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## LIVELIHOOD DIVERSIFICATION AND FOOD SECURITY AMONG THE MARGINALIZED WAATA COMMUNITY IN ETHIOPIA

## ZRÓŻNICOWANIE ŹRÓDEŁ UTRZYMANIA I BEZPIECZEŃSTWO ŻYWNOŚCIOWE WŚRÓD MARGINALIZOWANEJ SPOŁECZNOŚCI WAATA W ETIOPII

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### Abstract

**Subject and Purpose of the Study:** This study explores how livelihood diversification influences food security among the marginalized Waata community in Ethiopia, emphasizing the impact of structural and social exclusion on their pursuit of sustainable livelihoods.

**Materials and Methods:** Using qualitative methods – 18 focus group discussions with Waata men, women, and youth, and six key informants interview groups with government and community leaders – the research engaged 192 participants.

**Results:** It reveals that livelihood diversification significantly contributes to improving food security. However, persistent cultural stigmatization, marginalization, and restrictive regulatory frameworks continue to undermine the Waata community's traditional practices and limit their full participation in economic activities which resulted in food insecurity.

**Conclusion:** This study explores inclusive development policies that aim to preserve cultural identity, infrastructure improvement, promote equitable access to resources, access to credit and financial services. Addressing these interconnected challenges in a comprehensive and integrated manner is essential for advancing food security and sustainable livelihoods among socially excluded communities like Waata.

**Keywords:** food security, livelihood diversification, qualitative research, social exclusion, Waata Community

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### Streszczenie

**Przedmiot i cel badania:** W niniejszym badaniu analizowano wpływ dywersyfikacji źródeł utrzymania na bezpieczeństwo żywnościowe marginalizowanej społeczności Waata w Etiopii, kładąc nacisk na wpływ wykluczenia strukturalnego i społecznego na dążenie tej społeczności do zrównoważonych źródeł utrzymania.

**Materiały i metody:** W badaniu wykorzystano metody jakościowe – 18 dyskusji w grupach fokusowych z udziałem mężczyzn, kobiet i młodzieży z plemienia Waata oraz sześć wywiadów z kluczowymi informatorami, w tym przedstawicielami rządu i liderami społeczności – w którym wzięło udział 192 uczestników.

**Wyniki:** Wyniki badania wskazują, że dywersyfikacja źródeł utrzymania znacząco przyczynia się do poprawy bezpieczeństwa żywnościowego. Jednak utrzymująca się stygmatyzacja kulturowa, marginalizacja i restrykcyjne ramy regulacyjne nadal osłabiają tradycyjne praktyki społeczności Waata i ograniczają jej pełny udział w działalności gospodarczej, co skutkuje brakiem bezpieczeństwa żywnościowego.

**Wnioski:** W niniejszym badaniu analizuje się politykę rozwoju sprzyjającą włączeniu społecznemu, której celem jest zachowanie tożsamości kulturowej, poprawa infrastruktury, promowanie równego dostępu do zasobów, dostępu do kredytów i usług finansowych. Kompleksowe i zintegrowane podejście do tych powiązanych ze sobą wyzwań ma zasadnicze znaczenie dla poprawy bezpieczeństwa żywnościowego i zrównoważonych źródeł utrzymania wśród społeczności wykluczonych społecznie, takich jak Waata.

**Słowa kluczowe:** bezpieczeństwo żywnościowe, dywersyfikacja źródeł utrzymania, badania jakościowe, wykluczenie społeczne, społeczność Waata

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## 1. Introduction

Social exclusion is a multidimensional process involving the progressive detachment of individuals or groups from social relations and institutions, preventing their full participation in society (Silver, 1994). It encompasses systematic disadvantage, economic deprivation, and limited access to services, social isolation, and exclusion from cultural and political life (Atkinson, 1998; Sen, 2000; Levitas et al., 2007; Hoff, Walsh, 2018).

The Waata, a subgroup of the Oromo people living in Ethiopia and Kenya, have long faced social exclusion and marginalization (Stiles, 1988, 2013; Gemed, 2016; Adugna, 2017). Despite these challenges, they engage in diverse livelihoods such as pottery, fishing, small-scale farming, handicrafts, and cultural activities.

Livelihood diversification refers to the process by which households or individuals engage in a variety of activities and social strategies to improve living standards and manage risk (Ellis, 2000). It typically involves combining farm and non-farm income sources to reduce vulnerability and enhance resilience (Ellis, 1998). This strategy helps spread economic risk and enables households to cope with environmental, economic, or social shocks (Barrett, Reardon, Webb, 2001). However, the relationship between livelihood diversification and food security remains largely under-explored.

Understanding this relationship requires deeper examination of the broader issue of social exclusion. For communities such as Waata, this exclusion not only restricts economic opportunities, but also weakens traditional safety nets, increasing their vulnerability to food insecurity (Brady et al., 2021; Carter, Kelly, 2021; Moodi et al., 2023). Food security is defined as a condition in which “all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO, 2006). It encompasses four key dimensions: availability, access, utilization, and stability. A failure in any of these dimensions can result in food insecurity, particularly among vulnerable and marginalized populations, like Waata.

