

UNIVERSITY OF GHANA, LEGON

DEPARTMENT OF GEOGRAPHY AND RESOURCE DEVELOPMENT



**SPATIAL ANALYSIS OF THE DISTRIBUTION AND DRIVERS OF RETAIL
OUTLETS LOCATION IN RESIDENTIAL AREAS OF ACCRA**

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**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN
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DECLARATION

I hereby declare that I am the sole author of this thesis and to the best of my knowledge, has not been submitted to any other university for an award except where due acknowledgment has been made.

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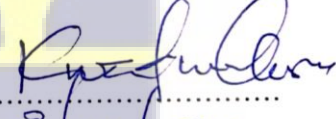
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DEDICATION

I dedicate this work to my parents, Mr. Emmanuel-Quist Hogba and Mrs. Josephine Deble-Hogba for your love, moral motivation, sacrifices, and unending prayers towards the successful completion of this work.



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I thank God for seeing me through this work and also for bringing me this far.

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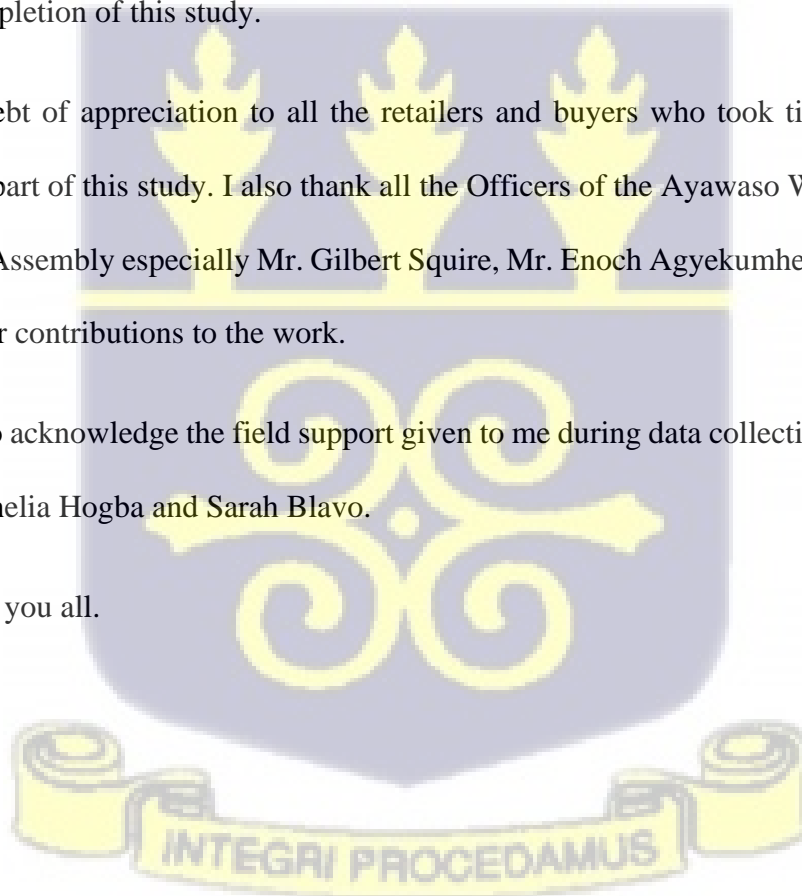
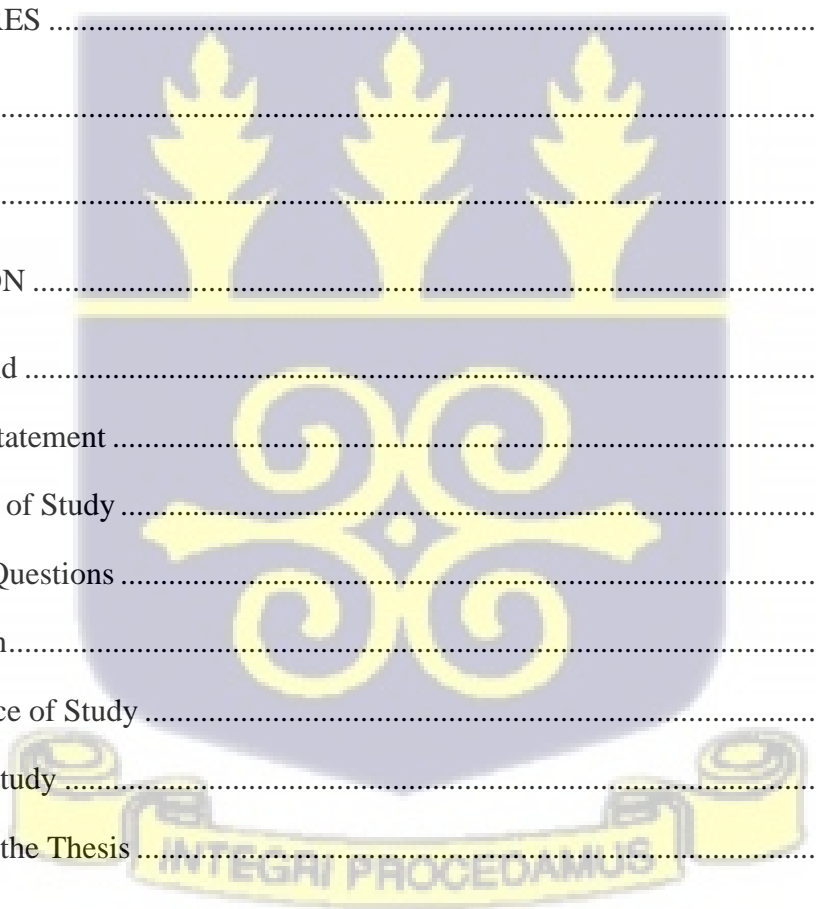


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ABSTRACT

In the last two decades, the retail sector has seen an unprecedented and widespread proliferation of retail outlets, particularly in the majority of developing cities. In Accra, Ghana's capital city, houses and residential neighbourhoods are increasingly becoming a haven for the location of retail outlets. Given the fast expansion of residential retail outlets, a comprehensive geographical understanding of the locational patterns, as well as the causes of these patterns are required for formulating spatial planning policies, decision-making and rational distribution of commercial facilities. The study, therefore, examined the spatial pattern and drivers of retail outlet locations in three residential areas of varied income levels in Accra. The study employed a complementary mixed-method approach, involving the mapping of locations of retail outlets using Geographic Information Systems, questionnaire administration, in-depth interviews with buyers and institutional stakeholders as well as field observations to collect data. The mapping established that the geographical pattern of retail outlets is aligned with the distribution pattern of urban development in the study areas and these include the distribution of population, road networks, and supplementary businesses. Though the distribution of retail outlets is suggested to be spontaneous, the study showed that the factors driving the location of retail outlets were taken by retailers based on their observations and experiences, including proximity to customers, existing clusters of retailers, and minimization of competition. The study also revealed that the distribution and operations of retail outlets pose great environmental threats to the residential environment and the quality of life of residents. The study recommended, among others, that policymakers develop an explicit and comprehensive policy to regulate and manage residential retailing.

CHAPTER 1

INTRODUCTION

1.1 Background

In both developed and developing countries, the retail landscape is a vital part of the urban environment (Prinsloo, 2016). Retail is primarily the activity of selling to customers in smaller quantities (Pride and Ferrel, 2018). Retail markets facilitate the distribution of final goods and services to consumers, a significant livelihood contrivance to its population, generating income for the local economy and revenue for local governments (Koster et al., 2019). By focusing on the spatial dimension, there are various types of retail businesses, and they include itinerant retailing, sedentary retailing located outside the home, and sedentary home-based or residential retailing (Acheampong, 2019). For this study, the retail business was restricted to sedentary residential retail outlets

Globally, the retail sector has undergone a significant transformation. The sector has evolved not only in scale but also in the organization and geographical distribution of retail outlets. The sector's transformation is largely attributed to changes in demographic, social, economic, and technological advancements around the world (Swar, 2007). These include rising per capita income, urbanization, economic liberalization, shifting consumer lifestyles, and changing taste preferences (Reardon and Gulati, 2008).

