



Economic Dynamics of Agricultural Product Supply in the Urban Markets of Douala and Yaoundé (Cameroon)

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Abstract

In spatial terms, Cameroon's rapid urbanization has increased the dependence of urban populations on commercial food supplies. Douala and Yaoundé alone will have more than 9 million inhabitants by 2025, generating massive daily food demand. This study analyzes the economic dynamics of agricultural product supply in the urban markets of Douala and Yaoundé, two Cameroonian cities that account for a growing share of national food demand. The objective was to identify the organizational mechanisms of agricultural supply chains, the economic strategies of stakeholders, and the constraints influencing the availability, prices, and quality of products in urban areas. We used a mixed methodology combining quantitative surveys and qualitative analyses. The data was collected from a representative sample of 470 actors in the supply chain, including 99 agricultural producers (21.1%), 80 collectors/intermediaries (17.0%), 40 transporters (8.5%), 70 wholesalers (14.9%), 41 semi-wholesalers (8.7%), 90 retailers (19.1%), and 50 consumers (10.6%). The tools used included structured questionnaires, semi-structured interviews, and direct observations in markets and on major transport routes. The data were processed using descriptive statistics and spatial analysis of supply flows. The results show that more than 65% of agricultural products sold in Douala and Yaoundé come from production areas located more than 200 km from urban centers, particularly in the western and central highlands. Transport costs account for an average of 25 to 35% of the final price of perishable products such as tomatoes and onions. Approximately 58% of stakeholders report post-harvest or post-transport losses, estimated at between 15 and 30% of volumes. Markets operate mainly informally, with 72% of transactions taking place without a written contract. On the consumer side, 76% buy agricultural products at least twice a week, while 56% consider product availability to be irregular and 24% consider their quality to be average. Based on these findings, the study recommends strengthening road and logistics infrastructure, creating storage and preservation areas suitable for perishable products, and reducing the number of intermediaries by promoting short supply chains. It also recommends the gradual integration of informal actors into flexible regulatory mechanisms, support for the collective organization of producers and traders, and the implementation of urban food policies aimed at stabilizing prices and improving the accessibility of agricultural products for urban households.

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Introduction

In Cameroon, supplying cities with agricultural products is a major challenge in a context of rapid urban growth and transformation of food systems [1]. This challenge is particularly acute in the two main cities, Douala, the economic capital, and Yaoundé, the political and administrative capital [2]. These two cities alone account for more than 40% of the national urban population, with an estimated population of around 4 million in Douala and nearly 3 million in Yaoundé, and annual urban growth rates of over 4% (INS, 2025) [3]. This high population density leads to high, diverse, and constant urban demand for food, which relies mainly on agricultural products from rural and peri-urban areas [4]. However, although agriculture in Cameroon employs nearly 70% of the working population and contributes around 17% of GDP, it remains dominated by small, poorly mechanized family farms, characterized by low storage capacity and high dependence on climatic conditions (INS, 2025). This situation makes the supply of large urban markets structurally vulnerable [5]. The urban markets of Douala and Yaoundé, such as Sandaga, Deido, Mboppi, Mfoundi, Mokolo, and Marché Huitième, are the main distribution points for agricultural products [6]. They provide more than 90% of the food supply for urban households, particularly for fresh produce (cassava, plantains, vegetables, fruit, cereals) [7]. These markets operate through complex networks linking production areas in western, central, coastal, northwestern, and northern Cameroon to urban centers via long and costly supply chains [8]. The agricultural supply economy in these markets relies on various actors in the value chain, such as producers, collectors, wholesalers, semi-wholesalers, transporters, intermediaries, and retailers, most of whom operate informally (FAO, 2025). This informal nature influences price formation, supply regulation, and margin distribution, but also contributes to the opacity of the system and the vulnerability of the weakest actors [9]. Added to this are major constraints

