**Original Research Article**

**Exploring the Effects of Large-Scale Land Acquisition on Rural Agriculture and Livelihood Sustainability: A Case Study of Kuntanase, Ghana**

**ABSTRACT**

The paper examines the impact of large-scale land acquisition by commercial agricultural investors on livelihoods, land tenure security, agricultural productivity, and food security in Kuntanase, Ghana. Although the study was restricted to Ghana, many countries in Sub-Saharan Africa face similar challenges. Data were collected from 127 households through interviews, focus groups, and questionnaires. Findings indicate that LSLA has greatly devastated agriculture, leading to land loss, reduced farm sizes, decreased production, and changes to petty trade and casual labour. Though there was temporary employment for some members of the community in investment firms, the majority of the jobs were precarious and poorly paid. Additionally, the study illustrates that land dispossession has heightened food insecurity, raised household expenditures, and undermined community solidarity. The paper proposes the demand for greater transparency in land governance, the safeguarding of customary rights to land, equitable compensation mechanisms, and sustainable rural development policies to counter the adverse effects of Large-Scale Land Acquisition (LSLA) in Kuntanase. It contributes to the frontier of knowledge on large-scale land acquisition in the realm of social science, farm expansion, and sustainable food production, offering theoretical intervention to enrich academic debate.

**KEYWORDS:** Effects, Large-Scale Land Acquisition, Agriculture, Livelihood, Ghana

1. **INTRODUCTION**

International land governance has been marked by large-scale land acquisition (LSLA) in the last few decades. Motivated by rising food, biofuel, and raw material and land speculation needs, multinational companies and governments, especially from more affluent countries, have purchased huge tracts of land in the Global South. They are commonly interpreted as attempts to enhance agricultural productivity and food security or stimulate rural development (Deininger et al. 2011; Cotula, 2013). They have, however, been criticised for the negative impact they have on the local population, such as displacement, loss of livelihood, and undermining customary land tenure (Zoomers, 2010; Borras et al., 2011). Sub-Saharan Africa has emerged as a hotspot for LSLA because of its rich soil, poor land governance frameworks, systems, and institutions, and prevalent customary tenure systems. Tens of millions of hectares have been allocated to private investors, typically without the free, prior, and informed consent of the local people. The transactions have contributed to poverty and hunger and triggered speculation on a "new scramble for Africa" (Hall, 2011).

LSLA has accelerated in Ghana since the early 2000s. Foreign and domestic investors have leased out extensive tracts of land for agribusiness, biofuel cultivation, and mining. Even though national policies promote them as drivers of modernisation, research indicates they often marginalise smallholder farmers, destabilise customary land systems, and threaten food security (Schoneveld et al., 2011; Boamah, 2014; Anaafo, 2014). The presence of customary and statutory land systems in Ghana further complicates tenure security. Under the dual land tenure system, customary leaders hold approximately 80% of land and allocate it based on customary practice, with statutory laws governing formal land administration (Ubink, 2009; Kasanga & Kotey, 2001). Such coexistence often leads to overlapping claims and legal uncertainties, thus eroding tenure security, especially among vulnerable populations like women and tenant farmers (Toulmin, 2009; Quan et al., 2008). In Ghana, large-scale land grabs have increasingly disrupted rural agricultural livelihoods, particularly in peri-urban areas. The country's dual land tenure system, blending customary and statutory laws, has made fertile lands vulnerable to commodification, often leading to disputes and displacement (Ubink, 2008). Urban expansion has intensified land speculation, threatening food security and smallholder farmers (Bugri, 2012). Women, integral to subsistence farming, often face greater challenges due to restricted land access (Daley & Englert, 2010). As agrarian communities transition to non-agricultural economies, balancing rural sustainability with economic development remains a pressing challenge (Kasanga & Kotey, 2001; Owusu & Agyei-Mensah, 2011).

These dynamics are evident in Kuntanase, a rural agricultural town in the Bosomtwe District of the Ashanti Region. Large-scale land acquisition around and within the town has only just started to limit access to agricultural land, displace smallholder agriculture, and transform customary landholding practices. This paper explored the manifestation of large-scale land acquisition on rural agriculture and livelihood sustainability. The impact of LSLA on agriculture in Kuntanase is examined here to inform policy discussion on land governance and rural sustainable development in Ghana.

1. **LITERATURE REVIEW**
   1. **Historical Context of Land Acquisition**

Land ownership in Ghana is complex, and it is governed by customary tenure, state intervention, and investor interest. Land is customarily owned by stools, individuals, clans, and families, with purchase, lease, and partnership practices. Customary regimes are predominant informally due to bureaucratic challenges, especially in Wassa Amenfi East and West (Boakye-Dankwah et al., 2024). The administrative issues recognized are lengthy, opaque, and costly land registration processes, overlapping mandates of land sector agencies, absence of coordination between customary and statutory institutions, and a shortage of digitalized land records (Ubink, 2008; Arko-Adjei, 2011). Consequently, many land users bypass formal institutions, opting instead for customary institutions that are viewed as more accessible and flexible. Land commodification and global restructuring have linked Ghanaian land to international capital, especially in forestry and agribusiness. This has disrupted customary land relations and enhanced competition (Amanor, 1999). Agricultural expansion is normally promoted by chiefs and state agencies at the cost of formal procedures, marginalising customary owners and creating avenues for elite capture (Lanz et al., 2018).

