Advancements in Agricultural Development
Volume 7, Issue 1, 2026
agdevresearch.org

Determinants of Agripreneurship Venture Performance in Ghana's Metropolises: Empirical Evidence from Accra and Kumasi

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Abstract

The agricultural sector occupies a central role in Ghana's economic development, with agripreneurs contributing to job creation, tax-base diversification, and foreign exchange earnings. However, these agripreneurs face social, economic, environmental, and technical challenges that impact their venture performance. This study employed a hybrid thematic analysis to investigate factors influencing agripreneurship venture performance in the Accra and Kumasi Metropolitan areas. Findings revealed that social factors, such as human and social capital, were critical determinants of success. Key elements included technical expertise, strong interpersonal relationships, excellent customer relationships, and leadership skills. Conversely, economic constraints, including insufficient capital and business-model fragility, were the primary drivers of agripreneurship venture failures. Based on these findings, to promote long-term sustainability and profitability, we recommend establishing integrated agripreneurship support centers that provide financing and on-demand trainings; establish dedicated agricultural financing programs with flexible, cycle-aligned terms, and encourage agripreneurs to leverage Ghana Incentive-based Risk-sharing System for Agricultural Lending. Also, creating structured mentorship programs that pair experienced agripreneurs and novice agripreneurs can help strengthen the social and human capital needed for business growth. Future research should investigate financial institutions' cautious approach extending credit to agripreneurs in the study areas, and also examine how employee attitudes and behaviors influence venture performance.

Article History
Received: September 20, 2025
Accepted: February 23, 2026
Published: March 11, 2026

Keywords
agripreneurs; agripreneurship; venture performance; agripreneurship sustainability; social capital; SDG 8: Decent Work and Economic Growth

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Introduction and Problem Statement

The global population's rapid growth and projected increase in food demand, coupled with decreasing arable land, necessitates entrepreneurial innovations in agricultural production to achieve higher yields with fewer inputs (Godfray et al., 2024). This challenge calls for the development of sustainable ventures to meet current and future needs. Agripreneurship serves as a crucial pathway for eradicating extreme poverty, fostering shared prosperity, and enhancing food security in low- and middle-income countries (Mukembo et al., 2020, 2023).

Agripreneurship involves innovative activities, such as value creation, proactiveness, risk-taking, and strategic orientation in agriculture to drive sustainable growth and performance (Alsos et al., 2003; Lans et al., 2013; McElwee, 2006, 2008; Mukembo, 2017). Agricultural ventures account for a significant share of global economic output and employment. In 2024, the World Bank estimated that agriculture, forestry, and the broader food sector contributed 4.0% of global gross domestic product (GDP), 17.5% in Sub-Saharan Africa, and 20.7% of Ghana (World Bank, n.d.). In terms of employment, about 26% of the global workforce was engaged in agriculture in 2025, compared to 49% in Sub-Saharan Africa, and 35% in Ghana (World Bank, 2025).

In 2025, Ghana's population was estimated at approximately 35 million people (United Nations Population Fund, n.d.). The Accra and Kumasi metropolitan areas accounted for about 2.7 million (7.71%) and 4 million (11.43%) residents, respectively (Macrotrends, n.d.a, n.d.b), and they are the focus of this study. These two metropolitan areas were selected for their status as Ghana's largest and fastest-growing urban centers and for their significance as major hubs for agricultural entrepreneurship and innovation (Appiagyei, 2023).

Transforming an agripreneurship idea into a thriving enterprise, however, remains fraught with risks and uncertainties. Although agripreneurs play an important role in employment, food security, and economic diversification, existing research has tended to examine the determinants of agripreneurship performance in fragmented ways. Recent systematic reviews reveal that much of the literature emphasizes constraints shaping agricultural venture performance, often focusing on economic, social, and environmental dimensions in isolation (Brenya et al., 2022).

Comparatively fewer studies have examined how these dimensions jointly shape both constraints and enabling conditions associated with agripreneurship success and failure, especially within rapidly urbanizing metropolitan agrifood systems such as Accra and Kumasi. As a result, limited empirical work integrates economic, social, and environmental factors to explain heterogenous agripreneurial outcomes in urban and peri-urban settings in low- and lower-middle income countries. This knowledge gap hampers the development of effective support mechanisms, leaving promising ventures vulnerable to collapse and undermining broader goals of sustainable urban business development.

