Received: 8 January 2021 | Revised: 1 August 2021 | Accepted: 29 September 2021

DOI: 10.1111/joac.12456

SPECIAL ISSUE ARTICLE

Journal of Agrarian Change WILEY

Land and contract farming: Changes in the distribution and meanings of land in Kilombero, Tanzania

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Abstract

In the context of contract farming of sugarcane in an out-grower scheme in Tanzania, this paper explores how the scheme has fundamentally altered people's relationships with the land over the last 50 years, in particular, since 1999, when, after three decades, the sugar parastatal was privatized. The paper reviews the literature on the mutual relationship between contract farming and land ownership and examines the scheme with a focus on long-term changes in the forms of land acquisitions and land use. We argue that the meaning and importance of landownership in contract farming schemes needs to be reassessed if participation in contract farming entails a departure from previous forms of acquiring land, generates new spatial patterns of agricultural production, and necessitates additional economic and social resources in order to transform land into an economic asset.

KEYWORDS

contract farming, land acquisition, land use, sugarcane, Tanzania

1 | INTRODUCTION

Contract farming is a controversial agricultural institution in Africa. Notoriously pluralistic, it embraces a great variety of experiences, organizational arrangements, ownership structures, and agricultural practices. Conceptually, this "fluid character of contract farming" (Oya, 2012, p. 17) renders it impossible to capture under a general theory, but as a mechanism for connecting farmers with the world market, contract farming has gained ground, both literally and politically, over the past half century. In Tanzania, the government is actively encouraging multiple forms of contract farming to insert agribusinesses into rural markets and communities. By assigning contract farming a key role in

Kilimo Kwanza (the national vision for agricultural development) as well as in the regionally specific Southern Agricultural Growth Corridor of Tanzania (SAGCOT) strategy, Tanzania is following other African governments and international donor agencies in promoting contract farming as an ideal model for rural economic and social development. Contract farming is regarded as a poor-friendly form of capitalism and an ideal win-win model of progress that ensures agricultural investment and market integration without sacrificing farmers' ownership of their land (FAO, 2015; UNCTAD, 2009). However, some salient questions need further examination. What if the meanings of land and ownership are transformed subject to such contracts? Is the formal ownership of land actually of vital importance in the lives and economies of contract farmers?

In the context of the contract farming of sugarcane in an outgrower scheme in Tanzania, this paper explores how the scheme has fundamentally altered people's relationships with land over the last 50 years. This relates in particular to the changes that have taken place since 1999, when the sugar company was privatized after three decades as a parastatal. While it is true of this scheme, as of so many other examples of contract farming, that the growers' ownership of their land has been maintained, the paper raises questions about the meaning—or meaninglessness—of this fact. If participation in contract farming entails a departure from traditional ways of understanding and using land, results in new spatial patterns of agricultural production and, increasingly, in new demands for economic and social resources in order to make the land work, one may wonder what it means for growers to retain the ownership of their land. What if the growers maintain their ownership of land but do not necessarily retain control over it due to lack of access to other tangible and intangible resources?

Some of these concerns have already been raised in earlier analyses of contract farming experiences in the Global South. Roger Clapp and Michael J. Watts described contract farming as "a form of disguised proletarianization" (Clapp, 1988, p. 16) in which peasants are treated "as *de facto* piece workers" (Watts, 1992, p. 95), even though they formally kept their right to their land and, for that matter, to their labour. Peter D. Little found that contract farming involved the commercialization of land and labour with ensuing processes of land accumulation and social differentiation, "where small groups of contract farmers prosper while substantial numbers earn very low incomes" (Little, 1994, p. 223). Others, however, concluded that, as an alternative to other forms of capitalist agrarian production, contract farming actually slowed down social differentiation (Glover & Kusterer, 1990, p. 140).

More recently, concerns about contract farming as an avenue for capital to de facto appropriate the land and labour of vast numbers of rural dwellers, and to act as a force for alienation, dispossession and loss of autonomy have re-emerged in debates about land grabbing and control of land. Peluso and Lund (2011) understand land control as practices that fix or consolidate forms of access, claims, and exclusion over a period of time. Without singling out contract farming specifically, they stress that it is not only land-grabbing that is new, but also "new crops with new labor processes and objectives for the growers, new actors and subjects, and new legal and practical instruments for possessing, expropriating, or challenging previous land controls" (Peluso & Lund, 2011, p. 668). Others argue more straightforwardly that contract farming can act as a way for capital to capture land and cheap labour: That is, it is essentially a form of land grabbing, albeit a more inclusive one than the direct take-overs that legally exclude people from ownership of the land (Borras & Franco, 2012; Hall, 2011; Vicol, 2017). Vicol sees contract farming as one among several other mechanisms for grabbing land *control* (Vicol, 2017, p. 158). However, he cautions that contract farming cannot be generalized, as the intersections between local livelihood patterns and the dynamics of contracting typically result in a complex mosaic of winners and losers among rural households (Vicol, 2017, p. 165). Research must therefore investigate in different empirical settings how local livelihoods are entangled with particular contract-farming schemes and agribusiness investment models (Oya, 2012; Vermeulen & Cotula, 2010; White et al., 2012).

In this paper, questions about relationships between contract farming and land are explored through a case study of sugarcane production in Kilombero, Tanzania. Rather than focus solely on land ownership, we investigate how participation in contract farming alters the forms of land acquisition and the ways in which people are connected to the land—socially, culturally, and economically. In doing so, we wish to emphasize a fact about land that seems to be underappreciated in the contract-farming literature, namely, that the "resourceness" of land is not an intrinsic or natural quality of the land itself but very much a socially conditioned phenomenon. As Tania Murray

Li (2014a, p. 1) reminds us, land is a strange object: "Although it is often treated as a thing and sometimes as a commodity, it is not like a mat: you cannot roll it up and take it away. To turn it to productive use requires regimes of exclusion that distinguish legitimate from illegitimate uses and users, and the inscribing of boundaries through devices such as fences, title deeds, laws, zones, regulations, landmarks and story-lines."

Li uses the analytical concept of an "assemblage" to examine the practices that make up land as a resource, that is, an assortment of materialities, relations, technologies, and discourses that have to be pulled together and aligned with one another. It takes work to turn land into a resource, to draw out the rich and diverse array of land's "affordances," that is, the uses and values it affords us, including the capacity to sustain human life. And it is not only agricultural labour that is needed but, just as importantly, work on social relations with other land users, neighbours, family members, village leaders, officials, powerful people, and groups.

Inspired by Li, in this paper, we contend that although land ownership is clearly an important factor in defining livelihoods, possibly the most significant—and divisive—factor among outgrowers in Kilombero is who has access to the financial capital and are connected to the social relationships that enables the land to be worked and turned into a resource. The study primarily focuses on the period from 1998 to 2016, a period of privatized ownership and management, but it also draws on data from the 1960–1998 period of controlled production of sugarcane and sugar by the government. The study therefore covers a longer timescale than most other studies of contract farming, it being a main argument of the paper that several historical, pre-privatization conditions are important in understanding the nuances and contradictions of capitalist expansion in Kilombero.

2 | PERSPECTIVES ON THE RELATIONSHIP BETWEEN CONTRACT FARMING AND LAND OWNERSHIP

In the literature, contract farming frequently appears as a benevolent agrarian saviour in the lives of poor farmers in developing countries (Eaton & Shepherd, 2001; FAO, 2012, 2015; Runsten & Key, 1996; UNCTAD, 2009, 2011; Warning & Key, 2002; Williams & Karen, 1985). Just as often, it is represented as a malevolent economic force that ruins their livelihoods (Little & Watts, 1994; Porter & Phillips-Howard, 1997; Shiva, 2004; Watts, 1990). In this paper, we will view it as a mode of organizing agricultural production that is likely to have both positive and negative outcomes for participants and to affect rural communities in highly contradictory and contested ways (De Schutter, 2011; Narayanan, 2012; Oya, 2012; Pritchard & Connell, 2011; Walker, 2009). This paper, however, focuses on the complex historical relationship between contract farming and land, a nexus for which three different perspectives appear to dominate.