Land acquisitions in West Africa, specifically Ghana, Mali, and Nigeria, by foreigners have increased in the form of farm or biofuel projects, with implications of food insecurity and local economic risks (Lanz, 2022; Anku et al., 2022). The majority smallholder farmers are disfranchised, threatening their livelihood (Earth & Environmental Science Research & Reviews, 2020; Quansah, 2021). Increased involvement of both local and foreign investors is indicative of Ghana's complex land buying dynamics. Community-private partnerships favor elites over marginalised groups like poor female-headed households (Lanz, 2022). This reflects how land governance entrenches conflict between development and local livelihoods.

* 1. **Types of Large-Scale Land Acquisitions**

Large-scale land acquisitions (LSLAs) refer to the huge acquisition of land for agriculture, industry, or business by local or foreign firms. They are complex since they occur at many levels of governance, ranging from customary to formal institutions (German et al., 2011). LSLAs are classified by purpose, biofuel, food crops, or agro-industrial production, each of which affects local livelihoods and tenure (Anseeuw, 2012). Agricultural LSLAs direct land use towards areas with open land markets (Appau et al., 2020). Post-acquisition dynamics vary by location. In Kasoa and Teshie, Ghana, multiple sales and weak regulation expose tenure weaknesses (Sparks, 2015; Appau et al., 2020). This erodes local decision-making and power from customary leaders to the state. Foreign and domestic investors impact communities in different ways; notably, local LSLAs can decrease household land investment (Abdallah et al., 2023). Governance, tenure security, and environmental issues continue to be significant.

* 1. **Motivations behind Land Acquisition**
     1. **Global Demand for Biofuels and Food Security**

LSLAs are caused by increased global demand for food and biofuels because of changing markets and energy policy encouraging alternative fuels. Vegetable oil and biofuels are identified by Schoneveld (2011) as key drivers for investing in energy crops. Foreign interest in cultivable land was spurred by the 2007–2008 global food crisis as nations pursued food security in light of escalating prices (Balehegn, 2015). In Ghana, LSLAs occupy 8.6% of the agricultural land, replacing food crops with biofuel, stressing water, and dislocating communities (Kuusaana & Gerber, 2015). Such pressures transform national farming systems (Chapoto et al., 2013).

* + 1. **Government Economic Development Strategies**

Governments play a central role in promoting LSLAs for development. In Ghana, they broker land acquisition to modernise agriculture and to secure investment, commonly favoring investors over customary rights (German et al., 2011). Poor land management enables customary lands to be taken over by the state (Sparks, 2015). Both state and traditional leaders support LSLAs, which results in governance gaps and conflicts (Anku et al., 2022).

* + 1. **Agribusiness Concentration and Market Expansion**

Agribusiness concentration in pineapple and cocoa production leads to land acquisition for competitiveness. Amanor (2012) remarks that global resource capture favors large-scale farmers over smallholders through buying out or displacement. This aligns with a neoliberal agrifood agenda that focuses on export-oriented commercialisation, which pushes actors to buy land for agro-industrial development rather than livelihoods’ subsistence.

* 1. **Large-Scale Land Acquisition, Rural Agriculture, and Livelihood Sustainability**

Over the last decades, large-scale land acquisitions, or so-called "land grabs," have generated serious concerns about rural agriculture and livelihood sustainability. These land acquisitions, which are often fueled by multinational corporations, foreign states, and agribusinesses, are targeted at expanding commercial farming, mining, or urban development. This process, nevertheless, ends up displacing the locals and downgrading the native agricultural processes, thus causing severe economic, environmental, and social effects (Yang & He, 2021). Among the primary effects of land grabs is the displacement of smallholder farmers' farmland. As investors and companies acquire huge areas of land, rural farmers are usually forced off their ancestral lands, thereby depriving them of their primary source of income and food production.

The change from subsistence to export-oriented agribusiness reshapes the rural landscape in that it prefers export crops to local food crops (Mandihlare, 2013). Consequently, this phenomenon leads to reduced food security, as displaced communities are not able to afford foreign food products.

Moreover, large-scale land acquisition is typically accompanied by significant environmental risks. Deforestation, soil loss of fertility, and water scarcity are typical outcomes when natural processes are disrupted to make way for the growth of commercial farming (Mabe et al., 2019). Intensive production methods used by large agribusiness can deplete the soil of nutrients, rendering the land unfertile for subsequent cultivation. The result is that rural farmers who initially depended on sustainable traditional farming have no alternative but to resort to industrialized food systems. Beyond agricultural concerns, land grabs also face severe threats to rural livelihood sustainability. The displacement induced by land acquisitions imposes economic vulnerability on local communities as farmers and indigenous groups lose their homes and source of income (Yang & He, 2021). Foreign investors' assurances of employment fail to materialize, and the displaced individuals are left with no viable prospects for sustainable jobs.

Even in cases where new farm job opportunities are created, they often come with low pay and require specialized training that traditional farmers do not possess. The reduction of local food production as a result of land grabbing exacerbates food insecurity. The communities are rendered unable to access food at reasonable costs, making them dependent on external sources that may cause economic hardship. Cultural heritage and community identity also suffer as indigenous land stewardship traditions are interrupted by corporate ownership of land (Mandihlare, 2013). Erosion of local knowledge and farming practices undermines the resilience of rural communities and diminishes their capacity to adapt to evolving environmental and economic circumstances.

