

Migration and Meatification: Ghana's Urban Protein Economy

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Abstract

Africa is experiencing a rapid urban transformation that is fundamentally reconfiguring urban food environments, value chains, and consumption behaviour. At the heart of this shift is the meatification of urban diets, characterized by increased consumption of animal-source proteins. This paper examines the dynamics of Ghana's urban protein economy, focusing on the critical yet invisible role of West African migrants in sustaining Accra's livestock and meat value chains. Utilizing a mixed-methods approach, the study draws on a survey of 50 international migrants and 30 in-depth interviews with livestock merchants and butchers across four major livestock markets serving the protein economy. The paper shows a high dependence on live animal imports from the Sahel, particularly from Burkina Faso, to meet escalating urban demand. The meat value chain and informal livestock trade networks are powered by migrant labour and entrepreneurship. However, these actors face significant challenges, including poor infrastructure, lack of cold-chain technology, and inconsistent oversight. The paper concludes that policy interventions should recognise the essential contribution of the informal meat value chain and that heavy-handed formalization would disrupt the regional system that sustains the urban poor's access to protein.

Keywords

meatification, urban food security, livestock value chains, migration, informality, protein economy

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Cover Image

'Cowboys' and merchants unloading cattle from a transport truck at the regional livestock market, Tulaku, Greater Accra Region, Ghana. Photo credit: Bernard Owusu



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Introduction

Sub-Saharan Africa is undergoing a profound urban transformation, with over half of the population projected to live in cities by 2050 (Parnell & Pieterse, 2014; Tacoli, 2020). In some countries, over three-quarters of the population is already urbanized (Moustier et al., 2023). Accompanying this process is the rapid reconfiguration of urban food environments, food supply chains, and dietary habits (Glatzel et al., 2024; Hawkes et al., 2017; Holdsworth & Landais, 2019; Ruel et al., 2018). Burgeoning African cities are having to cope with a double burden of malnutrition. On the one hand, rates of food insecurity and hunger in cities are high and escalating (Crush & Battersby, 2017; Crush & Frayne, 2014; Frayne et al., 2018; Riley & Crush, 2023). On the other hand, the consumption of ultra-processed, energy-dense, and fast foods is responsible for an obesity and non-communicable disease (NCD) epidemic (Casari et al., 2022; Demmler et al., 2017; Demmler & Qaim, 2020; Mensah et al., 2021; Reardon et al., 2021; Steyn et al., 2012). Animal-source proteins are also a major driver and indicator of the nutrition transition in Africa, offering benefits for addressing undernutrition but also contributing to rising chronic disease when consumption becomes excessive or shifts towards processed forms (Demmler et al., 2014; Glatzel et al., 2024; Ruel et al., 2018).

Tony Weiss (2021) refers to the global surge in the production, trade, and consumption of meat as the “meatification” of diets. In 2024, global meat production reached 379 million tonnes, and the global meat trade increased to 42.5 million tonnes (FAO, 2025). Demand for beef, mutton, and goat products is lower in Sub-Saharan Africa (SSA) than in other regions of the world but is still expected to double by 2030. Growing demand is outpacing supply, with local meat production (especially chicken and beef) insufficient to meet urban consumption needs (Clonan et al., 2016; Fukase & Martin, 2020; Herrero et al., 2015). Falchetta et al. (2021) argue that the growth in demand for meat in SSA is destined to become a major sustainability challenge in the years ahead. The meatification trend away from traditional plant-based diets common in rural environments towards animal-source protein in urban Africa has been documented in a range of urbanizing African countries, including Burkina Faso (Casari et al. 2022), South Africa (Pheiffer et al., 2024; Steyn et al., 2012), Kenya (Rousham et al., 2020), Tanzania (Ameje, 2023), Zambia (Harris et al., 2018), Mozambique (Smart et al. 2020), and Ghana (Ahmed et al. 2022).

The African protein market was recently estimated to reach USD 2.3 billion in 2026 and USD 2.9 billion by 2031, with animal-source proteins commanding a 60% market share (Mordor Intelligence, 2016). Escalating demand in West Africa’s urban protein economy is met by domestic production of live animals and, increasingly, global and regional supply chains (Brice, 2022; Sumberg et al., 2016). Domestic livestock production is constrained by high input costs, limited infrastructure, and vulnerability to disease outbreaks, resulting in a persistent supply deficit (Mensah et al., 2021). Africa’s poultry imports grew by more than 850% from just under 0.2 million tonnes in 1999 to more than 1.5 million tonnes in 2022. Imports from Brazil alone grew by

three-quarters between 2020 and 2024, reaching almost 1 million tonnes in 2024 (African Agribusiness, 2026). Beef imports into West Africa are also steadily increasing from global exporters, including Brazil and the European Union. Beef imports from outside West Africa coexist with a large regional livestock economy. Sahelian countries have substantial cattle populations and have historically supplied Ghana’s urban markets through live animal trade.

Although many urban households retain strong rural-urban links, most rely heavily on food purchases to meet their daily requirements (Tacoli et al., 2025). In Ghana, urbanization and food access have been strongly linked to a dietary transition, reshaping urban food environments and the availability and consumption of processed foods and animal-source proteins (Akparibo et al., 2021; Nkegbe et al., 2013). Kroll et al. (2019) argue that urban food environments in Ghana are increasingly obesogenic, with widespread access to meat-based, energy-dense foods contributing to rising overweight and obesity alongside persistent undernutrition. Additionally, Mingle et al. (2021) and Kushitor (2023) show that protein consumption in Ghanaian cities is increasing, reflecting changing lifestyles, income growth, and time constraints among urban consumers. However, there are still unexplored linkages between rapid urbanization, rising protein consumption, and the meat value chain in Ghana. In particular, the important role of international migrants in organizing meat value chains and the protein economy has received little or no attention in the literature.

This paper provides a corrective by focusing on the informal meat value chain in the city of Accra. The MiFOOD research project on which the paper is based had the following objectives: (a) to map the spatial-temporal flows of meat from the West African interior to the coastal city of Accra; (b) to analyse the structure and governance of the city’s meat supply chain; (c) to investigate the involvement and strategies of migrant actors; and (d) to assess governance frameworks governing informal trade and food safety, as well as the challenges within the sector. By situating migrant-driven informal trade within the broader discourse on meat value chains, the research contributes to understanding how informality functions as both an economic necessity and a structural feature of the protein economy in West Africa.

