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RESEARCH ARTICLE

URBAN FOOD SUPPLY SYSTEMS, URBAN MOBILITY AND TERRITORIAL DYNAMICS IN THE CITIES OF BOBO-DIOULASSO AND OUAGADOUGOU, BURKINA FASO

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ABSTRACT

Rapid urbanisation in Sub-Saharan Africa is generating profound transformations in food systems and urban logistics networks. In Burkina Faso, the cities of Ouagadougou and Bobo-Dioulasso represent the country's main urban consumption centres and concentrate a growing share of the national population. Ensuring a stable and efficient food supply for these cities has become a major challenge in the context of demographic growth, urban sprawl, changing consumption patterns and persistent logistical constraints. This study analyses the territorial organisation of food supply systems and the logistical dynamics that support food distribution in Ouagadougou and Bobo-Dioulasso. Using data derived from institutional studies, documentary analysis and stakeholder investigations conducted within the framework of the national study on food supply logistics, the research examines production areas, transport corridors, storage infrastructures, wholesale and retail markets, and the actors involved in food distribution networks. The results reveal a strong dependence of both cities on national and regional agricultural production basins, combined with significant deficiencies in transport infrastructure, storage facilities, packaging systems and market organisation. Urban food supply chains remain dominated by informal actors whose activities compensate for institutional weaknesses but also generate inefficiencies throughout the distribution process. The findings further highlight the strategic importance of logistics governance and territorial planning in improving urban food security. Strengthening logistics infrastructure, modernising wholesale markets and integrating food logistics into urban planning policies appear essential for enhancing the resilience and sustainability of urban food systems in Burkina Faso.

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INTRODUCTION

Urbanisation constitutes one of the most significant socio-spatial transformations affecting contemporary societies, particularly in developing countries. According to the United Nations, 56.2% of the world's population lived in urban areas in 2021, and this proportion is expected to reach nearly 68% by 2050, with Africa accounting for a substantial share of future urban growth (United Nations, 2022). While urbanisation generates opportunities for economic development, innovation and improved access to services, it simultaneously creates major challenges related to housing, mobility, infrastructure provision and food security (World Bank, 2020). The question of food supply occupies a central place within contemporary urban studies. The capacity of cities to guarantee regular access to sufficient, affordable and nutritious food increasingly depends on the efficiency of food systems and logistics networks linking rural production areas to urban consumption centres (FAO, 2019). Food systems are therefore not merely agricultural issues but also territorial, logistical and governance challenges involving multiple actors and spatial scales (Blay-Palmer et al., 2018). In Burkina Faso, urban growth has accelerated considerably during the last decades. According to the Fifth General Population and Housing Census, the urbanisation rate reached approximately 26.3% in 2019, compared with 22.7% in 2006 (INSD, 2022). Ouagadougou alone hosts approximately 45% of the national urban population, while Bobo-Dioulasso remains the second-largest urban centre and a major economic hub. Together, these two cities constitute the principal poles of food consumption and economic activity in the country (INSD, 2022). The demographic expansion and spatial growth of these metropolitan areas have considerably increased demand for food products while simultaneously extending the geographical scale of food supply networks. As cities expand horizontally, distances between production areas, distribution platforms and consumption zones become longer, increasing the complexity of urban food logistics (Battersby and Watson, 2019). The challenge is particularly significant because agricultural production in Burkina Faso remains largely dominated by smallholder farming systems. Although the country possesses

considerable agricultural potential, logistical constraints continue to affect the efficiency of food distribution channels. Difficulties associated with transportation, storage, packaging, market infrastructure and coordination among stakeholders contribute to increased costs, post-harvest losses and supply disruptions (FAO, 2011; World Bank, 2020). Institutional studies conducted within the framework of technical assistance programmes supporting the Ministry of Transport, Urban Mobility and Road Safety have highlighted the strategic importance of food logistics for urban development in Burkina Faso. These studies show that the functioning of food supply systems depends on complex interactions among producers, collectors, transport operators, wholesalers, retailers, market managers and public institutions. From a geographical perspective, food supply systems can be analysed as territorial networks connecting rural and urban spaces through multiple flows of products, information, capital and people. Such an approach contributes to a better understanding of the spatial organisation of food distribution and the challenges associated with urban food security (Morgan, 2009; Dubbeling et al., 2017). This article aims to analyse the territorial dynamics and logistical organisation of food supply systems in Ouagadougou and Bobo-Dioulasso. More specifically, it seeks to identify the principal production basins supplying these cities, examine the logistics mechanisms governing food distribution, analyse the role of stakeholders involved in supply chains and evaluate the challenges affecting the sustainability of urban food systems.

