

FUDMA Journal of Sciences (FJS)
ISSN online: 2616-1370
ISSN print: 2645 - 2944

Vol. 9 No. 9, September, 2025, pp 34 – 40 DOI: https://doi.org/10.33003/fjs-2025-0909-3941



### ASSESSMENT OF THE ENVIRONMENTAL EFFECTS OF STREET TRADING IN AWKA

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#### ABSTRACT

Street trading constitutes a pervasive economic activity in Nigerian urban centers, particularly in Awka, Anambra State. Its prominence is largely attributed to rural-to-urban migration, where individuals seek improved livelihoods and opportunities. In the absence of formal employment, many resort to informal street strading as a survival strategy. While this practice contributes to local economies and offers socio-economic resilience for marginalized groups, it also introduces substantial environmental and spatial challenges. This study critically examines the environmental and socio-spatial implications of informal street trading in Awka town. Adopting a mixed-methods approach, the research integrates semi-structured questionnaires, direct field observation, and in-depth interviews to generate a comprehensive understanding of the issue. Data were collected from 380 respondents, comprising traders, motorists, cyclists, and consumers across key informal commercial corridors. Quantitative findings indicate widespread urban effects, including solid waste accumulation, drainage obstruction, traffic congestion, and public health risks. Qualitative insights delve deeper into the spatial behaviors and adaptive strategies of informal vendors, revealing nuanced informal governance systems and the dynamic negotiation of public space. The findings illustrate the dualistic nature of street trading—as a critical socio-economic mechanism and a source of urban dysfunction. The study advocates for integrated urban management strategies including the creation of formalized trading corridors, deployment of enhanced waste management systems, implementation of spatial regulation policies, and expansion of educational empowerment programs. These interventions are essential to harmonizing economic informality with structured spatial development, supporting Awka's transition toward a more inclusive, resilient, and environmentally sustainable urban future.

Keywords: Street Trading, Socio-spatial, Urban environment, Waste Management, Pollution

#### INTRODUCTION

Street trading is a ubiquitous feature of many Nigerian cities, serving as a vital livelihood for a significant segment of the urban poor. In Awka, the capital of Anambra State, street vending has become an integral part of the urban economy, providing accessible goods and services to residents while supporting the livelihoods of countless vendors. However, despite its economic importance, street trading often results in complex environmental externalities that threaten the sustainability of urban spaces.

Globally, scholarly efforts have emphasized the socioeconomic significance of street vendors. Studies such as those by Ndukaeze et al. (2022) highlight that street traders are predominantly young, often female, internal migrants with limited formal education, engaged in low-margin businesses that support their basic survival. These traders frequently operate in constrained spaces, driven by factors like proximity to markets, transportation hubs, and high pedestrian trafficelements aligned with the spatial factors influencing their establishment choices (Fujita & Thisse, Abayomi, 2022). Such spatial dynamics are often shaped by socio-economic imperatives, including poverty alleviation, unemployment, and migration patterns.

While street trading bolsters local economies and provides essential services, it also has notable environmental repercussions. Numerous studies, including Udoka et al. (2024) and Egbuna & Alom (2024), document that unregulated street vending exacerbates land degradation, contributes significantly to solid waste pollution, and creates congestion, which hampers urban mobility and aesthetic appeal. These externalities pose challenges to urban management and highlight the need for sustainable strategies that reconcile economic activities with ecological preservation. For instance, research in Enugu State (Udoka et

al., 2024) indicates that street trading influences land use patterns and waste management effectiveness, while the London studies (Kelley, 2020; Suzuki & Almazan, 2022) underscore that street markets, if managed appropriately, can contribute positively to urban vibrancy—suggesting that policy and design interventions are crucial.

Furthermore, the global discourse on informal economies reveals recurring issues of regulatory exclusion, with vendors often circumventing restrictions through informal networks and resilience strategies (Adama, 2021; Long, 2023). Such practices impact environmental outcomes, especially when vendors operate in makeshift arrangements lacking waste disposal systems. This underscores the importance of sustainable land-use planning and inclusive urban governance, as advocated by scholars like Piazzoni & Loukaitou-Sideris (2024).