Literature Review

A growing body of food studies literature has examined the functioning of livestock and meat value chains in Africa. Various common themes can be identified in studies from Ethiopia (Abera et al., 2023; Nyokabi et al. 2023; Wakaso et al., 2025), Kenya (Carron, 2017; Muringi et al., 2021); Uganda (Mpairwe et al., 2015; Mubiru et al., 2023), Tanzania (Wilson, 2018; Prinsen et al., 2020), and Zimbabwe (Bennett et al., 2019; Morton et al., 2025). A major concern is mapping value chains, including identifying key actors and tracking livestock and meat product flows. In Kenya, for example, Alarcon et al. (2017) map beef, sheep, and goat systems to Nairobi, showing interconnected supply chains linking rural production areas to urban consumption. Similarly, Murungi et al. (2021) provide a detailed mapping of the Nairobi pork

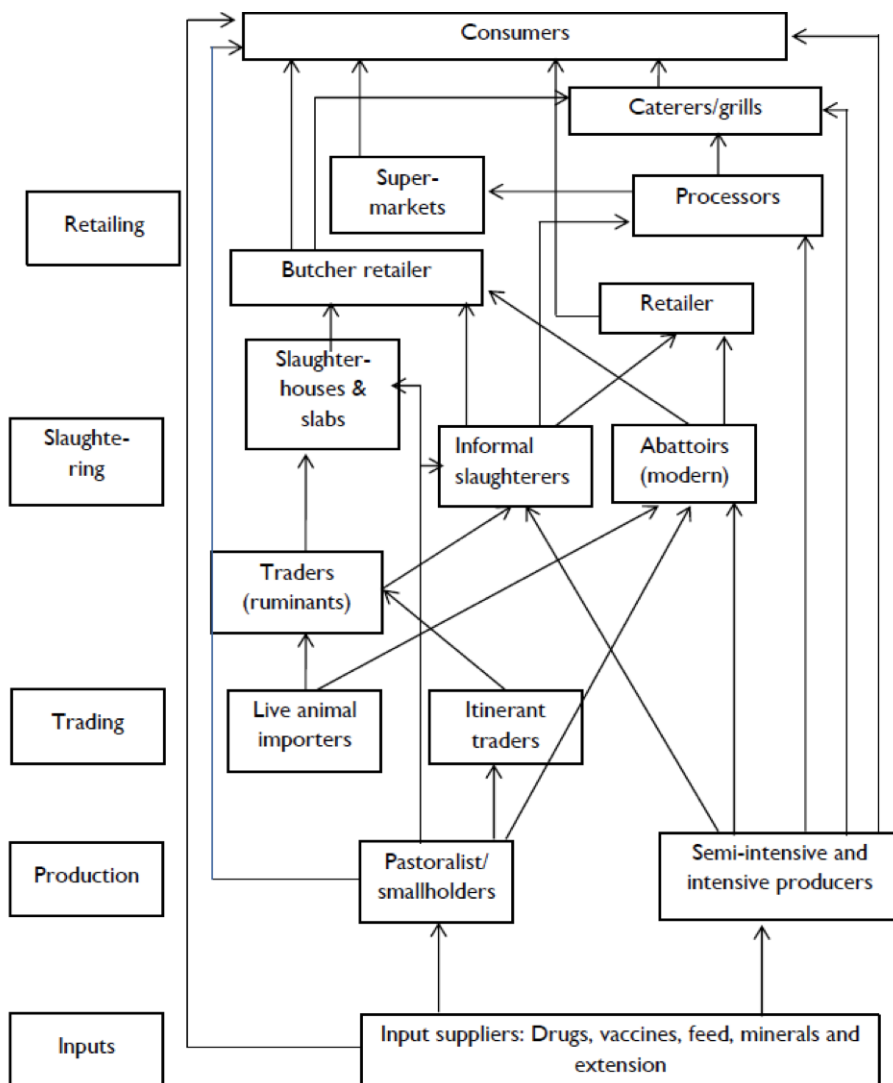
value chain. Across these different contexts, value chains are seen as multi-actor, spatially dispersed, weakly coordinated, and extremely inefficient. As Enahoro et al. (2021, p. 1) note, meat value chains are characterized by “prevailing factors such as low animal productivity, instability of pasture resources, limited investments by farmers, undeveloped markets and poor market integration.”

Figure 1 provides a schematic representation of the meat value chain in Ghana from producer to consumer. In the Ghanaian literature, there has been a significant focus on the productivity, coordination, and efficiency of meat value chains. Boimah et al. (2022), for example, apply a sustainable food value chain development framework to Ghana’s poultry sector, emphasising the need for coordinated interventions across production, processing, and marketing. Similarly, Tuoho et al. (2025) argue that live bird sellers and broiler producers need to reduce inefficiencies in their marketing and production activities. Addo et al. (2025) also call for greater efficiency, this time in pig production and pork marketing in urban Ghana. In the beef value chain, Vaskó et al. (2022) highlight areas for improvement in production systems and market linkages. A key insight is that meat value chains can be part of regional cross-border trading

systems. Rich & Wane (2021), for example, examine the competitiveness of Burkina Faso’s beef exports to Ghana and draw attention to inefficiencies and competition of cross-border trade dynamics within Ghana’s meat market.

Infrastructure constraints are frequently cited as limiting value chain efficiency in both national and regional contexts. Studies in Ethiopia (Abera et al., 2023), Tanzania (Wilson, 2018), Uganda (Mubiru et al., 2023), and Nigeria (Kuka, 2025) all identify deficiencies in transportation, market facilities, and slaughter infrastructure. Food safety risks are another major focus, this time in the biomedical literature (Adesola et al., 2024). In Tanzania, for example, Prinsen et al. (2020) document gaps in hygiene and risk management in butcherries and eateries. In Kenya, Murungi et al. (2021) identify food safety challenges in the pork value chain, including poor handling practices. Alarcon et al. (2017) identify similar problems in Nairobi’s meat system. In Nigeria, Adesokan et al. (2021) contrast the food safety risks of formal versus informal meat marketing. And in Ghana, Asiam (2014) examines the food safety knowledge and practices of meat handlers in abattoirs and butcherries, while Akuriba et al. (2026) focus on compliance with meat safety guidelines by butchers and variations in adherence to safety standards.

Figure 1: Meat Value Chain in Ghana



Source: Opong-Anane (2016, p. 7)

Another related area of research attention by veterinary medicine scholars is the transportation and (mis)treatment of animals en route to livestock markets and abattoirs, as well as once they arrive (Awuni et al., 2025; Badu & Teye, 2022; Frimpong et al., 2012; Johnson et al., 2025; Yenoah et al., 2024). While the scientific literature focuses on animals in the meat value chain, it pays only limited attention to the roles and experiences of human participants in the system.

Perhaps the most striking feature of Ghana's contemporary meat value chain is the high degree of informality at every stage from production to transportation to marketing to slaughter to retail. Meat value chains in other African countries operate through both formal and informal channels, shaping food accessibility and livelihoods in cities. Formal value chains are capital-intensive operations that involve just-in-time production, certified abattoirs, grading systems, temperature controls, integration into national and export markets, and supermarket-linked distribution (Rich et al., 2022; Sojl et al., 2015; Spies & Cloete, 2013). In South Africa and Namibia, for instance, formal systems have undergone rapid restructuring driven by supermarket expansion, policy reforms, and technological upgrading (Bowman & Bennie, 2026; Kalundua & Meyer, 2017; van der Merwe et al., 2023). Recent literature highlights that formal and informal value chains are not mutually exclusive but are increasingly interconnected through hybrid arrangements, cross-border trade, and adaptive governance structures (Alarcon et al., 2017; Ndlovu et al., 2025). Regional analyses highlight the hybrid models in which formal and informal actors intersect, producing mixed governance arrangements that blur regulatory boundaries (Ng'askie, 2019; Kalundua & Meyer, 2017). However, informal meat value chains still dominate the domestic meat supply in many African countries and are especially important for low-income urban consumers.