Theoretical and Conceptual Framework

In this study, we draw on Brenya et al.'s (2022) framework of economic, social, and environmental factors as an organizing lens. While their work synthesizes barriers through a systematic review, our study empirically examines how these dimensions jointly influence agripreneurial performance in rapidly urbanizing West African cities. In doing so, we extend their barrier-focused synthesis by examining these factors as both constraints and enabling conditions. Economic factors affecting agripreneurship venture performance include limited access to credit, high interest rates, strict collateral requirements, unfavorable loan terms, poverty, and the administrative burden of financing from traditional banks and microfinance institutions (Addo, 2017; Adobor, 2020; Aqeel et al., 2011; Brenya et al., 2022). Despite these constraints, evidence shows that credit access is positively linked to profitability, as it enables investments in technology and expansion to achieve economies of scale (Ali, 2016; Arasti, 2011; Njuguna & Nyairo, 2015; Nsoke et al., 2021). However, credit alone, without supporting policies and infrastructure such as better road networks and storage facilities, is insufficient to guarantee success (Prahalad & Hart, 1999). Moreover, because agricultural products are perishable, agripreneurs need value addition and storage facilities to extend the shelf life of their products and capture revenue down the value chain; without these, they lose income due to post-harvest losses (Amadu et al., 2021; Brenya et al., 2022).

Environmental factors affecting performance and sustainability of agripreneurship ventures include degradation, waste and pollution management, environmental regulations (such as climate-change mitigation), soil erosion, ecosystem health and biodiversity, soil quality, rainfall, and deforestation (Blignaut & Van Heerden, 2009; Brenya et al., 2022). The adoption of climate-resilient practices such as agroforestry and mixed cropping enhances soil health and mitigates the impacts of environmental degradation and climate-related shocks on crop yields, while failure to adopt such practices can reduce farm productivity and household revenue, thereby increasing the risk of agripreneurship failure (Amadu et al., 2021). Agricultural ventures that use organic fertilizers also achieve better long-term returns and soil health than those relying on inorganic fertilizers (Bidzakin et al., 2023; Erenstein et al., 2012; Mukembo et al., 2024).

Social factors affecting agripreneurship venture performance consist of the technical expertise of the labor force, relationships within communities and customers, sociocultural norms, gender inequality, land tenure rights, and the political influence on institutional policy enactment and implementation (Brenya et al., 2022; Dossou et al., 2023). Additionally, Brenya et al. (2022) identified a limited capacity for conducting rigorous scientific research as another barrier to venture performance and long-term viability.

Purpose

This study aimed to identify the underlying factors driving success and/or failure among agripreneurship ventures in Accra/Kumasi metropolitan areas. Although prior work has synthesized economic, social, and environmental barriers to agribusiness performance (Brenya

et al., 2022), limited empirical evidence explains how these dimensions interact to shape heterogenous performance outcomes within rapidly urbanizing metropolitan contexts. By focusing on these two major hubs and their market linkages, we aim to provide actionable insights to guide policymakers and practitioners in promoting the sustainability and performance of agripreneurship ventures, especially among young people for job creation. Three objectives guided this inquiry:

1. What factors contribute to the success of agripreneurship ventures Accra and Kumasi metropolitan areas?
2. What factors lead to the failure of agripreneurship ventures in Accra and Kumasi metropolitan areas?
3. Are the factors influencing the success and failure of agripreneurship ventures in these metropolitan areas symmetrical (i.e., the absence of a success factor leads to failure) or distinct (i.e., success and failure arise from different sets of factors)?

Methods

The researchers adhered to Tracy's (2010) eight guidelines for excellent qualitative research, including "(a)worthy topic, (b) rich rigor, (c) sincerity, (d) credibility, (e) resonance, (f) significant contribution, (g) ethics, and (h) meaningful coherence" p. 839). Ethical considerations were paramount throughout the research process, encompassing principles of autonomy, beneficence, non-maleficence, justice, and confidentiality (Arifin, 2018; Tracy, 2010). All participants were informed about their rights, and consent was obtained before data collection. Strict confidentiality protocols were maintained during data collection, analysis, and reporting, ensuring the protection of participants' privacy and the integrity of the findings. Beyond ethical considerations, rigor and credibility were enhanced through purposive sampling using a snowball approach and the incorporation of a multi-method design, combining semi-structured survey questionnaires followed by in-depth interviews until data saturation was achieved, which facilitated data triangulation. Sincerity and transparency were supported through explicit documentation of analytic decisions, peer debriefing, and reflective practices. The lead author maintained analytic memos documenting coding decisions and emerging interpretations, thereby enhancing transparency and credibility. Meaningful coherence was achieved through close alignment of the study with existing literature, research questions, methodology, and findings.