such as the deterioration of the road network, post-harvest losses estimated at between 20 and 30%, rising transport costs, insecurity in certain production areas, and high food price volatility [3]. In a context where urban households in Douala and Yaoundé sometimes spend more than 50% of their income on food, any disruption to agricultural supply has direct consequences on food security, purchasing power, and social stability. These realities underscore the strategic nature of urban markets as economic, social, and territorial spaces at the heart of relations between urban and rural areas [10]. Despite their importance, the economic dynamics of agricultural supply to the urban markets of Douala and Yaoundé remain insufficiently analyzed from a geographical perspective. Existing studies often favor sectoral or economic approaches, to the detriment of spatial analysis of flows, networks of actors, and territorial restructuring [11]. However, economic geography provides insight into how space, distance, accessibility, and power relations structure urban supply systems. In other words, how do the economic and spatial dynamics of agricultural supply structure the functioning of urban markets in Douala and Yaoundé and condition food accessibility for populations in a context of rapid urbanization and significant territorial constraints? This article analyzes the economic dynamics of agricultural product supply in the urban markets of Douala and Yaoundé, highlighting the spatial organization of distribution channels, the strategies of actors, and the structural constraints that influence the functioning of these markets. The article also shows the impacts of these dynamics on urban food security, the integration of rural areas, and the governance of urban food systems in Cameroon.

Research Methodology

This research adopted a mixed approach, combining quantitative and qualitative methods. This approach enabled us to analyze raw material supply flows, the economic logic of stakeholders, and the spatial configurations of urban food circuits in the value

chain of mixed sectors in Douala and Yaoundé. We used secondary institutional and statistical data, collected primary data in the field from households and markets, and finally used spatial, statistical, and economic analysis tools. The secondary data enabled us to contextualize the study and construct the overall analytical framework. It came mainly from urban demographic data, the consumer price index (CPI), food inflation data from the Ministry of Agriculture and Rural Development (MINADER), agricultural production statistics by region, and reports from NGOs and international organizations (WFP, FAO). Our study is based on field research conducted among stakeholders involved in agricultural supply chains in the urban markets of Douala and Yaoundé, including end consumers. Given the organizational complexity of these chains, characterized by the diversity of actors, the predominance of the informal sector, and the lack of comprehensive databases, the use of purposive sampling proved to be the most appropriate approach. This method allowed us to select respondents based on their functional role, experience, and strategic position in the supply chain, rather than according to a strictly probabilistic logic that would have been difficult to apply in this context. The selected sample comprises 470 stakeholders, distributed in such a way as to cover all links in the chain: 99 agricultural producers, 80 collectors/intermediaries, 40 transporters, 70 wholesalers, 41 semi-wholesalers, 90 retailers, and a representative sample of 50 end consumers, in order to understand their purchasing behavior, preferences, and perceptions of the availability and quality of agricultural products. This structure ensured a balanced representation of the functions of production, collection, transport, storage, marketing, and consumption. This volume of respondents allowed us to capture the diversity of economic practices and supply strategies at each level, while ensuring sufficient saturation of information for qualitative and quantitative analysis. The inclusion of consumers provided additional information on urban demand, flow dynamics, and potential tensions in the supply chain. Thus, the reasoned sample constituted a relevant methodological compromise between analytical depth and operational constraints, while ensuring the reliability of the results on the economic dynamics of agricultural supply in the urban markets of Douala and Yaoundé.

Table 1: Field Survey of Stakeholders

Actor Categories	Surveyed Number	%
Agricultural Producers	99	21.1
Collectors / Intermediaries	80	17
Transporters	40	8.51
Wholesalers	70	14.9
Semi-wholesalers	41	8.72
Retailers	90	19.1
Consumers	50	10.6
Total	470	100

Our surveys focused on the volumes of products transported, costs (transport, handling, informal taxes), profit margins, and supply strategies. We recorded the different prices, i.e., we conducted weekly price surveys over a period of 18 months. Twelve markets in Douala were studied, as well as ten markets in Yaoundé. The products targeted were cassava, plantains, corn, tomatoes, onions, peppers, etc.