Informal meat value chains are characterized by small-scale actors, flexible market arrangements, limited regulatory oversight, and lower barriers to entry (Hoffmann & Bernhard, 2007; Roesel & Grace, 2014; Sibanda & Von Blottnitz, 2018). In West Africa, much livestock production for the market is undertaken by mobile pastoralists and small farmers (Ouedraogo et al., 2021; Timpong-Jones et al., 2023; Turner & Schlecht, 2019). Animals are kept as a store of wealth, for subsistence, and to generate income through seasonal or sporadic sales (Molina-Flores et al., 2020). Livestock transport, slaughter, and retail often take place informally with minimal regulation (Badu 2021; Vaskó et al., 2022). In South Africa and Kenya, for example, informal actors rely on flexible, relationship-based procurement systems, lack cold chain infrastructure, and have sub-standard hygiene practices, which heighten microbial contamination risks and zoonotic disease exposure (Alarcon et al., 2017; Nyokabi et al., 2018; Rani et al., 2017).

Cross-border livestock trade for urban markets by agro-pastoralists is increasingly common in West Africa (Jahel et al., 2020; Johnson et al., 2025; Valerio et al., 2020; Walther, 2014, 2015). Some of the trade is through formal border posts, but a sizable proportion relies on more clandestine border crossings. Livestock is transported to informal live-

stock markets for auction and sale and then continues its journey southwards by road in private vehicles. On arrival in urban livestock markets, slaughtering is handled by formal abattoirs and informal slaughterers or butchers. Finally, the large and growing informal food sector, comprising butcheries, market traders, street vendors, and home-based food enterprises, plays an important role in the value chain by facilitating access to meat protein (Demmler et al., 2024; Riley & Crush, 2023; Skinner, 2018). Informal food vending thus plays a paradoxical role, potentially both slowing and accelerating the nutrition transition among low-income consumers (Cook et al., 2024; Roy et al., 2023).

The value chain literature tends to treat the system as territorially bounded. Even when cross-border trade is acknowledged, the focus remains on animal welfare and food safety rather than on the lived experiences, challenges, and mobilities of the actors involved. We were unable to locate any prior studies on the role of migrants in Ghana's meat value chain. This mirrors a notable silence in the broader literature on African meat value chains: that is, its relative neglect of human migration, mobility, and migrants. By neglecting the migrant merchants, butchers, and slaughterers that run the value chain, the literature reproduces a static view of human mobility, obscuring the dynamic networks that underpin value chain operation and resilience. Migrants are largely invisible in value chain analysis in Africa, and in policy and academic debates on urban food systems. Integrated analyses are needed to understand how dietary change, migration dynamics, and value chain organization jointly shape Ghana's protein economy. This omission oversimplifies the human complexity of meat value chains and may limit the development of policies on labour protections, cross-border trade, and the protein economy of cities.

In the Horn of Africa, migrants dominate the livestock transportation sector, linking production zones and urban markets through trekking, trucking, brokerage, and trade. Migrant traders and pastoralists facilitate market integration, drought risk management, and price stabilization through largely informal but functional trade networks. Further, abattoirs and slaughterers depend on migrant workers for tasks such as killing, carcass handling, and cleaning, jobs characterized by risky conditions, high injury rates, and weak labour protections (Maseko et al., 2017). Migrants are particularly prominent in informal slaughter slabs and abattoirs, where food safety and worker protection are unevenly enforced (Rani et al., 2017; Vaskó et al., 2022). In Ghana, migrants from the north and neighbouring countries are involved in livestock transportation, slaughtering, and meat marketing. Recent studies of livestock markets and transportation practices suggest that workers in the meat value chain face precarity and dangerous working conditions (Badu, 2021; Frimpong et al., 2012; Tetteh et al., 2024; Vaskó et al., 2022). Badu (2021), for example, highlights the role of migrants from northern Ghana in the handling, transportation, offloading, and marketing of cattle in Kumasi's meat industry. Despite the economic importance of transportation, slaughtering, and marketing activities, migrants in value chains elsewhere operate in legally ambiguous spaces where many are exposed to harassment and regulatory

exclusion (Berhanu, 2016; Birke & Bluhm, 2020; Maseko et al., 2017). In most cases, marketing and transportation depend on ethnic networks and trust-based relations but are increasingly threatened by formalization and market consolidation (Little et al., 2015; Marandure et al., 2016).

Ghana's Urban Protein Economy

Changing consumption practices and increased urban demand for protein-rich foods are straining domestic production capacity and increasing dependence on global and regional supply chains (Desiere et al 2018). To date, these power asymmetries have been most pronounced in the African poultry industry, which has seen a “remarkable surge” in Brazilian chicken imports in recent years (Poultry News, 2026). Ghana's imports of Brazilian chicken grew sixfold between 2020 and 2024, accounting for three-quarters of the total poultry meat supply (Econofin Agency, 2026). The rapid growth of imports has also prompted concerns about the impact on the domestic poultry industry and debates about import restrictions and protecting local producers (Banson et al., 2015; Boimah et al., 2022; Chibanda et al., 2022; Knöbelsdorfer & Qaim, 2023; Zamani et al., 2025). In contrast to the attention given to poultry production and supply chains in Ghana, the literature on meat imports and consumption is more limited. However, as Osei-Asare & Eghan (2014) note, urban Ghanaians typically consume almost twice as much beef as chicken per capita.

The livestock population of Ghana increased steadily between 2011 and 2020 (Table 1). Cattle numbers increased from 1.5 million to 2.1 million over this period (a 41% increase). Red meat production in Ghana is primarily undertaken by smallholder farmers using semi-intensive or extensive systems with an average of fewer than 50 head of cattle (Taylor, 2023). Despite the growth of the ruminant livestock population, the capacity to feed the growing urban human population is constrained by several factors, including low herd productivity and high input costs (Mensah et

al., 2021; Nkegbe et al., 2013; Rich & Wane, 2021). In 2023, for example, the live cattle population was projected to decrease by 8%, with smaller declines of 1-2% in the sheep and pig populations (Taylor, 2023). The anticipated decline was attributed to farmers cutting their losses due to the high costs of feeding, veterinary services, and overall animal production.

