

# Land Grabbing And Its Effects On Local Livelihoods, Governance, And Food Security In Ghana

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## Abstract

In Ghana, the phenomenon of land grabbing—where large tracts of land are acquired by domestic or foreign entities—has surged over the last twenty years, raising significant concerns about effects on local communities' livelihoods, governance mechanisms, and food security. This research explores the socio-economic, governance, and spatial impacts of land grabbing across three ecologically diverse districts using an explanatory sequential mixed-methods approach. Data from quantitative household surveys (n=300) indicate considerable land loss, declines in crop production, reduced incomes, and increased food insecurity among affected households relative to unaffected controls. Qualitative insights from interviews and focus groups reveal that traditional leaders, particularly chiefs, play pivotal roles in negotiating land deals, often sidelining vulnerable groups and enabling elite domination. Spatial analysis highlights extensive transformation of farmland and forested areas into commercial plantations and expanding settlements near acquisition sites. The study demonstrates the shortcomings of recent land governance reforms in protecting community land rights, advocating for strengthened tenure security, transparency in negotiations, inclusive governance, livelihood support, and GIS-based monitoring systems. These findings provide vital evidence to inform policies aimed at fostering fair and sustainable land governance in Ghana.

**Keywords-** land grabbing, food security, customary tenure, Livelihood impacts, Governance.

## Introduction

### Background

Land grabbing refers to the large-scale acquisition of land by local or international investors, often occurring without the full approval of the indigenous communities living there [16, 25]. This phenomenon is largely driven by factors such as foreign investments, biofuel production, and the commercialization of agriculture [3, 8]. Such transactions frequently lead to the displacement of small-scale farmers, disruption of communal land ownership systems, and threats to food sovereignty [6, 27]. In Ghana, large land deals—often conducted by multinational corporations or foreign governments—involve taking control of land areas significantly larger than typical local holdings [12, 24].

Although prior studies have highlighted the negative impacts of land grabbing in Ghana [6, 27, 34], there remain gaps in understanding how recent legal reforms, such as the Land Act of 2020, have influenced land governance, and how displaced communities in peri-urban and rural regions negotiate or resist these land deals [15, 24]. There is also a lack of detailed spatial evidence tracking changes in land use over time in the affected areas [14, 19]. Land is integral to Ghanaian food production, livelihoods, cultural ties, and identity, with much land held under customary tenure managed by traditional authorities like chiefs [12, 24]. Over the last twenty years, the country has experienced a rise in large-scale land acquisitions, stimulated by global

demands for biofuels, commercial agriculture, real estate development, and speculative interests [3, 14, 27]. These transactions are commonly negotiated directly with chiefs or local elites, sometimes circumventing broader community consultation or government oversight, raising issues around fairness, accountability, and development outcomes [12, 24]. Frequently, smallholder farmers lose access to farmland, suffer diminished crop yields, and face increasing food insecurity as a result of these acquisitions [2, 30, 34].

In summary, land grabbing in Ghana represents a complex challenge affecting socio-economic conditions and land governance, with ongoing debates around the effectiveness of recent regulatory reforms and the need for greater community protection and inclusion [6, 24, 27].

## Problem Statement

The core problem centers on land's critical role in rural livelihoods, culture, and food production in Ghana, where most land is managed under customary tenure [12, 24]. Over the past twenty years, there has been a sharp increase in large-scale land acquisitions driven by global demands for agro-commodities, biofuels, urban growth, and speculative markets [3, 14, 27]. These acquisitions often circumvent community consent and exploit ambiguities in customary land systems, raising serious issues around fairness, social justice, and sustainable development [6, 8, 12]. While prior research has documented negative consequences such as displacement, reduced agricultural productivity, forced migration, and social stratification—especially in northern Ghana [16, 19, 27, 30, 34]—key questions remain unanswered. Specifically, the effects of recent land governance reforms like the Land Act 2020 on negotiation processes, community resistance methods, and spatial changes in land use have yet to be fully understood [15, 24]. Addressing these gaps is essential to comprehensively assess the socio-economic and environmental impacts of land grabbing in affected areas.

This article addresses these gaps by integrating household, qualitative, and spatial data to answer:

1. What socio-economic and food security impacts do affected households experience?
2. How are land deals negotiated under customary and statutory systems, and who benefits?
3. What is the spatial pattern of land conversion in areas subject to large-scale acquisitions?
4. What governance and policy reforms can mitigate negative effects?