The study addresses the following research question: How do territorial organisation and logistics networks influence the functioning and resilience of food supply systems in Ouagadougou and Bobo-Dioulasso?. The article argues that despite the existence of extensive food supply networks linking urban centres to agricultural production areas, significant logistical and governance constraints continue to affect the efficiency, accessibility and sustainability of urban food systems in Burkina Faso. To answer this question, the paper adopts an urban geography perspective integrating concepts from food systems studies, logistics geography and territorial governance. The analysis contributes to ongoing debates concerning sustainable urban development, food security and the role of logistics in African cities (Crush and Frayne, 2011; Blay-Palmer et al., 2021).

LITERATURE REVIEW

Urban food systems and territorial approaches: The concept of urban food systems has progressively emerged as a major analytical framework for understanding the relationships between food production, distribution and consumption within urban contexts. According to Ericksen (2008), food systems encompass all activities and actors involved in the production, processing, distribution and consumption of food, together with their environmental, social and economic outcomes. Urban food systems are intrinsically territorial because they depend upon spatial interactions linking cities to their hinterlands and, increasingly, to national and international markets. Morgan (2009) argues that food systems should be understood as territorial assemblages connecting rural and urban spaces through networks of production, exchange and consumption. Similarly, Dubbeling et al. (2017) demonstrate that urban food systems reflect broader territorial dynamics associated with urbanisation, economic restructuring and demographic change. The territorial approach emphasises the spatial organisation of food chains and the role of geographical proximity, accessibility and infrastructure in shaping food distribution processes. In this perspective, food supply networks connect multiple territories through flows of agricultural commodities, capital, labour and information (Blay-Palmer et al., 2018).

Food logistics and urban supply chains: Food logistics refers to the set of activities ensuring the movement, storage and distribution of food products from production areas to final consumers. Logistics systems constitute a critical component of food supply chains because they influence food availability, accessibility and affordability (Bosona and Gebresenbet, 2013). Several studies have highlighted the importance of transportation infrastructure, storage facilities and market organisation in determining the performance of food supply chains. In developing countries, logistical deficiencies frequently generate substantial post-harvest losses and contribute to higher food prices and reduced market efficiency (FAO, 2011; Kitinoja and Kader, 2015).

The notion of the “last mile” has become increasingly important in logistics studies. Originally developed in freight transport research, the concept refers to the final stage of distribution linking wholesale markets, retailers and consumers. In many African cities, last-mile logistics is characterised by congestion, inadequate infrastructure and high transaction costs, which reduce supply chain efficiency (Lindholm, 2013; Kin et al., 2017).

Urbanisation and food security in african cities: Rapid urban growth is transforming food consumption patterns across Africa. Urban households increasingly demand diversified food products, including processed foods, fruits, vegetables and animal products. These changes require more sophisticated supply systems capable of ensuring regular and safe food distribution (Tschirley et al., 2015). Food security in urban areas depends not only on agricultural production but also on transportation systems, market accessibility, logistics infrastructure and governance mechanisms. Consequently, food security must be understood as both a social and territorial issue (Crush and Frayne, 2011). Recent literature stresses the need to integrate food considerations into urban planning policies. Battersby and Watson (2019) argue that urban planning has traditionally neglected food systems despite their central role in urban sustainability. Integrating food systems into planning frameworks can improve resilience, inclusiveness and environmental sustainability in rapidly growing cities.

Conceptual framework: This study adopts a conceptual framework combining urban food systems theory, logistics geography and territorial governance approaches. Food supply systems are understood as spatially organised networks connecting production territories, logistics infrastructures, market institutions and urban consumers (Ericksen, 2008; Blay-Palmer et al., 2018). Within this framework, territorial dynamics influence the spatial structure of food flows, while logistics networks determine the efficiency of distribution processes. Governance mechanisms mediate interactions among stakeholders and shape the overall performance of urban food systems (Dubbeling et al., 2017). Consequently, urban food security depends on the capacity of territories to organise efficient and resilient food logistics systems capable of connecting production areas to growing urban markets.