Livelihood diversification has emerged as a key strategy in response to such vulnerabilities. This process, which expands income sources to reduce risk and build resilience, is particularly important in rural settings (Chambers, Conway, 1992; Martin, Lorenzen, 2016; Sène-Harper et al., 2019; Hossain, 2024). When implemented effectively, diversification across agricultural and non-agricultural activities can improve household food security and promote long-term economic stability (Waha et al., 2018; Feliciano, 2019; Rahmanto et al., 2020; He, Ahmed, 2022; Haile et al., 2024).

However, diversification is not guaranteed. Without sufficient access to resources, such as land, credit, and markets, improved infrastructure or institutional support, these strategies may be inadequate or unsustainable. As a result, instead of alleviating food insecurity, poorly supported diversification efforts may contribute to income instability and deepen existing vulnerabilities (Robaa, Tolossa, 2016; Alobo, 2017; Dedehouanou, McPeak, 2020; Sisay, 2023; Tacconi et al., 2023; Duale, 2024).

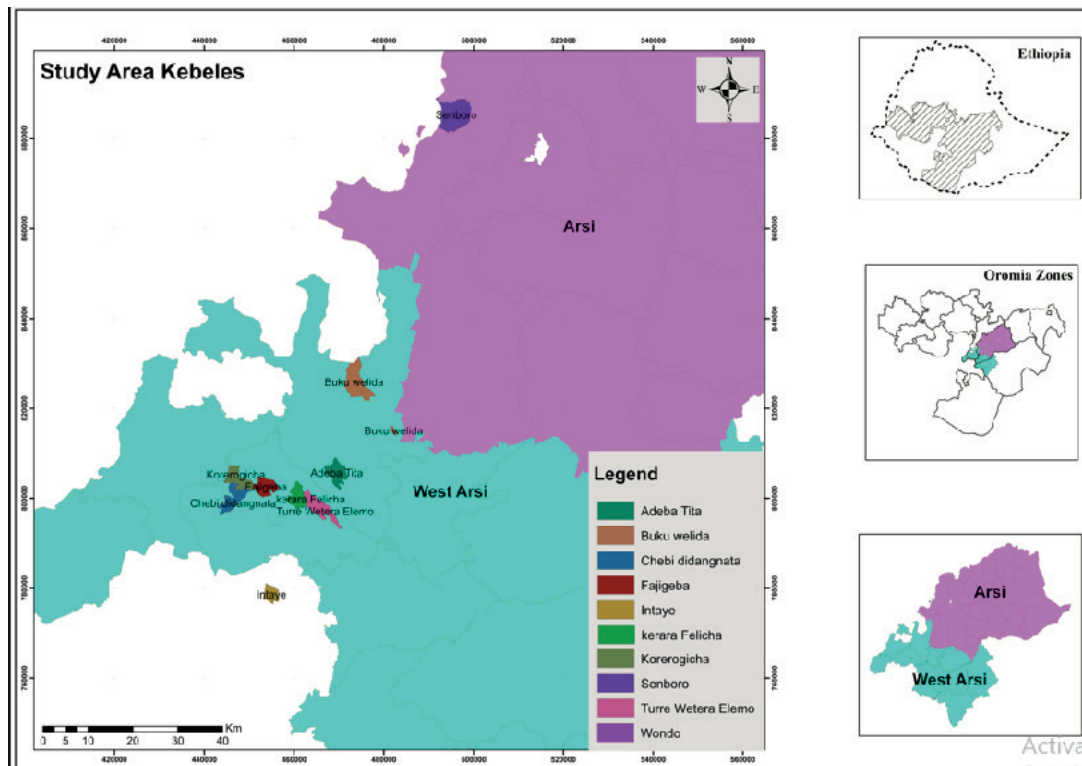
Although considerable research has been conducted on the link between livelihood diversification and food security, a significant gap exists in understanding how social exclusion affects the success of livelihood diversification, particularly in marginalized communities such as Waata in rural Ethiopia. Much of the existing literature focuses on broader economic and environmental factors influencing food security, while paying less attention to how cultural traditions, social norms, and exclusionary practices intersect to shape livelihood decisions and food security outcomes for marginalized groups, such as the Waata. This study assesses the livelihood diversification nexus of food insecurity in the context of social exclusion.