Theoretical, Conceptual, and Geographical Framework of Urban Agricultural Supply

Urban agricultural supply is a complex process that combines economic, social, and spatial dimensions. We analyzed the dynamics of the markets in Douala and Yaoundé, which led us to establish a theoretical and conceptual framework, as well as a detailed geographical understanding of agricultural flows. This section therefore focuses on presenting relevant economic and urban theories, defining key concepts related to food supply, and analyzing the geographical and territorial context of the cities studied. In urban supply theories, urban agricultural supply has been approached from several theoretical angles: Classical supply chain theory. This describes the movement of agricultural products from producers to end consumers, with an emphasis on the formation of costs, margins, and logistics flows. In the Cameroonian context, this theory helps to understand why transport accounts for 25 to 45% of the final price of products in urban markets. Urban food systems theory: this approach takes into account all actors and flows, integrating production, distribution, consumption, and waste. It also highlights the importance of interactions between different actors and the influence of informality on the regulation of urban markets. Central place theory: applied at the urban level, this theory explains how Douala and Yaoundé

function as food redistribution centers, capturing flows from surrounding production areas and structuring supply according to proximity and urban density.

Economic Approaches Related to the Distribution of Agricultural Products

In the analysis of costs and margins: the urban distribution of agricultural products is characterized by variable costs depending on the links in the chain. Field studies indicate that intermediaries capture up to 30-40% of the added value, while producers receive a smaller share. In the theory of price volatility: this has enabled us to explain the seasonal fluctuations observed, sometimes ranging from 20% to 60%, in connection with periods of food shortages, recorded climatic hazards, or logistical disruptions.

Conceptual Framework

Urban supply refers to all activities related to the transfer of agricultural products from production areas to urban markets and consumers. The supply chain is a series of links (producers, intermediaries, transporters, wholesalers, semi-wholesalers, retailers) connecting rural areas to urban markets. Agricultural flows correspond to the quantities of products transported in a given area, measured in tons per week or per month. Urban food security refers to regular access to sufficient, safe, and affordable food for urban populations.

Types of Circuits

Table 2: Field Observations

Circuit Type	Description	Example Observed in Douala/ Yaoundé
Short Circuit	Producer → Urban Market (direct)	Fresh vegetables from peri-urban areas of Douala delivered to central markets
Long Circuit	Producer → Collector → Wholesaler → Retailer → Consumer	Cassava from the North-West transported to Yaoundé via intermediaries
Mixed Circuit	Combination of the two	Maize from the Centre region distributed both via wholesalers and directly by producers

Source: field survey, 2025.

Geographical Context in Relation to Agricultural Supply

The cities of Douala and Yaoundé

Douala: economic and port capital, estimated population of 4.3 million (2025). Its main markets are concentrated in the center and suburbs (Bonanjo, Akwa, Ndogpassi). Agricultural flows come mainly from the Littoral, Southwest, and West regions, with average transport distances of between 150 and 300 km. Yaoundé: political capital, estimated population of 4.8 million (2025). The central markets (Mfoundi, Mokolo, Etoudi) are supplied by the Central, South, and West regions, with transport distances of up to 380 km for certain products.

Production Basins and Flows

The main production basins are identified according to food production: cassava, vegetables (West and Center), corn (Center and Northwest), plantains (Southwest and Littoral). Flows are characterized by strong seasonality, with production peaks during harvest periods and lower availability during the lean season.

Geographical and Logistical Constraints

Roads are in poor condition, urban congestion is high, and storage infrastructure is inadequate. Long distances

and the dispersion of producers result in high logistical costs, with post-harvest losses of up to 20-30% for perishable products in the production areas studied.

Spatial And Economic Organization of Agricultural Supply Chains

Our analysis of urban supply chains provides insight into how agricultural products are transported from production areas to the markets of Douala and Yaoundé. This section examined the spatial organization of flows, the economic structure of marketing chains, and the role of the actors involved. The aim is to show how spatial and economic factors interact to structure the urban food supply and determine the accessibility of foodstuffs to the population.

