuel land grabbing in Northern Ghana' states:

'This is the story of how a Norwegian biofuel company took advantage of Africa's traditional system of communal land ownership and current climate and economic pressure to claim and deforest large tracts of land in ... Northern Ghana with the intention of creating "the largest jatropha plantation in the

world". ... Many have now lost their incomes from the forest and face a bleak future (RAINS, 2008, p.1). ... We need a more aggressive campaign to halt land grabbing' (RAINS, 2008, p. 6).

The above publication influenced the NGO ActionAid Ghana (AAG), an affiliate of ActionAid International. ActionAid Ghana similarly reported livelihoods being destroyed through the destruction of valuable economic trees as a result of the BioFuel Africa jatropha project. An article captioned 'The biofuel debate' states:

'... when we noticed that large tracts of land were being taken for biofuel production, we (AAG) initiated the research to determine its implications for food security in particular and development in general. The results indicate that the plantations pose a potential threat to food security of the people. ... What happens to the poor women and their families who hitherto earned their livelihoods from these economic trees after the good numbers of them have been destroyed?' (ActionAid Ghana, 2009).

However, a study which examined the effects of the Biofuel Africa project in the Yendi district of Northern Ghana rather found improved livelihoods as well as increased food production in the project villages through employment creation and a "Food First Policy" adopted by the company, at least initially until the project was abandoned (Boamah, 2011a, 2011b). The "Food First Policy" refers to the company's commitment to increase food crop production in project areas (See Solar Harvest News, 2009a,b). The company cultivated 400 out of the 10,696 hectares with jatropha. Before the project, the 400 hectare land area was cultivated by 25 small-holder farmers. Whilst 4 out of these 25 farmers faced land dispossession and a consequent decline in crop yields, the remaining 21 continued farming within the leased land area without any incidence of livelihoods destruction (Boamah, 2011b). Adjacent village residents, especially women, who were employed in the jatropha plantation, were also able to intercrop maize in the jatropha plantation, used monthly wages to expand their own farms and for food purchases, as well as for the general upkeep of their households (Boamah, 2011b). BioFuel Africa also provided one maize hammer mill and three water dams for the nearby villages (Boamah, 2011b; see also Tsikata and Yaro, 2011).

As shown above, NGO reports publicized livelihoods destruction through the felling of valuable economic trees. The project affected some shea nut⁷ trees and other plant species in the project area. However, interviews with residents revealed that massive tree destruction (through charcoal production and farming) predated the project. To pre-empt further negative reports, BioFuel Africa advertised in the Ghanaian media its ability to successfully produce and use jatropha oil in their tractors and other machinery to raise hopes of energy provision in Ghana (Modern Ghana News, 2009; Solar Harvest News, 2009a,b). Despite these efforts, the negative publicity by NGOs and bribery allegations against the BioFuel Africa project forced its investors and prospective investors to pull out by the end of 2009 (Boamah, 2011a, see also Tsikata and Yaro, 2011). Without alternative funding sources, the jatropha project closed down and 300 out of its total of 400 workers were laid-off. During follow-up visits after the failure of the project, residents of the project villages accused NGOs over negative publicity that undermined a project which once provided them with incomes, especially during dry seasons when farming is impossible (Boamah, 2011b). BioFuel Africa Ltd, however, gained government loans in Ghana in 2010 to support its "Food First Policy" but not jatropha production. Describing the "Food First Policy" and Ghana government's commitment to

⁷ Nuts derived from the plant are used for making cosmetics, food and sometimes medicines. It is the major source of income for women in the savannah and transitional ecological zones of Ghana.

food security, the Chairman of the Ghana Energy Commission during a Bionergy Conference in Accra said:

'I wish to salute companies like Biofuel Africa Ltd who share our cardinal principle of sustainable biofuels for local agro-industrial development. Their food first policy is one that we would want to see more biofuels companies adopt in Ghana. I am aware that Biofuel Africa's claims are disputed in some NGO and academic circles. ... I personally admire Biofuel Africa for leading the way in our journey from talk to action, ...'. (Brew-Hammond, 2009, p. 4).