In Africa, the retail environment was defined by the convergence in traditional market centres and small-scale family outlets (Oltmans, 2013). However, since the colonial period, this trend has shifted with the introduction of new retail formats such as department outlets, supermarkets, chain stores, and malls located in specific areas of urban centres (Balogun and Onokerhoraye, 2017). Traditional small and medium-scale retailers in recent times are also facing keen competition from multi-national retailers. Despite the competition, informal retail outlets continue to account for the majority of retail sales volume in Africa, even though retail habits are becoming more formalized, westernized, and sophisticated. According to the United Nations Economic Commission for Africa (UNECA), about 90% of transactions in the African retail market take place through informal channels (Deliotte, 2015).

Ghana, like every other developing country in Africa, has an urban retail environment that is undergoing significant changes, resulting in a massive increase in retail space and a shift in the classification of retail outlets (Meng et al., 2014). Economic liberalization and, in particular, structural adjustment policies in the country, combined with political, urbanization, and other social forces, have resulted in significant growth in the country's retail sector (Anyidoho, 2013). Tsikata (2008), for example, observes that since the 1980s, when economic liberalization policies were adopted in Ghana as part of economic reform initiatives, the informal retail economy has developed to accommodate more labour force. Also, Deliotte (2015) stated that the expansion is attributed to Ghana's rapid economic growth, the broadening of the middle class (1.3 million households as of 2014), rising disposable income, lifestyle changes, and increasing population. This has resulted in the proliferation of various types of retail outlets in the country's urban areas, to meet the increasing demand for goods and services while also absorbing the growing urban

unemployment (Tsikata, 2008). Bank of Ghana reported that, during the first ten months of 2011, sales in the retail sector rose by a remarkable 31% (Deloitte, 2015).

The house and residential areas are increasingly becoming a haven for the location of retail outlets (Yankson, 2000). Most governments view retail outlets located in residential areas as modern urbanism that allows people to live, work, and shop in the same community (Heitmeyer and Kennita 2004). Sevtsuk (2014) also asserted that the presence of retail outlets in residential places constitutes an essential aspect of livable and walkable neighbourhoods. Also, outlets are being relocated from central business centres to residential neighbourhoods as the former become saturated with commercial activities and lands become more expensive (Öz and Eder, 2012). The lack of allocated spaces for markets for the new entrants further exacerbates the need to locate within residential areas (Anyidoho and Steel, 2016). Many households can meet their survival needs by buying daily housekeeping items conveniently from residential retail outlets without going to market centres (Gough et al., 2003). Residents, especially women, who participate in these activities can combine them with home responsibilities such as child care and cooking (Gough et al., 2003).

1.2 Problem Statement

In recent years, rapid urbanization has necessitated the study of the spatial pattern and dynamics of retail activities in urban centres (Paroli and Maraschin, 2018). Understanding the spatial patterns of retail establishments contributes significantly to efficient business administration, competent design of urban commercial space, and urban planning (Han et al., 2019). Retail analysts

previously predicted that the advancement of technology and online retail would result in a decrease in the spatial distribution of retail outlets (Pacione, 2012). Although the retail sector is transitioning into a new digital paradigm, with online retail sales accounting for 13.7% of retail sales in 2019, shopping in physical retail outlets remains the top preferred choice among retailers and consumers (Pezzini, 2021). As a result, retail outlets remain highly visible units in the urban landscape (Kickert et al., 2020). According to Skrovan (2017), the topmost reasons retail outlets are still a fundamental unit in the urban environment are the culture of bargaining, social relations, and the ability for a consumer to touch, smell, and hear the products or, in some cases, try them.

Retail outlet operation and location are no longer limited to market centres but have spread to all areas within urban communities as the city expands, particularly dotting residential settlements and along main streets (Dobbs et al., 2012). The highly fragmented retail sector is now dominated by a plethora of small neighbourhood outlets (Portell et al., 2019). Kompil and Celik (2006) asserted that new retail outlet formats such as metal containers, wooden box outlets, and individual ownership are gradually defining retailing in urban areas. Diallo and Zhengyu (2010) also relate that the change in retail outlet format and spatial location has a large impact on travel and time efficiency, land requirements, commercial property markets, and influences the aesthetic appearance in urban settlements.

The study on retail activities in Ghana is not new. With the increasing specialization in economic activities and the distribution of the urban population as well as the essential role of retailing, the number of retail-based studies has increased to a considerable degree (Büyükcivelek, 2014).

Scholars such as Oltmans (2013) studied the concept of supermarketization in changing the food retail environment and concludes that, despite the entry of supermarkets into the retail environment, traditional market retailers continue to be the main and preferred retail outlets for consumers (see also Reardon and Gulati, 2008; Meng et al., 2014). Solomon-Ayeh et al (2011) investigated street vending and the usage of urban public space in Accra and demonstrated that the methods used by street vendors generate impulse buying which has been a significant boost for the sustenance of the sector regardless of efforts made by officials to relocate them (see also Owusu et al., 2013; Anyidoho, 2013). Similarly, Mensah (2014) examined petty trading and home-based trading benefits and challenges in urban areas, and he found out that retailers derived their primary source of income from their enterprises and were limited by competition, fear of evictions, lack of space, and lack of access to formal loans. Shrand's (2017) work also focuses on the wholesale and retail of food and revealed that in Ghana the sector is dominated by informal retailers whose retail outlets comprise mainly non-self-service shops, open-air markets and street-side vendors.

Without a doubt, all of these studies examine the various opportunities that are emerging in the retail sector, with a focus on retail's contribution to society and the economy, as well as retailers' resilience and challenges. These studies, while significant, fall short in terms of current spatial dynamics and the impact of the spatial distribution of retail outlets on the urban environment. Retail studies, according to Crewe (2000), should not be limited to the benefits derived from the distribution, but should also include a broader geographical understanding of what, how, and where these changes are occurring, as well as the factors causing the variations, for spatial planning policies and decision-making by stakeholders in the distributive channel and urban development. Fang et al (2020) also asserted that, in light of the rapid development of the urban socio-economy

and the growing trend in retail outlets, spatial patterns must be understood because they facilitate a sound and systematic development of urban commerce. Against the described background, this study seeks to examine the spatial pattern and drivers of retail outlets location as well as their effect on the urban environment of Accra using Geographic Information Systems. GIS in retail analysis provides a platform for computing, mapping retail outlets, ascertaining, and analyzing retail distribution patterns (Wang et al, 2014).

1.3 Objectives of Study

The primary objective of the study is to examine the spatial patterns and drivers of retail outlet locations in Accra.

The specific objective sought to:

- Map retail outlets to ascertain the spatial distribution pattern.
- Investigate the factors accounting for the location of retail outlets.
- Examine the effect of the distribution of retail outlets on the residential environment.
- Examine the policy implications of the distribution of retail outlets in residential areas.

1.4 Research Questions

The study aims to address the following questions:

1. What is the spatial pattern of retail outlets within residential areas?
2. What are the types of retail outlet formats present?
3. What factors drive the location of retail outlets in residential areas?
4. Does the spatial distribution of retail outlets affect the residential environment?

5. What are the available retail policies and how effective are these policies in regulating retail outlet distribution in residential areas?