Supply Chains: Typology and Flows of Agricultural-Urban Products

Typology of the Chains Observed

Table 3: The Field Survey and Flow Data Identified Three Main Types of Chains:

Circuit Type	Description	Observed Proportion
Short Circuit	Producer → Urban Market → Consumer	25% of flows
Long Circuit	Producer → Collector → Wholesaler → Retailer → Consumer	50% of flows
Mixed Circuit	Combination of the two	25% of flows

Source: Field survey, 2025.

Our main observation is that long circuits dominate in both cities, particularly for perishable products such as tomatoes, cassava, potatoes and plantains, due to the distance between production areas and urban markets.

Spatial Flows of Agricultural Products

The flows were mapped using GIS and GPS data: Douala: supplied from the Littoral, Southwest, and West regions, over average distances of 150 to 300 km. Yaoundé: supplied from the Central, South, and West regions, over distances of up to 380 km.

Table 4: Estimated Volumes of Products Distributed in the Two Cities

Product	Quantity
Tomato	10,000 to 12,000 tons/week
Cassava	~1,200 tons/week
Maize	~850 tons/week
Plantain	~600 tons/week

Source: Field survey, 2025.

Supply chains exhibit strong seasonality, with volumes increasing by up to 40% during harvest time and decreasing during the lean season. In our comparative analysis of supply chains by product, we developed a more detailed framework that goes beyond varieties and production areas, incorporating all key elements of the value chain: producers, intermediaries, transportation, costs, prices, seasonality, and constraints. This allowed us to compare the economic dynamics of the different products studied.



Tomato, cabbage, chili pepper, onion, watermelon, bell pepper...