## 2. Method

### 2.1. The study setting

The Arsi and West Arsi zones, located in southeastern Ethiopia, were selected for this study due to previous ethnographic documentation of endangered cultural traits (Gemeda, 2016) and discursive construction and representation of Waata identity the critical discourse analysis of oral text (Adugna, 2017). The Waata in both zones inhabit areas such as Faji Kararu, Faji Goba, Karara Filicha, Kore Rogicha, Kalata, Koka, Warajo Washgulla, Sambaro, Sayimana, Dawe Kushe and Alelu Ilu. In these localities, most Waata live around lakes. They lived near Lake Batu (Dambal), Lake Langano, and Lake Shalla. The participants of this study were the Waata who live in Adaba Xixa, Buku Walda, Chabi Dida nyata, Intaye, Sambaro, Faji Goba, Kore Rogicha, and Ture Watera Elemo, who established their source of food in the water.

After a preliminary field visit, the first author noted that the districts in these zones had a higher number and representation of the Waata population than many other districts. Additionally, the Waata community in these areas claims to be the original Waata according to Gemeda (2016), mentioning the earlier literature from the homeland of Bale, called *Miidhagduu Kurkurru* and upholders of Waata culture. The selection of each *kebele* (the smallest administrative units in Ethiopia) was based on a similar reason for the higher number of residents and their settlement in a communal form, distinguishing them from other *kebeles* where the Waata population is scattered or dispersed. Figure 1 illustrates the study area, providing a visual representation of the geographical context in which the research was conducted. It depicts key features such as boundaries, landmarks, and spatial relationships relevant to the focus of the study. The study area is shown in Figure 1.



**Figure 1.** Map of the study area

Source: Google Maps.

## 2.2. Study approach and data collection methods

After explaining the project title and objectives of the study, we invited participants to take part in the focus group discussions and key informant interviews. We confirmed that their participation was entirely voluntary and that they could withdraw at any time without any negative consequences. We also assured them that all responses would be kept confidential and used solely for research purposes. Data were gathered through key informant interviews, participant observations, and focus-group discussions. Key informants included representatives from various sectors, such as agriculture and natural resource offices, early warning offices, culture and tourism offices, local village managers, administrators, development agents, primary school representatives, and health extension officers. Specifically, there were six groups of key informant interviews with government office representatives in each group, with eight representatives, totaling 48 people and community leaders. Participants in the key informant interview (KI-Is) were purposively selected based on their direct engagement in the daily socio-economic activities of the target population or their close proximity and sustained interaction with the community, enabling them to provide informed, context-rich insights into the lived experiences and conditions of the study group. Focus Group Discussion (FGD) participants were purposively selected based on their historical and contemporary knowledge of the community's socio-cultural and economic context, as well as their ability to articulate relevant information and lived experiences effectively.

Focus group discussions (FDG) involving Waata community men, women, and young members. Eighteen groups involving 144 individuals in total 192 participated in this study. This data collection spanned October 2020 to May 2022, with ethnographic observations conducted from 2019 to 2021.

The key informant interviews occurred at *Woreda* (district level administration) and the local *Kebele* offices, while focus group discussions took place within the residences of the Waata community. Key informant interviews and focus group discussions (FGDs) were audio-recorded, while research assistants recruited from the local community facilitated the FGDs. Thorough ethnographic observations were conducted to collect data on everyday activities related to food security.

Strategies such as obtaining permission letters, hiring public facilities including motorbikes and horse-drawn carts, regular communication with local leaders, and establishing rapport were employed to facilitate fieldwork and data collection. Flexibility and responsiveness to new developments such as adjusting schedules are crucial for the safe execution of fieldwork. The use of research assistants from local areas further enhances interaction and collaboration.

### **2.3. Data analysis**

The key informant interviews and discussion guides were initially prepared in English and later translated into *Afan Oromo* (the Oromo language). Audio recordings of key informant interviews and focus group discussions (FGDs) were transcribed and translated verbatim. The data were systematically coded and categorized into emergent themes, which were then organized into thematic constructs aligned with the study's research objectives and analytical framework. While the initial sense-making of participant observation data began during fieldwork, the majority of the analysis took place after fieldwork. Triangulation of field notes from participant observations, along with data obtained from key informant interviews and FGDs, was employed. Then themes emerging from data including the impact of social exclusion on the livelihood dynamics of the Waata community and the role of financial capital in enabling or constraining livelihood diversification. It also examines barriers to food security, such as limited access to markets, services, and diversified income sources. Additionally, challenges related to accessing land, water, and culturally significant resources are highlighted as critical constraints to sustainable livelihoods. Finally, the analysis addresses how historical and ongoing marginalization continues to shape and limit the Waata community's ability to diversify their livelihoods and achieve socio-economic resilience where analysed.

To provide a direct perspective, typical quotations were incorporated. Phone conversations with key informants in the study area served to clarify any vague points raised during data analysis. Additionally, individuals familiar with the area, residing in Addis Ababa City and frequently visiting the study area, Arsi and West Arsi zones, are consulted when clarification is needed.