Resonance was enhanced by offering rich descriptions of the study's participants and incorporating direct quotations within the emerging themes, allowing the findings to reverberate with readers, connect meaningfully to their own experiences, and support transferability. The topic is timely and worthy given the growing interest in urban and peri-urban agripreneurship as a development strategy for job creation, especially in rapidly urbanizing communities. Also, our study makes a significant contribution by integrating social, economic, and environmental dimensions, and by offering a methodological contribution through quantitizing qualitative data in the analysis.

The target population comprised agricultural entrepreneurs (agripreneurs) in Accra and Kumasi who met specific criteria, by engaging in innovative activities, value creation, proactiveness, risk-taking, or strategic orientation in their ventures, as evidenced by having registered businesses and minimum annual revenue of at least GH₵220,000 (approximately USD 20,000 based on the exchange rate at the time of study). This also included those engaged in primary production (crop and livestock) who operated as commercial businesses with market orientation and growth objectives, which distinguished them from subsistence farmers. A snowballing sampling technique was used to select respondents within an entrepreneurial network (Clark et al., 2021).

Data were collected from May 2022 to August 2022, with follow up interviews from January to March 2023. This timeframe was appropriate for examining agripreneurial decision-making processes, as the underlying economic, social, and environmental dimensions shaping venture performance tend to evolve more gradually than specific technologies or tools. The final sample consisted of 32 agripreneurs, all of whom responded to a semi-structured survey questionnaire designed to capture both quantitative and qualitative data. This sample size is consistent with qualitative research aimed at achieving data saturation rather than statistical generalizability and was further strengthened through in-depth interviews with 20 participants, which enabled us to achieve data saturation, where additional interviews yielded no new insights (Saunders et al., 2017). The quantitative section primarily covered aspects such as annual revenue, number of employees, and years in business. The qualitative section included open- and closed-ended questions, covering personal characteristics as well as economic, social, and environmental factors affecting entrepreneurial success.

Qualitative surveys involving open-ended questions are flexible and provide considerable benefits for both researchers and study participants (Braun et al., 2020). In this study, they were used as a precursor to explore the topic with participants before conducting in-depth follow-up interviews (Jain, 2021). Follow up interviews were conducted with 20 agripreneurs from the survey sample to gain deeper insight into the factors impacting their agripreneurship ventures, which is the focus of this paper, until data saturation was reached (Saunders et al., 2017). Examples of open-ended questions during the interview included: (a) what factors have contributed to the success of your agripreneurship venture? and (b) what factors have contributed to the failure or poor performance of your agripreneurship venture?

This multi-method qualitative approach, which combined qualitative survey instruments containing open-ended questions with follow-up in-depth interviews, helped mitigate limitations of relying solely on a single data source and facilitated data triangulation, thereby enhancing the rigor, credibility, and transferability of the findings (Collier & Elman, 2008; Wellman et al., 2023). Although the survey instrument included items for descriptive purposes such as number of employees and revenue, our study does not integrate quantitative and qualitative strands in a manner consistent with mixed methods designs; rather, all analytic procedures were qualitative in nature.

The study employed a hybrid thematic analysis, combing deductive and inductive reasoning to analyze the qualitative data (Fereday & Muir-Cochrane, 2006; Proudfoot, 2022). We used deductive analysis to guide our coding based on prior literature and theoretical perspectives, while inductive analysis allowed patterns and themes to emerge from participants narratives. This analytic strategy helps reduce the risk of confirmatory bias and strengthens analytical rigor by balancing theory-driven and data-driven interpretation (Joffe, 2012; Proudfoot, 2022). The lead author conducted the primary coding of the qualitative data, following Braun and Clarke's (2006) six-step framework to thematic analysis. Throughout the process, the coding and emerging themes were regularly discussed with two other co-authors to ensure consistency, credibility, and shared interpretation of the data (Nowell et al., 2017).