STUDY AREA

Ouagadougou: Burkina Faso's primary metropolitan area
Ouagadougou (see figure 1), the political and administrative capital of Burkina Faso, constitutes the largest urban agglomeration in the country and the principal centre of food consumption. According to the Fifth General Population and Housing Census, the city hosted approximately 2.45 million inhabitants in 2019, representing nearly 45% of the national urban population (INSD, 2022). The city has experienced rapid demographic growth and spatial expansion over recent decades, transforming it into a vast metropolitan area commonly referred to as the "Grand Ouaga". The Grand Ouaga extends beyond the administrative boundaries of the municipality and incorporates several surrounding communes that are increasingly integrated into the metropolitan economy and mobility system. Urban sprawl has considerably increased the distances separating residential areas, commercial centres and logistics infrastructures, thereby intensifying the demand for efficient food distribution systems.

Ouagadougou occupies a dominant position within the national urban hierarchy. It concentrates major administrative institutions, commercial activities, wholesale markets and transport infrastructures. Consequently, it functions as the principal destination for food products originating from all regions of Burkina Faso and neighbouring countries.

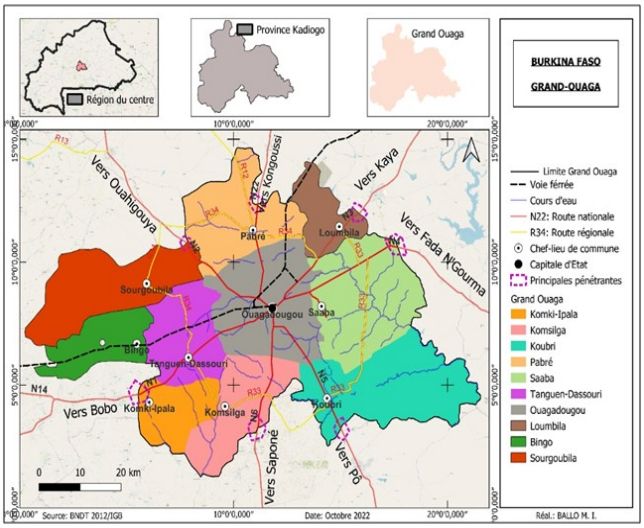

Fig. 1. Geographic location of the study area in Ouagadougou, Burkina Faso

Bobo-Dioulasso: Economic hub and logistics gateway: Bobo-Dioulasso is the second largest city in Burkina Faso and constitutes an important economic, industrial and commercial centre. Located in the western part of the country, it occupies a strategic position within national and regional trade networks (see figure 2). The city benefits from proximity to major agricultural production zones, particularly those specialised in cereals, fruits, vegetables and livestock production. Historically, Bobo-Dioulasso has played a major role in the commercialisation and redistribution of agricultural products. Its location along key transport corridors connecting Burkina Faso to Côte d'Ivoire, Mali and other West African countries reinforces its role as a logistics platform for food supply chains. The city therefore performs a dual function within the national food system. It acts simultaneously as a consumption centre and as a redistribution hub supplying other urban centres, including Ouagadougou.