### **2.4. Research ethics**

All participants were briefed on the objectives of the study and told that they would not encounter potential risks associated with participation. For instance, physical discomfort, injury, or harm resulting from procedures or interventions involved in the research; financial costs, such as travel expenses or lost wages; and related costs. Oral consent was obtained to ensure informants' willingness to participate in the study. Discussions were recorded only with informed consent from the participants. To maintain confidentiality, no personal names or identifiers were used in the analysis and write-up, except for obtaining consent from key informants. Instead, informants were coded based on sex, age, religious affiliation, social category, and status, as necessary. The study commenced after submission and review of the proposal by the Center for Food Security Studies at the College of Development Studies, Addis Ababa University. Following this, a letter from the center was provided to facilitate liaison with the Shashemene *Woreda* administrative office. Subsequently, *Woreda* issued a letter in the local language to the respective lower-level administrative bodies (*kebeles*). Finally, meticulous measures were implemented to mitigate biases stemming from the personal and religious affiliations of the researchers during the data collection phase. It undergoes training in research ethics and professional conduct to raise awareness of potential biases and their impact on the research process. This training emphasizes the importance of maintaining objectivity and avoiding personal or religious biases in data collection. The researchers followed the same procedure during data analysis, thereby enhancing the validity, reliability, and credibility of the research findings.



## **2.5. Theoretical Framework Underpinning this study**

This study is underpinned by the Sustainable Livelihoods Framework (SLF) (Chambers, Conway, 1992; DFID, 1999) and the Social Exclusion Framework (Sen, 2000; Silver, 1994; Atkinson, 1998). The SLF provides a comprehensive analytical tool to examine how individuals and communities access, mobilize, and utilize different forms of capital – human, natural, physical, financial, and social – within broader social, political, economic, and ecological systems. In the context of the Waata community, the SLF helps explain how exclusion from critical livelihood resources such as land, credit, education, and infrastructure severely undermines their ability to build and sustain diverse livelihood strategies. This restricted access reduces their agency, increases dependency on low-return subsistence activities, and heightens vulnerability to external shocks such as climate variability and market fluctuations (Ellis, 2000). Consequently, their resilience and capacity to ensure food security are significantly compromised.

Complementing this, the Social Exclusion Framework offers critical insight into the structural and relational processes through which the Waata community is systematically marginalized. Persistent exclusion from accessing livelihood assets and participating in decision-making processes reflects deeper institutional biases and cultural stigmatization, which result in limited visibility in public policy and unequal access to development opportunities (Silver, 1994; Levitas et al., 2007). This deep-rooted marginalization not only limits their economic participation but also reinforces intergenerational poverty and food insecurity, preventing the community from achieving sustainable livelihoods and social inclusion (Sen, 2000; Hoff, Walsh, 2018). Together, these frameworks provide a robust theoretical lens for analyzing how structural inequalities shape the Waata community's livelihood outcomes and food security status.

## **3. Result and Discussion**

This is how the Waata community, through social exclusion and marginalization, faces significant challenges in diversifying its livelihoods, accessing essential resources, and achieving food security.

### **3.1. Social Exclusion and Livelihood Dynamics of the Waata Community**

Through ethnographic observations, various aspects of Waata community settlement patterns, livelihood assets, access to resources, infrastructural facilities, and participation in community leadership became obvious.

In Arsi culture, livelihood strategies dictate that members of the same family reside in the same village, fostering mutual support and encouragement. In this clan, support is collective with benefits and hardships affecting the entire lineage. The key informant from the Ziway Dugda Culture and Tourism Office is expressed as follows:

In the Arsi culture, the locations are often named after the clan resides there. Within the Ziway Dugda *Woreda* region, 29 clans were recognized. The city Abura takes its name from the Abura clan. Each clan is structured to provide support and protection to its members during times of both benefit and hardship (KII, Ziway Dugda, {20/12/2021}).

Supported by exiting literature, social interactions within communities significantly influence households' livelihood outcomes by leveraging social capital, which includes networks, relationships, and social structures (Barnett & Eakin, 2015; Sun et al., 2021). This interaction can enhance resilience, diversify livelihood strategies, and improve access to resources and food security (Martin et al., 2004; Niles, 2021).

The residential area of Waata in Arsi and west Arsi is geographically not different from other clans of Arsi, but we observed and confirmed from our FGDs discussants that due to cultural aspects such as food habits and occupation (blessing cattle of the other clans, cleansing blood and craft works), the Waata mostly established their livelihood in areas where they easily get their daily food; they tend to inhabit

areas around lakes to do fishing and hunt hippopotamus, less fertile lands, dry and clay land, and limited crop growing areas were the options they had as they initially would not like to be involved in agriculture. As a result, they were not able to access enough farmland and fertile land, so they occupied areas that were categorized as food insecure.

Depending on limited natural capital and cultural activities that can be changed as a result of technological advancement and community awareness, the livelihood of the community cannot be sustainably improved.