* + 1. **Economic impacts of LSLAs on Local farming**
       1. **Loss of Land and Reduced Agricultural Production**

LSLAs decrease cultivable land for smallholder farmers. Tom-Dery et al. (2023) document in Ghana's Mion District that large-scale agriculture means deforestation and woody vegetation loss, which forces local farmers to curtail or give up farming, thereby undermining food security. Similarly, Degife & Mauser (2017) point to land loss, food insecurity, and displacement in Ethiopia's Gambella region as comparable parallels to risks Ghanaian farmers are exposed to through LSLAs.

* + - 1. **Impact on Agricultural Income and Profitability**

Large-scale land acquisitions (LSLAs) often cause farmers to shift economic activities. D’Odorico et al. (2017) found that contract farming linked to LSLAs offers mixed effects: while it improves future security and assets, agricultural income often falls as farmers move to non-farming work due to limited land access. Abdallah et al. (2023) discuss that LSLAs in Northern Ghana deter land investments and improve returns, even for those with secure tenure, due to fear of loss or diminution.

* + - 1. **Shifts in Livelihood and Asset Holdings**

Dwindling farm revenues force farmers to diversify. D'Odorico et al. (2017) confirmed that contract farming raises non-farm involvement, affecting rural work and social relations. In mining areas, reduced farm size heightens poverty, as Assan and Muhammed (2018) confirmed. These changes threaten customary livelihoods and communal stability.

* + - 1. **Governance, Transparency, and Economic Outcomes**

Poor governance and opacity exacerbate economic issues for farmers. Sparks (2015) reveals how land governance failures in Ghana and the environs subject farmers to dispossession, endangering livelihoods. Antwi-Bediako (2018) establishes that issues of land acquisition are caused by traditional leaders' activities, state failure, tenure insecurity, and land brokers, all have adverse implications for the local economy.

**2.4.2 Social Impact on farming communities**

**2.4.2.1 Displacement and Loss of Ancestral Lands**

Farming communities are frequently uprooted by land purchase, cutting off their connections to ancestral lands that are essential to their social identities. Particularly at risk of upsetting social structures and community ties are migrants and people without official land rights, according to Stenberg and Said (2018). Tensions and disputes over alleged unfair resource appropriation are exacerbated by this displacement. Such disputes are highlighted by Moomen & Yussif (2019) in Ghana's mining regions, where growing mining encroaches on farmlands, intensifying rivalry and upsetting local ties.

**2.4.2.2 Negative Effects on Farming Livelihoods and Household Well-being**

Reduced farmland due to mining and land acquisition forces households to stop farming, increasing the risk of poverty and undermining economic independence and food security (Agariga et al., 2021; Assan and Muhammed, 2018). Economic vulnerability is exacerbated by land loss and environmental harm, particularly for resource-poor indigenous populations. According to Nyantakyi-Frimpong (2020), tenure uncertainties resulting from LSLAs undermine resilience and restrict farmers' capacity to adjust to climate change by eroding indigenous farming traditions.

**2.4.2.3 Social Conflicts and Cultural Impacts**

Social tensions are exacerbated by the quick expansion of commercial mining and agriculture without the required community approval. According to Moomen & Yussif (2019), a lack of equitable engagement and benefit sharing during mining expansions leads to cultural tensions and dispossession. According to Antwi-Bediako (2018), property agreements that disregard the interests of the larger community are driven by chiefs and elites, which heightens conflicts. According to Nyantakyi-Frimpong (2020), a lot of the negative social effects of large-scale land acquisitions go unrecorded, concealing the actual scope of cultural loss and community complaints.

* + 1. **Environmental consequences**
       1. **Land Degradation and Loss of Agricultural Land**

Fertile farmland has been severely degraded and lost as a result of extensive land acquisition and mining operations. According to Agariga et al. (2021), mining in Ghana's Asutifi North District has harmed agricultural output by degrading the soil and lowering crop yields. According to Assan and Muhammed (2018), farming households near mining operations encounter difficulties in crop production and farmland loss. According to Moomen & Yussif (2019), mining developments in northwest Ghana have reduced the amount of arable land available by displacing farms and settlements, increasing flooding, and leaving bare lands behind.

* + - 1. **Deforestation, Biodiversity Loss, and Ecosystem Disruption**

In Gambella, Ethiopia, large-scale agricultural investments have caused extensive deforestation, biodiversity loss, and wetland drainage. Degife & Mauser (2017) highlight how these land acquisitions lead to environmental degradation and harm habitats crucial to local livelihoods. Similarly, Mensah et al. (2015) find that mining in Ghana’s communities results in vegetation loss, disrupted water systems, and soil organism destruction, all impairing ecosystems. Such deforestation threatens biodiversity and ecological balance in both regions.