Although formal inter-rater reliability was not calculated, as coding was performed by a single researcher, ongoing collaborative discussions and agreement among the authors served as a form of peer debriefing – a process that involves engaging colleagues to critically review and provide external check to enhance the trustworthiness, transparency, and validity of the research process (Lincoln & Guba, 1985; Nowell et al., 2017). Further, we used Brenya et al.'s (2022) classification of factors contributing to agribusiness failure to guide theme development and applied open coding – through inducting reasoning to identify codes that aligned with the three classifications. This comprehensive approach allowed for a thorough examination of the various dimensions influencing agripreneurship outcomes in the study areas.

NVivo software was used to categorize and analyze the qualitative contents of the survey, including the follow up interview transcripts, which allowed us to identify themes and patterns within the participant narratives. Transcription was made verbatim and identifiers such as names of interviewees were replaced by pseudonyms to maintain confidentiality. The frequency of mentions for each factor by participants was then calculated from the coded data.

Quantification of Qualitative Data

While our study employed qualitative methods for data collection and analysis, we calculated frequency counts or mentions of each factor identified by participants from the coded data to establish the prevalence of each theme. Many qualitative researchers have advocated quantitizing qualitative data to improve analytical rigor (Martyn, 2021; Maxwell, 2010; Messing et al., 2005; Miles et al., 2014; Sandelowski, 2001; Schwandt, 2007). According to Miles et al. (2014):

> In qualitative research, numbers tend to be ignored . . .. However, a lot of counting goes on in the background when judgements of qualities are being made. When we identify a theme or a pattern, we're isolating something that (a) happens a number of times and (b) consistently happens in a specific way. The "number of times" and "consistency" judgments are based on counting. . .. . When we say that something is "important," "significant," or "recurrent," we have come to that estimate, in part, by making counts, comparisons, and weights. (p. 253)

Our use of frequency counts serves as a supplementary tool to enhance analytical rigor while preserving the depth and context inherent in qualitative data. This approach does not replace

our thematic analysis but rather provides an additional dimension for understanding the relative prominence of identified factors across our participant sample, thereby helping to maintain objectivity and minimize potential bias (Miles et al., 2014), and allows for internal generalizability of the findings to the participants (Maxwell, 2010)

Reflexivity Statement

The lead researcher is a native of Ghana and an agripreneur involved in promoting mechanization among smallholder farmers. With a background in agricultural and biosystem engineering, he worked diligently to bracket his own perceived experiences. However, since the researcher is the instrument in qualitative research (Yin, 2015), we acknowledge that complete bracketing may not be entirely possible (Kafle, 2011). To mitigate potential biases, he collaborated with colleagues who provided fresh perspectives on the data.

Study Limitations

This qualitative study relied on a small sample of agripreneurs and snowball sampling, which limits the external generalizability of findings. While insights may be transferable to participants in similar contexts, caution should be exercised when extending them broadly (Tracy, 2010). In addition, data were collected 2022-2023. Although agripreneurs operate in a dynamic environment, this study focuses on underlying economic, social, and environmental conditions that change more gradually over time. To this end, the findings should be interpreted as capturing structural influences and decision-making processes during this period.

Findings

Description of Participants

A total of 32 agripreneurs participated in the study, representing a range of agricultural ventures along the value chain. Participants were between 24 and 55 years (M = 30.63, SD = 5.87). About two-thirds were male (62.50%) and one-third were female (37.50%). Of these, 37.50% of participants that were engaged in primary agricultural production of crops and livestock; 25.00% were involved in produce aggregation, which entailed buying and consolidating produce from multiple farmers and selling in bulk to urban markets or larger buyers. For example, some intermediaries purchased vegetables and fruits from smallholder farmers and sold them to processors or retailers in the urban centers of Accra and Kumasi.

Approximately, one-in-five participants were engaged in the selling of agro-inputs to the farmers (18.75%) or value addition through the processing and packaging (18.75%); see Table 1 which represents the breakdown of participants by sector and gender. Most of the participants (82%) were running active businesses at the time of the data collection, while a few (18%) had closed or paused operations due to various factors explored later in the manuscript.