To counteract public criticisms of the project, BioFuel Africa Ltd published on its homepage this speech by a celebrated Ghanaian renewable energy expert (see Solar Harvest news, 2010). After receiving these accolades, the granting of government loans was not surprising. It is important to note that, the company had cultivated about 400 hectares of jatropha before it collapsed. Interestingly, when the investor received the loans, an additional area of about 300 hectares out of the same leased land (10,696 hectares) was cleared for food production for sale in Ghana, but no negative publicity resurfaced. Meanwhile land tenure and livelihoods issues that reinforced the opposition to the jatropha project had not fundamentally changed. Possible reasons for the earlier opposition to the project by NGOs could be that it initially involved a fuel crop instead of a food crop.

4.2. The ScanFarm Project (Case II)

ScanFuel (now ScanFarm Ghana Ltd) is an affiliate of a Norwegian Company, ScanFuel AS. The project initially involved a 50-year land lease agreement with the Agogo Traditional Council (henceforth called the ATC) in Southern Ghana, signed in 2008 for jatropha biofuel production. ScanFuel began jatropha cultivation in 2008–2009 but switched to maize production in 2010 due to perceived inadequate economic returns from jatropha investments prompting the change of name from ScanFuel to ScanFarm (interview with ScanFarm Management, 2012). ScanFarm further claims that expectations of quick profit from jatropha by the company were not forthcoming as finding markets for the harvested jatropha nuts was quite difficult (ScanFarm Management, 2012). Although public agitation about the land deal led to the reduction of the lease tenure from 50 to 15 years, ScanFarm still claims that the switch to maize was in no way influenced by local resistance (see also Wisborg, 2012). In 2010, ScanFarm received the award "2010 Best Maize farmer in Ghana" from Ghana's Ministry of Food and Agriculture (MOFA). A letter confirming the award certificate, signed by the then President of Ghana (Professor John Evans Atta Mills) and issued by MOFA, was put on the various notice boards at the premises of ScanFarm to be read by visitors. In 2011, ScanFarm added soy beans production to the ongoing maize cultivation in the project. The ScanFarm project is still on-going. Case II focuses on one of the project villages called Nsonyameye.

The chiefs who sanctioned the land deal sought to pre-empt public criticisms by subscribing to the *development optimism* narrative. 'The lease covers only *mfofoa*⁸. ... farming will not be compromised. There will be employment for our unemployed youth' (Interview with an ATC chief, 2012). These representations imply "pro-poor" expectations from the project. Interviews with residents of the project villages showed that, the "pro-poor" representations of the project by the ATC downplayed fears of livelihoods destruction and land dispossession at the outset. This was particularly striking

during the first year of maize production when ScanFarm allowed residents of nearby villages to collect the left-overs of maize in the plantation after maize harvesting by the combine harvester. According to a resident of the Nsonyameye village, 'the ATC announced that a company [ScanFarm] is here to produce oil from *nkane dua* [jatropha] but we later heard of maize production. ... The maize benefited us but we are no longer allowed to pick maize from the plantation' (interview, 2012). Village residents benefited from this free maize collection to feed their respective households until the end of 2010 farming season when ScanFarm banned it on the grounds of increasing incidence of theft in the plantation. However, the employment opportunities created for the village residents were mainly temporary due to the mechanized farming system adopted by ScanFarm (Boamah, forthcoming-b). Expressing his disappointment over the provision of casual jobs by ScanFarm, a 28-year old male resident of Nsonyameye stated, 'the *odikro*⁹ [village chief] told us that, there would be jobs for us. ... Now all friends of mine who were initially employed by ScanFarm are laid off. I don't need this type of job' (interview, 2012). Out of the 40 households surveyed, the livelihoods of 14 households were undermined by the project as a result of limited access to productive land resources whereas the remaining 26 did not experience any significant livelihoods improvements due to the temporary positive spin-off effects (Boamah, forthcoming-b). Furthermore, contrary to the ATC's claim that only "marginal" areas were leased out, some residents' productive land areas were also used by the project. This results from the fact that, chiefs' description of the leased areas as *mfofoa* applies to almost all land areas in the project villages because most land areas undergo alternating fallowing and cultivation periods due to the relative scarcity of virgin land areas.