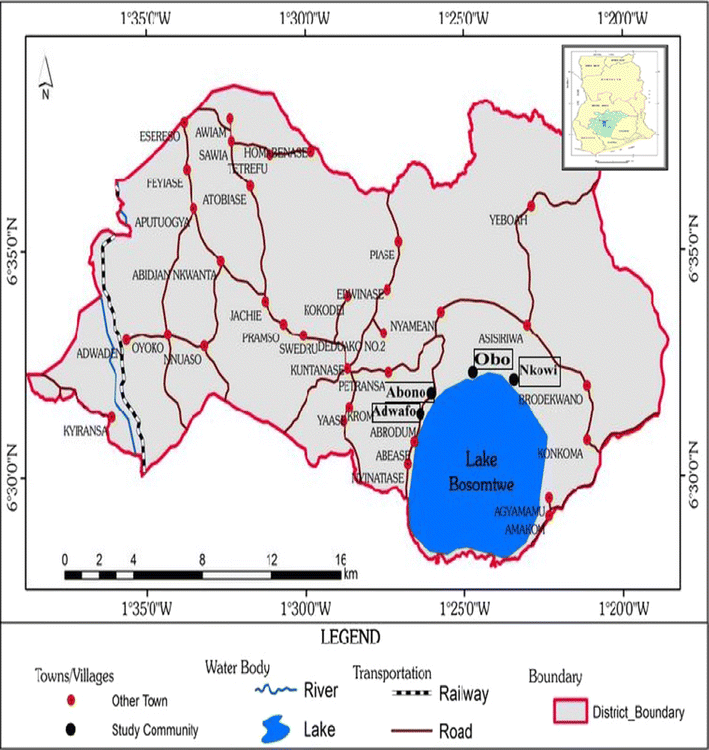
* + - 1. **Water Pollution and Hydrological Impacts**

Mining activities severely harm water quality, creating environmental and public health risks. Mensah et al. (2015) report toxic pollution of rivers in mining areas, especially from mercury used in artisanal mining, harming aquatic life and reducing water for farming and domestic use. Okyere et al. (2021) link mining to water degradation and respiratory illnesses caused by air pollution. Moomen & Yussif (2019) show that vegetation loss and soil disturbance from mining worsen flooding and waterlogging problems.

1. **METHODOLOGY**

**3.1 Study Area Description**

The study was carried out in Kuntanase, a peri-urban area in the Ashanti Region of Ghana, about 30 kilometres southeast of Kumasi. Bosomtwe, covering 718 square kilometres of land, had approximately 165,180 inhabitants as of 2021, with a higher number of females than males (Ghana Statistical Service [GSS], 2021). Kuntanase is experiencing high population growth rates because of urbanisation and migration. Kuntanase, once agrarian, is progressively shifting to non-agricultural economies due to rising land commodification and infrastructure. Being close to Kumasi has made land more valuable, making it attractive to real estate developers and "land grabs" (Owusu & Agyei-Mensah, 2011), encroaching on agricultural land and negatively impacting local agriculture and food security (Bugri, 2012). Kuntanase has a semi-equatorial climate with two rainfall seasons that support the cultivation of maize, cassava, and plantain (Acheampong, 2019). Small-scale agriculture is advantaged by rich soils, but the productivity of agriculture is undermined by large-scale land appropriation and land use transformation (Kasanga & Kotey, 2001). Kuntanase's dual land tenure system merges family and chief ownership with Bosomtwe District Assembly regulation (Ubink, 2008). Land commodification has exacerbated tensions, undermining rural livelihoods and sustainability, and Kuntanase has become a key case for examining the impacts of land acquisition on agriculture.



**Figure 1: Study Area Map**

Source: Adjei, 2017

**3.2 Research Approach**

This study utilised a qualitative case study design to examine local perspectives on land acquisition and its socio-economic impacts. The case study approach was deemed suitable for analysing complex, real-world issues within their specific context, facilitating the exploration of interactions between traditional land governance and contemporary agricultural practices in Kuntanase. A purposive sampling strategy was employed to select 127 participants, comprising local farmers, chiefs, elders, affected community members, and officials from the District Assembly and the Ministry of Food and Agriculture. Data collection methods included semi-structured interviews, focus group discussions, and direct observation. Both English and Twi were used to facilitate participant expression. Field notes and audio recordings were transcribed for analysis. A thematic analysis approach was applied, coding interview data and notes to identify key themes related to land acquisition, community engagement, livelihood impacts, and development perceptions. NVivo software was utilised to support data organisation and systematic analysis. This design provided nuanced insights into the dynamics of land governance and rural development in Ghana.

1. **RESULTS AND DISCUSSION**

## Selected demographic features of Respondents

The study evaluated the principal characteristics of 127 households sampled in Kuntanase through the use of questionnaires and interviews. As indicated in Table 1, 65% of the respondents were male, while 35% were female, reflecting a predominance of male farmers within the community. This gender distribution is also associated with the practice of married women engaging in farming activities alongside their husbands, which may lead to men being more frequently identified as the primary respondents in household surveys. The age of participants in the study ranged from 20 years and above. Among the respondents, 80.8% were married, 9.6% were single, 4.8% were widowed, and 4.8% were divorced. Regarding educational attainment, 31% of the participants had no formal education, 43% had completed primary education as their highest level, 12% had completed secondary education, and 6% had attained tertiary education.