Table 1

Sector and Gender Distribution of Participants

Sector/Category	Male (*n*)	Female (*n*)	Total (*n*)	Percentage (*%*)
Primary production (crop & livestock)	9	3	12	37.50
Produce aggregation	4	4	8	25.00
Agro-input sales	3	3	6	18.75
Value addition (processing and packaging)	4	2	6	18.75
Total	20	12	32	100

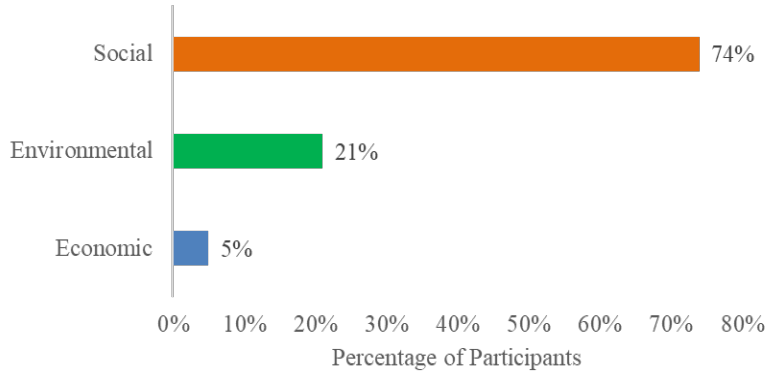
Note: Sectors indicate the primary activity of each venture; all participants met the study's selection criteria for agripreneurs, including formal registration and minimum revenue threshold of approximately $20,000.

Objective #1: Factors Contributing to the Success of Agripreneurship Ventures in Accra and Kumasi Metropolitan Areas

We present a bar graph indicating the percentage contributions of each factor to the success of agripreneurship ventures in Accra and Kumasi in Figure 1 based on participants' mentions (Miles et al., 2014). This is followed by a detailed explanation of each theme and supporting quotes from participants aligning each theme.

Figure 1

Factors Leading to Agripreneurship Venture Success/Performance



Theme #1: Social Factors Contributing to Agripreneurship Ventures Success

Most of the participants attributed their success to social factors (74%). By social factors, we refer to the human and relational aspects of agripreneurship, including human and organizational capabilities. Within this broad category, three dimensions were salient: (1) human capital and workforce management, including employee skills, autonomy, and work ethic; (2) customer relationships and trust, encompassing relationship building, service quality, and reputation; and (3) leadership practices and organizational culture, such as shared responsibility, motivation approaches, and workplace values. While other social factors such as cultural norms and institutional trust also appeared in participant narratives, these three dimensions were most consistently linked to their agripreneurship venture performance.

The centrality of workforce management was particularly evident in how the participants described their employees. Kwame, who deals in produce aggregation, credited his agripreneurial success and continued growth to having “a hardworking team,” while Kwesi who is engaged in primary agricultural production reflected on the advantages of employee autonomy, noting that his workers “are trained to solve problems quickly without waiting for me, which boosts productivity.”

Similarly, customer relationships emerged as essential for building loyalty and sustaining business performance. Yew, another produce aggregator emphasized the importance of maintaining “honest relationships with our buyers” which encouraged customers to return. Similarly, Esi whose venture is in value addition, observed that courteous customer service helped sustain loyalty even during service disruptions: “My staff speak politely to customers, and even when deliveries delay, customers stay patient and loyal.”

Leadership practices and organizational culture emerged as another important social dimension. For instance, Akua, who is also in primary agricultural production. explained that developing a leadership culture of shared responsibility and commitment by motivating workers to “treat the farm as their own” contributed to her success. This approach helped foster an ownership mentality among employees, strengthening their commitment to the business performance beyond transactional employee -employer relationships.

Theme #2: Environmental Factors Contributing to Agripreneurship Venture Success

Environmental factors emerged as the second contributor to venture success with only 21% of the participants mentioning quotes that could be attributed to this theme. These factors included consistent rainfall, flood mitigation, pollution and soil waste management, soil conservation practices, and governmental policies on environmental protection and climate change mitigation. For example, Owosu who raises crops and livestock explained that “crop rotation on our farms has kept the land healthy and ensured continuous production.” Akosua, also emphasized the importance of tree planting for environmental conservation, noting that rainfall was more abundant when there were trees and expressing optimism that reforestation could help restore the consistent rains.

Additionally, Afua highlighted the importance of developing proactive environmental risk mitigation policies such as strong fire belts to protect farmlands from bush fires, which can help reduce losses and improve profitability. Agripreneurs in primary agricultural production who proactively adopted sustainable practices that improved soil fertility, promoted soil conservation, reduced waste, and incorporated irrigation and other climate-smart agricultural practices reported to have better performance and reduced costs.