Whilst chiefs used the "land transaction" concept to describe the project favourably, the "land grabbing" concept was used by other actors to describe the same project. In one of its periodic newsletters, ActionAid Ghana (ActionAid Internal Biofuels Newsletter, 2010) described the ScanFarm project as a "land grabbing spree" and advocated for a government audit of the project. A subsequent report by ActionAid Ghana (2011) communicated to the public the "positive" impacts of its advocacy in the ScanFarm project area.

'... On 19th January, 2011, there was a meeting of Agogo/Scanfuel land grab victims called by the Agogo Traditional Council for discussions on private lands grabbed by the council and Scanfuel, in attendance was the Municipal Chief Executive (MCE) of the Asante Akim North Municipal Assembly, Ashanti region. Some positive changes effected include a reduction of a lease period of 50 years to 15 years; payment of ground rent by Scanfuel to the land owners and not to the Council and yearly payment of land use for cultivation to the private land-owners' (ActionAid Internal biofuels Newsletter, 2011).

A Norwegian NGO, Spire, inspired by Norwegian media reports about the ScanFuel project also initiated a study in Ghana. The report of the study captioned 'Norwegian land grabbers in Ghana—The case of ScanFuel' begins with doomsday scenarios by showcasing a photo of a warning sign-post erected by ScanFuel bearing the inscription:

'You are entering ScanFuel OPERATIONAL AREA. Beware of Heavy Duty Equipment. Jatropha Seeds are not edible. You enter this zone at your own risk. Scanfuel is not liable for injuries to unauthorized persons. All visitors should report to Scanfuel Base Camp for instructions' (Bull, 2010).

⁸ Ghanaian dialect which refers to land areas that are either temporarily abandoned to regain fertility or not under intensive crop cultivation. They are often perceived "bush" or "marginal lands", but not always so as most farmlands are subject to similar practices.

⁹ A Ghanaian dialect (Akan twi) which refers to a village chief. Village chiefs are the messengers of Paramount Chiefs or representatives of traditional councils at the village level.

Beside the perceived threatening sign-post, Spire described the potentially negative impact of the project as:

'In 2007, the Norwegian company Scanfuel AS, through its Ghanaian based daughter company ScanFuel Africa Ltd. leased vast amounts of land (400 000 hectares), for a period of 50 years in Ghana. ... Over 20 companies from countries like Brazil, Italy, China, Germany and India are currently pursuing this venture on Ghanaian land – the Ghanaian government warmly welcomes the investors' (Bull, 2010, p. 2). '... From our observations, this seems to serve Scanfuels interests, and might undermine vulnerable stakeholders. The fact that Scanfuel did not recognize the land tenure controversies might suggest that the unsatisfied landowners have been silenced' (Bull, 2010, p. 7).

Spire and ActionAid Ghana's representations of the land deal portrayed illegality and potential food insecurity in the context of weak governance. Interviews with residents confirmed some incidences of land dispossession created by the ScanFarm project. However, subsequent interviews with key informants revealed that some claims of land dispossession linked to the ScanFarm project were influenced by earlier sensitization workshops and public demonstrations organized by NGOs, which aimed at prompting the village residents to protect their land against large-scale deals. Similar claims of land dispossession were made by some residents to a researcher (Wisborg, 2012) on the same project. For example, whilst Wisborg (2012) corroborates negative livelihoods impacts of the ScanFarm project, some residents mostly "indigenes" made claims of livelihoods destruction as a result of shea nuts and *dawadawa*¹⁰ trees destroyed by ScanFarm. These claims were intended to pre-empt potentially negative outcomes of further land deals (interviews, 2012). Meanwhile, the ScanFarm project is located in the forest ecological zone of Southern Ghana where rural livelihoods depend on economic trees such as oil palm trees, mango trees, whereas shea nut and dawadawa trees are of similar economic value in the savanna/transitional zones of Central and Northern Ghana. This neither dispels evidence of tree destruction nor land dispossession created by the ScanFarm project but rather indicates the kind of responses that may be generated by respondents when influenced by narratives that correspond with local discourses.