The representative from the Ziway Dugda culture and tourism office team leader, who holds a bachelor's degree in sociology, articulated the livelihood activities and rationale behind the community's unwillingness to intermarry Waata in the following manner:

Other clans mistrust the Waata people regarding economic advancement, so they do not want to give their children to them because they live in poverty. The Waata community tends to avoid farming, considering it to be determined, and instead prioritizes cultural traditions and fishing. This avoidance often leads to a perception of poverty by other clans. Additionally, the consumption of hippopotamus meat and the crafting of whips from hippopotamus skin further distinguishes them, resulting in their exclusion from other communities(KII, Ziway Dugda, {20/06/2021}).

Social capital, including the value of relationships and networks, plays a significant role in food security. It can enhance access to food and improve dietary behaviors through shared resources and support systems (Paul et al., 2019; Malual, Mazur, 2020). Social capital is positively associated with household food security, suggesting that strong community ties can help diversify livelihood activities and mitigate food insecurity (Malual, Mazur, 2020). Extensive evidence in the literature indicates that sharing food and food products among community members enhances food utilization aspect of food security, reduces household food insecurity, and provides nourishment to disadvantaged families (Martin et al., 2004; Sseguya, 2009; Dean et al., 2011; Kansanga et al., 2020; Nosratabadi et al., 2020).

The interaction between poor individuals and well-to-do families in marriage interactions can impact food security through enhanced social capital and stabilizing effects of marriage. These factors can either mitigate or exacerbate food insecurity, depending on social and economic contexts. Addressing these dynamics through policy and community support can help improve food security outcomes in socially excluded individuals.

Consistent with existing theoretical and empirical insights, social exclusion through economic and social vulnerabilities is associated with increased food insecurity(Toit, 2004; Adam, Potvin, 2016).

According to our key informant from the Shashemene *Woreda* agricultural offices and the development agent, most places where Waata live are categorized under drought susceptibility and challenge in livelihood activities. The key informants' responses are as follows.

We currently have 48 *kebeles* in Shashemene *Woreda*, of these *kebeles* 21 are categorized under food insecure areas covered under the safety net program. The Waata community resides in these food-insecure areas. Actually, few of them may be available in other places, either segregated or in very few numbers and scattered in the community.

We confirmed consistent to our findings from the key informants. Our observations also revealed a lack of basic infrastructure in most Waata residential areas, including access to roads, distance from essential services, health extension sites, and a considerable distance from schools. During our field research, encountering difficulties in accessing transportation to Waata Villages was a frequent issue. The subsequent section outlines the distinctive obstacles encountered.

During our observations, we noted transportation challenges among all the residents of the Waata community. We typically had to hire motorbikes to reach Waata Village. However, there was a time when motorbike transportation was prohibited because of security issues that lasted for months. During this period, the Waata community, which primarily engaged in pottery-making, faced difficulties traveling by foot carrying their products to and from their villages. While other communities that could afford it

shifted to using carts, the Waata community struggled to access markets for their pottery products. Additionally, those involved in fishing were unable to sell perishable catches. Waata was the primary victim of such challenges.

Additionally, because of historical injustices and long-lasting disparities in wealth, education, and opportunities, they live with a lower social status in the community. All of these factors have led them not to establish marital relationships with other clans and refrain from actively engaging in leadership positions.

The Waata themselves and a key informant at local leadership informed us that the marriage relationship is not accepted between Waata and other Arsi clans, the local leadership position is also assigned by majority vote, the Waata community receives fewer votes, and they are hardly assigned a leadership position. They typically delegate the reporting of their clan members to the local leadership. The Waata community currently engages in livelihood activities, such as fishing, pottery, and smallholder farming. However, the success and conditions of diversification, as well as the potential for income generation and improved living standards and household well-being, depend on various factors influencing diversification.

Through ethnographic observations, distinct aspects of the Waata community from settlement patterns to livelihoods are evident. Their cultural traditions, reliance on fishing, and limited engagement in farming have contributed to their social exclusion. Despite facing challenges, such as transportation difficulties and economic marginalization, the Waata continue their traditional way of life. However, mistrust from other clans and limited access to leadership positions have perpetuated their marginalized status. This reluctance to form marital alliances and participate in leadership roles further reinforces their social exclusion, and underscores the need for comprehensive support to improve their living conditions and opportunities for economic advancement.

In conclusion, the Waata community confronts challenges in human capital development, characterized by limited education and literacy levels among household heads. Barriers to youth access to education further compounded this issue. Low human capital adversely impacts on a community's ability to adopt modern agricultural technologies and hampers opportunities for higher income, perpetuating the cycle of food insecurity. Though they are engaged in the diversification of activities, they are not able to use techniques to maximize the outcome of their activities, as they are not supported by human capital.