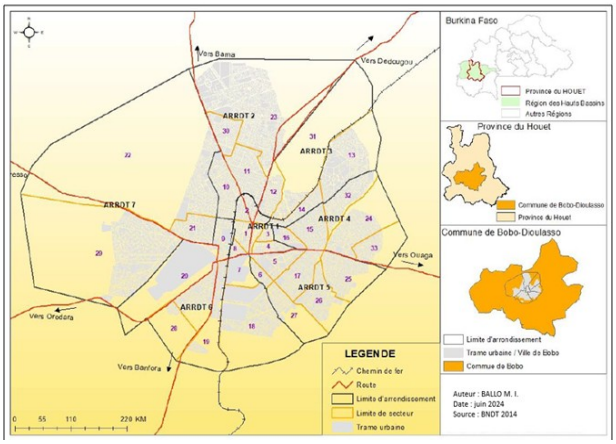

Fig. 2. Geographic location of the study area in Bobo-Dioulasso, Burkina Faso

Urbanisation, spatial expansion and food demand: The rapid urbanisation of Ouagadougou and Bobo-Dioulasso has profoundly transformed food consumption patterns. Population growth has generated increasing demand for cereals, vegetables, fruits, livestock products and processed foods. Simultaneously, changes in lifestyles and household income levels have contributed to the diversification of food consumption practices (Tschirley et al., 2015). Urban expansion has also modified the geography of food accessibility. Peripheral neighbourhoods frequently remain poorly connected to major commercial infrastructures and distribution networks. As a result, ensuring equitable access to food products has become a major challenge for urban governance and territorial planning (Battersby and Watson, 2019). The increasing concentration of population and economic activities in both cities has therefore intensified the importance of logistics systems capable of guaranteeing regular food supply under conditions of rapid urban growth.

MATERIALS AND METHODS

Research design: This study adopts a mixed-methods approach combining documentary analysis, territorial diagnosis and stakeholder-based assessment. The methodological framework is grounded in urban geography and logistics studies and seeks to understand how territorial structures influence food supply systems in Burkina Faso. The analysis is based primarily on data collected within the framework of the national study entitled "Étude des circuits logistiques d'approvisionnement alimentaires" conducted under the technical assistance programme supporting the Ministry of Transport, Urban Mobility and Road Safety.

Sources of data: Data used in this study originate from multiple complementary sources. The first source consists of documentary materials, including policy documents, planning reports, agricultural statistics, urban development strategies and previous studies related to food systems and logistics. The second source includes institutional reports produced by governmental agencies and development partners, particularly those focusing on agricultural production, food security, transport systems and urban development. The third source consists of empirical data collected through field investigations carried out among stakeholders involved in food supply chains. These stakeholders included producers, transport operators,

wholesalers, retailers, warehouse managers, market administrators and public institutions responsible for transport, agriculture and commerce.

Stakeholder analysis: Food supply systems involve a large number of actors operating at different stages of the value chain (see table 1). Upstream actors include agricultural producers, farmers' organisations and rural cooperatives responsible for primary production. Intermediate actors comprise collectors, wholesalers, transport operators and warehouse managers who facilitate product aggregation and movement between production areas and urban markets. Downstream actors include retailers, market traders and final consumers. Public institutions also play a significant role through regulation, infrastructure provision and territorial planning (FAO, 2019). The analysis focuses on understanding the relationships among these actors and their contribution to the functioning of urban food supply systems.

Analytical framework: The analytical framework combines three complementary perspectives. The first perspective is derived from urban food systems theory, which considers food supply as an integrated process linking production, transport, distribution and consumption (Ericksen, 2008). The second perspective is logistics geography, which emphasises the role of transport infrastructures, storage facilities and distribution networks in shaping spatial flows of commodities (Hesse and Rodrigue, 2004). The third perspective is territorial governance, which examines the institutional arrangements regulating interactions among stakeholders and influencing the efficiency of food systems (Dubbeling et al., 2017). Combining these perspectives makes it possible to analyse food supply systems not merely as economic processes but as territorial systems embedded within broader urban and regional dynamics.

Data analysis: The collected information was analysed through qualitative and spatial approaches. Documentary materials were subjected to thematic content analysis, while territorial information was interpreted using concepts from urban and transport geography. Particular attention was devoted to identifying production basins, transport corridors, market infrastructures, logistics bottlenecks and governance challenges. The analysis also sought to understand how urban growth influences the spatial organisation of food supply systems and the resilience of logistics networks.

RESULTS AND DISCUSSION

Spatial organisation of food supply systems in Ouagadougou and Bobo-Dioulasso: The analysis reveals that the food supply systems of Ouagadougou and Bobo-Dioulasso are structured around extensive territorial networks connecting urban consumption centres to multiple agricultural production basins distributed across Burkina Faso (see table 2). These networks involve a wide range of actors and logistics infrastructures that facilitate the circulation of agricultural products between rural and urban spaces. The food supply structure remains strongly influenced by the geographical distribution of agricultural production. Cereals are supplied from major agricultural regions such as Boucle du Mouhoun, Hauts-Bassins, Centre-Ouest, Centre-Nord and Cascades. Vegetable products originate predominantly from irrigated and peri-urban production areas, while fruit production is concentrated in western regions characterised by favourable climatic conditions. The organisation of these supply systems reflects the existence of a functional interdependence between rural territories and urban centres. Agricultural regions provide food products, whereas cities constitute the principal markets for their commercialisation and consumption. This observation corroborates the arguments developed by Morgan (2009) and Dubbeling et al. (2017), who emphasise the importance of rural–urban linkages in ensuring sustainable urban food systems. The increasing concentration of population and economic activities in Ouagadougou and Bobo-Dioulasso has reinforced these interdependencies. Consequently, food security in urban areas depends not only on agricultural productivity but also on the efficiency of territorial logistics systems.