An understanding of the local land politics sheds light on how and why the residents' reactions towards the projects may be either reinforced or suppressed by global discourses. The ATC sanctioned the lease agreement partly to re-establish authority over stool land,¹¹ which was occupied by "migrants" who were accused by chiefs of often evading payment of agricultural tributes (Boamah, forthcoming-a). Due to the non-existence of clearly demarcated land boundaries between stool land and family or privately-owned land areas, ScanFarm used family and privately-owned land without prior consultations (Boamah, forthcoming-a, -b). Some families and private individuals who have allodial land rights, often called exclusive land rights, were thus affected. This land deal was followed by other controversial land allocations sanctioned by the same paramount chief of ATC for Fulani herdsman. This land allocation generated many controversies locally because the activities of the Fulani herdsman created fears of further land losses, destruction of farms as well as alleged murder cases (Modern Ghana News, 2009; Boamah, forthcoming-a).

Spire's speculation that ATC had entered into 400,000 hectares land deal with ScanFarm (see also Dogbevi, 2010, 2009) and

ActionAid Ghana's representations of the land deal revived local scepticism, with associations to "neo-colonialism". Undoubtedly, advocacy by ActionAid Ghana led to re-negotiation of the lease agreement and consequently compensation for affected land areas increased from GHS¹² 15 to 30 per acre per year (interview with the Registrar of ATC, 2012; interviews with village residents, 2012). The lease tenure was also reduced from 50 to 15 years and the affected private land owners or allodial landholders were permitted to negotiate directly with ScanFarm. However, influenced by the NGOs' negative publicity, some residents perceived the re-negotiation phase as an opportune time to make many controversial claims to counteract land dispossessions. According to a successful land claimant, 'After the company [ScanFarm] cleared our [family] land without prior notification, I decided to make bigger claims for compensation because the trees marking the boundaries were no more. I must protect this family property' (Interview, 2012). The land deals representations by the NGOs therefore provided promising avenues for some allegedly "affected" residents to gain access to much bigger land areas than before, in addition to compensation payments. Nonetheless, the attendant negative impacts were shifted to some neighbouring farmers. For instance, after observing multiple compensation payments and land claims, ScanFarm rejected several subsequent land claims, even including some made by "allodial landholders" who were either not present during the project implementation or the re-negotiation phase (Boamah, forthcoming-a).

Furthermore, some "indigenous" residents made a petition to the King of the Asante¹³ to oust the paramount chief of ATC for leasing out many indigenous land areas. The petition stated: 'Recalling the Oath of Allegiance sworn before you, ... and the entire Asante Nation by [name withheld] to protect the lands our forbearers fought for and left behind, and to protect and defend the citizens at all times, he has failed woefully and miserably to honour this Oath and thereby does not deserve to serve you and the people of Agogo'.¹⁴ Indisputably, this petition was a reaction to land dispossessions faced by some indigenous residents primarily as a result of land allocations for ScanFarm project and Fulani Herdsmen. However, according to the leader of this community-based activist group, '... through our advocacy, some affected *kuromanfo* [indigenes] have gained new land areas plus compensation payments from ScanFarm. We will keep up the fight because we won't allow *Akwasi Broni*¹⁵ [European] to take our land again. ActionAid Ghana officers have promised us of their support' (interview, 2012). This shows that, the resistance was influenced not only by the negative local impacts of the land deals but also the land deals representations re-activated the pre-existing local discourse, which prompts "indigenes" to resist land dispossession. Currently, the continued scepticism about possible land losses to foreigners has compelled local activist organisations to further negotiate a joint venture agreement with ScanFarm instead of the current lease (interview with the Registrar of ATC, 2012).