1.5 Proposition

The study is based on the proposition that Accra's spatial retail pattern and factors of retail outlet location are influenced by the prevailing socio-economic factors, and therefore community differences induce a variation in the retail landscape of the selected study communities.

1.6 Significance of Study

The drivers and the spatial location of retail outlets are significant components that account for the visibility and viability of retailing potentials; however, it is often narrowly exploited in retail studies in Ghana. The study, therefore, aims to fill a fundamental gap in Accra's urban retail research by exploring the current spatial and structural dynamics of retail outlets within residential areas. In addition, the study sheds light on the environmental effects and policy framework of retail management in Accra. In addressing these abiding issues, this study benefits urban planning in concrete terms. Thus, the quantitative analysis of the spatial patterns of retail outlets is relevant not only for descriptive purposes but also for focusing on the related similarities and differences in retail patterns. This is because the study provides a clearer depiction of the urban residential retail landscape through a valid visual representation of the retail environment and growth potentials. The study also provides urban planners and policy-makers with specific factors influencing and accounting for the spatial and structural tendencies in the distribution of residential retail outlets in the typical socio-economic classes of residential areas in Accra. The findings also

provide current retailing patterns to prospective retailers, allowing them to develop appropriate strategies in terms of choosing a location, retail outlet format and identifying product categories.

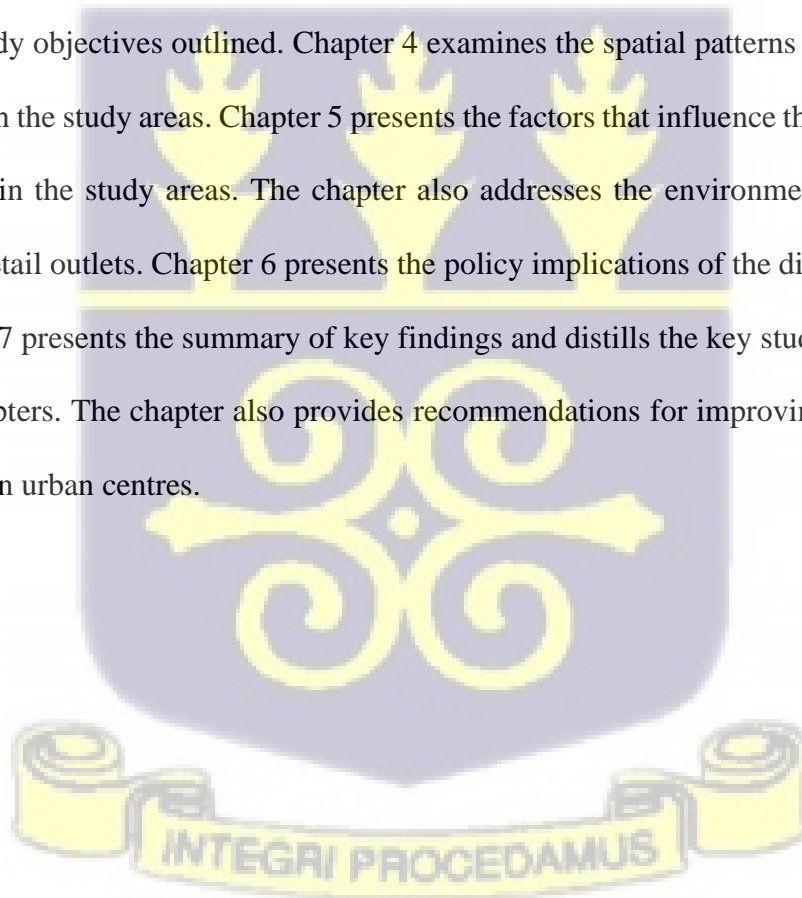
1.7 Scope of Study

The study focuses on residential or home-based retail outlets in three socio-economic differentiated communities in Accra. Retail outlets are conceptualized in this study to include any physical structure or defined space from which goods and services are transacted in smaller units (Singh and Chandra, 2016), located either inside the home, outside the home such as along the road, in front of the house and public spaces within the residential enclaves. This also includes retail outlets that are situated inside the study areas but operated by retailers residing outside the communities. This is to depict the actual scale and spatial spread of retail outlets in the study areas. However, outlets located in the market square within the study areas were not included. It should also be noted that retail outlets which did not have clear demarcations such as retailers operating in non-defined outlets and retailers who displayed their wares in front of other defined outlets were excluded from the study. This was because the study concentration is on a defined space or physical structure from which goods and services are transacted in smaller units. Therefore, outlets including metal containers, wooden boxes, table-tops, concrete buildings and defined open areas were considered for the study.

1.8 Outline of the Thesis

The thesis is arranged into 7 chapters with the basic contents briefly described in this section. Chapter 1 provides a general introduction to the study, stipulating the problem statement from

which the research objectives, research questions, proposition, and significance of the study are elucidated. Chapter 2 discusses the related literature on specific themes of the topic under investigation. This chapter also discusses theories of retail development and delineates the conceptual framework employed for the study. Chapter 3 of the study focuses on the review of the profile of the study area and the reason for the selection of the study communities. The chapter also discusses the methodology and procedures used in the study. These include the philosophical underpinnings of the study, the sample size of the study population, data collection methods, methods of data analyses and presentation. The Chapter also illuminates the limitations encountered during the study. Chapters 4, 5, and 6 present and discuss the findings of the study based on the study objectives outlined. Chapter 4 examines the spatial patterns of the distribution of retail outlets in the study areas. Chapter 5 presents the factors that influence the spatial locations of retail outlets in the study areas. The chapter also addresses the environmental effects of the distribution of retail outlets. Chapter 6 presents the policy implications of the distribution of retail outlets. Chapter 7 presents the summary of key findings and distills the key study drawn from the 3 preceding chapters. The chapter also provides recommendations for improving the distribution of retail outlets in urban centres.



CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review and discussion of relevant literature on the topic under study. The literature review is divided into eight sections which provide contexts and are significant for the study. These includes literature on the definition of retail concepts, the spatial distribution of retail outlets, the classification of outlets, retail structure in Ghana, retail policies and regulations, and the role of GIS in retail analyses. It also provides a coherent review of theories on retail development and discusses the conceptual framework for the study.

2.2 Definition of Concepts

2.2.1 Retail

"Retail" is derived from the old French verb "tailer," which means "to cut off a portion" or "to break a large quantity" (Kaviya et al., 2017, p. 83). As a result, retail is concerned with the activities of providing small quantities of products to consumers from a large quantity of goods (Hameli, 2018). According to Pride and Ferrel (2018), legal definitions of retail vary by jurisdiction, but to be deemed a retail activity, at least 80% of sales must be made in smaller units to end-users. In this context, Sharma (2008) defines retail as the sale of small quantities of products to customers. Accordingly, retailing achieves this by making merchandise available while offering it to consumers in a small proportion (Sharma, 2008). Dhotre (2010) also related that retail is a process

through which goods are transported to final consumers. Thus, the complete cycle of retail involves selling directly to the ultimate consumer. Hence, retail is viewed as the final gate in the delivery of items for consumption to customers, and any business that distributes goods to the end buyer is fulfilling the role of retailing (Perreault et al., 2013). Amit and Kameshvari (2012) stipulated that, although the concept of retail is commonly linked with the purchase of products, it may also refer to service providers that sell to customers. Therefore, Amit and Kameshvari (2012) in reorganizing the definition consequently related that retail is a collection of operations in which products and services are offered to consumers for personal or household use. Hence retail is not exclusively for the sale of a tangible product to consumers but also includes retail service providers such as retail banking, tourism, insurance, beauty care services, public transport, private security firms, legal firms, and publications, among others. Similarly, Armstrong and Kotler (2012) describe retail as any activity for selling products or services directly to consumers for personal or commercial use. In a more recent definition, Kakkar and Mathur (2020) concurred that retail is a process of contacting the final consumers through the exchanges of goods and services for the generation of profit. In this regard, a retailer is a person, agency, or organization that delivers goods or services to the final customer (Kakkar and Mathur, 2020).