Given the socio-economic importance of street trading in Awka and the environmental challenges identified worldwide and locally, there is an urgent need to systematically assess the environmental impacts of these activities. Understanding the demographic and socio-economic characteristics of street traders, alongside the spatial factors influencing their location choices, can inform policies aimed at promoting sustainable urban growth. This study aims to bridge gaps in existing knowledge by focusing specifically on Awka's urban landscape, leveraging insights from global and Nigerian-specific literature. The study is set to answer three specific research question:

- i. What are the socio-spatial profiles of urban respondents involved in street trading in Awka town?
- ii. What are the spatial factors influencing the establishment of street trading businesses in Awka town?



iii. What are the environmental effects of street trading in Awka, and what sustainable practices can be adopted to mitigate these effects?

#### Literature Review

Understanding the environmental implications of street trading within Awka's urban system requires an interdisciplinary theoretical lens—one that encompasses the socio-economic drivers, spatial behavior, and ecological consequences embedded in informal city dynamics. This section consolidates key frameworks in urban informality, spatial planning, resilience thinking, and environmental governance to contextualize street trading in Awka's evolving urban landscape

Informal Economy and Urban Spatial Structure: Street vending is a manifestation of urban informal economies that operate in parallel to formal land-use systems (Ndukaeze et al., 2022). These activities typically emerge from systemic socio-economic pressures—ranging from underemployment and migration to urban poverty—making them highly visible in Nigerian cities, including Awka (Abayomi, 2022). The proliferation of informal commerce reshapes spatial hierarchies through unregulated encroachment and clustering around transport corridors and commercial nodes. The Theory of Informal Urbanism (Roy, 2009) emphasizes that these informal practices, though extralegal, are spatially responsive and socially embedded. Understanding how street vendors appropriate and adapt to public space reveals patterns of landuse conflict, mobility flows, and informal spatial governance—all crucial for aligning spatial policy with lived urban realities.

Environmental Externalities and Urban Ecological Resilience: Unregulated street trading produces urban externalities such as improper waste disposal, public space degradation, and pollution. These effects resonate with the Urban Ecological Theory (Pickett et al., 2004), which urges planners to preserve ecological integrity through sustainable land management and green infrastructure integration. The Ecosystem Services Framework (McPhearson et al., 2016) offers a metric for evaluating how informal activities impact ecological functions—drainage blockage, air quality decline, and biodiversity loss. In Awka, unmanaged street trading undermines the ecological performance of urban landscapes, challenging the city's environmental carrying capacity and public health standards.

Resilience Theory and Informal Adaptation Strategies: Street traders in Awka demonstrate adaptive capacity by employing spatial and temporal resilience strategies—relocating in response to enforcement, clustering around high-traffic zones, and operating with mobility to avoid displacement (Abayomi, 2022). These behaviors align with Resilience Theory, which explores how urban actors respond to shocks and regulatory pressures while maintaining economic continuity. However, these tactics inadvertently intensify environmental burdens when they lead to overcrowded trading pockets and distributed waste pollution. Designing responsive urban interventions therefore requires an acknowledgment of informal resilience mechanisms to ensure spatial justice and sustainability.

Spatial Location Theory and Socio-Economic Drivers: Traders' spatial decisions are influenced by demographic profiles—age, income level, gender, and migration status—as well as the functional logic of site selection (Ndukaeze et al., 2022). According to Location Theory (Fujita & Thisse, 2013),

vending hotspots emerge near transit nodes, pedestrian flow corridors, and commercial anchors, maximizing market access while contributing to spatial congestion. Understanding these micro-locational choices helps urban planners to map informal trading patterns, assess land-use compatibility, and mitigate environmental friction in strategic urban zones.