### ***3.2. Financial Capital and Livelihood Diversification in the Waata Community***

Financial capital encompasses the various monetary resources individuals utilize to make their livelihood choices, including savings, cash flows, and credit from organizations (DFID, 1999). Key sources of financial capital in rural communities include access to formal credit facilities and family income derived from savings, off-farm income, on-farm income, and remittances. Our informants responded that although there is credit arranged, they choose not to borrow money. In the focus group discussions, they explained the reason for not borrowing money as follows:

Our farmland holdings are limited, and we lack sufficient farming equipment and resources. Without our own oxen, we depend on the goodwill of others to plow our small plots whenever they have time. As a result, if we borrow money for fertilizer and other farming necessities and cannot repay it before the next farming season, we risk legal action and even imprisonment, and lose our own small farmland. This makes us hesitant to take out loans or purchase inputs unless immediate funds are available. Instead, we prefer to lease land, which, although it further restricts access to credit, allows us to rely on support in the form of food grains.

In agreement with this households with access to formal credit are more likely to diversify their livelihood activities by investing in small businesses or adopting advanced technology (Kanwal et al., 2016; Shongwe et al., 2017; Salam et al., 2019 ; Chen et al., 2021). Financial capital empowers individuals to adapt to various livelihood choices and strategies and acts as a precondition for creating or improving



other forms of capital (Azad, Pritchard, 2022; He et al., 2022; Chuong, 2023; Huang et al., 2023; Huang et al., 2024). While the literatures above demonstrate that access to financial capital or credit can enhance livelihood outcomes, choices, and strategies as well as foster the development of other forms of capital, individuals with lower incomes and fewer assets are less likely to secure credit from mainstream financial institutions.

From our focus group discussions, there is a belief among the *Waata* and the other *Arsi* clans that financial sources are blessing and cursing. They believe “the *Waata* blessing makes things plenty and their curse makes things scarce.” This practice is another form of cultural and traditional practice that is considered an economic or financial source. *Waata* strongly believed in cultural activities.

We have a gift from the “Creator” our men given with blessing people, animals and plants(farm) and cleanse those commit sin (specially killing others person) and in return earn money in a reward for the activities. Our women is making pots. It is given to our women to find a means of livelihood and earn income for the family.

However, in the current economic system, access to formal finances through cultural activities is challenging (Bukvic et al., 2018; Kutsuri, 2020). Samuel and Sylvia (2019) highlight that, even with access to formal finance, smallholder households may struggle to diversify their means of subsistence beyond farming.

Consistent with prior research, formal financial support and access to credit are a positive correlation to diversifying activities and assist to invest on small enterprises or adoption of new technologies (Kanwal et al., 2016; Shongwe et al., 2017). Financial capital enables individuals to adapt their livelihood strategies and improve other forms of capital (Azad, Pritchard, 2022).

However, those with lower incomes or fewer assets are less likely to access formal financial services, reinforcing the poverty cycle. For the *Waata* community, cultural practices also influence economic activities through traditional beliefs. Despite these cultural practices offering alternative forms of economic support, access to formal finance remains a challenge, further complicating their ability to diversify livelihoods and engage with a broader economic system (Bukvic et al., 2018; Kutsuri, 2020; Samuel, Sylvia, 2019).

The findings of this study highlight the complex relationship between livelihood diversification, access to capital, and social exclusion among the *Waata* community. While existing literature often associates livelihood diversification with enhanced food security and improved asset accumulation (Ellis, 2000; Barrett et al., 2001), the experiences of the *Waata* suggest that this relationship is not always straightforward. Although prior literature links livelihood diversification to improved capital development, the challenges faced by the *Waata* community highlight the need for accessible and culturally sensitive financial systems.

### **3.3. Barriers to Food Security and Livelihood Diversification in the Waata Community (The Impact of Infrastructure, Resource Allocation, and Social Exclusion)**

Supported by existing evidence infrastructure positively or negatively affects food security and livelihood diversification (Khatun, Roy, 2012; Dereje et al., 2024; Nepali et al., 2024). Livelihood diversification and resource allocation can improve food security and reduce poverty; however, social exclusion and inequitable resource distribution can be barriers to these benefits (Dapilah et al., 2020; Dereje et al., 2024). Based on a testimony from a female development agent with over a decade of experience stated the following:

One of the primary challenges to achieving food security in this community is limited access to arable land coupled with poor soil fertility. These issues significantly constrain crop yield and hinder agricultural productivity. Despite ongoing efforts to promote improved farming practices, a substantial portion of the community continues to rely on traditional agricultural methods, which may not be sufficiently resilient to the effects of climate variability. This dependency on less

adaptive practices complicates the ability to maintain consistent food production throughout the year, exacerbating food insecurity.

The consequences of these challenges are particularly severe for marginalized groups, including low-income households and vulnerable populations, such as the Waata community. With limited resources, this group often faces heightened levels of poverty and food insecurity. The persistent challenges of inadequate land access, poor soil quality, and reliance on outdated farming methods create a cycle of vulnerability that is difficult to overcome without targeted interventions and support (FGD, Fajigoba, {20/03/2021}).