The educational categories were thus divided into four subgroups: no formal education, primary education, secondary education, and tertiary education. Of the 127 respondents surveyed from the community, 46% were natives of Kuntanase, while 54% were immigrants (settlement farmers). Among these, 8% had relocated to Kuntanase less than ten years ago, 51% had been residing and farming in the community for more than ten years, and 41% had been in Kuntanase since birth. Furthermore, 19% of the respondents were aged between 20-30 years, 25% were aged 31-40 years, 26% were aged 41-50 years, 17% were aged 51-60 years, and 13% were aged 60 years and above. These findings reflect the demographic characteristics of the community under study.

**Table 1: Selected Demographic Features of Respondents**

|  |  |  |
| --- | --- | --- |
| **Descriptive** | Category | Percentile (%) |
| Respondents’ Age | 20-30 | 19 |
| 31-40 | 25 |
| 41-50 | 26 |
| 51-60 | 17 |
| 60 and above | 13 |
| Gender of Respondents | Male | 65 |
| Female | 35 |
| Marital Status of Respondents | Married | 80.8 |
| Single | 9.6 |
| Widow | 4.8 |
| Divorced | 4.8 |
| Educational Level of  Respondents | No Formal Education | 31 |
| Primary Level | 43 |
| Secondary Level | 20 |
| Tertiary Level | 6 |
| How long respondents have lived in the area | Less than ten (10) years | 8 |
| More than ten (10) years | 51 |
| Since Birth | 41 |
| Community membership | Native of the Community | 46 |
| Immigrant | 54 |

**Source:** Field survey, 2021.

* 1. **Household Sources of Income**

Table 2 shows the revenue sources of all the households surveyed for this study. The respondents were asked to disclose their sources of revenue in a before and after scenario; thus, before the coming into force of the various companies operating in the local community. The questionnaire aimed at determining the primary income sources of community members. The results from the questionnaire indicate that all 127 respondents surveyed were farmers. However, aside the farming, other respondents had other sources of income to complement the proceeds they got from the farms. One of the respondents when asked why she combines farming with petty trading, currently stated that

‘‘Currently, the size of land I used to farm to produce food crops for both home consumption and commercial purposes has now reduced, and as a result, I need to resort to other sources of income to sustain the house and make a little money for my children and myself. Hence, I go to the farm very early in the morning and by noon to about 1 pm come back to operate as a seamstress’’ Interview, Farmer 1, Kuntanase.

Survey results show that before the arrival of large-scale land acquisition (LSLA) companies, 107 farmers in Kuntanase relied solely on farming for income. This number has since dropped to 71, and those remaining report declining yields, reduced crop variety, and smaller farm sizes. Notably, 56% of farmers are immigrants who must lease land from unaffected native landowners or rely on relatives in nearby villages for farmland. According to D’Odorico et al. (2017), contract farming linked to LSLAs offers mixed effects: while it improves future security and assets, agricultural income often falls as farmers move to non-farming work due to limited land access. Petty trading has become the second most common livelihood, increasing from 17 to 33 households since the LSLA operations began. Women dominate this sector, driven by reduced food crop output that compels them to travel to larger towns like Nsuta to buy goods for resale. Other emerging income sources include charcoal burning, carpentry, masonry, machine operation, and hairdressing. Additionally, 24 households reported at least one member working in local LSLA companies.

Most farmers cultivate food crops such as maize, cassava, yam, plantain, and cocoyam, mainly to feed their households and earn income. All 127 respondents stated that their crops are the primary food source for their families. However, 66% now buy certain food items they used to grow, such as maize, due to reduced land access and production capacity. These findings reflect a clear shift in livelihood strategies, with reduced reliance on farming and a growing dependence on alternative income sources. The loss of farmland and declining crop productivity have significantly impacted household food security and economic stability in Kuntanase.

**Table 2: Source of Income of respondents**

|  |  |  |
| --- | --- | --- |
| **Occupations** | **Frequency Distribution** | |
|  | **Before the operation of companies in the community** | **Currently** |
| Food Crop Farming only | 107 | 71 |
| Petty trade | 17 | 33 |
| Charcoal burning | 30 | 11 |
| Carpenter/ Mason | 3 | 8 |
| Seamstress/ Hairdressing | 3 | 6 |
| Machine operation | 2 | 13 |
| Local company | 1 | 24 |
| **Total** | **163** | **166** |

**Source: Field survey, 2021.**

* + 1. **Effect of LSLA on the level of income of the respondents**

Moreover, results from the survey indicated that the activities of the operations of the LSLA companies in the area has affected the income generation capacity of the community members, since some of the members of the community; especially immigrant farmers have lost some proportions of the lands they used to cultivate and hence this has affected their income generation capacity since the yields that will be gotten from their farm will drastically be affected. One of the interviewed farmers stated that

‘‘I used to harvest about 20 bags of maize during the harvest season, but now l get about 8-11 bags during the harvest season since portions of my maize farm were taken by these investors’’ Interview, farmer 2, Kuntanase.

As illustrated in Table 2, the number of households exclusively engaged in food crop farming in Kuntanase has decreased from 107 to 71, representing a 33.6% reduction. This decline has had a substantial impact on both household food availability and income generation. The primary cause of this reduction is attributed to the activities of firms operating in the region, which have limited access to agricultural land. Abdallah et al. (2023) specifically examine investments in land-improving and yield-enhancing techniques in Northern Ghana, demonstrating that LSLAs discourage household investment in agriculture. Even households with secure perceptions of land tenure reduce inputs, likely due to uncertainties related to potential land loss or decreased land quality.