Even without these challenges, the demand for red meat outstrips supply, and as a result, live animals are imported from the Sahel region for slaughter. Table 2 shows that between 2011 and 2019, cattle imports to Ghana dramatically increased from approximately 9,000 to 69,000. The number of goats and sheep imported shows an even more dramatic increase. The actual numbers of imported livestock are certainly much higher, for as Oppong-Anane (2016, p. 6) notes, “most of the animals do not come through appropriate ports of entry (so) data of live animal imports are not reliable.” The decline in imports in 2020 is directly attributable to COVID-19 and the closure of international borders. The overall growth in imports shows Ghana's growing reliance on cross-border meat value chains originating in the Sahel.

The share of slaughtered cattle from outside Ghana increased rapidly from 5% in 2011 to a high of 56% just before the pandemic (Table 3). The apparent decline in overall slaughter numbers, despite growing demand for meat, is due to reduced supply of cattle to abattoirs and informal slaughter slabs from domestic sources. As a result, Ghana is increasingly reliant on imported live animals from the Sahel, effectively substituting for local production, and meat consumption is sustained by the expansion of cross-border value chains rather than by an increasing domestic herd. Rich & Wane (2021) and Mingle et al. (2021) indicate that Ghana imports about 30-40% of its live and slaughtered cattle from Burkina Faso to supplement its supply deficit.

The main production sites for imported cattle, sheep and goats are farms in Burkina Faso. Livestock farming is a cornerstone of Burkina Faso's economy and rural livelihoods,

Table 1: Ghana Livestock Population (in 000), 2011-2020

Year	Cattle	Sheep	Goats	Pigs	Poultry
2011	1,498	3,887	5,137	568	52,575
2012	1,543	4,019	5,435	602	57,885
2013	1,590	4,156	5,751	638	63,732
2014	1,657	4,335	6,044	682	68,511
2015	1,734	4,522	6,352	730	71,594
2016	1,815	4,744	6,740	777	73,885
2017	1,901	4,978	7,151	816	75,363
2018	1,943	5,102	7,366	845	76,870
2019	2,032	5,333	7,764	894	79,391
2020	2,109	5,544	8,180	946	81,769

Source: Taylor (2023)

Table 2: Live Animals Imported to Ghana, 2011-2020

Year	Cattle	Sheep	Goats	Total
2011	9,384	2,835	2,495	14,714
2012	23,622	9,840	10,008	43,470
2013	21,131	16,738	16,953	54,822
2014	20,948	22,188	32,012	75,148
2015	17,968	15,763	20,004	53,735
2016	23,575	13,854	16,900	54,329
2017	32,249	47,526	46,665	126,440
2018	52,948	55,602	84,751	193,301
2019	69,083	48,799	103,201	221,083
2020	42,838	68,656	72,606	184,100

Source: Taylor (2023)

Table 3: Cattle Imports and Slaughter, 2011-2020

Year	Cattle slaughtered	Cattle imports	%
2011	202,104	9,384	4.6
2012	220,446	23,622	10.7
2013	200,819	21,131	10.5
2014	164,554	20,948	12.7
2015	141,144	17,968	12.7
2016	116,056	23,575	20.3
2017	129,694	32,249	24.9
2018	122,083	52,948	43.4
2019	122,802	69,083	56.2
2020	121,863	42,838	35.2

Source: Taylor (2023)

contributing almost 20% of national GDP and 26% of export earnings (FAO, 2018). Around 80% of the rural population of Burkina Faso is engaged in a sector dominated by extensive livestock production, including cattle, sheep, goats, and poultry. Livestock from Burkina Faso enters the Accra meat value chain through purchase from livestock farmers either at the farm gate or from the many livestock markets in the country (Mano et al., 2026; Minot & Elahi, 2020). The livestock is either conveyed across the international border by truck or is trekked on foot. The crossing points are either official border posts or clandestine, unofficial routes (Courtright & de Bruijne, 2025). Some Accra livestock merchants purchase their stock in Burkina Faso (either in person or using an agent), while others rely on others to import the animals and do their buying at livestock markets in northern Ghana. As Courtright & de Bruijne (2025) note:

The domestic and international trade in livestock in Ghana occurs largely through a network of cattle markets, ranging from small weekly markets in rural communities in the north to bustling entrepôts in the south. Rural northern markets sell between 90 and 600 head of cattle every week; the busy Ashaiman market in the capital Accra handles an estimated 1,200 to 3,000 cattle every week. Connecting these

two poles are a network of intermediary markets, mostly in the centre and north.

At official border posts, animals are inspected by the Ghanaian border agency before a 'movement permit' is issued for transportation. Veterinary services also assess the quality and health of purchased animals and issue clearance for their transportation. The animals that pass inspection are reloaded onto transport vehicles for onward conveyance. Transporters play a crucial role in the meat value chain, moving animals from the farms to the collection points and urban livestock markets. Ghana's livestock are mainly transported by road through informal but organized chains that link collection centres, regional markets, and coastal abattoirs, with long journeys often exceeding 500 km.

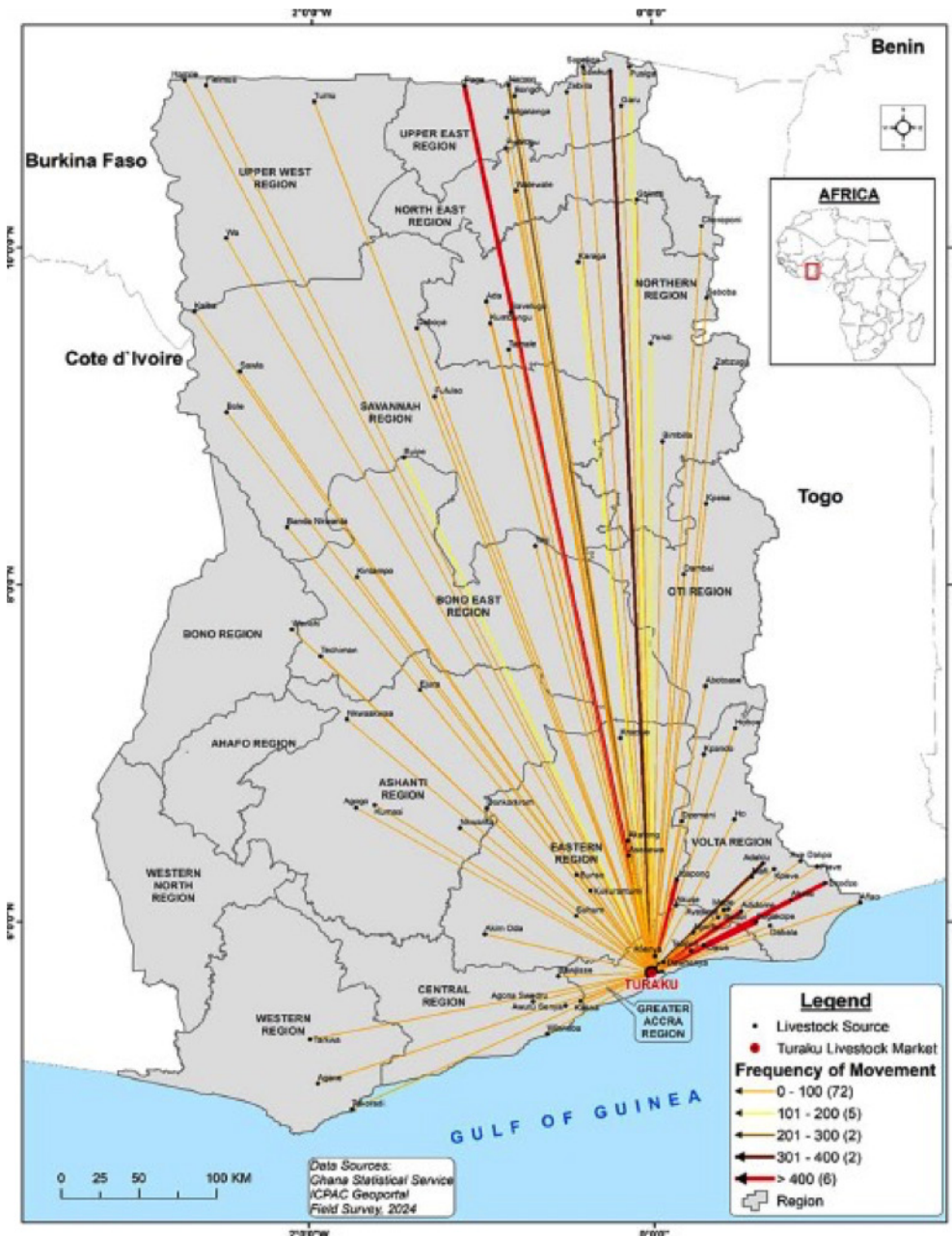
Mogre et al.'s (2024) survey of cattle transporters found that the majority use semi-trailer trucks, light commercial vehicles, and motor tricycles, but that less than half were fit for cattle transportation. Livestock merchants and butchers often combine their orders, gather their animals, and find a transporter willing to take them to the desired destination. One vehicle, therefore, might have several animals belonging to different customers. The average number of cattle carried in a vehicle was 27, with a maximum of 150. Mogre