Transport networks and food logistics corridors: Transportation constitutes the backbone of food supply chains. The movement of agricultural products from production areas to urban markets relies heavily on the national road network and a large number of private transport operators. The study indicates that food transport is dominated by road transport. Agricultural products are moved using a combination of trucks, minibuses, pick-up vehicles, tricycles and motorcycles depending on product type, distance and destination market.
This predominance of road transport reflects the limited development of alternative freight transport systems in Burkina Faso.

While road transport offers flexibility and territorial coverage, it also exposes supply chains to multiple risks, including road degradation, seasonal accessibility constraints, vehicle breakdowns and fluctuations in transport costs. Several logistical inefficiencies were identified. These include poor vehicle loading practices, inadequate handling equipment, insufficient cold-chain facilities and weak coordination among transport actors. Similar challenges have been documented in other African cities, where fragmented logistics systems contribute to increased transaction costs and reduced food system efficiency (Bosona and Gebresenbet, 2013). The territorial organisation of logistics corridors demonstrates the strategic importance of transport infrastructure for urban food security. Any disruption affecting these corridors can rapidly impact food availability and prices in urban markets.

Storage systems and post-harvest losses: Storage infrastructures represent one of the weakest components of the food supply chain. The study highlights the existence of important deficiencies in storage facilities at different stages of the distribution process. Agricultural products are frequently stored under inadequate conditions, resulting in significant quantitative and qualitative losses. In many production areas, storage facilities remain rudimentary and poorly adapted to modern food preservation requirements. Warehouses often lack ventilation systems, temperature control equipment and appropriate handling facilities. Similar limitations are observed in urban markets where storage capacity remains insufficient relative to growing demand. These deficiencies contribute to post-harvest losses, particularly for perishable products such as fruits and vegetables. According to FAO (2011), inadequate storage infrastructure constitutes one of the principal causes of food losses in developing countries. The persistence of these constraints reduces the overall efficiency of food supply systems and limits the capacity of urban markets to maintain stable food supplies throughout the year.

Table 1. Key actors involved in urban food supply systems

Category of actors	Main functions	Position in supply chain
Producers	Agricultural production	Upstream
Collectors	Product aggregation	Upstream-intermediate
Transport operators	Freight transport	Intermediate
Warehouse managers	Storage and preservation	Intermediate
Wholesalers	Bulk trading and redistribution	Intermediate
Retailers	Direct sales to consumers	Downstream
Municipal authorities	Market management and regulation	Governance
Government agencies	Policy formulation and control	Governance
Consumers	Final demand	Downstream

Source: BALLO Mohamed Ibrahim, field surveys, September 2025

Table 2. Main food production basins supplying Ouagadougou and Bobo-Dioulasso

Product category	Main production areas	Main destination city	Logistics characteristics
Cereals (maize, millet, sorghum)	Boucle du Mouhoun, Centre-Ouest, Hauts-Bassins	Ouagadougou, Bobo-Dioulasso	Long-distance road transport, seasonal storage
Rice	Vallée du Kou, Bagré, Sourou Valley	Ouagadougou, Bobo-Dioulasso	Bulk transport and warehouse storage
Vegetables	Peri-urban zones, Hauts-Bassins, Centre	Ouagadougou, Bobo-Dioulasso	Daily transport, highly perishable products
Fruits	Cascades, Hauts-Bassins, South-West	Ouagadougou, Bobo-Dioulasso	Seasonal flows, limited cold-chain facilities
Livestock products	Sahel, Centre-Nord, East Region	Ouagadougou, Bobo-Dioulasso	Live animal transport and specialised distribution