The Waata community traditionally prefers to settle near water bodies due to their reliance on aquatic resources such as fish and hippopotamus. However, according to community elders and key informants, many of these water sources have diminished or dried up over time, posing significant challenges to their livelihood. Most areas inhabited by the Waata lack irrigation facilities, difficult infrastructure, and less developed as it need additional efforts to be exerted for development. Discussions with local leaders and development agents revealed a systematic preference for selecting model farmers from non-Waata households. This practice has led to the unequal allocation of agricultural support and development resources, disproportionately favoring non-Waata communities and further marginalizing the Waata in local development initiatives. It did not happen deliberately, but it became a custom in the community as a result of social exclusion.

From what we have observed, there is an issue with the road infrastructure, hindering the transportation of products to the community, such as fertilizer and other products, and production from the community to markets where it could make better prices. For farmers, the availability of these resources is indispensable to the sustainability and success of their agricultural activities.

Aligned with established findings, access to machinery and roads/markets are the primary physical assets that influence livelihood diversification options (BIRTHAL et al., 2015; Adjimoti, Kwadzo, 2018). Consistent with our findings, infrastructure exerts a dual influence on food security and livelihood diversification – serving as both an enabler and a barrier. Its impact largely depends on the extent of accessibility and the equity of its distribution across communities (Khatun, Roy, 2012; Dereje et al., 2024; Nepali et al., 2024). While improved infrastructure can enhance resource allocation, livelihood diversification, and food security, the unequal distribution of these resources, particularly for marginalized groups, can exacerbate poverty and vulnerability (Dapilah et al., 2020; Dereje et al., 2024). These interconnected barriers underscore the need for targeted interventions that address both physical infrastructure and social inclusion to improve food security and livelihood diversification of the Waata community.

### ***3.4. Challenges in Access to Land, Water, and Cultural Resources for livelihood diversification and food security of Waata community.***

Natural capital is a crucial foundation for rural livelihoods, particularly in farming communities, because it supports sustainable development and enhances livelihood strategies (Berchoux, Hutton, 2019; He, Ahmed, 2022; Sun et al., 2023). However, marginalized communities' ability to benefit from natural capital is often hindered by unequal access and insecure land tenure. One shared community member

Before the land reform, we did not have any farmland. Following the reform, we acquired some land, but subsequent changes in the government led to the seizure of our farmland, which is now being utilized by others. We feel insecure because individuals from a dominant society can act with impunity.

This highlights how political dynamics and social exclusion can undermine access to natural resources, weakening both livelihood opportunities and food security of the poor and socially excluded (Dame, Nüsser, 2011; Raghuvier, Lakshmi, 2019). In Sub-Saharan Africa, political interests and power dynamics often exacerbate food insecurity by influencing control over resources and access to opportunities (Salifu, 2021).

Building on this, the case of the Waata community illustrates how marginalized groups rely heavily on natural capital to diversify their livelihoods. Livelihood diversification – through a mix of farm and non-farm activities – has been shown to enhance food security and nutritional outcomes by increasing income and building resilience (Dereje et al., 2024; Haile et al., 2024; Hegazi, Seyuba, 2024). However, this approach does not benefit all groups equally. For individuals and communities with limited access to resources, such as land and capital, combining farming with non-farm or off-farm activities may not significantly improve food security outcomes (Tesema, Berhanu, 2018; Akosikumah et al., 2025). Waata shared responsibility among males and females. The female Waata according to their belief “the order from the creator is to make pottery.” The resources they use for the products are a livelihood outcome, and livelihood activity is a challenge for them, as we discussed with Waata female elders.

As females, it is our responsibility to provide for our families by crafting pottery. However, the natural resource, clay soil, required for this craft is both costly and located far away, often under the ownership of others. Our young daughters are hesitant to engage in this practice because of societal disregard and fear of harassment.

These findings underscore the persistent structural barriers faced by socially excluded groups including unequal access to land, water, and cultural resources. Addressing these disparities requires more than economic diversification, which calls for integrated policy interventions that account for socio-ecological systems, local capacities, and specific vulnerabilities of marginalized populations.

### ***3.5. The Impact of Marginalization on the Waata Community's Livelihoods diversification***

The social exclusion experienced by minority groups is marked by their segregation from unequal resource access and intermarriage (Taddesse, 2020). Social capital plays a crucial role in fostering interactions and building social networks within a community, creating synergy that benefits everyone (Nosratabadi et al., 2020) based on Prisma, is designed to provide a state of the art review on capacity social capital in this realm. The output of this method led to finding 39 related articles. Studying these articles illustrates that social capital improves food security through two mechanisms of knowledge sharing and product sharing (i.e., sharing food products).

Elder Waata recounted his experience, despite planting potatoes and beginning a fattening venture. His responses are as follows:

I faced constant insecurity due to the prevalence of theft on my potato farm and quit farming potatoes and fattening as a consequence of social marginalization.