et al. (2024) note that the smooth transportation of animals to market was compromised by various challenges en route, including delays, vehicle breakdowns, scarcity of feed and water, and extortion by law enforcement officials. Figure 2 shows that imported livestock enters Ghana from different directions before converging on Accra.

In Accra, most animals are first offloaded at the Turaku Cattle Market in the Kpone Katamanso municipality that shares a boundary with the Ashaiman Municipal Assembly, and Tema Metropolitan Assembly to the west. Turaku is 38km from Accra and is one of the largest cattle markets in the country, playing a central role in the slaughter and sale of beef for Accra. Cattle bought and sold at Turaku are also transported by motor tricycles to smaller livestock markets for resale or slaughter in municipal or private abattoirs, as well as in informal slaughter facilities. Migrants working in the markets of Greater Accra include merchants, butchers,

and landlords. Livestock merchants (or dealers) organize the buying and transportation of livestock along the value chain, and in the sale and auctioning of live animals once they arrive. Landlords play an intermediary role, assisting merchants and butchers who are unable to communicate in English or local Ghanaian languages or lack approval from local associations. Their main role is to facilitate livestock auctions and transactions. Butchers purchase cattle and small ruminants from merchants before slaughtering and supplying meat to their retail clientele. They not only prepare carcasses for customers but also engage in livestock trading. Some butchers with large customer bases manage the entire process, bringing in livestock, slaughtering, and distributing directly to consumers. Slaughtering is generally carried out by gangs of young local men hired on a temporary basis by the butchers. Slaughtering is conducted according to Muslim slaughtering practices (halal or dhabihah) that follow traditional Islamic law.

Figure 2: Tulaku Market Livestock Value Chain



Source: Johnson et al. (2025)

Carcasses are distributed through a network of wholesalers, retailers, and market vendors, with limited cold-chain infrastructure, necessitating rapid sale and consumption. The large and expanding informal food sector, comprising consumer-facing butcheries, market traders, street vendors, and home-based enterprises, constitutes the final link in the meat value chain (Asuming-Bediako et al., 2018; Baah-Boateng & Vanek, 2020; Marras & AgBendeche, 2016). Workers in the markets frequently operate under precarious conditions, facing occupational health risks and limited regulatory oversight (Tetteh et al., 2024). Mogre (2021), for example, argues that the conditions and procedures of Ghanaian slaughterhouses are poor, with obsolete structures and few safeguards for animal and worker welfare. Additionally, “animals are exposed to great levels of stress and pain before and during slaughter.” Conditions at the slaughter sites are highly variable, with persistent challenges in sanitation, hygiene, and animal welfare (Adonu et al., 2017; Annan-Prah et al., 2012; Awuni et al., 2025). Compliance with meat safety standards are uneven and shaped by butchers’ perceptions of risk, economic constraints, and regulatory enforcement (Akuriba et al., 2025; Quartey, 2018).

Study Methodology

Migrants are likely engaged at every stage of the value chain, from pastoral production and cross-border trade to urban processing, slaughtering, and informal retail, often operating within regulatory grey zones that shape their personal safety and livelihood opportunities (Takyi et al., 2023). This study focused on migrant merchants and butchers in Accra, who coordinate many activities across the meat value chain. The study employed a mixed-methods approach, combining surveys, in-depth interviews, participant observation, and key informant interviews with environmental safety and veterinary officers. Conducted in April 2025, the research focused on the meat value chain activities in four major livestock markets in Greater Accra: Kwame Nkrumah Circle, Turaku Ashaiman, Madina, and James Town. All these livestock markets have slaughter slabs or houses. The research team also visited two mechanized, standard abattoirs to observe the scale of operations: Accra Abattoir (government-owned) and JFAMCO (privately owned). The team first observed how the meat business and activities were carried out at the markets, including the process of bringing livestock to market, mode of transportation, loading and unloading, and whether animals were sold or auctioned, as well as the details of how the transaction unfolded, and how the butchers transport the animals bought. The team also observed the slaughter process, dressing of the carcass, evisceration, and distribution and transportation until the carcasses are delivered to the final consumer, butcheries, and marketplaces.

A total of 50 international migrants were identified for the survey component with the help of on-site meat inspectors and officers. In-depth interviews were also conducted with 30 of these migrants, including 20 livestock merchants and 10 butchers. Most of the actual slaughtering of cattle is performed by young Muslim Ghanaian youth who live in Accra and are hired for the job by the migrant merchants and

butchers. Information sought from the in-depth interviews included the process of sourcing the meat, different sources animals are bought from, main geographical areas and type of farms, methods of transportation of animals, methods of slaughtering and carcass processing, type of interaction between the various actors and products generated and the distribution of products, as well as food safety policies and management. Further, to assess the value chain governance and challenges, the interviews identified the different roles involved in the decision-making process and the actual performance of the activity; the types of relationships with other stakeholders regarding animal transactions, products, and payments; and interactions with government officers and structures.