One way of investigating the relationship between contract farming and land is by asking whether farm size or landholding have any influence on the participation of households in contract farming. Bellemare (2012) reports from Madagascar that the size of a household's landholdings is positively related to the likelihood that the household will participate in contract farming. This is to be expected, he argues, given that households with larger landholdings are less likely to be constrained by land availability in deciding whether or not to participate in contract farming. Maertens and Swinnen (2009), Minten et al. (2009), and Bachke (2013) have made similar findings. Baumann (2000) argues that contracting often creates lucrative opportunities for absentee landlords who own relatively large tracts of land. A meta-study by Ton et al. (2018) analyses studies of 26 different empirical cases in 13 different developing countries and concludes that participation in contract farming does indeed tend to involve farmers who are wealthier in land or other assets. In 61% of the studies reviewed, the contracted farmers had significantly larger plot sizes than the average for their local area of residence, while the poorest farmers were rarely included in such schemes at all.

In contrast to these analyses, but still asking whether farm size influences participation in contract farming, Miyata et al. (2009) stress that land assets are insignificant for participation in contract farming in their Chinese study area. Instead, it is aspects and assets such as location, access to irrigation, and the availability of farm labour that are important. Other studies from India, Nicaragua, and Ghana (all cited in Barrett et al., 2012) emphasize that farm size appears to be unimportant or even, for some crops in India, negatively associated with farmer participation. In their study of rice farmers in Benin, Maertens and Velde (2017) find that land is not a constraining factor for farmers in their study area, although contracted rice farmers have larger landholdings compared with rice farmers outside the scheme. In a review of case studies from several countries, Singh (2005) concludes that participation in contract farming is not necessarily restricted to the larger landowners but may also involve a range of different classes of land users. Notably, Singh finds that, whereas contracted large and medium capitalist farmers tend to rely on wage labour, small peasant producers under contract depend mainly on family labour. He also adds a category of landless people who lease land for contract production and use either family or wage labour.

By exploring how companies face the challenge of attracting rural households whose increasingly diverse livelihood strategies make contract farming one of several income-generating options available to them, Walker (2009) underlines the place- and crop-specific significance of farm size when it comes to participation in contract farming. Barrett et al. (2012) note that, from the perspective of the agro-companies, contracting with the larger, better-off farmers may reduce their transaction costs but may require offering somewhat better contractual terms and may increase the risk of supplier noncompliance (Barrett et al., 2012, p. 725). This comprehensive study thereby confirms the heterogeneity of evidence across commodities and countries in terms of the importance of farm size for participation in contract farming (see also Reardon et al., 2009).

A second way of investigating the relationship between contract farming and land is to ask the reverse question, namely, how participation in contract farming might affect local patterns of landholding. This perspective is generally omitted in recently published papers offering econometric analyses of the income effects of participation in contract farming (e.g., Bellemare, 2012; Maertens & Swinnen, 2009; Minten et al., 2009; Miyata et al., 2009). However, the topic of how contract farming affects landholding and social differentiation are investigated in several older papers. Studies of oil-palm production in Côte d'Ivoire and Ghana by Daddieh (1987) and of outgrower schemes in Tanzania by Mbilinyi (1988) suggest that contract farming fosters indebtedness and land evictions among peasants while promoting capital and land accumulation among rural elites, thereby aggravating economic and social inequality and polarization (cited in Watts, 1994, p. 55; see also Daddieh, 1994). Adding to this, Vermeulen and Cotula (2010) argue that, even though contract farming may not have direct or immediate effects on landholding, it can still trigger changes in access to land in the longer term in favour of local elites.

Other studies conducted in different parts of the world have also documented how contract farming may lead to social differentiation in rural communities, as some people lose their links with the land, while others form a new prosperous class of rural capitalists (Burch, 1996; Clapp, 1988; de Janvry, 1981; Hervas, 2019; Kirk, 1987; Korovkin, 1992; Veldwish, 2015; Wilson, 1986). Roger A. Clapp voiced the often-cited notion that "contract farming is a form of disguised proletarianization: it secures the farmer's land and labour, while leaving him/her with formal title to both" (Clapp, 1988, p. 16) underlining the need to recognize contract farmers' uncertain real-life situations as "propertied labourers" or "working landlords." Or, to put it another way, as people who might be formally recognized as landowners but whose actual control over their own land may be very limited (see also Clapp, 1994). Writing even more strongly than Clapp, Michael J. Watts charged that "under contract in centralized systems, peasants work as *de facto* piece workers" (Watts, 1992, p. 95).

In her study of Chile, Tania Korovkin (1992) also acknowledge that proletarianization, whether disguised or de facto, is inherent in contract farming. However, she stressed that in her study area contract farming had not led to thorough proletarianization, but rather to increasing economic differentiation and social disintegration within rural communities under contract. Ben White's analysis of contracting in Indonesia also revealed highly negative effects for participating households in the forms of land alienation, increasing indebtedness and impoverishment (White, 1997, p. 132). However, rather than pointing to contract farming per se as the culprit, White makes the important argument that prevailing structures of local power and privilege, including political and co-operative institutions which on paper may appear to be democratic and fostering egalitarian forms of participation, in fact account for a substantial part of these mal-effects of the contracting experience (White, 1997).

A third way of investigating the relationship between contract farming and land has proved to be important for this paper, though it is not frequently dealt with in the literature on contract farming. That is the role of access to resources in the wider sense of the word for participation in contract farming, such as rented land and agricultural inputs, including labour, as well as less tangible forms of resources such as connectedness to powerful social networks.

In one of the relatively few papers on contract farming that looks beyond mere ownership, Singh (2002) finds that contract farming in Punjab, India, has reinforced reverse tenancy in the region, as the returns from farming have increased for those who can invest in it and can absorb the risk of crop failure. These people are mostly large landholders or individuals with other non-farm sources of income. They have access to resources that enable them to rent land from the poorest segments of landowners who lack the necessary capital to invest and participate in contract farming, even though they formally own their own land (Singh, 2002, p. 1633). Another study from India by Pritchard and Connell (2011) demonstrates that contract farming under the so-called "backward integration project" (BIP) for red chillies is largely carried out by migrant growers who comprise a complex network of lease-holdings. In one BIP location, 47% of chilli cultivation takes place on owned land and 53% on leased land (Pritchard & Connell, 2011, p. 245). In other BIP locations, chilli production has reportedly "strengthened the economic position of migrant farmers on leasehold land [and] encouraged an expansion of lease holding as a form of agricultural land tenure" (Pritchard & Connell, 2011). Both studies highlight the fact that by its very nature contract farming is a way of guaranteeing companies comprehensive access to land and capital accumulation that bypasses the expensive and tedious legal procedures associated with securing formal land ownership. In addition, however, the loss of control over land is double for landowners when the actual farming is controlled by tenants, whether migrants or others, whose access to capital allows them to enter into contracts with an agro-firm and gather the produce and value of the land.

Contrary to the dominant representation in the literature and agrarian policy papers about contract farming as a relationship between a firm and a farmer-cum-landowner, the studies by Singh and by Pritchard and Connell emphasize two important lessons. First, the reality of contract farming may well involve other forms of land control than pure ownership. Second, if researchers into contract farming aim to understand the factors that actually enable farmers to link up with firms, they need to focus more on the implicit demands for tangible and intangible resources rather than just farmers' land and labour, which is what permits them formally to enter into a contract. Apart from ensuring a more holistic view of contract farming as simultaneously a cultural, social, economic, and agronomic institution, this approach will also draw attention to the fact that land, as Tania Murray Li (2014a) stresses, is a highly complex natural *and* social resource (see above).

Based on a collection of quantitative and qualitative data collected over several years, the present paper deals with historical changes in modes of land acquisition in a sugar contract-farming scheme in Tanzania. First, we show that the commercialization and commodification of land took off during the period leading up to the privatization of the former state-controlled scheme and increased after 1999, not least because a market for renting land developed. Second, the analysis will highlight how changes in modes of land acquisition at a time when no further territorial extension of cultivated land is possible have a specific spatial dimension, as well as involving quite fundamental cultural changes in land-use patterns and management in four different selected villages. Third, we concentrate on the diversification of land-holdings after 1999 and demonstrate how participation in contract farming of sugarcane has affected different categories of households in the four different villages. As already indicated in this section, we aim to explain the importance of access to resources for participation in the sugarcane economy. Ownership of land is merely one resource—not necessarily the most significant one—that defines the ability of a household to participate in sugarcane production on contract. Access to rented land and inputs (including labour), not to mention strong relationships with association leaders and contractors in charge of harvest management, are as decisive, if not more so, in selecting which households will and will not benefit from the sugarcane scheme in Kilombero. Before we apply these three analytical lenses, we explain the context and methodology of the study in the following two sections.