Whenever people feel insecure, they are not able to diversify their activities, even though they have the capacity to do so. In Ethiopia, gender, education, access to credit, and market proximity significantly influence the choice and success of diversification strategies. These factors can either enable or hinder diversification efforts, thus impacting food and nutrition security (Dereje et al., 2024; Haile et al., 2024). However, from the focus group discussion, the Waata community's challenge stated the following. For generations, our people have survived through cultural activities, hunting, and water-based knowledge. As the rules changed, we lost these rights without offering alternatives. This is why diversification is difficult, and it is about identity and dignity.

When we try to reach out to Waata, there is often a trust gap. Their years of exclusion made them skeptical. Moreover, many live in remote or dispersed settlements, making access to services more complicated (FGD, Kore Rogicha, {15/02/2021}).

Promoting a strong sense of community, ensuring safety, respecting individuals' dignity, and fostering the expression of unique identities all contribute to enhancing social integration and food security (Platteau, Abraham, 2002; Mishra, 2020).

Through both focus group discussions and interviews with key informants, we verified that the Waata community has relied more on cultural livelihood activities for an extended period. When cultural

practices are no longer accepted by other communities, the benefits derived from these activities cease to sustainably support the food supply for the Waata community. The responses from the FGDs are as follows:

However, these traditional cultural practices have diminished in the modern young Waata group, as the community has adopted more contemporary methods for problem solving, incorporating modern technology inputs, and prefers to solve problems in legal approaches rather than cultural conflict resolution strategies. The enduring cultural belief remains embedded in Waata's culture of not seeking prosperity, as it is considered to compete with God, which leads to poverty.

Participants in the focus groups, particularly elderly men and women, expressed their objection to involvement in local government, citing exclusion rather than inefficiency as the cause. They highlighted the challenges in voting and being elected, emphasizing their minority status compared to other majority clans.

The Waata community's experience highlights the complex nature of social exclusion, which manifests through limited access to resources, political marginalization, and a lack of social integration (Taddeesse, 2020). While social capital can foster cohesion and mutual support (Nosratabadi et al., 2020), years of marginalization have eroded trust and community networks, leaving Waata vulnerable. Testimonies from community members reveal how insecurity, such as frequent theft, discouraged investment in livelihood diversification, despite their capacity and willingness to engage. Broader systemic factors, such as gender, education, credit access, and market proximity further shape the success of such strategies across Ethiopia (Dereje et al., 2024; Haile et al., 2024). Waata's traditional reliance on cultural practices such as hunting and water-based knowledge has been undermined by regulatory changes, with no viable alternatives provided. For many, diversification is not just economic; it is deeply tied to identity and dignity. Modern shifts in the younger generation show adaptation through legal channels and modern technologies, yet enduring beliefs, such as associating prosperity with spiritual transgression, continue to limit progress. Additionally, political exclusion remains a pressing concern, with elders voicing barriers to participation in local governance because of their minority status. Addressing these multifaceted challenges requires rebuilding trust, ensuring safety, and fostering inclusive development that respects cultural identity while enabling full participation in social and economic life (Platteau, Abraham, 2002; Mishra, 2020).

#### **4. Conclusion**

The experience of the Waata community illustrates the strong connection between social exclusion, limited resource access, and constrained livelihood options. While infrastructure development and access to formal credit can improve economic opportunities, many marginalized groups – like the Waata – remain excluded due to structural discrimination, cultural stigmas, and lack of political representation. Their traditional knowledge and cultural practices, though valuable, are increasingly undermined by external regulations and social pressures, limiting their ability to participate in modern economic systems. To address these challenges effectively, policy responses must go beyond economic solutions. A coordinated approach is needed that includes: (1) improving physical infrastructure and financial access in underserved areas; (2) reforming institutions to ensure fair representation and service delivery; and (3) integrating cultural identity and traditional practices into development planning. For communities like the Waata, inclusive development means ensuring food security, supporting diverse livelihoods, and promoting equity through policies that are locally grounded and socially just.

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#### **Conflict of Interest:**

We, the authors, hereby declare that the article titled “Assessing Livelihood Diversification Strategies and Food Security in the Waata Community of Ethiopia” is an original work, and all contributions to this manuscript have been appropriately acknowledged. We certify that we have no affiliations with or involvement in any organization or entity with any financial interest or other equity interest and expert testimony or patent-licensing arrangements, or non-financial interest.

#### **Declaration of Originality:**

We, hereby declare that the article entitled “Assessing the nexus between Livelihood Diversification Strategies and Food Security in the Waata Community of Ethiopia” is an original work and has not been previously published, either in whole or in part. The article is not under consideration for publication in any other journal, and I confirm that all the information provided is accurate to the best of my knowledge.

#### **Ethical Approval**

Not applicable since we are not using animal and/or human part for research purpose. However, we attached the letter that indicate the research is done under the knowledge of Addis Ababa University, College of Development Studies, Center for food security studies. It is attached under the supplementary material that not needed for review.

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