Governance Theory and Sustainable Informality Management: The Theory of Urban Governance stresses participatory, inclusive frameworks for managing informal activities in cities. Rather than pursuing eradication, contemporary planning literature (Long, 2023; Piazzoni & Loukaitou-Sideris, 2024) supports integrating street vendors into formal urban systems through designated trading precincts, regulated waste protocols, and community mechanisms. Applying sustainable oversight management principles ensures the coexistence of informal economies with ecological goals, reinforcing equity and urban functionality. In Awka, governance reform must prioritize trader engagement, spatial integration, and environmental stewardship to transform street vending from conflict to collaboration.

# MATERIALS AND METHODS

#### The Geographical Location

The study area is Awka Town, situated in the Capital city of Awka, Anambra State, Nigeria. It is bordered by Nibo to the southwest, Mbaukwu and Isuanocha to the northeast, and Umuawulu and Isiagu to the southeast. In ancient times, Awka was the site of the Nri Civilization, which produced the earliest documented bronze works in Sub-Saharan Africa around 800 AD. Awka was formerly covered with tropical forest, the area around Awka is now predominantly wooded grassland. The study area is primarily a low-lying region on the western plain of the Mamu River, with nearly all parts at an elevation of 333 meters above sea level. The major topographic features in the region are two celestas (asymmetric ridges) with east-facing escarpments, each trending southward outside Awka urban to form part of the Awka-Orlu upland. In a section of Agulu, the land rises above 333 meters (1000 feet) above mean sea level outside Awka urban area (Adeboboye, 2012). Figure 1 shows the map of Awka Town. This map provides a visual representation of the geographical location of the study area.

#### **Climatic Conditions and Vegetation**

Awka capital lies within the rainforest area with two seasonal climatic conditions but is now classified within the Guinea Savannah because of its derived vegetation, as the original vegetation has been removed by man. The two seasons are the rainy season and the dry season. The dry season also has a period called harmattan. The dryness of the climate tends to be discomforting during the hot period of February to May, while the wet period between June and September is very cold (UN-HABITAT, 2009). The harmattan which falls between December and February is a period of very cold weather when the atmosphere is generally dry with mist. Awka Capital Territory is characterized by the annual double maxima of rainfall with a slight drop in either July or August known as the dry spell or (August break). The annual total rainfall is above 1.450mm concentrated mainly in eight months of the year with a few months of relative drought. Climatologically records since 1978, show that Awka has a mean annual rainfall of about 1,524mm (UN-HABITAT, 2009).

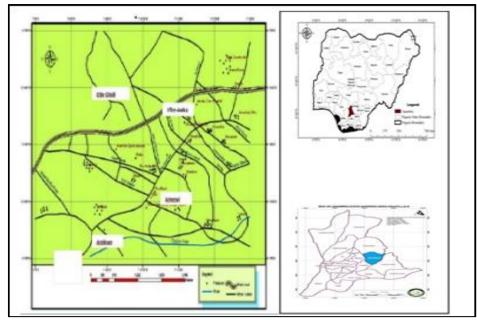


Figure 1: Map showing Awka Town

#### **Study Method**

The research was conducted within the urban context of Awka, a rapidly evolving city characterized by a high concentration of informal street trading. To effectively evaluate the spatial, socio-economic, and perceptual dimensions of these activities, the study employed a mixed-methods approach—integrating quantitative surveys and qualitative fieldwork to construct a holistic view of street trading's role within the urban fabric.

A stratified purposive sampling technique was used to engage 380 participants comprising both informal street traders and urban space users (including motorists, cyclists, and pedestrians), selected from strategically identified commercial corridors across the city. This ensured a comprehensive representation of stakeholders who interact with or are influenced by informal trading practices.

Semi-structured questionnaires were administered to collect empirical data on trade operations, spatial configurations, and user perceptions. Concurrently, structured field observations were conducted to document the physical characteristics of trading environments—such as stall distribution, spatial encroachment, and pedestrian-vehicular interface. These observations supported the mapping of informal trade zones and the identification of spatial conflicts and opportunities.