4.3. The Kimminic project (Case III)

The Kimminic project involves a 40-year joint venture land deal with six traditional councils in the Brong-Ahafo Region of Central Ghana for the cultivation of jatropha for biofuel production. The entire project involves a total land area of 65,000 hectares. This

¹² New Ghana Cedis. GHS 1 = US\$ 1.

¹³ One of the ethnic groups in Southern Ghana, to which the indigenes of Agogo belong.

¹⁴ Public notification of a formal petition against land allocations sanctioned by the Paramount of Chief of the ATC. This petition was made by community-based organisations called "Concerned Citizens of Agogo" and "Agogo Youth Organisations" in 2011 and 2012.

¹⁵ This name, used by Ghanaians mostly in Southern Ghana, refers to European visitors to the country.

¹⁰ Fine-powdered material derived from the plant is used in diets for their nutritional values and also to enhance taste and flavor. It is prevalent in the savannah areas and a major source of income for women.

¹¹ Land areas under the direct trusteeship of chiefs, and excludes family and other private landholdings.

case focuses on the village of Bredi near one of the Kimminic project areas in the Nkoranza Traditional Council¹⁶ (henceforth referred to as NTC) involving a land area of 13,000 hectares. A profit-sharing allocation of 75% and 25% for Kimminic and NTC respectively per annum was agreed. This type of land deal, unlike a lease agreement, involves a joint plantation ownership between Kimminic and the local communities represented by chiefs. Funding sources for the Kimminic project came from Canadian investors and Ghanaian residents in Canada, including the Chief Executive Officer of the company. As a joint venture, the Ghanaian investors together with chiefs of the NTC advocated for the protection of land areas cultivated by residents of the project villages. In 2010, Kimminic intercropped jatropha with maize purportedly to ensure food security in the project village. Plantation workers, and sometimes their spouses and relatives were allowed to cultivate food crops in the jatropha plantation.

The company advertised the project's potential for the communities as:

'KIMMINIC operates a unique model of joint plantation ownership with the local communities ... KIMMINIC's acquisition process with the traditional councils is consistent with the Office of Administrator of Stool Lands Act ... (Act 481). KIMMINIC explained the benefits and impacts of the projects to the chiefs before the lands were acquired' (Kimminic, 2010).

Furthermore, according to an NTC chief, 'We gave out the lands to the company so that the youth can secure jobs. Most occupants [migrants] of our land have not paid anything to us lately. ... It is not a lease, the land areas are not sold out. Local people [indigenes] are also owners of the project' (Interview, 2012). The "pro-poor" imagery of the Kimminic project is evident in the quote above. The project improved the livelihoods of 23 out of the 40 households surveyed through employment and the related income-generating activities, until its suspension in May 2012 due to funding problems (Boamah, forthcoming-b). Interviews with residents after the lay-offs illustrate how land deals representations can rekindle local discourses of resource utilization for improved livelihoods. 'Our chiefs negotiated with Kimminic to employ the *kuromanfo* [indigenes] and we all benefited from the project. Most of us are now still in the house [unemployed] after the lay-offs. We don't know when the company will resume work (interview with a former worker of Kimminic, 2012).

During transect walks in the jatropha plantation, reserved areas had been created by Kimminic for the use of residents. Also, farmland areas within the jatropha plantation were protected as required by the joint venture land deal. Migrant households in the survey, whose farmland lay within specific plots demarcated for the plantation, however lost portions of farmland areas or sometimes lost entire land areas. ActionAid Ghana sensitized local activists groups to oppose the Kimminic project on the grounds of possible land dispossession and livelihoods destruction. Despite this advocacy, the NTC strategically labeled some migrant farmers as "non-compliant" land users and this pre-empted opposition to the project by most affected migrant farmers (Boamah, forthcoming-a). This is a classic case of a biofuel project in Ghana whereby land deal representations, underpinned by the *development optimism* narrative, correspondingly translated into improved livelihoods for most households in the survey for nearly four years (Boamah, forthcoming-b). Nonetheless, in January 2013, portions of the Kimminic jatropha plantation were burnt down by irate migrant residents who had been influenced by ActionAid Ghana's advocacy. 'The NGO advised us to protect our farmlands. We don't know the source of the fire that burnt the jatropha farm but ...

jatropha cannot occupy land areas that can be used to produce food (interview with a migrant farmer, 2012).