3 | THE ORGANIZATIONAL FRAMEWORK OF CONTRACT FARMING: THE KILOMBERO SUGAR COMPANY LIMITED

Before 1960, Kilombero valley was sparsely populated and mostly covered by bush and forest. People living in scattered hamlets cultivated rice, maize, sorghum, and legumes. Traders of Indian and Arab descent living in Kidodi, a small trading centre, bought the local surplus production and sold it in the larger towns of Morogoro, Dodoma, and Dar es Salaam. Under Arab ownership a few small processing factories, mainly supplied with sugarcane from their owners' sugarcane estates, provided jaggery (a traditional type of cane sugar without separation of molasses and crystals) to buyers inside and outside Kilombero.

The establishment of the Kilombero Sugar Company Limited (KSCL) in 1960 resulted in a massive influx of migrants into the valley. Between 1960 and 1987, the population rose from 2000 to 60,000 (Sprenger, 1988; cited in Mbiliny & Semakafu, 1995, p. 60). KSCL was part of the creation of a modern capital- and technology-intensive sugar industry in Tanzania in the 1960s, largely dependent on foreign finance and technology (Kopoka, 1989; Mbiliny & Semakafu, 1995). From the outset, KSCL consisted of a nucleus-estate scheme as well as the actual sugar production and marketing facilities. Its first sugar mill (K1) opened in 1962, its second (K2) in 1977. The two sugar mills are located on opposite banks of the Great Ruaha River. The Tanzanian government intended the establishment of the nucleus-estate scheme to stimulate social and economic development in KSCL's surrounding communities. Land allocated to the company's estate farming was limited to ensure that its factories would always require a large volume of sugarcane from local out-growers. After the opening of K1 people living near the factory began to grow sugarcane, but K1's supply came mainly from just five private family estates, one of which, the Kidodi Sugar Estate, was responsible for around a quarter of the company's supply (Mr. Kaid, manager of Kidodi Sugar Estate, personal communication, 08-10-2014). These family estates held land titles and covered several hundred acres each.

Between 1967 and 1998 KSCL was nationalized and operated as a parastatal by the National Agricultural and Food Corporation and, after 1974, by the Sugar Development Corporation (SUDECO). During this period, KSCL offered comprehensive assistance to outgrowers throughout the production process, from land preparation to harvest, but the quality of these services was reputedly highly inconsistent. While it has proved impossible to determine the precise legal and economic content of the contractual relationship between the company and the outgrowers at that time, it is generally acknowledged that the costs were either subsidized or deducted from the post-harvest payment and that payment delays and economic challenges were almost chronic (see Magongo, 2008; Mbiliny & Semakafu, 1995). Throughout the period of nationalization and the process of creating a socialist economy in Tanzania, the large family estates continued to dominate local sugarcane production. After the establishment of K2 in 1977, however, more and more smallholders became outgrowers, including individuals who owned just 1 or 2 acres. The jaggery business stopped completely after K2 was opened.

In 1998, KSCL was re-privatized. Ownership shifted to a consortium consisting of the South African company Illovo (55%), the British ED&F Man Holdings Limited (20%), and the Government of Tanzania (25%), which is still the ownership structure. In 2001, the Tanzanian government passed the Sugar Industry Act, which set up the Sugar Board of Tanzania to improve, develop, and regulate the sugar industry. The Act requires membership of an outgrowers' association in order to be allowed sell sugarcane to KSCL (for a detailed analysis of these associations, see Isager et al., 2018). The Sugar Act also provides legal protection for KSCL's monopsony status in Kilombero. The risk of non-compliance by the larger growers, which Barrett et al. (2012) discuss as one of the key features of company concerns in contract farming, is also prevented by law and by the Sugar Board's continuous rejection of applications from these growers for permission to build their own sugar mills.

After privatization, KSCL gradually devolved the supply of agricultural inputs, credit, extension services, and harvest assistance to the outgrowers' associations. By 2006, contract farming was being introduced in the form of cane supply agreements between the two parties. Unlike the four previous decades, when the contractual relationship between the company and its outgrowers was direct and orally based, the situation since 2006 has been that there are no direct contractual relations between the company and the individual outgrowers—the associations now represent the latter. Cane supply agreements are formally written in a legalistic style that stipulates mutual rights and obligations regarding production, harvesting and sales of sugarcane and sugar. They are re-negotiated every third year by company officials and association leaders, many of whom admit they do not fully understand the language and content of the agreements (see Isager et al., 2018).

After taking over KSCL, Illovo offered new and more attractive price levels and payment practices to local outgrowers. Between 1998 and 2013, the number of outgrowers rose from 3500 to 8000, while the area planted with sugarcane grew from around 3500 ha to 11,000 ha, and the outgrowers' total deliveries to the company went from 140,715 tons to 583,474 tons (KSCL, data obtained in June 2013).

KSCL divides the roughly 8000 outgrowers into three categories (Table 1). The company's statistics leave no doubt that the contract farming of sugarcane in Kilombero has proved to be a longstanding popular option for large-, medium-, and small-scale outgrowers. In addition to procuring sugarcane from 8000 outgrowers annually, KSCL is also the area's biggest employer and supports local charitable initiatives in the health and education sectors (see KSCL, 2014). In many ways, the company and its outgrower scheme remind one of the win-win scenarios that proponents of contract farming often put forward. That said, KSCL's achievement in enrolling thousands of small-scale outgrowers rests on its combined efforts and the fact that, through the Sugar Board, Tanzania's government, one of KSCL's shareholders, ensures the company's monopsony status, as well as the vital role of the outgrowers' associations in the management of the harvest process. As pointed out by Oya (Oya, 2012, p. 27; see also Grosh, 1994), contract farming schemes are in many cases only sustainable under monopsony power, not free market conditions. However, even under continuous government-guaranteed conditions of monopsony, certain features of the scheme's recent history raise concerns about its future regarding questions of land.

So far, the post-privatization history of KSCL has depended on the availability of land that enabled an expansion of sugarcane plots from 3500 ha (8650 acres) to 15,000 ha (37,000 acres) over less than 20 years. However, further extension of land is no longer possible in Kilombero. After decades of the unrestricted clearance of bush and forest for agricultural purposes, the government is demarcating and policing the boundaries around the national parks and wildlife reserves that surround the Kilombero valley quite strictly in order to prevent further land clearances. Hence, some of the villages in the area, including three of the four study villages, cannot expand their cultivated land beyond their current geographical boundaries.

Moreover, since around 2005, the production capacity of the outgrowers has greatly exceeded the crushing capacity of K1 and K2. For more than a decade, therefore, every year, hundreds of outgrowers fail to harvest their sugarcane. Harvesting has become a fiercely competitive process involving fraudulent and corrupt association leaders, who struggle to secure as high harvest ratios as possible for their association and then use the redistribution of harvest ratios among their members for purposes of social and economic control over the latter. Realizing the crucial role of associations in the harvesting process, since 1999 several outgrowers with large landholdings have organized themselves and others with smaller land holdings into their own association. The number of associations thus rose from two to more than 15 within a decade of KSCL's privatization (Isager et al., 2018; see also Smalley et al., 2014; Sulle, 2017).

The opportunity to harvest and deliver sugarcane smoothly to K1 or K2 is the single most important factor enabling outgrowers to draw out the "affordances" of their land. Add to the social struggle involved in this process

TABLE 1 KSCL outgrower statistics

	Outgrowers	Cane procured (%)
Small-scale growers: 0–5 ha (0–12 acres)	6320	71%
Medium-scale growers: 5–50 ha (12–124 acres)	1667	19%
Large-scale growers: +50 ha (+124 acres)	13	11%

Source: KSCL (2014).

other factors such as weather hazards, technical trouble, and more or less planned fire “accidents,” and it becomes clear that it takes a lot of work—and luck—to realize the “resourceness” of the land. Add further the fact that expenses for buying the fertilizers and other chemical inputs that are considered necessary to ensure a high rendement—that is, the recoverable sucrose content in the sugarcane that is vital in fixing the final price of sugarcane—are rising year by year at a higher rate than the incomes obtained from selling the sugarcane. In this context of intensifying competition and commercialization, the history of contract farming in Kilombero is taking a new turn, which the remaining parts of this paper will describe by exploring how the contract farming of sugarcane has dramatically changed the meanings of land for different outgrowers in Kilombero.