Charcoal production, previously the second most significant source of income, has diminished by 63.3%, primarily due to restricted land access resulting from land acquisitions. Nevertheless, some households have experienced enhanced income through employment with these companies. Survey results indicate that 25 individuals from the 127 households have obtained gainful employment with investor companies, providing a stable monthly income. Concurrently, there has been a marked increase in alternative income-generating activities. Petty trade has increased by 94.1%, carpentry/masonry by 166%, and machine operation by an impressive 650%. These changes suggest a growing diversification of household income sources in response to shifts in land use and agricultural decline. Overall, while LSLA activities have adversely affected traditional farming and charcoal production, they have also facilitated the emergence of new economic activities within the Kuntanase community.

* + 1. **Household Expenditure**

Household expenditures predominantly focus on the consumption of services and goods, including financial outlays for agricultural inputs, particularly fertilisers, food for domestic consumption, educational fees, utility bills, transportation, and healthcare, among other categories. Notably, food and fertilisers are the most significant items on the expenditure list. The primary expenditures for all surveyed households are food for home consumption and fertilisers for agricultural purposes. During the research period, the majority of household respondents reported an increase in their expenditures compared to previous years, primarily due to purchasing nearly all consumed goods from the market. Survey respondents indicated that the current rise in household expenditures, in conjunction with their limited income, has exerted pressure on their budgets, resulting in indebtedness to various suppliers and acquaintances.

## Employment by the LSLA companies in the Community.

Analysis of the household survey data indicates that 21% of the 127 surveyed households have at least one or two members employed by companies operating within the Kuntanase region. These individuals occupy positions such as out-grower farmers, machine operators, tree planters, or engage in both contract and non-contract farming activities. Further examination reveals that 85% of these workers are employed on a casual or seasonal basis, predominantly during planting and harvesting periods, as exemplified by employment at Kwanmako Farms. Only 15% are employed on a contractual basis, typically serving as farm caretakers or supervisors. Despite initial assurances from investors, chiefs, and stakeholders that large-scale land acquisitions (LSLA) would generate significant employment opportunities, the actual number of residents employed is insufficient to meaningfully enhance household income levels. Moreover, wages for casual laborers are minimal and often unstable. Workers reported earnings on a "work and pay" basis, with some receiving as little as 600 cedis per month, and occasionally less, contingent upon daily work availability. These positions offer limited job security, prompting many to express concerns about meeting household food needs and paying for utilities. Ultimately, while LSLA has created some employment opportunities, the jobs provided are neither sufficient nor reliable enough to mitigate the broader economic challenges resulting from reduced agricultural activity.

## Access to Farmland for Production of Food.

Before the operations of the various companies in the community, many of the community members had access to a vast amount of community land or forest land for farming. However, since the coming into force of the various companies, most of the households have either lost a vast majority or a portion of their lands to some of these organisations, hence affecting their ability to satisfy household food consumption and also produce food for sale.

**4.4.1 Loss of Land and Its Effect on Farmers**

According to Stenberg and Said (2018), farmers without formal land rights are particularly vulnerable to losing their farms, resulting in the disruption of social structures and community ties. Of the 127 households surveyed, 58% reported losing part of their land to investors, while 42% had not lost land at the time of the study. However, 84% of those who had not yet lost land believed that their land was likely to be acquired soon. This growing concern reflects the widespread impact of large-scale land-based investments (LSLBIs) on land access in Kuntanase.

The loss of farmland by more than half of the community has led to severe land scarcity, limiting food crop production for both consumption and sale. Respondents recalled having vast lands before company operations began, often supplying food to relatives in urban areas. Now, reduced land access has significantly diminished food crop yields. A key effect of this is the drop in the number of households engaged in farming from 107 to 71, as indicated in Table 2. This shift has increased household expenditures, particularly on food, as many farmers who once produced their own staples now depend on market purchases. This transformation from food producers to buyers has placed additional financial strain on households and signals deeper concerns about long-term food security and economic resilience in the community.

**4.4.2 Changes in Landholding(acres) Sizes**

As part of the questionnaire, respondents were asked to indicate the size of their lands before 4-10 years ago and in contemporary times. As indicated by Table 3 below, there has been major changes in the size of landholdings by community members.

**Table 3: Changes in landholdings**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Land size (acres**) | **Number of households** | | **Percent*age*** | |
|  | Before 4-10 years ago | Currently | 4-10 years ago | Currently |
| 1-5 | 13 | 40 | 10.2% | 31.5% |
| 6-10 | 32 | 52 | 25.2% | 40.9% |
| 10-25 | 59 | 25 | 46.5% | 19.7% |
| 25-50 | 23 | 10 | 18.1% | 7.9% |
| **Total** | **127** | **127** | **100%** | **100%** |

Source: Field survey, 2021.

As shown in Table 3, before 4-10 years ago, only 10.2% of the respondents owned 1-5 acres of land, that number has increased to 31.5% as at the time of the research, 25.2% of the household owned 6-10 acres of cropland 4-10 years ago, however in contemporary times, 40.9% of respondents’ farm on only 6-10 acres of land. Furthermore, 46.5% of households surveyed farmed on 10-25 acres of land before 4-10 years ago, however, that number has decreased to 19.7% and, 18% of the households had access to 25-50 acres of land for food production, however in contemporary times, that figure has also decreased to 7.9%.