Source: BALLO Mohamed Ibrahim, field surveys, September 2025

Table 3. Major logistical constraints affecting food supply systems

Constraint	Consequences	Impact level
Poor road conditions	Delays and higher transport costs	High
Limited storage capacity	Product deterioration and losses	High
Inadequate packaging systems	Reduced product quality	Medium
Weak cold-chain infrastructure	High perishability losses	High
Market congestion	Delays in loading and unloading	High
Fragmented logistics governance	Coordination difficulties	High
Informal transport arrangements	Unpredictable service quality	Medium

Source: BALLO Mohamed Ibrahim, field surveys, September 2025

Table 4. SWOT analysis of urban food logistics systems

Strengths	Weaknesses
Extensive agricultural production zones	Insufficient logistics infrastructure
Dynamic informal trading networks	Limited storage facilities
Strong urban demand	Weak cold-chain systems
Strategic role of Ouagadougou and Bobo-Dioulasso	Fragmented governance arrangements
Opportunities	**Threats**
Growing urban markets	Climate variability
Technological innovations	Rising transport costs
Public-private partnerships	Rapid urbanisation pressure
Regional market integration	Supply chain disruptions

Source: BALLO Mohamed Ibrahim, field surveys, September 2025

Markets as strategic nodes of urban food systems: Markets occupy a central position within food supply systems. They function as territorial interfaces connecting producers, transport operators, wholesalers, retailers and consumers. The study identifies several categories of markets involved in food distribution, ranging from rural collection markets to wholesale and retail urban markets. These markets facilitate product aggregation, commercial transactions and redistribution towards final consumers. In Ouagadougou and Bobo-Dioulasso, major urban markets play a strategic role in ensuring food accessibility. However, increasing demographic pressure has generated significant operational challenges. Market congestion, inadequate loading and unloading areas, limited storage facilities and insufficient parking spaces frequently affect market operations. Similar observations have been reported in several African metropolitan areas where market infrastructures have struggled to adapt to rapid urban growth (Battersby and Watson, 2019). Despite these difficulties, markets continue to constitute essential territorial nodes within urban food systems and remain critical for ensuring food availability and accessibility.

Stakeholders and governance of food supply systems: The functioning of food supply systems depends upon interactions among multiple stakeholders operating at different territorial scales. Upstream actors include producers, farmers' organisations and agricultural cooperatives. Intermediate actors comprise collectors, wholesalers, transport operators, warehouse managers and market intermediaries. Downstream actors include retailers, street vendors and consumers. Public institutions are also involved through regulation, infrastructure development, quality control and market supervision. The

study highlights the important role played by ministries responsible for agriculture, transport, trade and territorial planning. However, governance arrangements remain fragmented. Coordination among institutions often appears limited, resulting in overlaps of responsibilities and insufficient integration of logistics concerns into urban planning policies.
This finding supports the arguments developed by Blay-Palmer et al. (2018), who stress that effective governance constitutes a fundamental prerequisite for sustainable and resilient urban food systems.

The last-mile challenge in urban food distribution: One of the most significant challenges identified concerns last-mile logistics. The last mile refers to the final stage of product distribution between wholesale markets and final consumers. Although often neglected in policy discussions, this stage significantly influences food accessibility, transport costs and service quality (Lindholm, 2013). In both Ouagadougou and Bobo-Dioulasso, last-mile distribution relies heavily on informal logistics arrangements involving motorcycles, tricycles, handcarts and small commercial vehicles. While these solutions provide flexibility and adaptability, they also contribute to traffic congestion, roadside occupation and conflicts over the use of public space. The rapid growth of informal distribution activities further complicates traffic management and urban planning. These findings demonstrate that food logistics should be considered an integral component of urban mobility policies rather than solely an agricultural or commercial issue.

SWOT analysis of urban food logistics systems: The analysis reveals several strengths within existing food supply systems. Burkina Faso benefits from extensive agricultural production areas, dynamic commercial networks and strong participation by private-sector actors. Urban markets also demonstrate considerable adaptability in responding to changing consumer demands (see table 4). However, significant weaknesses remain. These include inadequate logistics infrastructure, insufficient storage capacity, limited cold-chain facilities, fragmented governance arrangements and high dependence on road transport. Opportunities are associated with ongoing urbanisation, technological innovation, market modernisation and increasing interest in food system resilience. Growing demand in urban areas can stimulate investments in logistics infrastructure and agricultural value chains. Threats include climate variability, rapid urban growth, transport disruptions, rising logistics costs and increasing pressure on market infrastructures. These factors may compromise the long-term sustainability of urban food supply systems if appropriate interventions are not implemented. Overall, the SWOT analysis highlights the urgent need for integrated policies capable of linking agriculture, transport, logistics and urban planning within a common territorial framework.