4.4. The European Union Project (Case IV)

The 500-hectare European Union-funded Jatropha project (henceforth called the EU project) was launched primarily for income-creation for vulnerable groups, especially women in fourteen villages in Northern Ghana. Unlike the others, this was therefore labeled as an "aid" project. The project is coordinated by the University of Sassari, Italy, in partnership with four reputable Ghanaian research institutes to promote successful implementation. The partners include Technology Consultancy Centre of the Kwame Nkrumah University of Science and Technology, the Savannah Agricultural Research Institute, the MOFA and an NGO, New Energy. The farmers who expressed interest in the project were encouraged to use "marginal lands" so that the project would not undermine local livelihoods and food security. This advice was given to the residents so that higher expectations of incomes from the project would not mislead farmers to swap their usual productive farmland for jatropha which has a longer gestation period compared with food crops. Farmers then indicate land areas they categorise as "marginal" and hence suitable for jatropha cultivation. So-called "marginal" land areas are recorded with a GPS device and registered for both free ploughing and seed or seedlings. The project adopts an out-grower system where farmers produce jatropha nuts and then receive free training from the EU Project about the processing of the jatropha nuts into oil. The farmers would then decide whether or not to use the oil for soap-making or as a fuel in hammer mills, tractors and lanterns. Others may sell the jatropha nuts or the jatropha oil to fellow village residents. The EU project would also negotiate with the farmers to set prices for the jatropha oil or jatropha nuts for the benefit of the project villages. This project was advertised in the media as:

'... The five years pro-poor EU funded project also targets at creating income generating-activities as an integrated approach to ensure sustainable livelihood conditions of residents of the identified underserved communities in the northern region. ... This ... will go a long way to reduce desertification effects on the environment and also improve the livelihood of residents of the beneficiary communities through the implementation of a participatory approach at the rural community level' (Northern Ghana News, 2010).

In addition, according to one of the EU project partners, 'We did not take away any land from the farmers. The participating farmers offered their land areas willingly' (interview, 2013).

As the project aimed at improving the livelihoods of perceived vulnerable groups such as women, group interviews based on gender were conducted to examine the impacts of the project on the livelihoods of men and women. According to a project representative, 'the first groups of farmers [30] were dominated by women. Most of them [women] stopped food production and started jatropha cultivation' (interview, 2013). Interviews with female farmers revealed that most women, who were fully convinced by the project's objectives, strategically categorised productive land areas as "marginal" in order to be integrated into the project. Out of the 10 women interviewed, only 3 intercropped the jatropha with food crops. Interviews with the 6 men indicated rather scepticism towards the market for the jatropha nuts. Men therefore continued with food crop production and in rare cases did intercropping with jatropha plants. The gendered ambivalence towards the project was because the men claimed high profitability of large-scale food crops production compared to women, and were thus doubtful of the comparative advantages of jatropha cultivation. In addition,

¹⁶ A Traditional Council in the Brong Ahafo Region of Central Ghana.

women, being the main target groups of the project, perceived jatropha cultivation as a new income-generating opportunity compared to their usual smaller farm sizes meant solely for domestic consumption. However, besides free ploughing and seeds provided by the project, the participating farmers bear the maintenance costs of the jatropha farms. Most women hired labourers for the maintenance of jatropha farms but not men (interview, 2013).