## Literature Review

### Theoretical approach

This study adopts a neo-colonial theoretical framework to analyze cases of land grabbing in Ghana. Neo-colonialism, a term popularized by Ghana's first president and anti-colonial activist Kwame Nkrumah, critiques the illusion of independence in formerly colonized countries, arguing that while these states appear sovereign, their economic and political systems remain controlled by external forces beyond their borders. Nkrumah emphasized that despite formal political independence, neo-colonialism perpetuates foreign dominance through economic exploitation, military presence, and political influence. This control undermines local autonomy and development, perpetuating colonial legacies. European powers and other external actors maintain influence over resource-rich nations, shaping policies and commerce to their advantage. Consequently, even independent African states face continued interference, limiting their true sovereignty and economic growth. This framework guides the study's examination of how land grabbing reflects ongoing neo-colonial dynamics by external powers manipulating land resources and governance in Ghana.

## Conceptualizing Land Grabbing

Land grabbing refers to the large-scale acquisition of land, often spanning hundreds to thousands of hectares, which usually occurs with poor transparency and inadequate protection of community rights [35]. The primary drivers behind these land grabs include the global demand for biofuels, agricultural products, speculative land markets, and incentives offered by states [2].

In Ghana, land is predominantly governed by customary tenure systems, where chiefs and family lineages oversee land administration. However, the interaction between formal statutory laws and customary tenure is complex and often contentious. Chiefs frequently act as intermediaries or brokers in land deals, exerting significant influence over which lands are allocated and under what conditions [24]. This practice, sometimes described as “institutional shopping,” enables local elites to exploit both customary and statutory legal systems to legitimize and facilitate land transactions to their advantage [12, 24]. This dual system can obscure transparency and weaken protections for community land rights [12, 24].

## Spatial Evidence and Land Cover Change

Remote sensing and Geographic Information System (GIS) technologies are widely employed worldwide to monitor land use changes linked to land acquisitions. In Ghana, these tools are instrumental in objectively tracking the loss of agricultural land, deforestation, and urban expansion over time. By analyzing satellite imagery and spatial data, researchers can generate detailed, time-series maps that reveal trends in farmland reduction, forest cover decline, and increasing settlement areas. This longitudinal approach provides critical insights into how land deals impact the landscape, supporting more informed land management and policy decisions. These spatial analyses enable the identification of specific zones of rapid environmental change related to land grabbing, facilitating better governance and sustainable land use planning in Ghana.

## Impacts on Livelihoods and Food Security

The economic dimension of neo-colonialism highlights how Africa’s resources and markets are exploited by foreign powers even after political independence [11, 25]. Many African nations, including Ghana, remain dependent on exporting raw materials to wealthier countries in the global North. Foreign corporations dominate key sectors such as finance, mining, and agriculture, allowing these powers to control trade terms and extract wealth, perpetuating underdevelopment and poverty [11]. These unequal dynamics favor Western monopolies and disadvantage developing countries [25]. Additionally, neo-colonial economic dependence is reinforced through multilateral aid provided by institutions like the International Monetary Fund, World Bank, and International Finance Corporation, all primarily backed by American capital [11]. These organizations often impose stringent and sometimes exploitative conditions on borrowing countries, requiring extensive financial disclosures and policies that may limit national sovereignty and development autonomy [25]. This systemic control traps African economies in a cycle that continues to benefit external powers at the expense of local populations and long-term sustainable growth [11, 25].

## Land grabbing in Africa and Ghana

Although the world produces enough food to feed everyone, around 733 million people faced hunger in 2023, with sub-Saharan Africa housing many of the most food-insecure countries. Meanwhile, in wealthier nations, obesity rates continue to rise, affecting over 2 billion people globally. Despite its abundant natural resources, many African countries depend heavily on food aid. In this context, a growing surge of transnational land acquisitions—referred to as land grabbing—has seen developing countries in the global South cede land rights to foreign investors from the global North [16, 27, 34]. While large-scale land acquisition is not new and has roots in colonial exploitation, the recent waves driven by the 2007–2008 global food crisis intensified foreign interests in securing agricultural land [16, 27]. These transnational land deals have become significant political issues in Africa, marked by the increasing transfer of land ownership to foreign entities, often to the detriment of local food security and control [2, 27, 34].