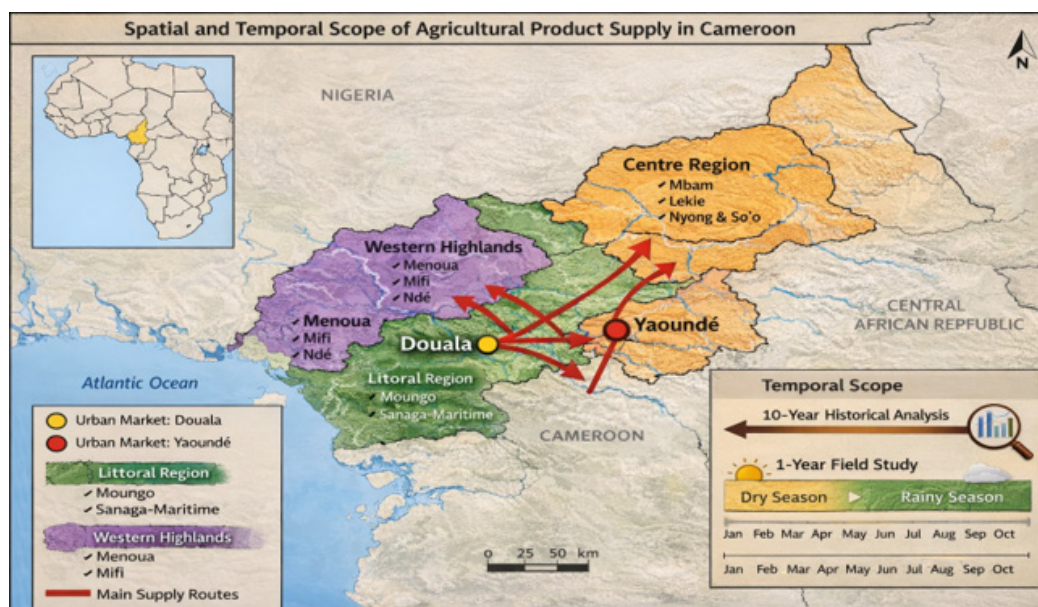


Table 5: Product Flow Structure to the Cities of Douala and Yaoundé

Product	Main Varieties	Main Production Areas	Intermediaries	Modes of Transport	Average Producer Price (FCFA/kg)	Average Urban Market Price (FCFA/kg)	Seasonality / Availability	Specific Constraints
Cassava	Sweet, Bitter, IRAD	Centre, South, Littoral	Collectors, Wholesalers	Truck, Motorcycle, Canoe	150–200	300–500	All year, peaks after harvest	Post-harvest losses, difficult transport
Plantain	Large, Medium, Small	West, Littoral, South-West	Producer, Trader, Wholesaler	Truck, Motorcycle	200–300	400–700	All year, less abundant May–August	Fruit fragility, rapid ripening
Maize	White, Yellow, Hybrid	West, North-West, Far North	Producers, Collectors	Truck, Cart	120–180	250–400	September–December and April–June	Sensitive to rain, limited storage
Tomato	Local, Roma, Hybrid	West, North-West, Centre	Producers, Wholesalers	Truck, Motorcycle	300–500	600–1,200	March–May and September–November	Fragile, high losses, volatile prices
Onion	Purple, White, Local	Far North, North, Adamawa	Producers, Wholesalers	Truck	250–400	500–800	All year, peaks after harvest	Sensitive to storage, unstable prices
Pepper	Green, Red, Bird	West, Centre, Littoral	Producers, Wholesalers	Truck, Motorcycle	300–500	700–1,200	All year, peaks March–July	Fragile, post-harvest losses, high urban demand

Source: Field survey, 2025.

The comparative analysis of this table shows that economic flows and the comparison of producer prices with urban market prices reveal where value added is highest. Regarding seasonality, we identified products available year-round in markets and those subject to seasonal shortages. Within networks and intermediaries, we identified the shortest (fewer intermediaries) and most complex supply chains. We listed specific constraints to facilitate understanding of limiting factors (losses, fragility, transportation). Political and commercial decisions have guided investments in the transportation, storage, and processing of each product.

Economic Organization of Agricultural Product Distribution Channels in the Cities of Douala and Yaoundé

Table 6: Actors and Roles in the Agricultural Production and Consumption Chain

Link	Main Actors	Economic Role
Production	Rural Producers	Production and initial sale
Collection	Collectors / Transporters	Bulk purchasing, transport, temporary storage
Wholesalers	Urban Wholesale Traders	Redistribution to retailers, partial price stabilization
Retailers	Market Traders	Final sale to consumers

Source: Field survey, 2025.

Our results show that intermediaries play a structuring role and capture 30 to 40% of the added value, while producers receive a smaller share (estimated at 25-30% of the final price).

Cost Structure and Margins in Supply

Table 7: The Economic Analysis Made it Possible to Calculate the Average Composition of the Final Price of Agricultural Products.

Cost Type	Percentage of Final Price
Production	25–30%
Transport	25–45%
Handling and Storage	5–10%
Formal and Informal Taxes	5–15%
Intermediate Margins	30–40%

Source: Field survey, 2025.

Our results show that, for example, in the city of Douala, the producer price of cassava is 300 FCFA/kg, the consumer price is 700 FCFA/kg and transport and intermediation costs represent about 55% of the final price.

Temporality and Seasonality of Agricultural Products

Supply chains are strongly influenced by agricultural seasons and are also linked to farming campaigns. Harvest periods increase flows and lower prices; the lean season has the opposite effect. From a supply perspective, climatic conditions such as floods or droughts disrupt the transport and availability of agricultural products. Urban events, such as holidays, economic or political crises, increase demand and prices by 20 to 60%.

Constraints and Vulnerabilities of Agricultural Supply Chains

Spatially and logistically, the distances between producers and markets are significant (150 to 380 km). Road infrastructure is often in poor condition, leading to traffic congestion around urban markets. From an economic and institutional perspective, the informal sector is predominant (unofficial taxes, price-fixing), public regulation is insufficient, and structured wholesale markets are lacking. Price volatility affects access to food, particularly for the most vulnerable households in production areas.