The quantitative survey data were analysed using simple descriptive statistics. Qualitative interview data were analysed using NVivo 12 software to develop and apply codes, identify themes, patterns, and relationships, and summarize the data on this meat value chain, consumption patterns, food insecurity, governance challenges, and policy implications. Additionally, the analysis considered key components, including demographic data, meat transport routes, abattoir systems, meat consumption patterns, and governance in Accra.

Migrants in Meat Marketing

Migrants surveyed in the livestock markets came from diverse backgrounds and experiences, including country of origin, educational background, age, roles, and years of experience in the business (Table 4). They came from six different African countries, with Nigeria and Burkina Faso being the predominant sources. All migrants were male, reflecting that almost all market activities are undertaken by men. This is in sharp contrast to the informal food sector more generally, where most vendors are women (Ashaley-Nikoi & Abbey, 2023). In Greater Accra, for example, 82% of the region’s 405,000 market traders are women, as are 86% of the 29,000 street food vendors (Baah-Boateng & Vanek, 2020). The pattern reflects broader gender norms in Ghanaian food value chains, where women are heavily represented in informal retail but underrepresented in upstream and more asset-intensive segments of the protein economy.

Educational attainment was generally low among the merchants and butchers, with over half having only a junior high school education and one-third having no formal schooling at all, which may constrain access to alternative livelihoods and reinforce dependence on the meat trade. The migrants’ age profile was also older than anticipated, especially given the back-breaking nature of much of the work. Only 20% of the sample were under 30, with almost 40% in their thirties and 35% in their forties. Experience seems to count for far more than youthfulness, as nearly 70% of those surveyed have more than a decade of experience, and most are engaged in core activities such as slaughtering and selling, as well as retail trading, with many performing multiple roles. The combination of long-term experience, multi-tasking, and limited formal education suggests that migrant participation in the meat value chain is a pathway to acquiring

trade-specific skills within an informal but structured economic niche with growing consumer demand.

Merchants primarily source animals from Burkina Faso (77% of the sample), followed by Niger (48%), Nigeria (29%), and Mali (27%) (Figure 3). Smaller contributions come from Benin (19%), Togo (17%), and Chad (10%). Imports dominate the supply, as only 8% of migrants source livestock from Ghana itself. These findings align with earlier studies that identify Burkina Faso as Ghana's most important livestock trading partner (Rich & Wane, 2021; Mingle et al., 2021; Taylor, 2023). One butcher described his personal sourcing strategy as follows:

Because I have a large customer base, I decided to rather import the animals than buy them at an expensive price at the livestock market. I bring them

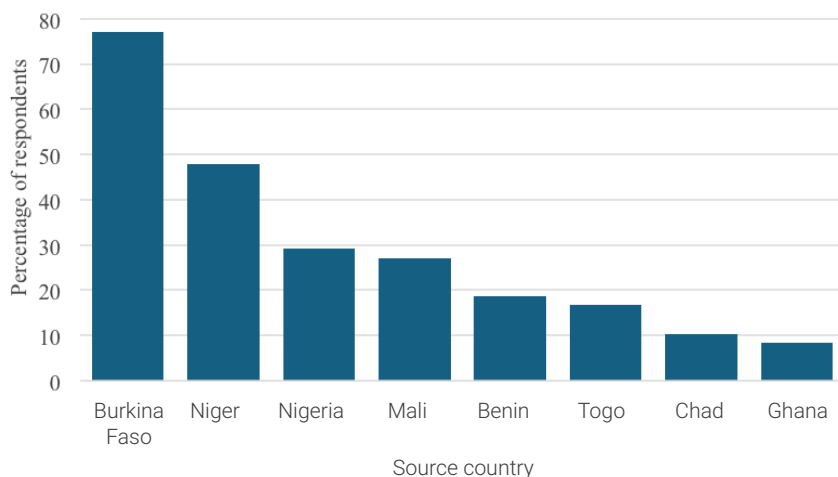
from Togo and Burkina Faso. Also, procure them myself because of the scarcity of livestock in Ghana and the rise in demand for meat from my clients. I buy my livestock at a major livestock market in Burkina Faso called the Doli market. After I'm done purchasing the livestock, we wait sometimes for two weeks for Burkina Faso police to provide us with an escort due to the rise of insurgency of Boko Haram (Butcher Interview, Accra, April 5, 2025).

Some merchants do their sourcing from other West African countries as well:

I buy animals from Burkina, Senegal, Mali, and Bawku (Ghana). We also buy from Buipe (Ghana). Animals from the north are usually larger in size. The animals from Kupe are smaller. Some are from

Table 4: Profile of Migrant Respondents		
	No.	Percentage
Country of origin		
Nigeria	21	43.8
Burkina Faso	11	22.9
Benin	8	16.7
Togo	3	6.2
Mali	3	6.2
Niger	2	4.2
Age		
18-30	9	18.8
31-40	18	37.5
41-50	16	33.3
51-60	3	6.2
60+	2	4.2
Sex		
Male	50	100.0
Female	0	0.0
Education		
No formal education	16	33.3
Primary school completed	4	8.3
Junior high school completed	26	54.2
Senior high school completed	2	4.2
Role (multiple response)		
Slaughtering/selling	39	78.0
Trading with final consumers	30	60.0
Distribution	14	28.0
Processing meat into final product	6	12.0
Transportation of the carcass	4	8.0
Years in the meat trade		
More than 10	33	68.7
7-10	8	16.7
4-6	3	6.3
1-3	4	8.3

Figure 3: Countries of Origin of Livestock



Senegal, some from Ghana, and some from Mali. The black one with ropes all around the legs is from Senegal, and apart from Senegal, you wouldn't get any animal of this type anywhere. The price for the black animal will be GHC 30,000 with no deduction. Veterinary officers assess them before purchase, and they issue a permit for us to send to the border, where we obtain movement permits to transport them to Accra. We usually use a long truck. We have cowboys who load and unload them. Some are Fulani men with whom we work. We pay them to help us (Merchant Interview, Accra, April 3, 2025).

Almost 40% of the merchants surveyed operate at the higher value end, purchasing animals for GHC10,000 or more. Others buy at mid-range prices from GHC4,000-9,000 (34%). The rest focus on less valuable animals, worth under GHC4,000. In general, these prices suggest that a substantial capital investment is required for participation in the livestock business.