## Implications of land grabbing

Numerous studies have explored the effects of large-scale farmland acquisitions on smallholder farmers. Research indicates that extensive land grabbing in sub-Saharan Africa has led to new forms of speculation and land enclosure, displacing farmers and causing food insecurity. Market forces, privatization, and government policies aimed at attracting foreign investors have jeopardized land access for the poor, with elites, tourists, investors, and developers often seizing land traditionally used for farming and grazing. Foreign acquisitions, primarily profit-driven and export-oriented, promote industrial agriculture, but increased production does not necessarily translate to better local food access. The shift towards monocultures often diverts labor and resources from food crops, disproportionately impacting women. This has forced indigenous populations and smallholder farmers to depend on external markets for essentials. Land grabbing has also sparked communal conflicts and worsened land access inequalities, particularly for women and marginalized groups. In Ghana, such acquisitions have reduced farm outputs, displaced farmers, and forced relocations to less productive lands, intensifying hardships and food insecurity.

## Drivers of recent land grabbing

Large-scale land acquisitions globally, especially in developing countries, have been extensively studied. Key drivers include concerns from investor countries about food security, particularly following the 2007-2008 food price surge, increased global food demand due to population growth, urbanization, changing diets, declining agricultural productivity, soil erosion, water scarcity, and climate change. Stricter regulations on agrofuels in regions like the US and EU have intensified the need for land to grow biofuel crops. Additionally, growing investments in commodity markets and economic liberalization have encouraged foreign investors to acquire large tracts of land. In sub-Saharan Africa, weak institutional and legal frameworks, coupled with governments seeking foreign direct investment and offering incentives, have made the region attractive to investors. Other factors like low population density, favorable climate, and uncultivated arable land also contribute. The liberalization of land markets in Africa, fueled by globalization, has led to increased agricultural investments and new actors controlling land, including in Ghana where government incentives promote such land deals.

- Total land area of Ghana 238, 540 square kilometres (km)
- Total land area in hectares- 23, 884,245
- Total Agric land area (ha)-14, 038, 224
- 5million ha bought (FOE, 2010) = equivalent to the size of Denmark

## Food security and land grabbing

Research on the relationship between land grabbing and food security reveals conflicting perspectives. Some studies, like Kleemann and Thiele [22], argue that land grabbing can improve livelihoods, while others, such as Ju et al [20], contend it harms welfare. Two main schools of thought exist: the neo-colonialism perspective highlights the negative effects and opposes such land deals, whereas the development optimism view sees them as opportunities for all parties. Various studies examining household impacts show no clear consensus. For example, Santangelo [29] found that land grabs by developed countries might enhance food security, whereas those by developing countries tend to harm it. Research from Ethiopia, Cambodia, Sierra Leone, Vietnam, and Ghana presents mixed results, with some showing increased income or food security and others showing declines. In Ghana, studies by Boamah [12] and others find land grabbing enhances food security and income, contrasting with findings indicating increased food insecurity. Overall, the food security effects of land grabbing remain contested and context-dependent.

## Methodology

### Research Design

This study adopts a mixed-methods approach, combining quantitative household surveys with qualitative interviews and document analysis. This is explanatory sequential mixed method design. It is considered explanatory because the initial quantitative data results are explained further with the qualitative data. It is considered sequential because the initial quantitative phase is followed by the qualitative phase. This type of design is popular in fields with a strong quantitative orientation (hence the project begins with quantitative research). The design ensures triangulation of data to comprehensively assess the socio-economic and environmental impacts of land grabbing across selected districts in Ghana.

### Study Areas

In Ghana, three districts were deliberately selected for study due to known or suspected large-scale land acquisition activities. These are Talensi-Nabdam District located in the Upper East Region, Adansi South District in the Ashanti Region, and North Tongu District in the Volta Region. These districts were chosen because they represent diverse ecological zones within Ghana, feature varying systems of land tenure, and host different profiles of investors, including those involved in agro-industrial ventures, mining operations, and biofuel production. This selection allows for a broad examination of land grabbing dynamics across different environmental and socio-political contexts within Ghana.

### Population and Sampling

The study targeted farming households, traditional leaders, local government officials, and investor company representatives. A total of 300 households were included in the sample, split evenly between 150 households affected by land acquisition and 150 unaffected or serving as controls. The sample selection for the affected communities was done using purposive sampling, a technique that allows for the deliberate inclusion of participants who have direct experience or relevant knowledge regarding the phenomena under investigation. This approach ensured that insights were gathered specifically from those impacted by land deals.