Economic Dynamics, Costs, and Price Formation of Agricultural Products

After analyzing the spatial and economic organization of supply chains, it is essential to understand how agricultural product prices are formed and evolve in the urban markets of Douala and Yaoundé. We examined: the cost and margin structure at each link in the chain; price formation at the market level; the seasonal and territorial variability of prices; and the economic impacts on urban consumers and producers.

Cost and Margin Structure

Costs Related to Agricultural Production in the Study Areas

Table 8: Production Costs Include Inputs (Seeds, Fertilizers, Labor, and Equipment). for Basic Commodities

Product	Average Production Cost (FCFA/kg)
Cassava	300–350
Maize	250–300
Plantain	400–450
Tomato	600–650

Source: Field survey, 2025.

These costs represent 25 to 30% of the final price paid by the consumer in the city.

Logistics and Intermediary Costs

Transport costs account for 25 to 45% of the final price, depending on distance and road conditions. For example, the cost of transporting cassava over 300 km is 180 to 200 CFA francs/kg. Handling and storage costs account for 5 to 10%, including market fees, and post-harvest losses are estimated at 20-30% for perishable products. Intermediaries and wholesalers capture 30 to 40% of the added value in all the markets studied.

Taxes and Informal Costs Related to Commercial Food Crops

Official taxes amount to approximately 5-10%, while informal taxes and transit costs account for 5-15%. These charges have a significant impact on the final price and producers' margins, which remain relatively low.

Price Formation in Urban Markets

Determining the Final Price

The final price of a product in the urban market is calculated by adding:

Table 9: The Price of Cassava in Douala, for Example

Link	Price (fcfa/kg)
Producer	300
Transport	150
Handling	30
Taxes and informal fees	40
Intermediate margins	180
Consumer price	700

Source: field survey, 2025

Factors influencing price variation show that during the lean season, the price of cassava increases by 40 to 60%. Distance and infrastructure show that poor roads or long distances increase costs by up to 45% of the final price. The distribution chain is very long and the share captured by intermediaries is significant.

The comparative table between the cities of douala and yaoundé shows that yaoundé, although closer to certain agricultural basins, sometimes has slightly higher prices due to longer distribution channels for certain products and urban congestion.

Table 10: Comparison Between Douala and Yaoundé

Criterion	Douala	Yaoundé
Number of Main Markets	15	18
Average Producer–Market Distance	150–300 km	200–380 km
Average Cassava Price (FCFA/kg)	700	720
Transport (% of Final Price)	30–35%	35–40%
Intermediate Margins	35%	30–40%

Economic Dynamics and Food Accessibility

Producers receive only a small portion of the final price (25 to 30%), which limits their investment capacity. The impact on urban consumers shows that low-income households spend 55 to 65% of their food budget on basic commodities. Intra-urban inequalities mean that peri-urban markets charge higher prices (10 to 20% more than central markets) due to additional transport and storage costs.

Consumer Purchasing Behavior, Preferences, and Perceptions Regarding the Availability and Quality of Agricultural Products.