Findings on the transportation of livestock to Accra are consistent with those of earlier studies (Mogre et al., 2024). After purchase, the animals are transported directly to Accra by road. 'Cowboys' are hired to load the animals into trucks and often accompany the drivers to market. Small ruminants are not mixed with the cattle, as they will be trampled. Instead, there is a two-layer arrangement, with the small ruminants on top and the cattle beneath. At the border, the animals are offloaded for documentation and inspection by the Ghanaian border agents before a 'movement permit' is issued for transportation to Accra. One merchant described the whole process as follows:

We load ourselves by putting all the purchased animals together and pushing them into the truck one after the other. The animals are friendly and do not react fiercely, although they can occasionally become upset. We don't employ anyone to do the loading, nor do we require specialized skills. We have our boys who help to load and unload at each site. When we reach the Ghana border, the animals are all brought down and counted again; the Ghanaian

veterinary officers then assess them to ensure they are healthy and suitable for consumption. A movement permit is issued for the transport from the border to Accra. When we arrive in Accra, especially at the Tulaku Market Centre, the animals are further assessed by veterinary officers, who take stock and charge accordingly. The price of the charges depends on the number of animals you bring. I paid GHC600 for the 11 cows I brought. After, we park the truck close to the kraal, we open the main door of the kraal, give them a level ground from the truck to the main entrance and drive all of them downwards to the kraal and straight to the water point for them to drink water to cool down after a long journey. We then begin the auction of the animals in the evening to the Ghanaian traders and other international migrants. The buyer normally hires a local transport service to send the animals to the mechanized abattoirs or slaughterhouses and slaughter points to kill them. For me, my business ends with the sale of the cow; the rest is in the hands of the local trader and his butchers (Merchant Interview 10, Accra, April 8, 2025).

In some instances, animals purchased in other countries are walked through the country's borders, and after they receive clearance and movement permits, they are loaded into a truck at the border and transported to Accra. This was confirmed by a merchant who hails from Niger and has been in the business in Ghana for over 30 years:

We used to bring goats from Niger to Ghana. We would walk with them from Niger to Burkina Faso, then from Burkina Faso to Bawku. From Bawku, we would continue by car to Accra. The goats would graze as we walked. We would stop to rest at some point and then continue the journey early the next morning. It took approximately a month to reach Bawku. We didn't have any encounters with immigration. I didn't know anything about permits. I can't really tell if my dad took care of that. We no longer buy goats from Niger. We buy them from villages. My dad sometimes went to Krobo Asesewa (East-

ern Region) to buy them. Sometimes, he also went to the Volta region and bought from there (Merchant Interview 7, Accra, April 8, 2025).

While the livestock markets are dominated by cattle trading, there is also a significant trade in small ruminants. Cattle are the most common, with 73% of the respondents handling them, followed by sheep at 56% and goats at 54% (Table 5). This indicates that many migrants work with more than one type of livestock. The sourcing patterns for each type of livestock varied, highlighting how the migrants strategically utilize different channels based on the type of livestock they seek (Table 6). Cattle are most often sourced from wholesalers (73% of respondents), followed by individual farms (54%) and local collectors (46%). Wholesalers are located in the livestock source regions and own or accumulate large herds for sale. The procurement of goats and sheep was more evenly distributed across the three channels. This varied approach demonstrates a tailored sourcing strategy in which buyers select channels based on the specific type of animal, ensuring a steady and diversified supply.

The average individual purchase per trip is about 12 for cattle, and 20 for goats and sheep. Livestock arrives in the primary markets on Thursdays and Sundays and typically takes more than 48 hours to reach Accra. The journey is long, and there are no stops for the animals to graze. Some arrive in a weak state or even dead. At Tulaku Market, they are untied and unloaded by the cowboys who drive them directly to the market's ranches, kraal, and pen. They are later led to drink and provided with food. Some of the animals intended for merchants and butchers in other market nodes in Accra are transported there using tricycles and Kia vehicles.

Animals purchased and selected for slaughter are separated, tied, and transported to the slaughtering sites to allow the butchers easy access. Slaughtering usually takes place at dawn and late at night when the temperatures are cooler. The slaughtering supply chain is highly localized, which min-

imises transit stress for animals and reduces operational costs for traders. Most traders transport animals a very short distance to slaughterhouses, slabs, and abattoirs. The most common locations for slaughtering are private slaughter slabs and houses, which are utilized by 61% of respondents. Only 22% use government abattoirs. These private locations are often very close to the livestock markets. The cost of slaughtering at private slaughter slabs and houses is much lower than that of formalized, mechanized abattoirs owned by the state or government.

After slaughter, meat is sold in various forms, including whole carcasses, unprocessed meats, and finished meat. Additionally, the meat is processed into various parts for sale or supply to customers and informal retail outlets, cold stores, and restaurants. Before a carcass is ready to be moved off-site, veterinary officers inspect the meat to determine its fitness for human consumption. The penultimate stage of the value chain, therefore, relies on a public source for veterinary inspection. All the respondents rely on the government Veterinary Service for pre-slaughter advice and post-slaughter meat inspection. Government services are therefore critical to ensuring animal health and meat safety standards for the urban population.

The most popular product is beef, followed by chevon (goat). Lamb or mutton is a more specialized offering, accounting for only 3% of products sold. The sales structure is clear and well-defined, with distinct tiers. Prime cuts of beef, mutton, and chevon are the primary revenue generators for butchers and abattoirs. The head and feet of the animals have the second-highest sales, followed by the intestines, skin, and bones. Very little, therefore, goes to waste. Most of the butchers offer distribution services, while others employ or contract with distributors. Transportation by car is the main method for moving meat from the slaughterhouse to the selling point. Two-thirds of the customer deliveries are based on pre-orders, although butchers do also sell direct to walk-in customers at the markets.

Table 5: Migrant Handling of Different Livestock

Type	No. of respondents	% of respondents
Cattle	35	72.9
Sheep	27	56.3
Goats	27	54.2

Table 6: Livestock Sources

Type	Wholesalers % of respondents	Local collectors % of respondents	Individual farms % of respondents
Cattle	72.9	45.8	54.2
Goat	50.0	50.0	52.1
Sheep	52.1	43.8	54.2

Table 7: Types of Slaughter

Category	% of respondents
Slaughterhouses/slabs	61.2
Abattoirs	22.5
Wholesale butchers	16.3

Value Chain Challenges

The in-depth interviews identified a set of challenges faced by migrants embedded in the meat value chain. First, despite the informal nature of much of the value chain, government plays an important oversight role at certain points. Because of the cross-border nature of the trade, the government provides essential authorizations through border agents and officers which facilitates the organized transportation of livestock from points of origin to markets in Accra. Traders are issued “movement permits” after veterinary services assess the health of the animals and verify that food quality standards are met. Additionally, the government deploys meat inspectors and environmental health officers to ensure slaughterhouse safety, maintain sanitary conditions, and oversee the safe transportation of meat to retailers. While these interventions aim to guarantee food safety and promote above-board business practices, they also introduce operating challenges for migrants within the meat industry:

Our work starts at the border; we have an entry point, a quarantine station where the animals are supposed to be offloaded and checked for their health, and also vaccinated, before we issue them entry permits. When they enter the country and attempt to relocate to other areas, they undergo the same process. We also follow the animals in case they are going to be mixed with other animals on a farm, just to make sure they are vaccinated before they are introduced. That's our role; we ensure that all farmers understand this. If they are buying animals from markets for their farms, they should make sure they are all vaccinated and isolate them for 3 to 21 days. For auction and consumption, it's normally between 24 and 36 hours. With that, we observe the animals, conduct inspections, and, after slaughter, conduct further inspections. If we find anything unsafe for consumption, we bury it (Key Informant Interview 1, Accra, April 4, 2025).