In addition, in-depth interviews with selected traders and urban dwellers provided qualitative insights into regulatory challenges, survival strategies, and informal governance mechanisms. This layer of data illuminated the tacit norms and socio-political dynamics embedded within Awka's street economy.

Data analysis combined descriptive statistical techniques with thematic coding, allowing for pattern recognition across environmental impacts, spatial behavior, and stakeholder sentiment. The results contributed to an evidence-based understanding of informal trade as both a livelihood strategy and a spatial phenomenon within the urban planning discourse.

Ethical considerations underpinned the research process. All respondents participated voluntarily, with full awareness of the study's objectives, and their privacy and confidentiality were rigorously safeguarded throughout.

#### RESULTS AND DISCUSSION

### Socio-Spatial Profile of Urban Respondents in Awka Town

An assessment of urban survey data collected from Awka town offers valuable insights into the demographic composition and human capital distribution essential for strategic land use, infrastructure provisioning, and community-based planning. The gender distribution presents a marginal demographic tilt toward male residents, with 55% identifying as male and 45% as female, a trend that may influence gender-responsive planning, economic participation rates, and the design of inclusive public spaces. In terms of age stratification, the population reflects a strong concentration within the economic productivity range of 26-45 years, comprising 44% of respondents. This cohort represents the backbone of the urban labor force and has direct implications for employment zoning, housing demand, and transportation planning. A substantial portion of respondents—31%—are aged 20 years and below, pointing to the critical need for investments in educational facilities, youth services, and recreational zones. Meanwhile, 19% fall into the 46-64 age bracket, a segment often associated with residential stability and healthcare needs. A smaller group-6%—are aged 65 and above, signaling emerging priorities around age-friendly urban design and eldercare services. The analysis of literacy state, used here as a proxy for spatial literacy and socio-economic mobility, reveals significant disparities. A notable 41% of respondents reported having no formal education, which presents a challenge to participatory planning and community engagement strategies. 33% had attained only primary education, emphasizing the need for adult literacy initiatives and basic skills development. 24% of respondents held secondary education qualifications, offering a foundation for technical training and upward mobility. A very limited segment—2%—possessed a diploma or undergraduate degree, and 5% had completed postgraduate education, representing an emerging professional class with potential to contribute to knowledge-based planning and innovation.

Table 1: Socio-Spatial Profile of Urban Respondents in Awka Town

		Frequency	Percentage	
Gender	Male	209	55%	
	Female	173	44%	
	Total	382	100%	
Age	25 Years and below	113	31%	
	26-45 years	169	44%	
	46-64 years	76	19%	
	64 & above	24	6%	
	Total	382	100%	
Literacy State	None	115	41%	
	Primary	124	33%	
	Secondary	91	24%	
	Higher education	12	2%	
	Total	382	100%	

Source: Field Survey, 2025

# Spatial Factor for Establishment Street Trading Business in Awka

Field data collected from respondents in Awka urban area highlights several spatial factors shaping the locational behavior of street vendors. The most predominant criterion, cited by 86 respondents (30.7%), was proximity to high vehicular circulation corridors, indicating a strategic preference for sites with intense traffic flows that offer greater visibility and customer volume. This reflects a locational logic rooted in accessibility and footfall optimization, common in informal economic geography. Another 62 respondents (22.1%) prioritized proximity to commercial anchors, including established markets and retail concentrations, underscoring the role of economic agglomeration and centrality in influencing vendor distribution patterns. Meanwhile, 47 respondents (17%) identified pedestrian-oriented infrastructure, such as

walkways and crossings, as favorable for trade activitysuggesting a preference for human-scale urban design and walkability as enabling factors. Availability of public space and physical infrastructure, cited by 42 respondents (15%), points to the spatial adaptability of traders to underutilized urban margins, vacant lots, and setback areas-often outside formal planning jurisdiction. A smaller group, 29 respondents (10.1%), emphasized environmental quality and perceived safety, aligning their location choices with areas demonstrating cleanliness, reduced congestion, and minimal health hazards-indicative of spatial sensibility to urban livability. Finally, 14 respondents (5%) referenced compliance with designated vending zones and legal safety boundaries, reflecting limited awareness or enforcement of formal urban policies and zoning mechanisms tailored toward informal trade integration.