Critically assessing the figures above, it can be deduced that while previously many farmers had access to farm about 10-25 acres of land for household food consumption and sales as a source of income, in contemporary times, due to the loss of some portions of the land they previously had access to for farming, a vast majority of households; about 40.9% now only have access to 6-10 acres of land to produce food for home consumption and sale as well. From the results of the survey, it can be deduced that the activities of LSLA in the community have led to a decline in the available land for food production in the area, resulting in many households now farming on lesser sizes of farmland than they previously used to. This, in turn, has negatively affected the production of food crops in the community.

* 1. **Reasons for the Change in Landholdings**

Responses from the 127 surveyed households reveal significant changes in landholding sizes due to various causes. Notably, 47 households reported that their farmlands were taken by an organization without consent or compensation. Another 16 households attributed changes to sharing land with relatives, while 6 said they consented to the acquisition and received compensation. Additionally, 5 households sold land to private individuals or groups, 7 reported lands taken by overseas individuals (referred to as ‘borga’), and 3 were unaware of who authorised the land transfer.

Table 4 shows that 33.9% of respondents experienced no change in land size, mostly among native residents with access to family land. However, settler farmers mostly immigrants were most affected, as they typically lease forest lands or farmland from local leaders. Among the 12.6% who shared land with relatives, most did so to support affected family members. Farmers reported that many were not informed during the land acquisition process. Some only learned of it days before operations began, and several experienced the destruction of crops during land clearing leading to major financial losses. Before the land acquisitions, farmers cultivated fertile forest land for food production without drastically altering land use. Now, some of these lands are being used for timber or plywood production. This shift has reduced the size of land available for food crops, negatively affecting both food yields and household consumption. Respondents expressed deep concern over the conversion of fertile food-producing land to non-food uses, exacerbating food insecurity in the community.

**Table 4: Reasons for changes in landholdings**

|  |  |  |
| --- | --- | --- |
| **Primary Causes for Change in Landholdings** | **Frequency** | **Percent*age*** |
| Shared with my family relatives | 16 | 12.6% |
| Sold to a group or an individual | 5 | 3.9% |
| Taken by an organisation with no compensation and without my consent | 47 | 37% |
| Taken by an organisation with compensation paid, and with my consent | 6 | 4.7% |
| Taken by ‘Borga’ | 7 | 5.5% |
| Don’t Know | 3 | 2.4% |
| No Change in Landholding | 43 | 33.7% |
| **Total** | **127** | **100** |

Source: Field survey, 2021.

## Factors Affecting the Production of Food in the Community

This study examines the current factors affecting food production in Kuntanase, based on responses from 127 surveyed households, as detailed in Table 5. The most commonly reported constraint was insufficient farmland, cited by 96.9% of respondents. This was followed by a lack of capital, affecting 87.4% of households. Declining soil fertility was also a major concern for 75.6% of respondents, with many farmers unable to afford the increasingly expensive fertilizers needed to sustain productivity. Additionally, 48% of respondents reported difficulties in selling their produce, particularly cassava, which is widely cultivated and often oversupplied. In some cases, farmers returned from the market with unsold goods. A smaller proportion (12.6%) mentioned that conflicts with local companies had negatively impacted their farming activities.

Several respondents expressed a willingness to relocate to nearby villages for farming if they had access to sufficient capital. Although labor was generally available, underemployment remained an issue due to a shortage of job opportunities. Importantly, water was not considered a constraint, as the community has abundant water resources. In summary, the key barriers to food crop production in Kuntanase are limited land, lack of capital, declining soil fertility, and poor market access, particularly due to fertilizer costs. Addressing these challenges could enhance food security and improve household livelihoods.

**Table 5:** Factors affecting food production**.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Factors** | **Yes** | **Percentage** | **No** | **Percentage** |
| Insufficient Lands | 123 | 96.9% | 6 | 4.7% |
| Lack of Capital | 111 | 87.4% | 10 | 7.9% |
| Difficulty in selling farm produce | 61 | 48% | 65 | 51.2% |
| Soil Fertility Decline | 96 | 75.6% | 27 | 21.3% |
| Land Conflict with the Company | 16 | 12.6% | 109 | 85.9% |

Source: Field survey 2021.

* 1. **Food Accessibility Concerns.**

As part of the survey, respondents were asked ‘whether it has been difficult to access food in the past few months to satisfy household food consumption.’ Out of the 127 respondents, 64 (50%) households answered no, and 57 (45%) respondents affirmed that accessing food in the community has been difficult over the past few months, and 6 (5%) respondents mentioned sometimes, as shown in Figure 2. Out of the 57 respondents who responded ‘Yes’, approximately 66% reported having had scenarios where the whole household had gone a whole day without food because there was neither food available at home nor any money to buy food from the market.

It was deduced that the issues about the availability of food for household consumption are often associated with poverty or as a result of the lack of household income. Although the respondents who responded ‘No’ (50.4%) to difficulty in accessing food are more than the respondents who responded ‘Yes’ (44.9%). It can be deduced that, should the current happenings in the community go on unchecked, it’s only a matter of time before large sections of the community experience severe food security concerns. One of the respondents of the survey stated that;

‘‘These days, although my family and I eat every day, the food we get now is not as sufficient as in the past. We hardly have enough food at home’’ interview, Farmer 3, Kuntanase.