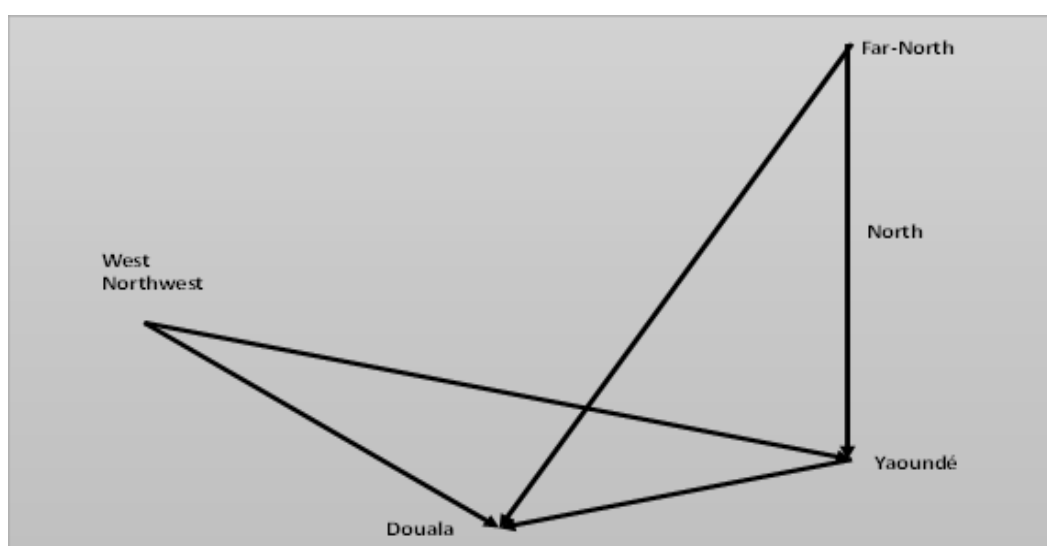
We worked on standard indicators derived from field surveys (purchase frequency, selection criteria,

satisfaction with availability and quality). Purchase frequency shows that the majority (76%) buy at least 2-3 times a week, reflecting daily consumption of fresh produce. Selection criteria are based on freshness and price, which are by far the most important, followed by local origin. This shows that consumers value quality and cost, and that short supply chains (local origin) have a significant influence. In terms of availability, it appears that more than half of consumers consider that products are sometimes unavailable, indicating occasional tensions in supply chains. In terms of quality, the majority of consumers say that quality is good, but 24% find it average, which may reveal problems related to storage, transport, or freshness.

Table 11: Consumer Purchasing Behaviors, Preferences, and Perceptions

Criterion	Douala	Yaoundé
Number of Main Markets	15	18
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Intermediate Margins	35%	30–40%

Source: Field survey, 2025.



Source: Field survey, 2025

Schematic Map of agricultural supply flows (tomato, onion, cassava, vegetable)

Differentiated Spatial Organization of Supply Flows of Tomatoes, Onions, and Cassava to Urban Markets in Douala and Yaoundé

Tomatoes are a highly perishable product, with the main production areas being the western highlands (Menoua, Bamboutos, Noun) and the northwest (high-altitude market gardening areas). Significant long-distance flows (>200 km) are characterized by thick arrows. Unstable seasonal flows are characterized by discontinuous arrows. Specific constraints include high sensitivity to road conditions and high post-harvest losses (20-30%). For the onion sector (a semi-perishable product), the main production areas are in the Far North (Logone, Diamaré), the North (Bénoué), and the Adamawa region (relay basin). Very long flows (>500 km) with very thick arrows, structured and regular flows, are also observed. Specific constraints include high transport costs. High dependence on north-south corridors. For the cassava sector (non-perishable and localized product), whose main production areas are located in the center (Lékié, Mbam-et-Inoubou), on the coast (Sanaga-Maritime), in the south and southwest, short and medium flows (<150 km): thin arrows. Diffuse and multipolar flows with specific constraints, mainly artisanal processing, and a weak logistics structure. Overall, the map reveals that the more perishable

the sector, the longer, more concentrated, and more vulnerable the flows are, highlighting the need for differentiated development, logistics, and governance policies depending on the agricultural product.

Vulnerabilities and levers for Improvement Identified Vulnerabilities

Seasonal and economic price volatility remains dependent on road infrastructure and informal transport, as well as producers' weak bargaining power vis-à-vis intermediaries. The structuring of wholesale markets can reduce the number of intermediaries.

Territorial and Social Issues and Prospects for Sustainability

The supply of urban markets is not limited to economic and spatial considerations. It has major territorial and social consequences and raises questions about the sustainability of urban food systems. We analyzed the territorial issues related to the structuring of agricultural flows, the social implications for producers, intermediaries, and consumers, as well as the prospects for sustainability and resilience of supply chains.