Table 2: Spatial Factor for Establishment Street Trading Business in Awka

Reason	No	0/0	_
Proximity to high vehicular circulation	86	30.7	
Pedestrian-oriented infrastructure	47	17	
Proximity to commercial anchors	62	22.1	
Availability of public space and infrastructure	42	15	
Environmental quality and perceived safety	29	10.1	
Designated vending zones and legal safety	14	5	

Source: Field Survey, 2025

## **Environmental Effects of Street Trading in Awka**

An environmental audit of informal commercial activities in Awka town reveals substantial impacts stemming from the proliferation of street trading within the urban fabric. Data interpretation from community surveys underscores a dual reality: while these activities provide livelihoods and contribute to economic dynamism, they also generate critical environmental stressors that demand planning attention. The dominant environmental externalities identified include solid waste accumulation, urban runoff obstruction, and transportation network disruption. Specifically, 99.5% of respondents acknowledged that street vending contributes significantly to waste generation, while 370 individuals (approximately 96.9%) attributed urban drainage blockages to indiscriminate waste disposal by traders. Such infrastructure impairment increases flood risk and diminishes urban resilience during peak rainfall seasons. Additionally, traffic congestion, reported by 93% of respondents, highlights a

major functional constraint on mobility systems in commercial precincts. The encroachment of vending stalls onto rights-of-way disrupts vehicular and pedestrian circulation, intensifying travel time and reducing overall efficiency of urban transport corridors. Environmental health and sensory pollution indicators were also noted, though at lower prevalence: 31% of surveyed individuals cited air and noise pollution emanating from trading clusters—particularly in high-density areas with vehicular exposure and informal generators. Furthermore, 10% of respondents associated street trading with the emergence or spread of public health risks, such as unsanitary food handling and stagnant waste contributing to vector-borne diseases. Importantly, only 0.5% of respondents believed that street trading has no environmental consequences—a negligible minority that contrasts sharply with the widespread acknowledgement of its urban ecological impacts.

Table 3: Environmental effects of street trading in Awka

Effects	No	%	_
It generates waste	380	99.5	
It produces air/noise pollution	50	31	
The waste blocks urban drainage system	370	97	
It leads to diseases and other ailment	40	10	
It leads to traffic congestion	356	93	
No environmental effects	2	0.5	

Source: Field Survey (2025)

## Possible Solutions to street Trading

The data in table 4 presents various solutions to mitigate the environmental effects of street trading activities, along with the number of respondents who support each solution and their respective percentages. 100% of the respondents unanimously support that sensitization campaigns can effectively inform traders and the general public about the negative environmental impacts of street trading, such as littering and congestion, leading to more responsible behaviours. 65% of the respondents agreed that providing adequate market facilities could help organize trading activities, reducing the chaos associated with street trading.

The whole respondents highlighting the belief that high costs deter traders from using formal market spaces. By reducing financial burdens, more traders might opt for proper market stalls, which can alleviate street congestion and environmental degradation. 100% of the respondents agreed that effective waste management is crucial in reducing litter and pollution resulting from street trading. Only 29% of the respondents agreed to stop street trading on motorists and pedestrian path. 220 respondents agreed that by providing education, it might help reduce the number of people engaging in street trading, possibly leading to more organized trading environments.