4 | METHODOLOGY: SELECTION OF FOUR STUDY VILLAGES AND METHODS OF DATA COLLECTION

Based on the results from a comprehensive scoping exercise (including interviews with informants and headmen in villages that produced sugarcane for the KSCL), four villages were selected for in-depth studies: Ruhembe, Kitete, Nyamvisi, and Kidogobasi (Figure 1). Situated in the same administrative district (Kilosa) and with a nearly equal number of households, the four villages are also comparable inasmuch as they are all located within 10 km of KSCL's second sugar mill (K2). Therefore, all outgrowers in the four villages have similar expenses for the supply of harvest services per ton, a key economic factor for purposes of comparison and analysis. At the same time, however, there are significant differences between the four villages in terms of village histories and locations, which help explain why contract farming has had such varying impacts on households and local land ownership patterns.

The first phase of data collection was carried out in September–October 2015. In each of the four study villages, a survey of 100 household heads was implemented, that is, a total of 400 households. The questionnaire included topics on current and historical land-use, land-holding patterns, employment, and sources of income; the interviews were conducted in Kiswahili by local enumerators. The respondents were identified through stratified random sampling, structured by location in the village (an equal number in each hamlet) and gender (two female-headed households in each hamlet to provide indicative data for a later study on gender dynamics). Data on land ownership were collected from respondents randomly sampled in the hamlets. “Big Growers,” that is, farmers with more than 50 acres of sugarcane land, were deliberately excluded from the survey as they were not residing in the villages and operate at a completely different scale with activities in several villages (but see below on collection of qualitative data). Data on land ownership and land transfer were based on recall from respondents with obvious risks of lost or biased memories. However, making reference to 10 years' intervals, triangulation of data, and reporting of identical patterns and trends support the analytical results.

The second phase of the fieldwork was carried out in May–June 2016. Based on the survey data, four categories of household data were selected for qualitative interviews (also conducted in Kiswahili). The four categories were constituted by (1) “Big Growers” (not part of the survey), (2) households with more than 6 acres under sugarcane (but not included in the “Big Growers” category), (3) households with zero acres of sugarcane but access to rented land, and (4) households with zero acres of sugarcane who do not rent any land. These categories were selected in order to investigate different social trajectories through which households were either excluded from entering the sugarcane economy or able to participate in it and accumulate capital. In total, 57 households were interviewed using qualitative interview guides although data on the Big Growers were acquired through life histories.

5 | CHANGING MODES OF LAND ACQUISITION

Until the early 1990s, land transfers in Kilombero were predominantly based on customary values related to kinship and communal land tenure: People acquired land either through inheritance or by clearing communally owned village

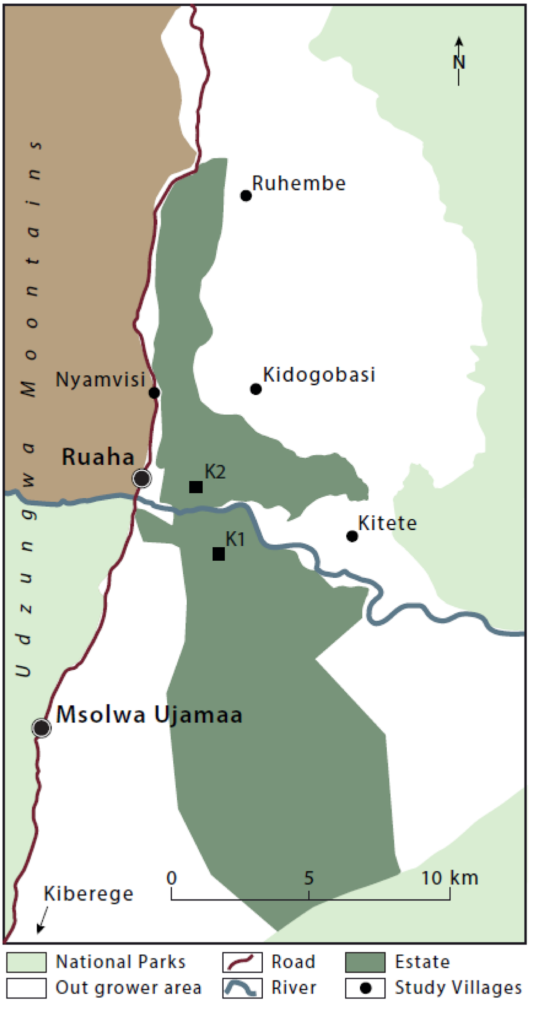
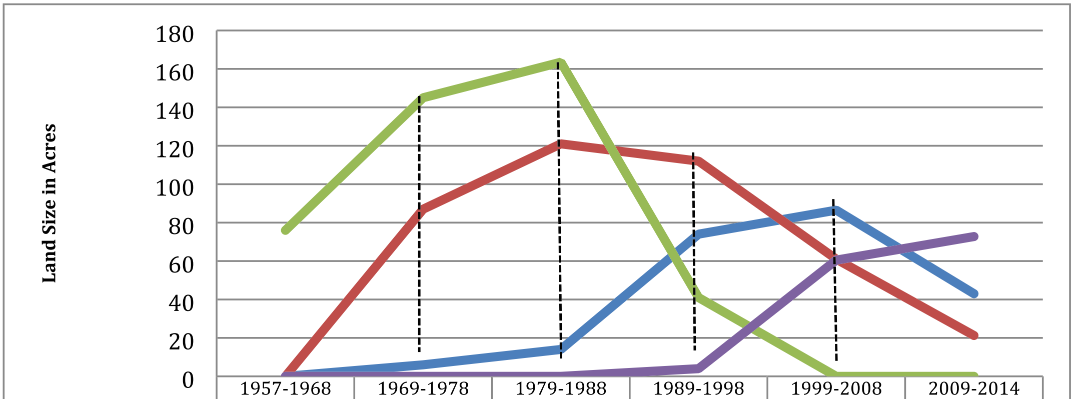


FIGURE 1 Map of the KSCL sugarcane area with the four study villages

land with the permission of village councils of elders. The few families who owned large sugarcane estates with titles to the land were exceptions to this rule. Reportedly commercial land transfers took place in connection with business activities as well, mainly in small local trade centres like Kidodi, Kidatu, and Msolwa, but otherwise, land was not treated or transferred as a commodity.

By the 1990s, however, land purchases had emerged on a hitherto unseen scale as a supplement to the previous forms of accessing land, and after 1999 (the year of KSCL's privatization) renting land rapidly became a preferred mode of land acquisition. People point to several drivers behind these fundamental changes: population increases, migration, and the spatial demarcation and policing of national park boundaries. However, few doubted that the real driving force behind it all was the increasing demand for land that followed the privatization of KSCL and the ensuing promises of higher prices, increased production capacity, and security of payment.

Figure 2 shows how and when the land used for growing sugarcane in the four study villages was acquired. The 400 households interviewed for the survey have access to a total of 1190 acres of sugarcane land, originally transferred to them either through purchase (223 acres), renting (139 acres), inheritance (402 acres) or village allocations



	1957-1968	1969-1978	1979-1988	1989-1998	1999-2008	2009-2014
Purchased	0	6	14	74	86.5	43
Inheritance	0	87	121	112	61	21.25
Village	76	145	163.5	41	0	0
Rent	0	0	0	4	60.5	72.75

FIGURE 2 Changes in modes of sugarcane land acquisition (acres); total figures for the four study villages
Source: Survey data (2015)

(426 acres). With inheritance and village allocations accounting for 70% of the total area used for growing sugarcane in the four villages, these figures may seem to indicate an almost continuation of traditional land-tenure patterns. Taking the time of transfer into account, however, it becomes apparent that these forms of land acquisition were dominant until 1999 and negligible after that year. In fact, not a single household out of the 400 received any village land after 1999. Moreover, of the total of land transfers in the four villages after 1999 (345 acres), just 24% were through inheritance. The rest of the land was transferred through either purchase (37%) or rent (39%).