The high expectations of income-creation by the participating farmers have not however been met. Since the start of jatropha cultivation in 2010, with the exception of jatropha nuts bought from a few farmers for experimental oil processing, there have been no markets for the harvested nuts due to the delays in the training of farmers. For example, the first training of the farmers for jatropha oil processing which was eventually scheduled for October 2013 has been postponed again to November 2013 as a result of requests to involve a machine fabrication company, Gratis Foundation,¹⁷ in order to expedite the training of farmers (Phone communication with one of the project partners, 8 October 2013). A contract finalized in October 2013 confirms that Gratis Foundation will collaborate with the Technology Consultancy Center both in the provision of hands-on experiences as well as in the installation of subsequent jatropha processing facilities. Contrary to the project's main objective of reducing the vulnerability of women to poverty, the reverse is the case. Despite these disappointing outcomes, one project partner stated that no negative publicity has been observed since its inception (interview, 2012; phone conversation, 2013). Currently, the project partners have identified soap-makers in the nearby cities who have expressed interest in switching to the use of jatropha oil due to the high prices of palm oil, which is often bought from Southern Ghana. This is intended to secure markets for jatropha oil after the training of the project participants. Proper consultation processes were followed though and no land dispossessions occurred during the project implementation. However, productive land areas that could be used for food production are converted into non-lucrative jatropha farms. The 3-year old project has escaped public criticism despite its disappointing outcomes perhaps because there was no incidence of land dispossession and the supposed beneficiaries were farmers rather than agro-conglomerates. Other possible reasons could be its alignment with powerful partners (including an NGO), the small land area (500 hectares) involved or the willing offer of land areas by the participating farmers. Nonetheless, if avenues for jatropha markets are developed, the seemingly well-organized project will hopefully translate into positive spin-off effects for the village residents.

5. Why are the choice of framings and concepts so effective in Ghana?

The choice of framings and narratives adopted in the debate about outcomes of land deals, using either “land transaction” or the “land grabbing” concepts, clearly indicates certain political priorities. The advocacy by NGOs and how it reinforced the residents' opposition to the ScanFarm project area attest to the influence of *neo-colonialism* narratives. The residents' preference for a community partnership with ScanFarm instead of a lease attests to this. Conversely, the “pro-poor” association with the “land transaction” concept was emphasized by the NTC to express possible “win-win” outcomes of the Kimminic project. It is worth noting that,

¹⁷ It is a Ghanaian Machine Fabrication company that offers services to micro, small and medium scale enterprises including food processing, textiles and light engineering sectors. Through its branches in the ten regions in Ghana, the company offers entrepreneurial and technology-based training, equipment manufacture services, technical and business advisory services, equipment on hire purchase. Its branch in the Northern Regional capital of Tamale has been officially enrolled into the EU Jatropha project as a fifth partner since October 2013.

whilst the NTC used the “land transaction” concept to describe the project favourably, the NGOs preferred the “land grabbing” concept. This highlights conflicting standpoints referring to the *development optimism* and *neo-colonialism* narratives respectively. Similarly, arguments reinforced by the *development optimism* narrative were advanced by ATC despite some incidences of land dispossession created by the ScanFarm project. Furthermore, the “pro-poor” representation of the EU project and the claim that farmers “willingly” offered their land areas for participation in the project clearly denotes reference to the *development optimism* narrative whilst pre-empting public critiques that may be reinforced by the *neo-colonialism* narrative. Finally, whilst media and NGOs' critiques of the Biofuel Africa project reinforced by the *neo-colonialism* narrative contributed to the failure of its jatropha project, praise corresponding with the *development optimism* narrative revived its “Food Production Project” though nothing fundamentally changed during the second phase of the project.

As neither the biofuels policy frameworks nor the new land regulation by the Ghana Lands Commission gave comprehensive guidelines for biofuels investments in Ghana, the choice of concepts used by powerful non-state actors (NGOs, researchers and chiefs) have become the available alternatives. The polarized framings of outcomes of land deals by the use of the concepts “land grabbing” and “land transaction” effectively corresponds with Ghanaians' ambivalence towards large-scale agriculture. For instance, due to its claimed “social democracy” philosophy, the NDC government is sensitive to reports highlighting potentially negative food security impacts of biofuels investments. The government loan for BioFuel Africa to support food production only and the “2010 National Best Maize farmer Award” for ScanFarm indicate the current government's preference for food supply in large-scale agriculture. It is therefore not surprising that ScanFarm's initial sign-post, publicized by Spire as “threatening”, was later replaced by the “Best Farmer” award as its first official signposts, which were erected along major roads in the project areas. Furthermore, ScanFarm's proud public display of the government award and the display of the letter by the Ghanaian President confirming the award intended primarily to project its contribution to food security in Ghana suggests that, the switch to maize was influenced by the government and some Ghanaians' perceptions about what “what ought to be” an ideal large-scale agriculture. Moreover, ScanFarm's justification for the switch from jatropha to maize on the grounds of limited profitability of the latter is illogical because it is not possible to meet profit expectation from investments in jatropha in less than two years.