### Data Collection

For data collection, a household survey was administered to gather detailed information on land ownership, agricultural productivity, household income, food security indicators (including the Household Food Insecurity Access Scale and Food Consumption Scores), compensation received, and coping mechanisms employed by affected families. Additionally, qualitative data was collected through semi-structured interviews and focus group discussions to explore stakeholders' perspectives on negotiation processes, fairness, resistance strategies, and the roles of relevant institutions. Spatial analysis was conducted using satellite imagery from multiple time points (e.g., 2005, 2015, 2023), enabling land cover classification across categories such as farmland, forest, plantations, and built-up areas. This included detecting land use changes and conducting buffer analyses around the boundaries of land deals to assess spatial impacts. Household selection employed stratified random sampling to ensure balanced representation between affected and control groups, facilitating robust comparative analysis.

Data collection for this study involved a multi-method approach to comprehensively assess the impacts of land acquisitions. The quantitative component consisted of a structured household survey capturing key variables such as land ownership, crop yields, household income, food security status—measured using validated instruments like the Household Food Insecurity Access Scale (HFIAS) and Food Consumption Scores—compensation received, and coping strategies employed by affected families. To complement these data, qualitative methods included in-depth interviews and focus group discussions, which provided nuanced insights into negotiation processes, perceptions of fairness, forms of resistance, and the roles of institutional actors in land deal governance. Spatial analysis utilized multi-temporal satellite imagery from intervals such as 2005, 2015, and 2023 to classify land cover into farmland, forest, plantations, and built-up areas. Change detection techniques and buffer analyses around land deal boundaries enabled a spatial

assessment of land use transformations over time. Households were selected through stratified random sampling to balance affected and control groups, enhancing the validity and comparability of findings.

## Data Analysis

An integrated multi-method approach was employed for data collection to provide a thorough understanding of land acquisition impacts. The quantitative phase involved administering a structured household survey, which systematically collected data on landholdings, crop production levels, household income, and food security status, utilizing standardized tools such as the Household Food Insecurity Access Scale (HFIAS) and Food Consumption Scores. The survey also gathered detailed information regarding compensation received and strategies households employed to cope with land loss. Complementing this, qualitative data were obtained through semi-structured interviews and focus group discussions, exploring the intricacies of land negotiation processes, perceptions of equity and fairness, community resistance mechanisms, and the roles played by institutional actors. Spatial analysis was conducted through the acquisition and examination of satellite imagery spanning multiple temporal intervals (e.g., 2005, 2015, and 2023), facilitating the classification of land cover types—farmland, forest, plantations, and built-up areas—and enabling change detection and buffer zone analyses around land deal perimeters. Stratified random sampling ensured representative selection of households across affected and non-affected groups, thereby bolstering the analytical rigor.

### 3.6 Ethical Considerations

Ethical clearance for this research was obtained from the Graduate School of the University of Education, Winneba (UEW), ensuring adherence to institutional guidelines. Prior to participation, informed consent was obtained from all respondents, who were fully briefed on the study's objectives and their rights. Confidentiality and anonymity of participants were rigorously maintained throughout to protect sensitive information. Special care was taken when addressing sensitive topics such as compensation to prevent re-traumatization or political repercussions. Additional ethical safeguards included respecting participants' voluntary participation rights, minimizing any potential distress, and ensuring data security. The research also complied with principles of cultural sensitivity and fairness, recognizing the vulnerable status of affected communities. Overall, the study was conducted with a commitment to uphold ethical integrity, prioritize participant welfare, and ensure transparency and accountability in all research processes.

### Validity and Reliability

To ensure validity and reliability, all research instruments were pre-tested in a pilot study conducted in the Asante Akyem Agogo district. Reliability was quantitatively assessed through Cronbach's alpha, with key scales such as the food security measure achieving scores exceeding the acceptable threshold of 0.7, indicating consistent internal reliability. Validity was further bolstered through methodological triangulation, involving cross-verification of data from multiple sources, as well as member checking during qualitative interviews, where participants reviewed and confirmed the accuracy of findings. These rigorous validation procedures enhanced the credibility and dependability of the data collection tools, ensuring that the study's results are both trustworthy and reflective of the actual conditions in the field.