Figure 2 shows the steep rise in land purchases that took place around 10 years before an equally steep rise in land rentals. These trends from the four study villages fit the overall picture for Kilombero as a whole. People with access to capital—that is, local traders of Indian and Arab descent with "old capital," newly migrated businessmen from other regions of the country, civil servants from Dar es Salaam and Morogoro, and salaried employees at KSCL—led a "land rush" in the decade leading up to privatization, which continued until it peaked a few years later. Comparatively, this group accounts for many acres of sugarcane land purchased or acquired at no cost from local village councils during that period. Ordinary outgrowers at the time were reportedly still unaware of the commercial value of land and did not anticipate the economic impacts that privatization was likely to bring about. Moreover, they lacked the capital to buy land. We will return in more detail to the processes of accumulation and dispossession in a later section. For now, the aim is to stress that by 1999 most outgrowers understood the commodity value of land and tried to hold on to it under almost any circumstances. From around 2005, when the expansion of cultivated land became very restricted, land prices soared, but sales were in decline. Our interviews revealed unanimous agreement among those with large land-holdings that by 2010, 1 acre of sugarcane land cost 1–1.5 million TZS and by 2015 between 2.5 and 3.5 million TZS.

Since around 2005, therefore, renting has become the main way of accessing land. This chronological logic is visible in the stagnating trend shown in Figure 2 for purchases and the continuously rising trend for renting after 1999. Just 15 households (4%) divided evenly among the four villages reported ever selling land. However, it is possible that a sense of shame associated with selling land may have prevented us from understanding the full extent of dispossession through land sales. The overall post-privatization trends (Figure 2) about changing avenues of land

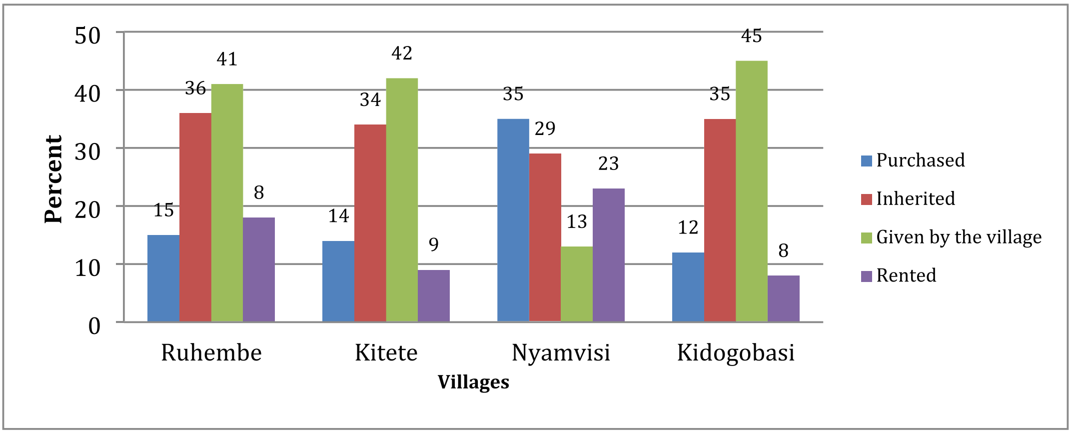


FIGURE 3 Modes of sugarcane land acquisitions in the four study villages
Source: Survey data (2015)

acquisition were confirmed by the manager of the local branch of a national bank (CRDB in Kilombero), who stated that "land sales are relatively rare, but leasing is widespread" (personal communication 09-10-2014). Likewise, KSCL's long-term outgrowers' manager explained:

> *It is far more common that land is leased for one or more seasons rather than actually being sold. [I reckon that] around 20% of the total land area owned by out-growers is leased.*[1] *Usually people lease out their land when they need cash for their children's education, for food or other basic necessities. There are a few people who lease several plots at the same time, thus commanding in total more than fifty and even up to one hundred acres. This happens all over the sugarcane area, not just in specific locations. (KSCL Out-grower manager, personal communication 09-10-2014)*

Of the four study villages, Nyamvisi stands out with regard to how the history of changing modes of land acquisition manifests itself. Nyamvisi is situated on a narrow stretch of land between the Udzungwa Mountain range and the KSCL estate, and the district road that connects Kilombero to other parts of Tanzania runs through it. Already in 1977 KSCL annexed a large part of the land that used to be under the control of the villagers, meaning that restrictions on land expansions happened two or three decades earlier in Nyamvisi than in the other study villages. When comparing the four villages in terms of sources of sugarcane land, it is therefore not surprising that most fields farmed by outgrowers from Nyamvisi were accessed either through purchase (35%) or rent (23%). In contrast, outgrowers in the other three villages mostly acquired their sugarcane fields through inheritance or village allocations (see Figure 3).

Despite being situated on less land than any of the other three villages, households in Nyamvisi have access to a total of 596.5 acres, which is more than any of the other villages. In order to understand the apparent discrepancy at work here, the following section will analyse how the changes in modes of land acquisition brought about by the privatization of KSCL and new contract-farming practices have entailed changes in spatial land-use patterns as well.

[1]This statement refers to all out-growers associated with KSCL rather than just the four study villages.

6 | NEW SPATIAL PATTERNS OF LAND-USE

The history of KSCL involves the transformation of bush and forest into an agricultural production space that is increasingly dominated by the mono-cropping of sugarcane. In the past, and prior to 1999, agricultural production was carried out by households in fields located near their homes, except for the few large-scale estates that already existed before the establishment of KSCL. In the course of the vast expansion of sugarcane production and the increasing commercialization of land, this land-use pattern has changed, albeit not in the same way or to the same degree in all the four study villages. As shown in Table 2, Ruhembe and Kidogobasi still follow the traditional spatial pattern, with nearly the entire production of crops taking place within the village. In Nyamvisi, the pattern is the exact opposite, as around 90% of all agricultural fields owned or rented by households in Nyamvisi are located outside the village. In Kitete, households divide their paddy farming almost equally between plots inside and outside the village, whereas sugarcane is still predominantly grown inside the village.

These changing spatial land-use patterns affect villages and households differently, not least because the term “outside the village” carries a variety of meanings to the villagers. For outgrowers in Ruhembe and Kidogobasi, it means going to a hamlet (Kierezo) located between the two villages. Depending on the precise location of the field, Kierezo is within walking distance, approximately 5 km from both villages. The village lands of Ruhembe and Kidogobasi cover larger spaces than Kitete and Nyamvisi, in part because of the longstanding presence of large family estates within their village boundaries. Two of the largest estates in the Kilombero area are located in Ruhembe, a third and a fourth in Kidogobasi. Three of these estates cover more than 500 acres each and have existed since the era of jaggery production. The fourth estate was set up during the 1980s and covers 400 acres. Hence, in both Ruhembe and Kidogobasi, some fields located within the village boundaries are further away from people's homes than the fields in Kierezo. Moreover, as several residents in Ruhembe and Kidogobasi were born in Kierezo or have

TABLE 2 Land location and size (acres) for different crops

		Land location		
Villages	Crops	Inside village	Outside village	Total land size (acres)
Ruhembe	Sugarcane	354 (94%)	22 (6%)	**376**
	Paddy	92.5 (85%)	16 (15%)	**108.5**
	Other crops	56 (95%)	3 (5%)	**59**
Subtotal		**502.5 (92%)**	**41 (8%)**	**543.5**
Kitete	Sugarcane	180 (85%)	32 (15%)	**212**
	Paddy	63 (54%)	53 (46%)	**116**
	Other crops	7 (70%)	3 (30%)	**10**
Subtotal		**250 (74%)**	**88(26%)**	**338**
Nyamvisi	Sugarcane	24.5 (9%)	252 (91%)	**276.5**
	Paddy	13 (6%)	219.25 (94%)	**232.25**
	Other crops	10.0 (11%)	77.75 (89%)	**87.75**
Subtotal		**47.5(8%)**	**549 (92%)**	**596.5**
Kidogobasi	Sugarcane	310 (95%)	16 (5%)	**326**
	Paddy	178 (91%)	18.75 (9%)	**196.75**
	Other crops	9.75 (100%)	0 (0%)	**9.75**
Subtotal		**497.75 (93%)**	**34.75 (7%)**	**532.5**
Grand total		**1297.75 (65%)**	**712.75 (35%)**	**2010.5**

Source: Survey data (2015).

relatives living there, Kierezo is hardly perceived as being "outside the village," even though it is geographically situated outside the boundaries of both Ruhembe and Kidogobasi.

Since 1977, when large tracts of village land were appropriated by the KSCL estate, farming "outside the village" for most outgrowers in Nyamvisi has meant travelling across a narrow stretch of estate land to fields in Kidogobasi, Ruhembe, or Kierezo. Some of these fields are just two or three kilometres away, others up to 10 km from Nyamvisi. If travelling by bicycle, motorbike, or car, these distances are considered convenient, but this obviously depends on the exact location of the fields and the quality of the roads that lead there. Some residents in Nyamvisi inherited their land in the other villages, but most of it was acquired on a commercial basis (Figure 2).