Territorial Issues in the Cities Studied

Spatial Organization and Territorial Inequalities

Supply chains connect production areas, which are often remote, to urban markets. For example, the main supply chains for the city of Douala, to the west and southwest, cover an average distance of 150 to 300 km. In Yaoundé, on the other hand, flows from the center, west, and south cover an average distance of 200 to 380 km. As a result, peripheral neighborhoods, which are less well served, experience higher prices (+10 to 20%) and lower availability of certain products, revealing territorial inequalities in access to food.

Pressure on Urban Infrastructure

Urban roads are sometimes congested and central markets crowded. The risks of post-harvest losses and additional costs for transporters and traders are increased. These problems highlight the need for integrated territorial planning that takes into account transport, market location, and urban development.

Social Issues

Impact on Rural Producers

Low share of income, representing 25-30% of the

final price. Dependence on intermediaries for access to urban markets. Vulnerability to seasonal and climatic variations. The impact on urban consumers shows that urban households spend 55 to 65% of their food budget on basic commodities. Seasonal price volatility increases by 40 to 60% during periods of food shortages. Differences between central markets and peri-urban markets lead to unequal access to food. Intermediaries play a key socio-economic role in stabilizing flows, but capture a significant share of the added value (30 to 40%). They participate in the informal regulation of markets, but can reinforce economic inequalities between producers and consumers.

Conclusion

The main objective of this study was to analyze the economic dynamics of agricultural product supply to urban markets in Douala and Yaoundé, two cities that account for most of Cameroon's urban food demand. Using a geographical approach that integrates spatial, economic, and social analysis of the agricultural sectors, the study highlighted the complexity of supply systems and the multiple interactions between production areas, distribution networks, and consumption areas. The results show that urban market supply is based on polycentric systems, linking nearby (peri-urban) and distant (rural areas in the West, Northwest, Center, Littoral, and sometimes the Far North Highlands) production basins. This spatial organization reveals a strong dependence of cities on the countryside, confirming the structuring role of urban-rural relations in urban food security. However, this dependence remains fragile, as it is subject to climatic hazards, infrastructural constraints, and logistical disruptions. On the economic front, the study highlights the fragmentation of agricultural value chains, which are characterized by a multitude of actors, including producers, collectors, transporters, wholesalers, semi-wholesalers, retailers, and consumers, whose supply and marketing strategies are largely informal. These actors develop economic practices based on flexibility, rapid adaptation to price fluctuations, and the exploitation of social and relational networks. Analysis of prices and margins reveals high volatility in the costs of agricultural products, particularly for perishable products such as tomatoes, onions, and fresh vegetables. This volatility is amplified by high transportation costs, poor road infrastructure, post-harvest losses, and the multiplicity of intermediaries. In Douala and Yaoundé, prices are also

influenced by agricultural seasons, periods of scarcity, and exogenous shocks (health crises, insecurity in certain production areas, climate disruptions). These factors contribute to the instability of producers' incomes and the increased vulnerability of urban consumers, particularly low-income households. From an economic perspective, the research highlights various supply strategies depending on the category of actors involved. Producers seek to secure their outlets through informal agreements with collectors or wholesalers, while the latter favor diversifying their sources of supply in order to limit the risk of disruption. Transporters play a key role in the chain, but continue to face significant constraints related to fuel costs, road difficulties, and insecurity. As for retailers, they adjust their volumes and prices on a daily basis according to consumer purchasing power and product availability. The economic dynamics of agricultural product supply in the urban markets of Douala and Yaoundé reveal a system that is both resilient and vulnerable. Resilient, because despite numerous constraints, it manages to provide food to millions of inhabitants on a daily basis. It is vulnerable because it remains exposed to economic, climatic, and institutional shocks. This research therefore highlights the need to strengthen transport and storage infrastructure, reduce post-harvest losses, improve market governance, and promote shorter and more sustainable supply chains.

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