2.2.2 Retail outlet

A retail outlet is defined by Davies (1972) as a service or functional selling point, which maintains an outlet frontage in a stall within a market or a street (cited in Mittal et al., 2010). Similarly, a retail outlet is also defined as a structure from which commerce is carried out. Both definitions relate to a retail outlet as a fixed point or structure for transacting goods and services. However,

Mittal et al (2010) contend that a retail outlet is not merely a building from which goods are sold but any business whose sale or revenue comes predominantly from retailing. Narayan and Chandra (2015) also highlighted that a retail outlet is not simply a structure or a location for retail transactions but also a place customers decide which products are offered by the retailer to purchase. Therefore, the outlet becomes an essential resource in the retail industry, and the operations must be well-managed to achieve and maintain customer satisfaction while remaining cost-effective (Pantano and Dennis, 2017).

2.3 Spatial Location of Retail Outlets

The physical retail outlet represents a significant investment in the retail sector. Accordingly, the chosen site must be a prime location to suit the target market (Armstrong and Kotler, 2012). Therefore, the most significant and costly decision a retailer must make to achieve long-term success is the location of a retail outlet (Oner, 2014). Location deals with where the retail outlet is positioned, the time and distance covered by buyers to get to the outlet. Almost all retailers prioritize proximity to consumers when deciding on their location (Waxell, 2014). Consequently, many buyers do not want to incur a lot of costs or spend much time getting to the retail outlet (Elliot et al., 2013).

Many studies have sought to ascertain the logic behind the geographic location and distribution of retail outlets in urban towns. Earlier studies, such as Christaller's (1933) central place theory, focused on a key aspect of retail location with a particular interest in customer accessibility.

Accessibility may be used as a broad indication of local development since it is linked to spatial concentration, land-use competition, and land values (Levy and Weitz, 2009). Spatial agglomeration is another factor to consider when it comes to retail outlet location. According to some studies, retail concentration is both a determinant of customer attraction and a technique for minimizing the negative consequences of competition (Paroli and Maraschin, 2018). The success of concentrated retail centres, according to Konishi (2005), is due to the uncertainty of consumer preferences and the anticipation of low pricing. Not only in multi-purpose trips but also in single-purpose shopping trips, the agglomeration of diverse types and sizes of outlets favorably impacts the consumer's decision (Aventze et al., 2005).

Other studies have generally classified retail location factors into two categories: internal factors affecting the outlet and external factors affecting the outlet's surroundings (Bui et al., 2021). Flanagan (2006) stated that external factors change depending on internal factors such as the type of business and the business's marketing approach. Jones and Mock (1984) also claimed that site and situation factors influenced the location of retail outlets. The site factors are connected to the environmental features around the location point, whereas the situation variables are related to the environmental characteristics of the location. The market population is the most essential component in the situation factors (Brueckner, 2011). This covers not just the population in the outlet's projected trade area, but also its socio-economic structure, prospective expenditure, and consumption patterns (Paroli and Maraschin, 2018). Configurational studies, another field of inquiry, have also contributed to the debate on retail outlet spatial patterns. The goal of urban configurational studies has been to create the link between the location of retail operations and

specific aspects of the urban street grid, to better understand the spatial difference that emerges from street networks (centrality, accessibility, and connectivity) (Porta et al., 2009). Such research has enabled a more comprehensive examination of the urban environment, overcoming the limitations of aggregated locational analysis based on zones and distances. According to Porta et al (2009), high street connection and density are key criteria for the viability of retail centres. Duggal (2007) further argued that the size and retail concentration of particular retail outlets in a given region are frequently influenced by the type of goods and services provided by the retail outlets, as well as the spatial distribution of competitors. For example, retailers that sell goods and services that are in high demand and easily afforded by the majority of consumers create a larger retail concentration as related to a specialty outlet.

Furthermore, land-use zoning regulations are another important element that controls the location of retail outlets within the city (Brueckner, 2011). The majority of urban planning is done through zoning, which divides up the land into several zones for different purposes (Levine, 2006). Residential, commercial, industrial, and agricultural demarcation are the main zoning classes in particular (Nielsen et al., 2002). Previous research has shown that zoning essentially enacts market processes that control land use, with no impact on outlet distribution (Bates and Santerr, 1994; Brown, 1993; Shlay and Rossi, 1981). However, several recent studies have shown that zoning plays an important influence in determining the distribution of commercial points throughout urban areas (Flanagan, 2006; Levine, 2006; Acheampong, 2019). For example, Levine's (2006) research shows that zoning serves the exclusive interests of entrenched elites by supporting a model of stable residential neighbourhoods above all other land uses and thwarting market

mechanisms that would otherwise result in more preferred mixed land uses. This has a direct influence on the existence and concentration of outlet formats in these locations (Flanagan, 2006). In this way, zoning may be viewed as both a vehicle for community mobilization, favoring rich areas with the resources to mobilize, and an autonomous regulatory force that, once implemented, perpetuates local disparity in the distribution of commercial centres. Iton (2015) also asserts that high-income residential zones are likely to be less densely inhabited than other neighborhoods, resulting in fewer commercial targets. This infers that zoning is an important factor in deciding how retail outlets are distributed. As a result, Arku et al (2016) conclude that zoning is a key factor that either helps or hinders retail development. However, according to Yeboah and Obeng-Odoom (2010), zoning and siting decisions can work in tandem, such as when a developer requests that a parcel of land be rezoned to support a specific commercial development.

Black et al (2017) also identify other primary indicators in the decision-making of outlet distribution, comprising the quality of the location's catchment area (incorporating factors such as age distribution, housing prices, the size of the nearby population and employment rates), access to the outlet (access to roads, available means of transportation and distance to population centres) and outlet characteristics (size of selling area, range of products and nearby competitors). For example, retail outlets tend to concentrate and cluster in areas with a significant share of the resident population (Brueckner, 2011). In addition, the population demographics and socio-economic composition of an area are prominently mentioned factors in literature contributing to the distribution of retail outlets (Carpenter and Moore, 2006; Jain et al., 2017) The demographics of an area are essential to be considered to choose the retail location, including the age group of

the customer, profession, lifestyle, religion, income groups among others (Jain et al., 2017). Retail outlets targeting specific ethnic communities, in particular, may locate themselves near the residence of these ethnic groups (Carpenter and Moore, 2006). Implying that, some outlet formats are only operated and concentrated among certain ethnicities. Studies have also demonstrated that the distribution of retail outlets is determined by the area's road networks, geology, terrain, and land use. For instance, Singleton et al (2016) revealed that streets with steep slopes discourage customer movement and are therefore unsuitable for retail locations.

The various factors propelling the spatial locations of retail outlets tend to define the various observable spatial distribution patterns in the urban environment (Singleton et al., 2016). According to Widaningrum et al (2018), these factors result in the non-geometrical distribution of outlets, thus being in a circle, square, or polygon pattern unless purposefully arranged as similar to market centres and shopping areas.

2.4 Classification of Retail Outlet Formats

Retail outlets are not only located near consumer settlements but are also organized to meet modern standards globally. This results in continual changes in retail classification which is a common issue in geographical studies of retail development as a consequence of innovations in outlet formats (Sinha and Tripathi, 2008). This includes changes in outlet location, layout, size, design, merchandise offered, service and shopping experiences (Vedamani, 2012). As a result of the

constant change, some institutions have collapsed and newer ones have emerged (Sinha and Tripathi, 2008).