Data from the survey reveal that outgrowers in Nyamvisi purchased 14 plots outside the village before 1999 and 20 plots after 1999. One plot was rented before 1999, a further 24 after 1999. In comparison, altogether the 300 interviewed outgrowers living in the other three villages merely purchased two plots and rented one plot outside their villages, all after 1999. Conversely, they purchased 47 plots (10 before 1999) and rented 50 plots (one before 1999) in total within their respective villages. These figures suggest that until recently residents in Ruhembe and Kidogobasi had access to land within their villages and therefore did not seek to acquire land elsewhere in the same way as residents in Nyamvisi did. Certainly the figures also indicate that households in Nyamvisi generally have access to more resources—economic, social, and cultural—than most households in the other three villages. Many of the current residents in Nyamvisi are either salaried employees of KSCL or retired workers with a monthly pension. They possess more knowledge about the sugar industry and economy and a more lucid awareness of the increasing commodity value of land since 1999 than most people in the other villages. In the course of time, they have also managed to form the kind of social relations with people in Ruhembe, Kidogobasi, and Kierezo—often by employing them as wage labourers—that are needed to enter the market for land in these villages.

That said, it is important to recall that until the opening of K2 in 1977 the inhabitants of Nyamvisi were largely a completely different group of people than those we interviewed for our questionnaire survey. After that year, faced with massive losses of land, many of those who had claimed ancestral rights to their land decided to leave Nyamvisi. During the 1980s and 1990s, more and more households moved to an area southeast of Msolwa Ujamaa, where they acquired new land for paddy, maize and sugarcane. This group of people made up the first wave of dispossessed farmers after the extension of KSCL's estate. In one sense, this process of dispossession is still not quite over. There are still households left in Nyamvisi who lost their land in 1977 but remained in the village and adopted other livelihood strategies than just farming. Over the years, however, households belonging to this category of villagers have become fewer and fewer. Some have died, and others have at some stage succumbed to the economic pressures of living in Nyamvisi and moved away. They represent the last ripples, so to speak, of the first wave of dispossession. By the time the data for this paper were collected, most of the families that had occupied Nyamvisi in the past had been replaced literally by a new kind of resident able to pay for housing within the village and to invest in land outside it.

The opening of K2 in 1977 had significant effects on Kitete as well. This village had been designated an *ujamaa* village in 1974. *Ujamaa* ("extended family" in Swahili) was a policy of the nationwide forced relocation of millions of people into new village units with collectivized land and labour management. In Kitete, the *ujamaa* years led to falling production and productivity and an influx of immigrants from other parts of Tanzania. When *ujamaa* began, Kitete was situated on the land where K2 is located today, but in 1977, it was removed by government decree to its current location. It was allocated a new piece of bush land to the west, as well as a portion of its former land which remained within the village boundary, but the overall result of the transfer was a net loss of agricultural land. When *ujamaa* ended, some families repossessed their former land, but for the majority of the villagers, who were newcomers from other regions of Tanzania, this option did not exist. Instead they were given communal land in equal shares per household. Due to the increasing scarcity of land in the following decades, particularly after the demarcation of village and national park boundaries, since 1999 many households have purchased or rented additional plots 40 km south of Kitete. This second wave of dispossession is leaving its mark on Kitete, as many agricultural activities now take place outside the village.

Hence, for outgrowers in Kitete, going "outside the village" means going to places called Kiberege and Signali 40 km away. Transport is inconvenient and expensive, regardless of whether the means of transportation is a bicycle, motorbike, car, or bus. Practically all of the acquired land in Kiberege and Signali is rented. Sugarcane is chiefly grown in Kitete, within the village, apart from a few households with fields in Kidogobasi or Kierezo. A 40-km limit for the provision of harvest services has been imposed by KSCL and the outgrowers' association, which prevents commercial cultivation of sugarcane on the rented land in Kiberege and Signali. In order to maintain participation in the contract farming of sugarcane, households in Kitete therefore grow their food crops far away from their homes in order to find space for sugarcane nearer their homes and within the 40-km limit. Hence, the households in our questionnaire survey grow 46% of their paddy and 30% of other crops (maize and legumes) in Kiberege and Signali. This is a case that accurately illustrates what has been interpreted as a general phenomenon of "commuter farmers" among poorer households in the Kilombero sugar outgrower scheme (Sulle, 2017).

It is interesting to consider the commonalities and differences between Kitete and Nyamvisi. Both villages lost large parts of their land to KSCL's estate in 1977. Whereas Nyamvisi was left with very little available agricultural land after that year, Kitete in its new location had more land and could expand its agricultural area until around 2000, when the government stopped further encroachment into the Selous Game Reserve and Mikumi National Park. Still, according to our survey, Kitete's households ended up with significantly less accessible land (338 acres) compared with the households in Nyamvisi (598 acres) or, for that matter, Ruhembe (543) and Kidogobasi (532). Data from our qualitative follow-up interviews clearly suggest that a lack of capital prevented Kitete's outgrowers from buying or renting land in Kidogobasi or other places that were nearby but outside their village boundaries. The downpayment for renting 1 acre of sugarcane land for 3 to 5 years (300,000–500,000 TZS) is out of reach for the great majority of Kitete's households. Instead, they can afford to rent land in Kiberege or Signali for paddy or maize production, which costs around 50,000 TZS per acre per year (2015 prices) on a yearly basis. Apart from lacking financial capital, the households in Kitete—composed largely of migrants without educational qualifications or salaried jobs—generally also lack the social relations and connections of Nyamvisi's residents, who, as employees of KSCL, have had easier access to village leaders and landowners in Ruhembe and Kidogobasi when they wanted to buy or rent land.

Neither Ruhembe nor Kidogobasi has experienced land dispossession in the same way as Nyamvisi and Kitete. However, given the closing of the land frontier around these two villages during the past decade, it remains to be seen how their residents will react when the scarcity of land becomes more acute. Will they be able to stay in the villages, or will they have to pursue the same option as households in Kitete in being forced to travel far in their pursuit of food security?

7 | THE DYNAMICS AND PATTERNS OF RENTING OUT LAND, AND THE ROLE OF THE "BIG GROWERS"

We have already shown that there was a particular chronological logic in the stagnation of land sales after 1999 and the continuous rise in land rentals after that year. Empirically, there is a demand and supply side to the chronological logic of land rentals and purchases too. One of the pervasive findings in our qualitative interviews was that the privatization of KSCL made practically every outgrower household aware of the commercial value of land, not necessarily in respect of outright sales, but also by renting out the asset for a limited period. Inevitably, households in times of crisis and need will therefore seek to rent out their land instead of selling it, preferably to a wealthy person who can be trusted to pay and be discreet about the deal. After a period of 3 to 5 years, the land returns to its owner. To the extent that the landowner recovers in the meantime from whatever crisis had caused him or her to rent out the land, this arrangement may be perceived as a win-win situation. Usually, payment is made immediately and in full for the whole period, which brings the landowner an often much-needed cash injection. In 2015, price levels varied from around 100,000 to 400,000 TZS per acre per year, depending on location, soil quality, and so forth. As the temporary

TABLE 3 Distribution of sugarcane land in the four study villages

Distribution of sugarcane land (ownership)	Ruhembe	Kitete	Nyamvisi	Kidogobasi	Total
0 acres	13	21	41	9	84 (21%)
0–3 acres	57	66	42	66	231 (58%)
3–12 acres	28	13	16	25	82 (21%)
+12 acres	2	0	1	0	3 (0%)
Total hhs	100	100	100	100	400 (100%)

Source: Survey data (2015).

tenants may expect profits of up to 5–600,000 TZS per year per acre (in 2015 prices), they are also satisfied. Indeed, as several wealthy people explained, growing sugarcane on rented land is a very good investment.