Theme #3: Economic Factors Contributing to Agripreneurship Success

Only five percent of the participants mentioned factors that could be attributed to the economic theme, and they included materials, policies, or financial conditions that contributed to the ability to start, grow, and sustain the business to remain competitive and profitable. This included things such as access to grants, credit, subsidies, and machinery. For example, Maame

who deals in agro-inputs attributed some of her success to favorable government subsidies on fertilizers that improved her profitability: "I was fortunate to benefit from the government's policy on subsidies on inputs like fertilizer under the planting for food and jobs project have lowered costs and made my farm more profitable." Meanwhile, Araba who is in agricultural value addition attributed his success to being able to secure grants as highlighted in this quote: "We have grant opportunities that support our agribusiness and lead to success."

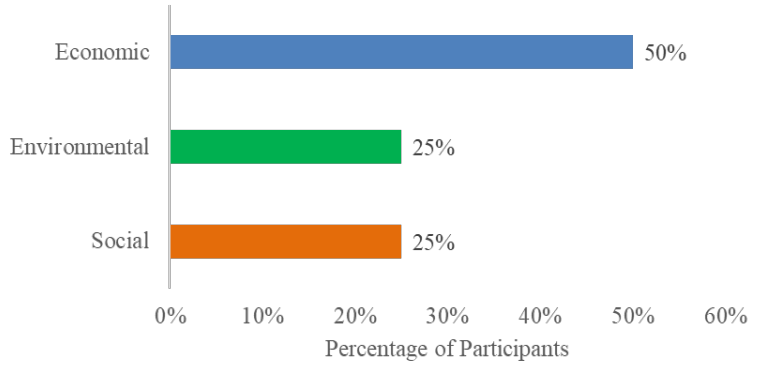
Also, access to credit through banks has been an important factor contributing to agribusiness success as highlighted by Esi: "A few banks are now recognizing farming as a business and are beginning to give us credit due to some training and assistance from one USAID program." Another economic factor contributing to agripreneurship venture success was the ability to secure inputs in kind. For example, James, who deals in produce aggregation shared: "We have investors who bought us processing machines, and our agribusiness is profitable."

Objective #2: Factors Leading to the Failure of Agripreneurship Ventures in Accra and Kumasi Metropolitan Areas

Figure 2 represents a summary of the factors contributing to failure of agripreneurship ventures in Accra based on our conceptual framework as outlined by Brenya et al.'s (2022) classifications. These factors are presented into three themes, including economic, social, and environmental. Each factor is later examined in depth, with supporting quotations from participants to demonstrate how the themes were reflected in the data.

Figure 2

Factors Leading to Agripreneurship Venture Failure



Theme #1: Economic Factors Contributing to Failure of Agripreneurship Ventures

Half of the participants identified economic challenges as a primary contributing factor to the failure of their agripreneurship ventures. They emphasized difficulties such as limited access to and inadequacy of financial resources for agricultural ventures, high interest rates on loans, restricted access to essential machinery, and the escalating cost of agricultural inputs such as fertilizers. These constraints created financial pressures that undermined both their ability to grow and sustain their businesses. Kojo, who is in primary agricultural production, explained:

> If I had adequate funds, I could expand my farm to a very large one and it will be a commercial base farming because I would have gotten my irrigation project running and accessing other tools like pipes wouldn't be a challenge.

Similarly, Ama, also a primary agricultural producer, highlighted the challenge and cost associated with renting agricultural machinery:

> My community is evident as farmers have to be in queues in order to access [rent] tractors to plough their farm. Should the government rent machinery to large-scale farmers at low or moderate cost, it will help farmers increase their farm size and boost the economy with food.

Beyond machinery and infrastructure, participants consistently emphasized the broader challenge of inadequate financing and high interest rates, as banks and microfinance institutions often perceived agricultural ventures as high-risk with long gestation periods. This perception made agripreneurship ventures less attractive, particularly to the younger people with limited resources. James tied the declining interest of youth in agriculture directly to this financial gap, sharing that "because of lack of financial support to farmers and agribusinesses, agriculture is no more attractive to the youth." Kwesi echoed this sentiment, stressing the systemic failure in creating reliable funding funnels, lamenting the "lack of financial support and reliable sources such as the government and other private entrepreneurs [funders]."

The findings further revealed that limited access to financial support was compounded by the rising cost of operations, largely driven by inflation. Kwabena, a primary producer described how input costs had escalated dramatically within a single year:

> The price of NPK fertilizer has increased from $15 to $40 within a year. Also, the cost of herbicides for controlling weeds has increased from $20 to $50 per liter, causing an increase in the cost of production to more than 100%.