Table 4: Possible solutions to the environmental effects of the activity

Solutions	No	%
Sensitizing people on the effects of street trading activity to the environment	382	100
Provision of sufficient market stalls and shops	250	65
Reducing cost of shop rent and taxation	382	100
Improving waste management scheme	382	100
Stopping street trading on motorists or pedestrian path	110	29
Providing free and compulsory education to reduce the number	210	55

Source: Field Survey (2024)

#### Discussion

The demographic analysis offers vital planning intelligence for urban policy formulation in Awka town. The concentration of respondents within the prime working-age group (26–45 years) reflects a population segment central to the city's economic productivity and labor force composition. Coupled with a significant youth presence (≤20 years), this demographic profile signals a pressing demand for educational infrastructure, employment-generating urban nodes, and transitional housing frameworks. The relatively low levels of formal educational attainment—where a substantial proportion of respondents reported primary education or none at all—suggest systemic barriers to socioeconomic mobility and underscore the importance of inclusive learning environments and skill development initiatives.

These socio-spatial attributes necessitate differentiated urban planning approaches that respond to localized demographic realities. Tailored interventions such as community-centered educational hubs, youth-focused skill incubators, and targeted urban renewal projects would address latent inequalities and drive inclusive urban growth across Awka's evolving landscape.

Complementing the demographic realities is the complex environmental footprint of informal street trading. Empirical data from the study points to a high incidence of environmental externalities linked to street trading, particularly waste accumulation, drainage obstruction, and traffic congestion—issues cited by an overwhelming majority of respondents. These trends reflect the spatial disorganization and infrastructural strain resulting from unregulated informal economic activities.

While street trading plays a pivotal role in livelihood generation and economic accessibility, its proliferation in unplanned urban spaces presents significant challenges to environmental sustainability and mobility planning. The convergence of economic informality and urban dysfunction creates spatial tension that requires integrative and adaptive planning mechanisms.

This necessitates the implementation of integrated urban management strategies, including: Designated and formalized trading corridors equipped with basic infrastructure to contain and support informal vendors without compromising mobility or environmental health; Strengthened solid waste management systems, particularly around informal market zones, to mitigate pollution and improve drainage efficiency; and Spatial regulation policies that define and enforce right-of-way usage, trading boundaries, and environmental compliance to preserve the integrity of public infrastructure. Mreover, fostering inclusive stakeholder engagement—incorporating traders' unions, planning authorities, and community representatives—can facilitate co-designed solutions that safeguard environmental integrity without disenfranchising vulnerable economic actors.

# **Summary of Findings**

The findings from this research enlightened a crucial intersection in the trajectory of Awka's urban development—where economic informality and environmental sustainability collide within a rapidly evolving cityscape. Awka's streets, bustling with informal economic activities such as street trading, reveal a vibrant entrepreneurial spirit driven by survival, opportunity, and accessibility. Yet, beneath this dynamic lies a complex web of urban environmental

challenges that require deliberate, inclusive, and strategic planning responses.

On the socio-economic front, the demographic composition—marked by a substantial youth population and a high prevalence of low educational attainment—calls for inclusive urban interventions that extend beyond infrastructure. Urban planners and policymakers must embrace models that not only stimulate economic participation but also empower communities through education, training, and localized support systems. The informal sector must be viewed not as a nuisance, but as a fundamental layer of the urban economy that, if integrated effectively, can catalyze both economic growth and social resilience.

Simultaneously, the environmental consequences of unregulated street trading—ranging from waste proliferation and drainage obstruction to congestion and pollution—demand robust environmental governance frameworks. This involves more than enforcing regulations; it requires reimagining the spatial organization of commercial activity, introducing designated trading corridors, and investing in context-responsive infrastructure. Infrastructure must be intuitive, accessible, and scalable—offering traders the dignity of space while preserving the ecological balance and usability of public domains.

The path ahead for Awka's urban transformation is not merely about expanding the city's physical footprint. True progress lies in cultivating a city that grows strategically and equitably—where spatial planning is harmonized with human needs, environmental constraints, and economic realities. A forward-looking approach should weave together layers of stakeholder engagement, adaptive policy mechanisms, and data-informed planning tools to craft a city that reflects both its lived experiences and its aspirations.