Defining an outlet classification format is difficult since criteria differ between scholars and organizations, and there is no widely agreed classification for outlet format in most circumstances (Volpe and Cho, 2017). The classification of retail outlet formats has been done in a variety of situations, based on the prevailing factors of a location and the objective of a study (Besharov et al., 2011). As a result, researchers are forced to rely on disparate data sources, resulting in conflicting definitions. Sinha and Tripathi (2008) also observed that retail outlet categorization is not mutually exclusive; that is, an institution may be correctly placed in more than one category. According to Coles (1948), retail outlets have several distinct features that bear meaningful relationships with one another. Thus, retail outlets may possess few or all of these characteristics, and therefore, many classifications are possible. Hence the problem of organizing a study becomes a rather complex one as a result of defining a classification system (Coles, 1948). For example, the National Commercial Department of the United States of America in 1980 classified a supermarket as a large-scale outlet with an annual turnover reaching \$ 5 million and defined it in 2011 as a traditional retail outlet with 9,000 square feet of retail space and generates at least \$2 million in annual sales. Japan also classifies a supermarket as a large-scale outlet with a leasable floor area of no less than 3000 square metres (Volpe and Cho, 2017).

Several means have been used by geographers and planners to classify retail outlets, each relating to some physical or economic characteristics. Earlier scholars such as Coles (1948) classified retail

outlets broadly by location and products offered. Classification of outlets by location, for geographical and planning purposes, is significant for monitoring retail development concerning land use in a community (Gordon et al., 2011). Classification by product offered is defined broadly by defining products offered by outlets into service and non-service (Coles, 1948). Thus, intangible and tangible products. Guy (1998) also identifies four conventional classification systems: classification by type of goods and services, classification by outlet size, classification by outlet ownership, and classification by shopping trip purpose. Classification by type of goods is done by the use of commodities sold by retail outlets. Difficulties arise in this type of classification when retail outlets sell a variety of goods, which have little in common (Guy, 1998). Classification by outlet size comprises the grouping of outlets by total floor area covered by the outlet; however, this classification, according to Guy (1998), tends to be problematic as floor area is defined differently from one geographic location to another. Classification utilizing ownership is based on the number of outlets owned by a retailer, thus, independent and multiple retailers. The former owns one outlet and the latter owns several or many outlets. Classification by shopping trip purpose involves the classification of outlets in terms of shopping visits to an outlet. These are grouped as convenience outlets, which are frequently visited by customers, and comparison outlets, which are a destination for an occasional shopping trip.

Recent marketing studies have classified retail outlets by grouping outlets into outlet-based retail and non-outlet retail (Mittal et al., 2010). The outlet-based classification is centered on the physical organization of retail outlets. These operate at a fixed point-of-sale location. These can be further classified based on various parameters, such as ownership and merchandise offered (Mittal et al.,

2010). The non-outlet base includes indirect retailing such as internet retailing. Confusion typically develops when utilizing this term due to the unpredictability and cut-off points provided by various official sources.

In Ghana, there is no explicit retail enterprise classification standard. The classification changes from time to time and depends on the institution (Avevor, 2016). At one time, capital cost and turnover were used; at another time investment in machinery and equipment, as well as the enterprise's working capital was utilized for classification (Oppong et al., 2014). The Ministry of Trade and Industry, which has control over the development of retail establishments has adopted the values of installed fixed cost of the establishment for classification. However, the valuation methodologies employed for fixed assets are unreliable, and the Ghanaian currency's constant devaluation makes the definition impractical (Amoah and Amoah, 2018). Nonetheless, the most often utilized criterion is the number of establishments' workers (Quartey and Kayanula, 2000). The National Board for Small Scale Enterprises (NBSSI) categorized enterprises as Micro-enterprises with less than five workers, Small enterprises with six to 29 workers, Medium enterprises with 30 to 99 workers, and large enterprises with 100 or more workers (cited in Oppong et al., 2014). The Ghana Statistical Service (GSS) also categorizes enterprises with fewer than 10 workers as small-scale enterprises, while those with more than 10 workers are classified as medium and large-sized enterprises (GSS, 2016). In practice, there are problems with using this definition due to the upper and lower restrictions that apply to various official sources (Avevor, 2016). The Local Government Act (2016) classification of retail enterprises is done mostly for revenue mobilization purposes. Based on the standard issued by the Local Government Act (2016), the

types or forms of retail outlets mainly include small outlets, which are usual table tops, medium and large outlets, general merchandise outlets, and supermarkets.

2.5 Retail Structure in Ghana

The retail sector in Ghana is one of the economic backbones of the country. Over the last decades, the sector has been experiencing structural transformation and an influx of ideologies regarding consumption, retail formats, and locational changes (Waxell, 2004). The main drivers of retail evolution in the country, according to Kennedy et al (2004), are urbanization, liberalization of markets, and finance. Urbanization is associated with an increase in income and growth in the middle class with more buying power (GSS, 2012) and higher demands for quality and safety (Nielsen et al., 2002). Ghana is undergoing rapid urbanization (at 3.1 % per year), and more than 52 % of the population now lives in cities, bringing with it a slew of issues such as unemployment (GSS, 2012). The considerable change in Ghana's retail landscape has introduced new formats and locations of retail services (Owusu, 2007). It also led to the dual operation of both the traditional designated markets which are still a large part of retailing and modern retailing with the advent of e-commerce, which has been spurred by the rise in internet connectivity (Oltmans, 2013). The decentralization of retail activities from the traditional market centres has led to the penetration of retailing activities in residential areas (Oltmans, 2013).

Before the 1980s, the retail environment was concentrated within a few market centres (Kumcu and Kumcu, 1987). The trade was dominated by small-scale, independent, and family-owned retailers (Kaynak, 1979 cited in Findlay and Sparks, 2012). Large retailers' operations were

modest, and multinational retail businesses were unusual. Retailers usually worked for themselves from small premises, and few had more than one shop. Small, independent, and single-location outlets would only benefit from agglomeration economies created by the expansion of a total business cluster in a centralized location. Like most economies in developing nations, Ghana encountered macroeconomic crises in the 1980s and 1990s where economic restructuring initiatives were required (Acheampong, 2019). Structural Adjustment Programmes (SAPs) established a portfolio of neoliberal economic reforms to primarily change the structure of the economy by decreasing national budget deficits, liberalizing trade, enhancing macro-economic stability, and encouraging private sector-led economic development (Potter and Hilson, 2005).

Although scholars still debate about the exact impact of SAP, there is an agreement in the literature that pursuing such neoliberal economic reforms without taking into account the prevailing political economies of the beneficiary countries resulted in a number of negative consequences, some of which persist to this day (Acheampong, 2019). For the vast majority of the people, the SAP prolonged poverty and led to continuing financial misery, unemployment, and instability (Briggs and Yeboah 2001). Between 1985 and 1991, formal sector employment is projected to have dropped from 464,000 to 186,000, resulting in 278,000 job losses (Gockel and Vormawor, 2004). Young employees, drivers, labourers, messengers, cleaners, and personnel at lower levels of the public sector made up the bulk of those laid off (Konadu-Agyemang, 2001). According to Gockel and Vormawor (2004), women were the hardest impacted at this time, mainly due to their poor skill levels at the time. With a decreasing public sector, a rising population, and an undeveloped private sector, persons impacted by labour retrenchments turned to self-employment, notably in

retailing (Yeboah, 2000). Although retailing had long existed in Ghana, the era immediately following SAP witnessed major growth in the industry's scale, helping to establish the informal retail economy as the country's largest non-formal job sector (Oduyayo, 2015). The retail environment has not only increased in size but has also broadened the backgrounds of those who currently work in the industry. Briggs and Yeboah (2001) highlighted that while the retail industry was once thought to be dominated by low-skilled employees, the percentage of college-educated people has considerably grown in recent years. With limited formal sector job opportunities and rising graduate unemployment, a new type of informal retail economy has emerged in Ghana's urban centres, in which participants are well-educated and competent (Yeboah and Obeng-Odoom, 2010).