Conversely, the public perceptions of “ideal” agricultural investments have equally necessitated the use of appealing concepts by investors and chiefs in order to attract praise from the government, the media and NGOs or pre-empt public critiques. As a consequence, disappointing outcomes of some biofuels investments are often not subject to public scrutiny. The discussions above implicitly illustrate lack of political will, funding problems and biofuels investors' poor forecasting of biofuels markets as additional factors that have influenced the trajectory and outcomes of biofuels investments in Ghana. The paper has however mainly focused on the choice of concepts and framings used in land deals representations and their centrality in political debates in Ghana.

6. Conclusion

The paper does not deny that political will, poor funding and investors' poor forecasting of biofuels markets influence the trajectory and outcomes of biofuels investments. Neither does it downplay the important role of NGOs, researchers and other actors as “watch dogs” in environmental resource governance in the global

south. These actors have indeed become not simply “watchdogs” but active shapers of policy and outcomes of investments through the use of particular concepts and transmission of selective interpretations for political purposes. In contexts characterized by weak regulations and uncertainties, the dominant concepts used in debates define “authoritative knowledge”. Whereas reverence for the chieftaincy institution in Ghana has given prominence to the “win–win discourse” expressed by chiefs, the “critical discourse” expressed through the political activism by NGOs and other Civil Society Organizations, which often involve the mobilization of perceived affected residents (or prospective victims), have equally claimed another form of “truth”. The ambivalence towards large-scale agriculture expressed by Ghanaian governments and some Ghanaian citizens has also reinforced the two “truths” claimed by the two competing discourses. By normatively portraying biofuels investments as necessarily detrimental, unrestrained posturing of so-called “watch dogs” may rather pre-empt the possible positive impacts on livelihoods and energy provision. Conversely, one-dimensional portrayal of projects as “pro-poor” may promote problematic investment projects. With strong pre-existing scepticism towards large-scale agriculture in Ghana, the strategic uses of concepts prompting residents of project areas to mobilize themselves against possible land dispossession (or livelihoods destruction) becomes more persuasive than those expressing “win–win” outcomes. NGOs and other Civil Society Organizations are therefore more powerful in their representations of outcomes of land deals than other actors. The relative power asymmetries between the actors producing, disseminating and controlling global discourses and how these global discourses correspond with local discourses influence local level responses to new developments. Labeling biofuels investments as “land grabbing” hampers their potentials for local development and profit-making. Biofuels investors whose projects are labeled as “land grabbing” often either switch to food crop production, which is perceived as beneficial to the country, or to the adoption of production models that are perceived as potentially non-detrimental to the land use rights of small-holder local residents. To ensure an effective regulatory framework for expeditious implementation of biofuels investment projects in Ghana, the author recommends environmental impact assessments encapsulating the following:

- Land use patterns of proposed project areas; criteria and procedures for compensation payments for possible affected residents; evidence of prospective markets for biofuels and of the sustainability of funding sources for proposed biofuels investment projects.
- Documented evidence of public sensitization programmes and of informed consent between chiefs, prospective biofuels investors and residents of proposed project areas for perusal by the Lands Commission, Environmental Protection Agencies and the related state institutions.
- Expeditious delivery of decisions on environmental impact assessment reports to avoid bureaucratic processes which may either unduly delay project implementations or create a recipe for clandestine land deals.
- Creation of periodic fora to deliberate on feedback or reports about observed outcomes of biofuels projects for follow-ups by appropriate agencies after project implementations.

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