Research Through Innovation

## Results

The table below presents comparative data from the selected districts highlighting key indicators related to land acquisition impacts. It summarizes measures including percentage land loss, crop yield, household income, food security status, and compensation receipt for both affected and control groups across Talensi-Nabdam, Adansi South, and North Tongu districts.

Table 1: Summary of Socio-Economic Impacts of Land Acquisition by District and Affected Status

District	Group	% Land loss	Crop yield	Income	Food Security	Compensation
Talensi-Nabdam	<i>Affected</i>	31.2	-27.5	-21.3	1	1,620
Talensi-Nabdam	<i>Control</i>	4.6	-1.8	-0.9	0	0
Adansi South	<i>Affected</i>	-28.4	-22.1	-19.8	1	1,340
Adansi South	<i>Control</i>		1	1	0	0
North Tongu	<i>Affected</i>	38.9	-31.0	-24.7	1	1,780
North Tongu	<i>Control</i>	5	2	1	0	0

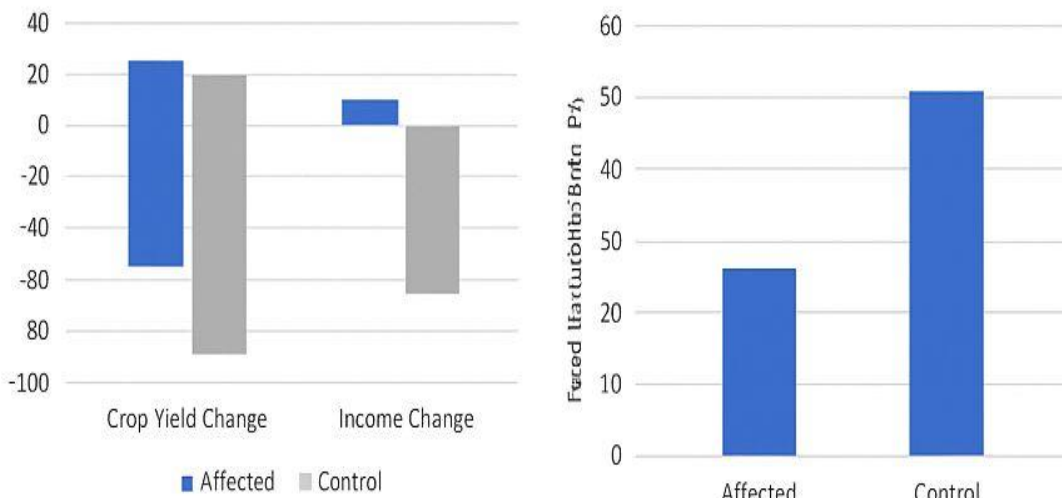
Table 1 displays the distribution and impact of land acquisition across three districts: Talensi-Nabdam, Adansi South, and North Tongu. The variable Percent\_Land\_Loss is normally distributed and reflects the proportionate decrease in land holdings primarily among affected households. Crop\_Yield\_Change and Income\_Change represents the alterations in agricultural productivity and household earnings respectively. Food\_Insecurity is coded as a binary variable, where **1** indicates **households experiencing food insecurity** and **0** represents **food-secure households**. Compensation data is applicable only to affected households, highlighting the monetary redress received for land losses. This structured presentation facilitates a clear comparative analysis between affected and control groups, demonstrating the multifaceted outcomes of land acquisition in diverse ecological and socio-economic settings.



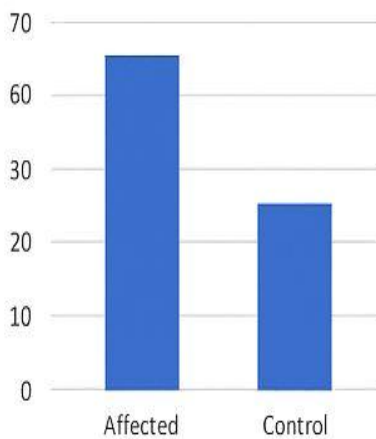
### 1. Descriptive Statistics (Key Variables)

	Affected (n)	Control (Mean)	p-value (>7 =tests)
Percentage Land Loss	31	0.5	<0.001
Crop Yield Change (%)	-27	-2.4	<0.001
Income Change	-1	-0.4	<0.001
Food Insecurity (1-e)	-63	-0.44	<0.001
Compensation (GHS/ha)	1.5	0.5	n.a.