2.6 Retail Policies and Regulations

The effort to turn cities and towns into proper habitats has advanced significantly in most nations. As a consequence, governments adopt land use planning strategies and regulations (Mosha, 2010). Land use planning, in general, guide urban growth (Halla, 2002) and ensure that urban areas are cleaner and safer to live in (Acheampong, 2019). Land-use regulation is profoundly ingrained in the political, socio-cultural, legal, and economic situations of the countries that utilize it to attain certain development goals (Acheampong, 2019). In this regard, while looking for a place to establish a business, government approval cannot be overlooked, as has been widely established in previous retail studies. Li and Hu (2012) conducted a study in China on government regulations and the location preferences of small and medium-sized businesses. The study showed that China's stringent environmental rules hampered business operations (Li and Hu, 2012). Boja's (2011)

research in Malaysia also shows that the government is responsible for launching programs to recruit businesses and providing incentives to encourage businesses to locate in specific areas. Keter (2012) also found that, in Kenya, government regulations continued to obstruct the development of small and medium-sized businesses in the nation. Keter (2012) went on to say that government regulations force potential small and medium-scale business owners to incur excessive costs when starting their businesses. As a result, government regulation raises the cost of starting a business since the business must comply, with rural businesses being the worst hit because they have less capital than those in cities.

2.6.1 Retail Policies and Regulations in Ghana

In Ghana, Acheampong (2019) noted that from afar, one may assume that physical development in Ghanaian cities is governed by no rules and regulations. This is especially true when dealing with the scourge of urban issues. Ghana has implemented various land-use control regimes in recognition of the critical role of development restrictions in achieving sustainable cities and a cleaner, safer living environment. The Town and Country Planning Ordinance (Cap 84) of 1945, the Town and Country Planning Regulations, 1959, the Local Government Act 465 of 1993, the Town and Country Planning Act, 1958 and the Building Code (L.I. 1630) of 1996 have all guided physical development in Ghanaian towns and cities from the colonial era to contemporary times. For example, Cap 84 was modeled after the British Town and Country Planning Act of 1932, to enforce and encourage the orderly development of towns (Konadu-Agyemang, 2001). However, Cap 84 did not help the entire population; it only succeeded in constructing orderly and better

neighbourhoods for colonial expatriate employees, European company expatriates, senior indigenous governmental servants, and the few educated Ghanaians inhabitants.

Despite its ineffectiveness, Cap 84 has remained in the country's status books till now, although planning officials have seldom used it in recent years (Acheampong, 2019). The Local Government Act (Act 462) of 1993 and the National Building Code (LI 1630) of 1996 are now the primary tools for guiding physical development in Ghana. The Metropolitan-Municipal-District Assemblies (MMDAs) are the planning authority for their respective districts, according to Section 46(1) of Act 462. The MMDAs are, therefore, responsible for the preparation and implementation of development schemes, and the enforcement of development controls in their respective jurisdiction. Section 49, sub-section (1) of Act 462 states that “no physical development shall be carried out in a district without prior approval in the form of a written permit granted by the District Planning Authority (DPA)”. The building code also regulates all physical development in Ghana, including permanent and temporal commercial structures (section 1, LI 1630, 1996). The LI 1630 outlines the procedures for obtaining a building permit, as well as construction densities, acceptable land uses, site and spatial standards, the DPA's responsibilities, and the duration of building licenses.

These sections of the Local Government Act (Act 462) 1993 and the National Building Code (LI 1630) 1996 demonstrate that the MMDAs in Ghana have an adequate legal basis to implement land-use rules. Despite Ghana's lengthy history of development restrictions and the existence of laws governing land use, urban land-use issues remain. This involves haphazard structure

development, improper usage of adjoining lands, and unsanitary conditions in most Ghanaian cities (Edusah, 2008). In Ghana, development controls are not effectively applied owing to inadequate procedures (Gough, 1999). According to Boamah et al (2012), most residents in Kumasi and Tamale did not acquire a permit before siting structures, particularly informal retailers. As a result of this infringement, outlets are being illegally placed on public properties without the permission of the planning authorities (Edusah, 2008). According to Oppong et al (2014), violations of development restrictions in Ghana are caused by security concerns, low-income levels, large family sizes, cultural traditions, and unrealistic land-use rules. Boamah et al (2012) also noted that most residents in towns violated regulations concerning building and siting permits because of the rapidly increasing need to engage in informal activity to sustain livelihoods.

Though the development of retail outlets improves the livelihood of urban residents, uncontrolled retail outlet expansion leads to a slew of urban issues such as unplanned development, residential blight, traffic congestion, and environmental degradation, all of which decrease the quality of life for city dwellers (Aribigbola, 2008). Grout et al (2009) suggested that land-use regulations have a constructive impact on the standard of living of the residents of an urban area. The dynamics and relevance of land development are affected by the rapid increase in the urban population (Alexander, 2001). Notwithstanding the inadequacy in the enforcement of development control in urban centres of Ghana, the application has enormous significance for the dynamics of the retail environment (Oppong, 2013). Regardless of the challenges in implementation, is depended on to provide and ensure sustainable development and livable communities (Godschalk, 2004).

2.7 Overview of the Role of GIS in Retail Analyses

Geographic Information Systems (GIS) is a computer-based system that enables the digital gathering, storage, and management, analysis, and presentation of spatial data (Sergio et al., 2009). The field of GIS started in the 1960s as computers and early concepts of quantitative and computational geography emerged (Baviera-Puig et al., 2016). Prior to the inception of GIS, was a staggering era of paper-based maps being developed which were used in vehicle routing, development planning, and locating points of interest (Barnes et al., 2016). But this came with challenges: calculating areas was next to impossible, data was coarse and often inaccurate, and measuring distances was cumbersome (Reigadinha et al., 2017). With all the issues that came with paper maps, it was no surprise that cartographers and spatial users wanted to explore computing options for handling geographic data (Han et al., 2019). In the period between 1960 to 1975, technological advancements in new computer technology led to the birth of GIS (Jiao and Han, 2013). Roger Tomlinson, widely acclaimed as the ‘Father of GIS’, develop the first computerized GIS in the world in 1963 (Wood and McCarthy, 2014). This gave researchers the ability to record coordinates as data inputs and perform calculations on those coordinates.

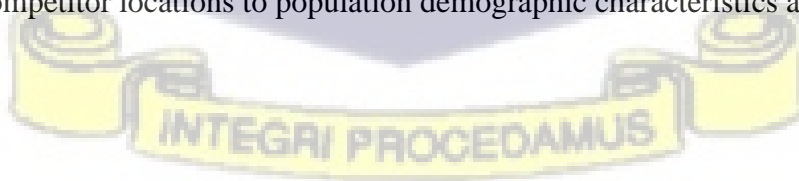
The adoption of GIS into the mainstream took off between 1990-2010. This was facilitated by some technological advancements: computers were getting cheaper, faster, and more powerful; there were an increasing number of GIS software options, and digitized mapping data was more readily available (Fang et al., 2020). These advancements, together with the launch of new earth observation satellites and the integration of remote sensing technology with GIS, saw more and more applications being developed. Tools and techniques are now constantly refined to serve

purposes such as urban planning, disaster response, market research, resource management and military operations (Barne et al., 2016). According to the GIS exploratory spatial analysis, the most common GIS analyzing methods, including the nearest proximity index, nuclear density, buffering zone analysis, and overlay analysis, are adopted to analyze population factors, such as the amount and density of the population, transportation factors (the road type, road network density, and spatial accessibility), and consumer factors (consumption space and distance to consumption space) (Ozimec et al., 2010).