However, the necessity and benefits of renting out land vary between different groups of smallholders. In order to illuminate these differences, we have re-categorized the smallholders according to another criterion than that used by KSCL. According to KSCL's own definition, small-scale growers are outgrowers with fewer than 5 ha (12 acres) of land under sugarcane (KSCL, 2014, p. 24). In light of this definition of small-scale growers, it is notable that, of the 400 households interviewed for our survey, 397 households (99%) belong to KSCL's small-scale grower category or have no land at all. This high proportion is to some extent due to a selection bias (see the section on methodology), but we would argue that our data provide valuable evidence of the real-life diversity of livelihoods subsumed under KSCL's category of small-scale growers. Besides this, by deliberately including landless households as well, the survey allows us to include this kind of household in the analysis of the social and economic effects of participation in the outgrower scheme.

Table 3 shows the distribution of sugarcane land (ownership) among the households interviewed for the survey. The category of households with up to 3 acres of land is defined according to qualitative information we derived from the interviews. Three acres is generally understood as the area that one household—usually a married couple with children—can manage on their own without having to hire extra labour. Notably, households in this study belonging to the category with 3 to 12 acres of sugarcane land mainly have 4 or 5 acres in practice, only a handful having more than 10 acres. Bearing in mind that our data are not completely compatible with KSCL's data, it is therefore interesting to note the distribution of land-holdings among outgrowers with up to 12 acres of land.[2] Also notable is the fact that in each of the four study villages, there are some households who own no sugarcane land, a category not included in KSCL's statistics.[3]

Taking our point of departure in these different categories of outgrowers, we return to the issue of selling and renting land. If a landowning household is unable to recover from a crisis, its land is likely to be sold to the same person who rented it. Our survey data show that 73 households had rented out sugarcane land at some time (see Table 4), a figure unevenly divided between Ruhembe (25), Kitete (7), Nyamvisi (14) and Kidogobasi (27). However, only 15 households reported ever selling sugarcane land, divided as follows: Ruhembe (4), Kitete (2), Nyamvisi (4), and Kidogobasi (5). The difference between these sets of numbers indicate that most of the households that had

[2]Our data raise questions as to whether KSCL's categorization of small-scale growers as having up to 12 acres presents a reliable impression of the outgrowers' situation. Other studies from Kilombero align well with our data on the social distribution of land-holdings (Smalley et al., 2014; Sulle, 2017). When fewer than 25% of the interviewed households own more than 3 acres of sugarcane land (and most of them only marginally more than 3 acres), it is somewhat curious why the company maintains a categorization that clearly exaggerates the proportions of people's landholdings. The broad definitions used by KSCL are obviously perfectly legitimate, but they do hide a diversity of social and agricultural trajectories among the households that are subsumed under these categories.

[3]Interestingly, some landless households actually cultivate sugarcane on rented land; the households without any access to sugarcane land amount to Ruhembe (8%), Kitete (9%), Nyamvisi (24%), and Kidogobasi (2%).

rented out their land at some stage had later recovered from their crisis and maintained their ownership of it. However, the exact magnitude of land sales is difficult to ascertain. Wealthy landowners, those we call "Big Growers" (see below), with landholdings of more than 50 acres under sugarcane, mentioned in interviews that poor outgrowers quite regularly come to them to rent out their land or even to sell it, usually 1 or 2 acres at a time. Table 4 also shows that the more land a household possesses, the less likely it is ever to have rented it out. Nonetheless, Ruhembe appears to differ from the other villages in having far more households in the 3 to 12 acres category with experience of renting out land.

Our qualitative follow-up interviews with households from each category in the four villages showed notable differences in people's motivations for renting out their land. In the case of households with up to 3 acres of sugarcane land, the motivation was predominantly an acute need for cash due either to the failure of a harvest or a health problem within the household. Another motive mentioned by this group was a lack of capital to invest in the chemical inputs required for sugarcane farming or to perform the necessary ratooning, that is, the uprooting of existing sugarcane plants and their replacement with new ones, which must be done every few years to ensure a high yield. Under the Sugar Act, outgrowers are not free to choose which variety of sugarcane they plant in their fields, this being a decision made for them by KSCL.

Households in the 3 to 12 acres category gave the same motivations, but this group also mentioned a lack of capital for employing casual wage labourers as an important motive for renting out land. As family labour is considered sufficient for looking after 3 acres, it makes sense that those with larger land holdings need capital to hire casual labourers. If they lack this capital they might rent out parts of their land rather than not seeing it farmed at all.

The lack of capital to pay for hired labour, whether on a permanent or occasional basis, is a key factor distinguishing households in the 3 to 12 acres category from those villagers we call the "Big Growers," here (and above) used to denote landowners with more than 50 acres of sugarcane land. They are almost all male and 40 years of age or older. They came as immigrants from other parts of Tanzania, but unlike most other migrants, they had access to capital when they arrived in Kilombero. The few non-immigrants among the Big Growers are the wealthy owners of the old, large family estates that produced jaggery before the 1960s. They have a long history of residence in the area, though two of them are the descendants of Arab traders who came to Kilombero in the 1930s and 1940s. Regardless of their place of origin, all except one Big Grower had acquired more than 50 acres of land before 1999 and therefore benefitted greatly from the privatization and the favourable conditions offered by Illovo in the years immediately following the take-over. Big Growers are further characterized by owning other businesses, including contractors' businesses (harvest management). Furthermore, they exercise far more control over the outgrowers' associations than ordinary outgrowers do, usually through a position as chairman or board member. Thus, in contrast to outgrowers with less land, the Big Growers hardly ever fail to harvest all their sugarcane. Since 1999, they have bought more and more land as other people regularly offer land for sale, and they rent between 10 and 50 acres annually in different villages.

TABLE 4 Households that ever rented out land (categorized according to ownership of sugarcane land)

	Ruhembe	Kitete	Nyamvisi	Kidogobasi	Total
0 acres	0	1 (14%)	1 (7%)	2 (7%)	4 (5%)
0–3 acres	10 (40%)	4 (57%)	9 (64%)	20 (74%)	43 (59%)
3–12 acres	13 (52%)	2 (29%)	3 (21%)	5 (19%)	23 (32%)
+12 acres	2 (8%)	0 (0%)	1 (7%)	0 (0%)	3 (4%)
Total	25	7	14	27	73 (100%)

Source: Survey data (2015).

8 | CONTRACT FARMING AND LAND OWNERSHIP: LESSONS FROM KILOMBERO

The timescale of many contract-farming studies is limited to a few or even just one production season. This is most observable in the econometric studies of the income and welfare "effectiveness" of contracting, which dominated publications in the years around 2010 (e.g., Bellemare, 2012; Maertens & Swinnen, 2009; Minten et al., 2009; Miyata et al., 2009). When effects and effectiveness are measured over such a short time span, the long-term consequences of participation in contract farming remain obscure. Our study of the history of KSCL and its outgrower scheme, in contrast, offers a longer and more dynamic time perspective than is usually found in the literature. Since 1960, KSCL has fundamentally altered the Kilombero valley from being a sparsely populated landscape covered in bush and forest where people lived in small hamlets organized around subsistence farming of paddy and maize. The exceptions were a few large sugarcane estates owned by traders of Arab descent and the annual influx of migrant labourers who worked on the estates. During its years as a parastatal and since 1999 as a private company, KSCL has turned this landscape into a huge sugarcane production field, which has attracted thousands of migrants from other regions of Tanzania, generated a dramatic population increase and created a completely new rural economy. Capitalist and commodity-based means of acquiring land have replaced previous forms of non-commercial land acquisition. In this penultimate section, we return to the three perspectives on land and contract farming we reviewed at the beginning of the paper and extract the main lessons from this study.

First, looking at the history of sugarcane contract farming in Kilombero from the perspective of whether holding land has had an effect on participation in contract farming, the answer seems quite straightforward. A few large-scale family estates made up the entire category of outgrowers until 1977, when the opening of K2 caused numerous people with smaller landholdings to become outgrowers as well. The current figures show that, very much in line with the government's original intention, KSCL's outgrower scheme includes households with diverse land holdings ranging from just 1 acre to more than 500 acres. The government's role is unmistakeable. From the very beginning, the appropriation of land to establish KSCL was a private–public joint venture land grab. Over the years, through legislation and political discourse, the government has defined legitimate and illegitimate uses of land in Kilombero. After privatization, the Sugar Board and Sugar Act provided the legal foundations that mitigate investor risk by guaranteeing not only the monopsony status of the company but also the organizational arrangements that relieve it from all direct management responsibilities concerning the outgrowers. In doing so, ever since 1999, the government has been able to maintain that KSCL should not exclude outgrowers because of the limited size of their landholdings.