In essence, Awka stands at a pivotal juncture: the opportunity to reconcile informality with order, growth with sustainability, and tradition with innovation. The success of this urban evolution depends not solely on governmental action, but on the collective will to foster a city that works—for everyone, everywhere.

#### CONCLUSION

This study has illuminated the intricate relationship between informal street trading and the broader urban dynamics of Awka town, revealing both its socio-economic significance and its environmental consequences. The findings underscore that while street trading serves as a vital source of livelihood for many residents, its unregulated expansion exerts considerable pressure on the urban fabric—manifesting in waste accumulation, impaired drainage, traffic congestion, and compromised public health.

Equally compelling are the socio-demographic insights, which point to a predominantly working-age and undereducated population—indicators that must inform forward-thinking planning interventions. Addressing these realities requires urban strategies that are both inclusive and adaptive: approaches that not only manage spatial conflict and environmental degradation but also elevate human capital and support economic resilience.

Ultimately, the future of Awka's urban transformation hinges on its ability to balance economic informality with structured spatial development, forging a pathway where growth is not only outward but also equitable and sustainable. The integration of formalized trading zones, improved infrastructure, participatory governance, and targeted social investment will be essential in shaping a city that is efficient, inclusive, and environmentally conscious.

Awka has the potential to serve as a model for secondary cities navigating the complexities of urbanization—where informality is not eradicated but meaningfully integrated into a resilient and forward-looking urban vision.

#### RECOMMENDATIONS

In response to the environmental and socio-economic complexities revealed by the research of street trading in Awka town, a suite of strategic urban planning recommendations has emerged to guide equitable and sustainable city development.

First, the formalization of informal trade zones is imperative. This involves the establishment of designated street market areas that are adequately serviced with infrastructure such as waste bins, drainage channels, and standardized trading kiosks. Integrating these zones into the city's master plan through localized market clustering would significantly reduce the encroachment on pedestrian and vehicular pathways, easing congestion and enhancing spatial order.

To complement these efforts, solid waste management systems must be strengthened, particularly in zones with high concentrations of informal trading. Deploying community-based waste collection schemes and installing shared waste receptacles can improve environmental hygiene. Promoting trader awareness and enforcing waste compliance regulations will be essential to maintain clean and functional public spaces.

Addressing mobility challenges also requires targeted interventions. Implementing clear right-of-way policies is essential to reduce friction between pedestrian movement and commercial activity. Furthermore, strategic rerouting and expansion of road infrastructure will better accommodate the mixed traffic flows generated by these vibrant commercial areas.

Recognizing the underlying socio-economic conditions, particularly low levels of formal education among vendors, educational and empowerment programs must be expanded. Initiatives such as adult literacy campaigns and vocational training will enhance economic resilience. Partnerships with NGOs and financial institutions should also be fostered to deliver microcredit and business development support tailored for informal traders.

From a spatial development perspective, creating neighborhood-scale commercial centers would bring economic activity closer to residential zones, minimizing informal sprawl. Adaptive zoning strategies that reflect actual demographic distribution and service demands will improve efficiency and equity in land use allocation.

To reinforce inclusive urban governance, it is recommended that dialogue platforms be institutionalized, enabling consistent engagement between municipal authorities and street vendor associations. Trader unions should be empowered to contribute to the monitoring and co-design of urban interventions, bolstering policy legitimacy and community ownership.

Finally, enforcing urban environmental regulations specific to street trading is vital. This includes strict guidelines on waste disposal, stall boundaries, and sanitation protocols. Developing standardized operating procedures for both mobile and stationary vendors will help align informal activities with broader public health and urban design goals. Together, these recommendations offer a roadmap for reconciling the tensions between informal economic vitality and formal urban sustainability—ensuring that Awka town evolves into a more orderly, inclusive, and environmentally responsible city.

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