The beginning of the 21st century saw an integration of GIS applications in research on the spatial layout of retail commerce (Li et al., 2016). It helped commercial location research overcome several quantitative difficulties, and it provided additional scientific, digitalized, and visual evidence for spatial planning (Hernandez, 2007). Using GIS, scholars re-digitalized several kinds of studies on commercial space layouts. It also helped to gradually classify the type of commercial space examined in the research, to calculate areal sales volume potential, sales territory mapping, and determine industrial plant or warehouse locations (Ji and Zhao, 2010). For example, Yu (2013) applied GIS analysis to examine the Wuhan urban population and the retail sales value of its social commodities. He matched the spatial relationship with the population distribution and commercial network distribution, providing advice for optimizing the commercial networks in Wuhan (Yu, 2013). Roig-Tierno et al (2013) applied nuclear density and an analytic hierarchy process in GIS and studied the decision-making of retail locations. They concluded that the success of a supermarket was related to its location and competitiveness (Roig-Tierno et al., 2013). Similarly, Lamichhane et al (2013) studied the spatial patterns and field characters of a supermarket and a

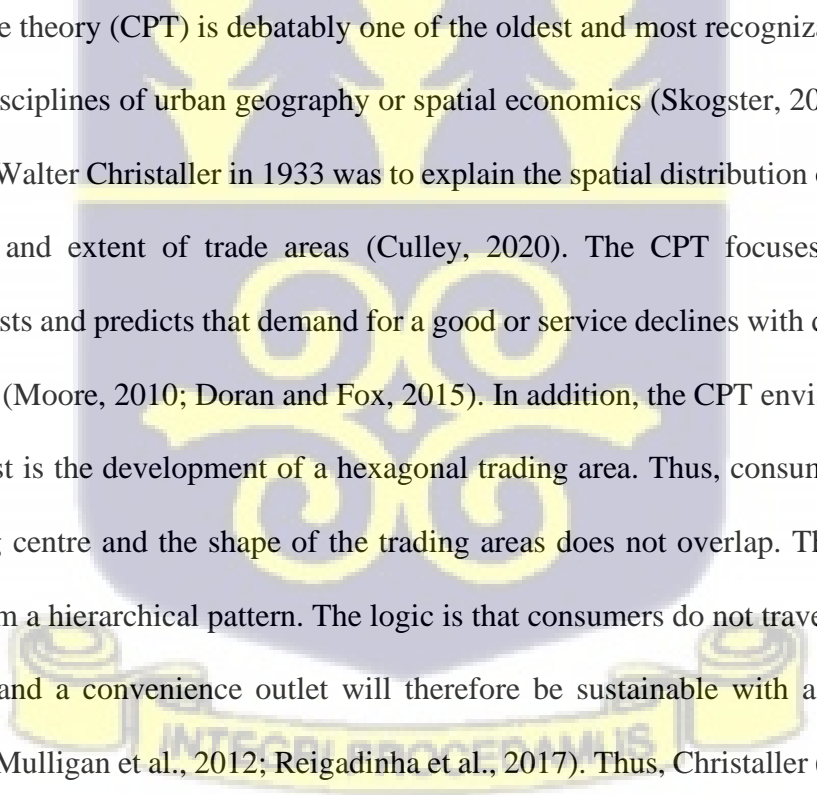
fast-food restaurant based on environmental differences. They found that space symbiosis and a cluster relationship could greatly influence the population structure (Lamichhane, et al., 2013). Wang et al (2014) collected data for a large commercial network in the central areas of Changchun, applying orderly multiclassified logistic regression and point pattern analysis to study the location character and layout-influencing factors of the large-scale commercial network. In more recent research, Lin et al (2018) collected point-of-interest network data in the central places of Guangzhou, China. Based on the nearest neighbor distance analysis and spatial statistical analysis, the study discussed multitype recognition of commercial centers and the spatial mode in Guangzhou (Lin et al., 2018). In a similar vein, Fang et al (2020) used GIS analysis such as nearest proximity index, nuclear density, spatial interpolation, buffering zone, and overlay analysis to examine the spatial concentration, density, and structure of large-scale retail commercial facilities in the Gulou District, Nanjing, China, and recommends a spatial layout for the future of the Gulou District according to the analysis results.

From the aforementioned retail research studies, it is evidence that GIS as a marketing geography research tool allows retail researchers to create, display, analyze, and manage spatially referenced data consisting of a wide range of categories from customer location to supply nodes to lines of distribution to competitor locations to population demographic characteristics and more.



2.8 Theoretical Overview

Over many years of studies done in the retail sector, numerous theories on retail development have emerged (Ashraf et al., 2014). From the retail spatial patterns perspective, four most significant theories of retail location emerged and these include the Principle of Minimum Differentiation Theory (Hotelling, 1929), Bid Rent Theory (Alonso, 1960), Central Place Theory (Christaller, 1933), and the Spatial Interaction Theory (Reilly, 1931) (cited in Culley, 2020). Many decades afterward, these theories still attract substantial attention from the academic arena, but also some criticisms (Toit and Cloete, 2018).

The image shows a large, semi-transparent watermark of the University of Ghana crest in the background. The crest features three golden flames at the top, a central shield with a golden scroll, and a banner at the bottom with the Latin motto "INTEGRUM PROCEMUS".

The Central place theory (CPT) is debatably one of the oldest and most recognizable neoclassical theories in the disciplines of urban geography or spatial economics (Skogster, 2006). The CPT as promulgated by Walter Christaller in 1933 was to explain the spatial distribution of retail facilities and the pattern and extent of trade areas (Culley, 2020). The CPT focuses on the role of transportation costs and predicts that demand for a good or service declines with distance from the source of supply (Moore, 2010; Doran and Fox, 2015). In addition, the CPT envisages two spatial patterns. The first is the development of a hexagonal trading area. Thus, consumers travel to the nearest shopping centre and the shape of the trading areas does not overlap. The second is that trading areas form a hierarchical pattern. The logic is that consumers do not travel far to purchase everyday items and a convenience outlet will therefore be sustainable with a relatively small catchment area (Mulligan et al., 2012; Reigadinha et al., 2017). Thus, Christaller (1933) illustrates how the hierarchy of urban centres is established using this approach. The CPT has undergone several challenges from its initial inception. One of the most fundamental critiques leveled against

the CPT is the assumption of single-purpose shopping trips to the nearest cluster centre (Vionis and Papantoniou, 2019). As a result, it has long been contended that, while CPT provides a solid theoretical framework for the geographical distribution of retail establishments, it does not effectively reflect all characteristics of consumer behavior or the inter-relationships that occur between inter and intra-format retailers (Moore, 2010).

In contrast to the CPT, the Spatial Interaction Theory (S.I.T) is founded on the premise that buyers evaluate the attraction of alternative shopping destinations against the deterrent effect of distance. (Piovani et al., 2017). In other words, shoppers may pick a less appealing retail location closer to them or a distant centre with a greater selection of goods and services. The idea was inspired by Newton's gravitational law, which attempts to explain human behavior in relation to retail operations by using gravitational phenomena around nearby businesses (Dawson, 2017). According to the theory, three factors influence customer purchasing decisions toward feasible outlet destinations. The first is the deterrent impact of travel to other outlets from the consumer's location. Second, there are pull variables, such as the relative attractiveness of the outlets, and third, there are push factors, such as the level of competition (Rogers, 1992 cited in Oner, 2014). S.I.T may be used to investigate the influence of hypothetical circumstances on shop patronage (Oner, 2014). The model, however, fails in determining market regions (Lee and Pace 2005). For instance, Huff (1964) argued that the model is inefficient since it disallows overlapping market regions (cited in Nilsson, 2020). In addition, because it does not account for variations in the types of shopping trips, the assumption of a direct proportionate link between city size and trade area is regarded as impractical (Dawson, 2017).