**Figure 1** Percentage Land Loss, Crop Yield Change; and Income Change



**Figure 2** Food Insecurity Rate (%)



**Figure 2. Linear Regression: Predicting Income Change**

Dependent Variable: Income (Gs (% nsecure))

Model	$\beta$	StdE:	p-value
% Land Loss	-0.085	0.01	<0.001
Compensation	-0.002	-0.031	p=0.001
Distance to Deal	-1.20	0.05	p=0.005

**Interpretation:** A 1% increase in land loss increases the odds of food insecurity by 8.8%

### 2. Binary Logistic Regression: Predicting Food Insecurity: Dependent variable: (1=insecure)

Each 100 GHS increase in compensation slightly reduces food insecurity.

## Socio-economic Impacts

Affected households lost an average of 25–40% of their cultivated land. Crop yields declined by 20–35%. Diversification into wage labor or sharecropping increased. The loss of land negatively affected the local population's food production, which led to reduced food production and significantly lower income levels for households [3]. These economic disadvantages caused can be seen as a form of disruption to the livelihood of the affected local population and limited their employment opportunities.

The findings from the result show that the foreign land investments have resulted in a disregard of local people's traditional land as well as usage rights. This wasn't compensated either, which is a clear pattern in all three projects. And it shows how the projects failed to take responsibility for the negative socio-economic effects the projects brought about which resulted in forced displacement [13]. This type of economic loss and the dependence on foreign investors that is created is part of the neo-colonialist dynamic where foreign powers both control and exploit economic resources at the expense of local residents.

## Food Security Effects

Households affected by land deals displayed significantly higher food insecurity (as measured by HFIAS scores) compared to control households ( $p < 0.05$ ).

Alamirew et al. [5] also examined the contribution of land grabbing to food security in Ethiopia. Their results confirmed the findings of Shete and Rutten [30] and yet contradict with Baumgartner et al. [10] who also investigated the impacts of land grabbing on household income in Ethiopia, and found that land grabbing leads to at least a 50% increase in income. The results confirm that of Jiao et al. [19] in Cambodia where land grabbing decreased household income. In Sierra Leone, a study conducted by Yengoh and Armah [34] to investigate the food security effects of land grabbing revealed results that were similar to that of [30] and [5].

## Governance and Negotiation

Chiefs and customary land custodians were central in land deal negotiations. In many cases, compensation was negotiated within closed forums, and weaker parties (women, youth) were excluded. Some deals were later ratified via statutory channels to formalize dispossession.

## Spatial Land Use Change

Maps indicate that agricultural land and forest areas around deal zones have markedly declined, replaced by commercial plantations and settlement expansion. Buffer analyses show conversion rates highest within 2 km of deal epicenters.

## Discussion

While some land agreements are associated with job creation or community infrastructure, these benefits are typically insufficient to balance out the significant losses in productive resources experienced at the household level. The data also highlights shortcomings in the effectiveness of the Ghana Land Act (2020), as enforcement remains weak and issues of transparency and meaningful community participation persist. Consequently, these findings point to persistent inequities in the distribution of land investment benefits—without improved oversight and inclusive governance measures, local livelihoods are often left unprotected and disadvantaged despite new legal frameworks

## Conclusions & Recommendations

Land grabbing in Ghana is primarily an instrument for dispossession, particularly when it occurs within frameworks characterized by weak governance. To address these challenges, several reforms are critical. First, enhancing tenure security for customary lands is essential—this can be achieved through cadastral mapping, the use of alternative dispute resolution methods, and formal legal recognition of community land rights. Second, it is important to require increased transparency in contract terms, independent third-party audits, and inclusive, participatory negotiation processes. Third, compensation packages should go beyond

basic cash payments to encompass holistic livelihood restoration for affected communities. Fourth, the implementation of GIS-based spatial monitoring should be prioritized to detect and address questionable land conversion activities in real-time. Lastly, governance structures must be reformed to be more gender-sensitive and inclusive, ensuring the active participation of women, youth, and marginalized groups in all negotiation and decision-making stages.

Future research should prioritize examining the long-term effects of land grabbing across generations, explore comparative analyses spanning diverse agroecological zones, and conduct ethnographic studies that shed light on community resistance movements and their strategies.

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