POLICY IMPLICATIONS FOR SUSTAINABLE URBAN FOOD SYSTEMS: The findings of this study highlight the strategic role of food logistics in ensuring sustainable urban development and food security in Burkina Faso. The increasing demographic growth of Ouagadougou and Bobo-Dioulasso requires a transition from traditional food distribution systems towards more integrated and resilient urban food systems. A first policy implication concerns the integration of food logistics into urban planning processes. Current planning instruments largely focus on housing, transportation and land use while paying limited attention to food systems. Yet food distribution activities generate significant mobility flows and require dedicated infrastructures such as wholesale markets, logistics platforms, storage facilities and loading areas. Integrating food logistics into urban planning strategies would contribute to reducing congestion, improving accessibility and strengthening food security. A second implication relates to transport infrastructure development. The efficiency of food supply systems depends heavily on the quality of transport corridors linking production areas to urban markets. Investments in road maintenance, rural accessibility and freight transport facilities would improve the reliability of food distribution networks and reduce logistics costs. The study also highlights the need to modernise market infrastructures. Existing wholesale and retail markets frequently operate beyond their designed capacities. Modernisation programmes should prioritise storage facilities, cold-chain systems, parking areas, loading and unloading platforms and sanitation services. Such improvements would contribute to reducing food losses and improving the quality of products reaching urban consumers. Governance constitutes another critical dimension. The multiplicity of actors involved in food supply systems requires improved coordination among public institutions, local governments, producer organisations, transport operators and market associations. Establishing multi-stakeholder governance mechanisms could facilitate the formulation and implementation of integrated food system policies. Finally, strengthening local and regional food systems appears essential for improving resilience. The COVID-19 pandemic, climate variability and geopolitical disruptions have demonstrated the vulnerability of food supply chains worldwide (FAO, 2021). Enhancing local production capacities and strengthening connections between urban markets and surrounding agricultural territories could contribute to reducing dependence on distant supply sources.

CONCLUSION

This study analysed the territorial dynamics and logistical organisation of food supply systems in Ouagadougou and Bobo-Dioulasso, the two largest urban centres in Burkina Faso. The results demonstrate that urban food systems are structured around complex territorial networks connecting agricultural production basins, transport infrastructures, storage facilities, market institutions and consumers. The analysis revealed that both cities depend on extensive supply networks extending across multiple regions of Burkina Faso. These networks ensure the circulation of cereals, fruits, vegetables and other food products required to satisfy growing urban demand. The functioning of these systems relies on the interactions of numerous actors operating at different stages of the value chain, including producers, transport operators, wholesalers, retailers and public institutions. Despite the existence of dynamic commercial networks, significant logistical constraints continue to affect the efficiency of food distribution processes. Inadequate transport infrastructure, insufficient storage facilities, weak cold-chain systems, market congestion and fragmented governance arrangements constitute major obstacles to sustainable urban food supply. The findings also demonstrate that food logistics should not be considered solely as an agricultural issue. Rather, it represents a major territorial and urban governance challenge. Food supply systems generate substantial mobility flows, influence land-use patterns and affect the accessibility of food products within urban areas.

From a theoretical perspective, the study confirms the relevance of territorial approaches for understanding urban food systems. The concepts of territorial networks, rural–urban linkages and logistics governance provide useful analytical tools for examining the spatial organisation of food distribution processes in rapidly urbanising contexts. From a policy perspective, the study highlights the necessity of integrating food logistics into urban planning, transport policies and territorial development strategies. Such integration would contribute to improving food security, reducing logistics costs and strengthening the resilience of urban food systems. Future research could further investigate the spatial distribution of food accessibility within urban neighbourhoods, the environmental impacts of food logistics systems and the opportunities associated with digital technologies and smart logistics solutions for urban food distribution in West African cities.

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