Second, looking at this history from the perspective of whether participation in contract farming has had any effect on the size of landholdings, the case of KSCL is less straightforward. Evidently, for the thousands of migrants who came to Kilombero after the opening of K1 and K2, the contracting scheme was what motivated and enabled their acquisition of land in the first place. When our data show a high proportion of households with very limited landholdings, it is not because they have lost land due to contracting but rather because they never acquired very much land to begin with. That said, our data also show that dispossession of land has happened in the course of KSCL's history, affecting most dramatically the indigenous people of Nyamvisi who ended up leaving their ancestral lands after the expansion of K2 in 1977. Many villagers in Kitete likewise lost their land to *ujamaa* in 1974 and to K2 in 1977. Arguably, the history of KSCL entails a more indirect form of land dispossession as well. As the land frontiers have been closed since 1999, access to sugarcane land is increasingly a matter of having access to capital either to rent or to buy land. Land is still transferred through inheritance, but the subdivision that usually follows means that more and more households rely on smaller and smaller parcels of land. Such households make up the great majority of households in the four study villages. Some have managed to diversify their economies by combining sugarcane production with wage labour and petty trade. We would argue that most of them struggle to raise the capital needed to invest in sugarcane production, let alone to pay for other expenses. As prices for chemical inputs rise year after year, combined with the risk of harvest failure due to dysfunctional producer associations, the future scenarios available to these households do not appear at all promising. While the recent decades of agricultural and economic growth in Kilombero may not have dispossessed them of their land, they are dispossessed of the capital they need to draw out the "resourceness" of their land (Li, 2014b). This resonates with research emphasizing that land holdings are no good measure of wealth, it is land used (See Howland et al., 2021).

Third, looking at the history of KSCL from the perspective of the role of access to resources for participation of contract farming, the data presented in this paper show that this perspective is increasingly important in the outgrowers' lives. As the studies from India by Singh (2002) and Pritchard and Connell (2011) discussed earlier, this paper emphasizes that, although land ownership is clearly an important factor in the lives and livelihoods of contract farmers, it might not be the most important factor. In the case of the contract farming of sugarcane in Kilombero, land ownership in itself is not enough to secure participation because sugarcane farming depends on the availability of inputs such as fertilizers, insecticides, pesticides, herbicides and, in some cases, access to hired labour—all costly expenses for most households in the area. Furthermore, even if a household has access to the financial capital to cover these expenditures, there is a high degree of risk associated with harvest management because a successful harvest depends on access to and good relationships with association leaders and contractors.

These findings speaks to Bernstein's (2006) argument about the persistence of what he denotes as the agrarian question of labour—the existence of fragmented agrarian "classes of labour" who meet simple reproduction needs through small-scale (petty commodity) farming in combination with a range of temporary wage employment and informal sector activities across different places. Hence, land—and struggles for land—is just one element in the livelihoods of these "classes of labour." Land is of varied significance and this is important to recognize for a materialist political economy that aims to assess development and new forms of struggle in and over a wide range of a socially and environmentally diverse global countryside.

However, an important lesson from this study is the cushioning effect of landownership against immediate dispossession and proletarianization in a situation where renting of land has become a widespread practice. Presumably some kind of transparent and "formal" rules and procedures concerning period of lease, factors for determining rent, return of land to original owner, and so forth have developed in the outgrower scheme and is commonly used. Surely conditions for renting out land are embedded in power relations shaped by the severity of the need for cash by the landowner who gives up the user right for a certain period of time. In that sense control over land resources is lost via an unequal relationship but an immediate shock or crisis is not equivalent to a one-way route of proletarianization. Renting out of land may even be a possibility to maintain access to land resources while pursuing other opportunities, for instance if semi-permanent wage labour should become available.

The importance and effects of an emerging "market" for renting of land on rural social differentiation processes are scarcely examined in relation to contract farming, but further studies may potentially have important policy implications—not only pertaining to contract farming but also to rural development in general. We would argue that the relative stability of the "market" for sugar cane, that is, KSCL as the sole buyer (jointly owned by the state) and the strategic prioritization of the sugar sector in Tanzania (see Sulle, 2017), provides conditions for this kind of mixed land market to develop. Big Growers and resource-rich smallholders are able to accumulate capital on the basis of sugar cane production on a low-risk basis and may use the profit for further expansion of sugar cane cultivation, other agricultural products or diversification of capital into other economic sectors. On the one hand this may potentially stimulate a dynamic regional development process where resource poor or crisis-stricken households have an option to avoid immediate dispossession and perhaps find employment in new activities—agricultural as well as non-agricultural. On the other hand, mono-culture may gradually take over land use, prevent local food crop production and push resource poor households into "commuter farming" if not outright dispossession and migration.

Further research is needed on the reasons for the existence of commercialized land transfers (renting out and direct purchase) in contract farming schemes and their effects on land use, distribution of control over cash crop production and use of surplus at a regional scale. The findings of this study are conditioned by the given particularities of this contract farming scheme: participation determined by territorial limitations (distance and conservation areas), state guaranteed monopsony, the particular nature of the crop (processing requirements), and the social relations embedded in the organization of harvest and logistics. Comparative studies in structurally similar contract farming schemes would help to expose consistency and causality in the importance and meaning of landownership—noting that it probably plays out differently in other kind of contract farming schemes. However, an important message from this study is that even within a particular contract farming scheme, livelihoods in local communities are playing out quite differently depending on original endowments, events and trajectories started before and during previous phases of the scheme. Land is assembled in different ways even at this scale and this diverse pattern is important to acknowledge in order to understand what contract farming means for different people, at different times and in different places.

9 | CONCLUSION

The history of contract farming in Kilombero is a history of the increasing commercialization of agriculture and of the changed social relationships that constitute the agrarian structure in the area. Since 1999, even though KSCL has enrolled thousands of outgrowers in its production, this history has taken a turn towards the marginalization of households without personal connections to local elites or access to financial capital and, simultaneously, a turn towards increasing capital accumulation among a relatively small group of households. It is worth emphasizing that the households that have benefitted the most from KSCL's expansion since 1999—the Big Growers—for the most part already had access to capital when they arrived and started sugarcane production in Kilombero. Significantly, this implies that participation in contract farming is not a sufficient strategy for accumulation for those who do not have initial access to capital, whether their own or via loans.

Another significant finding is the vital role played by the Tanzanian government in the fate of the outgrower scheme and in the continuous process of the private accumulation of capital. As Oya points out (Oya, 2012, p. 27), contract-farming schemes are in many cases only sustainable under monopsony power. Interestingly, the outgrower scheme in Kilombero has been challenged in recent years by the very group that has benefitted most from it, namely, the Big Growers. Several of these growers have demanded that the Sugar Board ends KSCL's monopsony and instead ensures free market conditions by granting them permission to construct their own sugar mills alongside KSCL's K1 and K2. In light of the annual overproduction of sugarcane in Kilombero and devastating examples of harvest failures associated with it, the Big Growers argue that there is a need to increase crushing capacity in the area. They maintain that KSCL would then not need to cut back its production, that the outgrowers would be able to sell all their sugarcane and that Tanzania would become more self-sufficient in sugar supply. So far, the Sugar Board had rejected the Big Growers' wish, although it is unclear whether this is because of the lack of crucial checks and balances in the Big Growers' argument. Surely, it remains to be seen whether the Big Growers are able to realize the "Junker road" towards agrarian capitalism, or whether socio-political forces within the state and/or ruling party will reverse the trend in an effort to maintain political support from the outgrowers.

ACKNOWLEDGEMENTS

This study is part of a collaborative project between Mzumbe University (Tanzania) and the University of Copenhagen (Denmark). The project is entitled "Enhancing Productivity, Market Access and Income of Small farming Business: Potentials and Limitations of Contract Farming" (POLICOFA) and was financed by the Ministry of Foreign Affairs in Denmark (Grant No. 13-P03-TAN). We are grateful for the responsiveness of farmers in Kilombero (Tanzania) with whom we have interacted and interviewed. We also thank the POLICOFA research team for stimulant discussions during our work and to three anonymous reviewers who offered constructive comments and suggestions for improvements of this paper.

DATA AVAILABILITY STATEMENT

Authors elect to not share data.

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How to cite this article: Isager, L., Fold, N., & Mwakibete, A. (2022). Land and contract farming: Changes in the distribution and meanings of land in Kilombero, Tanzania. *Journal of Agrarian Change*, *22*(1), 36–57. https://doi.org/10.1111/joac.12456