While there were a few recorded complaints about border and veterinary officials, the police did not get off so lightly. Police corruption, extortion, and demands for “settlements” appear to be commonplace, adding significantly to the cost of transportation:

The major problem when coming to Ghana is that crossing the border to engage in livestock trade encounters many problems with the Ghanaian police. We don't have any problems in Togo and Benin. We buy our cattle from the market. When we show our permit paper, no police officer will stop us. But in Ghana, when we cross the Togo border, the police still hassle us even if we show them our permit papers. We don't unpack the animals from the car, but we can be delayed for about two hours or more. When the police see cars with foreign number plates, even if you show them your driver's license or permit, you will be stopped and delayed until you pay them the amount they demand (Merchant Interview 14, Accra, April 14, 2025).

Merchants and butchers in Ghana's informal meat supply chain say that operating within the sector does not require formal licensing. However, the high market fees imposed prior to livestock auctioning and slaughtering significantly undermine their competitiveness. Traders and butchers are required to pay multiple charges: a fee for each animal brought to market, a fee for each animal slaughtered at slaughterhouses or abattoirs, levies to landlords who facilitate livestock auctions, and payments to workers who slaughter animals. These financial burdens are attributed mainly to Ghana's decentralized market governance system. Collectively, these costs substantially increase operational expenses, making butchers less competitive:

Sometimes the business is good, and sometimes it's not good, but now it's not good at all. The market is not all that good due to the CFA's prices and erratic nature; hence, business and sales don't go as fast as they used to. Our main problem is that the cows are too expensive now. I think it is the increased rate of CFA that has caused the cattle to be expensive (Butcher Interview 8, Accra, April 17, 2025).

There are a lot of challenges here, just like every other business. Our biggest problem is the cost of the cows; cows that used to cost 10,000 cedis now cost about 50,000. I don't even know if it's a general issue or if it's just here. So, if I buy one cow for 50,000, how do you think I'm going to sell it? And not everyone has the money to buy a pound of beef for 50 cedis (Butcher Interview 3, Accra, April 4, 2025).

Merchants also identified several significant challenges affecting their operations. These include inadequate capital, the high cost of purchasing and transporting live animals, and rising production and maintenance costs until the animals are sold. For instance, merchants often need to provide animal feed to fatten livestock and maintain healthy weights, which is further complicated by fluctuating costs and the instability of the local currency:

My biggest challenge now is capital. With enough money, I could buy a larger number of animals and grow the business further. In the past, we used to help one another a lot. People would build large sheds for free, and some would provide water at no cost. But those days are gone. Now, we buy everything ourselves. We feed the cattle with rice bran, which costs 120 cedis, and cassava peel, which costs 100 cedis. We also go to Blue Skies to buy fruits, and again, we negotiate the prices, so it benefits everyone. Buying young cattle and rearing them is a considerable risk, but we continue to hope for the best. Sometimes, we can go three months without making a single sale (Merchant Interview 1, Accra, April 4, 2025).

Livestock diseases, such as anthrax, pose significant threats to the meat value chain in Ghana (Akuriba et al., 2026). These diseases spread easily if not closely monitored and not only limit the supply of livestock but also constrain

household-level livestock production, thereby affecting the ability to meet the growing demand for meat:

The key challenge in the meat value chain is the routes from which the animals are coming. Let's say I have Farm A in Adenta, which produces 45 cattle for five different markets. However, other farms also kill animals, and their meat is distributed to similar markets. Now, imagine there's an outbreak, and you might find it difficult to trace the source of the disease. This occurred during joint vaccinations within the health system. Ghana received low scores due to this challenge. They recommended that we find ways to better track or trace meat distribution to help identify who was exposed to it (Key informant Interview 1, Accra, April 4, 2025).

Finally, some key respondents highlighted the poor infrastructure and deplorable conditions of the slaughter sites.

Unfortunately, this place [the informal slaughter slab at Tulaku] is not in the best condition. As you can see, many things will need to change here. They have brought the sand and gravel, as you can see over there, to improve conditions here. These places lack proper, well-constructed structures; sanitary conditions are subpar. Butchers face significant challenges, including inadequate access to water. Despite the condition of these informal slaughterhouses and slabs, butchers prefer them to formal ones, such as JFAMCO and Accra Abattoir. The cost of slaughtering is cheaper here compared to the formal abattoirs. Additionally, I believe people prefer it here due to its distance and proximity to the livestock markets. Most livestock markets have slaughterhouses and slabs closer to them (Key informant Interview 2, Accra, April 15, 2025)

Conclusion

This paper highlights the role of migrants from other West African countries in sustaining Accra's meat value chain and meeting the city's growing demand for animal-source protein. Migrants from neighbouring countries act as transporters, merchants, butchers, and distributors, ensuring a continuous flow of livestock into Ghanaian markets. Their activities are embedded in informal trade networks and value chains that are responsive to urban food demands. Informality, while often perceived as a governance challenge, is a critical mechanism for the affordability and accessibility of meat in Accra and other urban centres. Previous studies on cross-border meat value chains have largely focused on border dynamics and animal welfare, neglecting how these flows extend into urban spaces and are shaped by migrants in cities. Similarly, while migration studies often emphasize labour markets or remittances, they rarely explore migrants' economic roles in African meat value chains. By reconstructing the organization of the flows of livestock from producer to consumer and documenting the role and lived experience of migrant livestock merchants and butchers, the paper fills a notable gap in the literature.

The findings have significant policy implications. First, the reliance on informal, migrant-driven trade networks suggests that any efforts to commercialize livestock production and formalize the meat value chain would need to avoid undermining the very system that helps to meet the growing demand from the protein economy. Heavy regulation, expensive licensing, or the marginalization of migrants could disrupt value chain efficiency and increase food prices for urban consumers. On the other hand, if informal meat value chains fail to meet the escalating demand, it is quite possible that red meat imports will increase, as they already have for white meat. Second, investments in dilapidated infrastructure, including transport vehicles, market facilities, cold chains, and hygienic slaughter environments, would enhance efficiency and food safety without displacing the key role of informal actors. Third, addressing corruption and rent-seeking practices along transport routes would reduce transaction costs and improve the overall functioning of the value chain.

Finally, the paper makes an important conceptual contribution by challenging the prevailing tendency in value chain analysis to treat them as territorially bounded and primarily technical or logistical phenomena. Considerable biomedical and veterinary research is devoted to the treatment and welfare of livestock, while the experiences of the human participants are largely invisible. Instead, the paper highlights the fundamentally social nature of Ghana's meat value chains, showing how they are constituted through networks of migration, trust-based relations, and cross-border mobility. In addition, by bringing migration into the analysis of meat value chains, the paper advances a more in-depth understanding of urban food value chains, connecting dietary change (meatification), regional trade, and migration.

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