These skyrocketing prices of agricultural inputs substantially increased the cost of doing business, thereby reducing profitability and contributing to the eventual failure of their ventures. Inadequate storage facilities for their agricultural products compounded these financial pressures, forcing farmers to quickly sell their produce at lower prices to avoid spoilage. Kwado, a producer aggregator explained how the lack of storage infrastructure threatened the viability of his business, noting that the absence of "storage facilities like standard banks [grain banks] and warehouses to store harvested crops affect the sustainability of my business."

Theme #2: Social Factors Contributing to Failure of Agripreneurship Ventures

Based on Brenya et al. (2022) classification of the social factors leading to agricultural venture failure, only 25% of the participants made remarks that could be attributed to this theme. Unlike the economic factors discussed above, which reflected external financial constraints, the social factors identified here are centered on human capital deficits and relational challenges. Most of their accounts highlighted issues such as limited technical knowledge in financial accounting and cost projection, seasonality of labor supply, poor social infrastructure, gender

inequality and exclusion (especially where women lacked access to land, credit, and training), as well as theft and lack of trust when customers were offered goods on credit but failed to pay back. Yaa, for instance attributed his agro-input business failure to "poor inventory control and excessive credit to customers." Abena descried a similar lack of financial foresight, explaining that: "I failed to project the cost my business may incur in the future, and that affected my business financial strength … cost of feeding staff which wasn't projected heavily affected my business."

Beyond management and planning challenges, some participants pointed to operational vulnerabilities. Nana-Yaw, a produce aggregator shared how inadequate storage facilities exposed his crops to theft: "My crops are easily exposed to threat to theft especially herdsmen owing to lack of warehouse to store them." Ama highlighted the unpredictability of labor availability, recounting that "early this year, I had no one when I needed laborers to work on my farmland. I would have gone to rent combine harvesters if they were available for farmers to rent."

Theme #3: Environmental Factors Contributing to Failure of Agripreneurship Ventures

Our findings also revealed that 25% of the participants attributed the failure of their agripreneurship ventures to environmental conditions. Several participants identified factors related to poor soil fertility management, including soil erosion, deforestation, and pollution as contributing factors to low crop productivity and profitability. Other pointed to biophysical challenges such as changing climate, poor soils, pests, diseases, and weed invasion, as well as natural disasters including droughts and floods.

Drought emerged as a major threat, especially to those in production agriculture since most of the agricultural ventures require a constant and reliable water supply. The changing seasons contributed to unreliable rainfall, leading to crop failure and animal losses during the dry seasons while creating conditions that allowed insects and locusts to destroy the remaining field crops. For instance, Ebo recounted the cascading effects of these climate extremes on his rice farm:

> My rice farm suffered a very long drought of two months which paved way for locust and insects to feed on the rice. Sadly, just after reploughing, there came a heavy downpour of rain which got the rice submerged. This lasted for three months, causing the rice to rot.

Deforestation and bushfires posed additional environmental threats. For example, Akosua connected the clearing of trees to disrupted rainfall patterns, noting that "improper cutting down of tress affects rainfall patterns." Similarly, Afua described the devastating impact of seasonal fires set by hunters and charcoal burners: "During dry seasons, when hunters and charcoal burners cut down trees to burn, it destroys entire farm if there is weak fire belt. Almost 60% farmlands, comprising more than 78% acres of rice got burnt this year." These participants' narratives brought into focus the strong connected between deforestation and destabilized rainfall patterns, directly compromising farm productivity. Moreover, the bush fires caused by hunters using fires to trap their game or by charcoal burners clearing woodlands

were cited as frequent threats to most of the agripreneurship ventures that were tied to crop and animal production and could lead to the complete destruction of farms and community livelihoods.

A notable pattern that we observed in our findings was that the economic factors were the dominant contributors to failure (50% of the participants) but featured less prominently (25%) among the success narratives (Theme #3, objective #1). This asymmetry may suggest that while adequate financial resources, affordable inputs, and access to credit are necessary for agripreneurship performance, they are not sufficient to drive success. Instead, success appeared more strongly connected to social factors such as workforce management, customer relationships, and leadership. This finding has policy implications. Interventions focused solely on financial support may help prevent failure, but they are unlikely to promote sustained success without parallel investments in capacity and relation building.