**Figure 2: Difficulty in accessing food**

Source: Field survey, 2021.

* 1. **Future Operations of LSLA in the Community**

The various households surveyed were asked by the researcher to indicate whether or not they were happy with the LSLA companies operating in their community, and the results are indicated in Table 6. Respondents (88%) responded not happy with the LSLA firms operating in the community of Kuntanase, while 12% communicated that they were happy with the operations of the companies and that they should continue their operations in the area. The difference between the 88% who said ‘No’ and the 12% who said ‘Yes’ can be attributed to individual gains that a certain portion of the community members derive from the operations of some of these firms

As shown in Table 6, approximately 41% of the households stated that the LSLA firms in the area should take part in the land available in the community and give back the remaining land. While 26% of the responded saying they wished the LSLA companies operating in the community ‘pack their bags and leave the community, handing back the land to them’ The other respondents selected options such as ‘They should continue working’, ‘they should deliver their promises’ while others responded that the firms should create employment opportunities for the community members.

**Table 6: Future Operations of LSLA in the Community**

|  |  |
| --- | --- |
| **Are the community members happy with the operations of the companies?** | **Respondent** |
| Yes | 12% |
| No | 88% |
| ***Total*** | **100%** |
|  |  |
| **Respondents were allowed to choose at most two 2 options** |  |
| They should take part of the land and leave some for us | 41% |
| They should hand back the lands and leave | 26% |
| They should employ more of our community members | 12% |
| They should keep their promises | 15% |
| They should continue their work | 6% |
| **Total** | **100%** |

Source: Field survey, 2021.

1. **SUMMARY OF FINDINGS**

This paper examined the effects of large-scale land acquisitions (LSLA) on farming in Kuntanase. Findings show LSLA has drastically altered the traditional farming system, with over half of local farmers losing land to investors. This has led to reduced farm sizes, lower agricultural output, and declining household incomes. Farming, once the main livelihood, has diminished, forcing many to seek alternative jobs such as small-scale trading, machine operating, or casual labor for LSLA companies. However, these jobs are often seasonal, low-paying, and offer little financial security.

The decline in farming has also caused a rise in household expenses, especially for food and farming inputs, as families now rely more on the market. Many respondents reported experiencing food insecurity, raising concerns about future food availability. Although a few farmers received compensation for lost land, most were either uncompensated or only informed after land deals were finalised, indicating a lack of transparency and fairness in the acquisition process. Key challenges to food production include limited farmland, insufficient capital, reduced soil fertility, and market barriers. Overall, the study concludes that LSLA has had severe negative impacts on agriculture, food security, and the socio-economic well-being of households in Kuntanase.

1. **CONCLUSION AND RECOMMENDATIONS**

The paper assessed the effect of large-scale land acquisitions (LSLA) on farming activities in Kuntanase, proving that LSLA has highly disrupted farmers' livelihoods in the community. More than half of the respondents pointed out that they have lost portions of their lands to investors, leading to a remarkable reduction in landholding size, farm productivity, and income for the households. Most farmers who had hitherto depended on agriculture alone have had to diversify into small-scale trading and other non-farming activities in a bid to keep their families afloat. While some members of the community secured formal employment with LSLA companies, it was largely seasonal, casual, and lowly remunerated, leading to scant reward in relation to the severe loss of agricultural livelihoods. The expansion in family consumption, particularly of food and agricultural inputs, also stretched family budgets, and therefore raised the amounts of borrowing and added to the growing problems of food insecurity among the population.

In view of these observations, there is an urgent need for the protection and reinforcement of land rights to avert the uneven acquisition of agricultural land through lack of consultation and compensation. Effective and inclusive community consultation by harnessing social license to operate, and involving women in decision-making process must be made a precondition to any prospective land agreement, accompanied by equitable and prompt compensation packages being extended to the impacted farmers. The support of alternative livelihood schemes, the provision of access to affordable credit and farm inputs, and the regulation of LSLA firms to guarantee their commitments to communities are required actions to buffer the observed negative impacts. Furthermore, some of the lands bought up must be reclaimed or ceded for community-driven agriculture ventures to protect food security, and regular tracking of LSLA impacts must be institutionalised to guide policy responses. The strengthening of community education and advocacy concerning land rights will also further empower farmers to negotiate better in future land deals and protect their interests. Addressing these critical concerns will be crucial to the revival of the socio-economic well-being of the people of Kuntanase and ensuring sustainable rural development in the backdrop of large-scale land purchases.

**Consent**

As per international standards or university standards, Participants’ written consent has been collected and preserved by the author(s).

**DISCLAIMER (ARTIFICIAL INTELLIGENCE)**

Author(s) hereby declare that generative AI technologies such as Large Language Models, etc. have been used during the writing or editing of manuscripts. This explanation will include the name, version, model, and source of the generative AI technology and as well as all input prompts provided to the generative AI technology

Details of the AI usage are given below:

The authors hereby declare that Grammarly was used for grammar check during the editing of this manuscript.

**Conflict Of Interest Statement**

The authors do not know of any conflicts of interest associated with this publication, and there has been no significant financial support for this work that could have influenced its outcome.

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