Conclusions, Discussion, and Recommendations

Grounded in the Brenya et al. (2022) conceptual framework, the findings on factors contributing to agripreneurship success in Accra and Kumasi showed that social dimensions were the most influential drivers among participants. These were followed by environmental and, to a lesser extent, economic factors. Agripreneurs attributed their success to strong networks, customer relationships, trust, leadership, and technical skills, which highlighted the centrality of human relationships, social and human capital in sustaining agripreneurship ventures (Dossou et al., 2023). Environmental factors such as soil fertility management, reliable rainfall, reduced waste, and other climate-smart practices, though mentioned less frequently, also shaped business outcomes (Blignaut & Van Heerden, 2009). Economic factors such as subsidies, grants, access to credit, and machinery, though cited less often, also contributed to the venture success where available (Addo, 2017; Adobor, 2020).

Regarding objective two, we observed interconnected challenges faced by agripreneurs, with economic constraints emerging as the major contributor to agripreneurship failure in our study areas. Economic barriers such as inadequate financing, high interest rates, rising input costs, and limited access to storage and machinery were the dominant drivers of failure, often preventing businesses from expanding or remaining profitable (Ali, 2016; Prahalad & Hart, 1999). On the social side, limited human capital, poor social infrastructure, theft, and lack of trust constrained the ability of agripreneurs to sustain ventures leading to failure. Environmental pressures, including droughts, floods, soil degradation, deforestation, and bushfires, further reduced productivity and led to business losses (Amadu et al., 2021; Brenya et al., 2022).

Regarding the third objective, we found that factors affecting success and failure in Accra and Kumasi were not symmetrical but operated differently across outcomes. While several factors (e.g., access to finance, institutional support, and human capital) appeared in both success and failure narratives, their roles, intensity, and combinations differed substantially. The absence of

a factor associated with success did not automatically result in failure, nor did the inverse of failure conditions necessarily produce success among these agripreneurs. Rather, agripreneurial outcomes reflected how these factors interacted and were leveraged, rather than their mere presence or absence. Thus, agripreneurship success or failure among the study's participants was not driven by a single factor but by the interaction of social, economic, and environmental conditions shaping their ventures.

To advance SDG #8, which calls for decent work and inclusive, sustainable economic development, policymakers and development practitioners should design integrated interventions that strengthen social and human capital, promote sustainable environmental practices, and expand access to financial resources, creating an enabling entrepreneurial ecosystem for agripreneurs to thrive and build resilience. Activities such as structured mentorship programs that pair experienced agripreneurs with novice agripreneurs can also help strengthen the social and human capital needed for business growth.

We also recommend establishing integrated business support centers that provide financing and on-demand trainings, as well as establish dedicated agricultural financing programs with flexible, cycle-aligned terms. Agripreneurs should be encouraged to leverage Ghana Incentive-based Risk-sharing System for Agricultural Lending to reduce financial risk. In addition, strengthening post-harvest practices through affordable storage facilities and quality control would allow farmers to sell when prices are favorable, reducing losses. Finally, promoting and standardizing climate-smart practices such as fire-belts, mulching, crop rotation, and organic soil amendments would help improve crop yields and improve long-term resilience.

Further research should examine why some financial institutions are reluctant to extend credit to agripreneurship ventures in the study areas and how employee attitudes and behaviors influence agribusiness performance. There is also a need to explore how gendered constraints such as land tenure, social norms, and family responsibilities affect the growth of women-led agricultural entrepreneurship ventures.

Acknowledgments

Funding Information: The McQuinn Center for Entrepreneurial Leadership at the University of Missouri provided funding support for publication.

Conflict of Interest: No conflict of interest

Previous Dissemination:

This manuscript is derived from Jeffrey B. Appiagyei's Master's thesis completed at the University of Missouri. The authors also acknowledge Douglas Moesel for his service on the Master's thesis committee and for his guidance and feedback during the development of the thesis.

Portions of this research were presented at the 40th Annual Conference of the Association for International Agricultural and Extension Education (AIAEE), April 22–25, Orlando, Florida.

Author Contributions: J. B. Appiagyei- led the conceptualization of the study, conducted the data analysis, and drafted the original manuscript. **S. C. Mukembo-** contributed to data analysis, manuscript development, and revisions in response to reviewer comments. **H. James-** contributed to data analysis, manuscript development, and served as chair of the Master's thesis committee from which this manuscript is derived. **K. Clark-** provided critical feedback and editorial support to strengthen the manuscript.

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