The Bid Rent Theory is a refinement of earlier location theories by scholars such as William Alonso (Delloye et al., 2018). The idea concentrated on urban settings and understanding urban organization (Toit and Cloete, 2018). In his seminal paper 'A Theory of the Urban Land Market,' Alonso (1960) stated that due to the scarcity of land in urban centres, all locations within the regions will be filled by the activity willing and able to pay the greatest rent for that land. Alonso (1960) also emphasized the idea that when a retailer buys land, he is buying two goods: land and location. As a result, a company will pay the highest rent in the area with the biggest profit. Conceptually, a business will want to be as near to the centre as feasible to draw consumers from all around the city. According to Alonso (1960), companies located near the central business district have the lowest transportation expenses, whereas firms located on the periphery have the highest. And as such, the land value is high in the city centre and low at the periphery.

Whereas the other theories emphasize locational centrality, the Principle of Minimum Differentiation states that not every transaction is dependent on access to the entire market, but the relative proximity to other retailers selling the same goods or services (Lee and Pace, 2005). In other words, proximity to competitors is more important than proximity to buyers. Hotelling (1929) initially introduced the basic theoretical idea in his work "Stability in Competition". The idea tries to demonstrate the concept that retail establishments operating in the same, or comparable market sector will benefit by grouping together at a single location (Nilsson, 2020). These additional benefits stem from the greater utility that is passed on to customers via their capacity to perform comparative shopping activities. The theory takes into account a linear market, such as along a road, in which demand is inelastic and same, transportation costs are constant, and

customers are uniformly dispersed and patronized outlets only based on supplied pricing. According to Hotelling (1929), if two retailers selling the same kind of goods decide to enter this market, they will both place their outlets in the centre of the market and sell at the same price. When a third shop joins the same market, it will locate near but not between the other two businesses to tap into the existing customer base. If more shops desire to enter the market, they will be more likely to cluster. The practical implication of this principle is evidenced by the automobile row phenomenon, where several different automobile retailers congregate close to each other. The applications of the Principle of Minimum Differentiation focus mostly on the clustering hypothesis (Fernández-Villadangos and Borrell, 2010) and pricing competition (Barreda-Tarrazona et al., 2011).

However, the aforementioned classical spatial theories have been contended to be narrowed in their universal applicability due to their positivism and simplified premises (Litz and Rajaguru, 2008). Since the bulk of empirical investigations was promulgated many decades ago and given the dramatic changes in retail spatial structures, these theories have been questioned in their validity to support and explain contemporary retail structures (Litz and Rajaguru, 2008; Reigadinha et al., 2017). Regardless, it is critical to understand these four ideas since they support the principles of location planning used by retailers. These theories assist to explain the retail landscape's structure, as well as how retail locations are assessed and selected.

By the 1950s, more theories emerged, but generally, three fundamental approaches can be distinguished: cyclical theory, environmental theory, and conflict school of thought (McArthur,

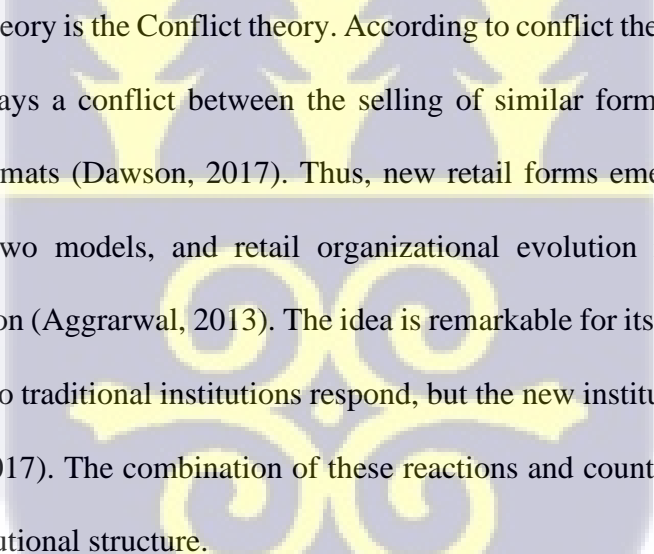
2015). According to the cyclical theory, retail change is oscillatory, including the repetition of previous patterns (McArthur, 2015). As a result, the cycle hypothesis is concerned with patterns that appear to reoccur throughout time. The theory has been described as one of the most important developments in retail conceptualization (Hollander, 1966 cited in Kerssens, 2017). The wheel of retailing theory and the accordion theory are two of the most well-known cyclical theories. According to the wheel theory, new forms of retailing emerge as price-cutting, low-cost, and low-profit-margin operations (Kerssens, 2017). The new format's success draws competitors, who begin to enhance the original format, boost margins, and gradually lose the low-cost competitive advantages that first set them apart from traditional retailers (Miotto and Parente, 2015). Finally, the shop improves displays, location, credit, delivery, and advertisement. As the business prosper, they expand their business, adding more products or investing in more expensive facilities. This in turn attracts other retailers to enter the market and repeat the process (Anitsal and Anitsal, 2011).

In a similar vein, the retail accordion describes the growth of the modern commercial system in terms of the number of product lines handled by the dominant institutional form (Evans, 2011). Retail Accordion formulated by Hollander (1966) considers product assortment as the main driver for retail format innovation (cited in Findlay and Sparks, 2012). The theory suggests that retail development is characterized by a continual movement of product assortment expansion and contraction. The assortment expands in width but contracts in-depth during the expansion phase, and vice versa during the contraction phase (Miotto and Parente, 2015). This idea has been supported by the fact that retail institutions have transitioned from general outlets to specialty outlets and then returned to a new expansion and contraction cycle (Espinosa and Hernandez,

2011). Individual institutions, according to Hollander (1966), broaden and limit their inventories throughout time, in addition to the broad sweep of the general-specific-general cycle. For example, most department outlets in America began as specialist establishments, but as the nineteenth century progressed, more and more lines of merchandise were added with the point of maximum diversification was attained at the start of the twenty-first century (Evans, 2011). In contrast, studies done by scholars such as Spalding (1978) and Brown (1993) show that some retail innovations did not commence at the low margin level. For instance, Brown's (1993) studies revealed that boutiques, planned shopping centres, and convenience outlets entered the retail market on a high-cost basis. Goldman (2001) also points out that not every department store, supermarket, or discount store started as a low-cost, no-frills business; there were significant variations on each theme. The cycle theories have generally been criticized for their lack of universal applicability (Kaynak, 1979 cited in Findlay and Sparks, 2012). The theories have also been criticized for their inadequacy to explain the reaction of existing retailing institutions to the infiltration of new outlets. Another long-standing critique of cyclical models of institutional growth, notably the wheel theory, is its inability to account for traditional retailers' reactions to the threat of an innovative institution (Nagpal, 2019). Nonetheless, their overall obsession with patterns has given rise to a number of models that attempt to integrate the cyclical growth of retail institutions with other models (Anitsal and Anitsal, 2011).

The Environmental theory, on the other hand, asserts that changes in the marketplace's demography, economic, cultural, social, legal, and technological factors are reflected in the retail sector's structure (Fuhrmanns, 2020). In short, retail institutions emerge, develop, mature, and decline as a direct result of environmental conditions. The department store, for example, could

not have emerged in the mid-nineteenth century without the increase in middle-class demand (Piovani et al., 2017). Similarly, the emergence of supermarkets as a result of the Great Depression increased automobile use, and technical advances in food packing, processing, and distribution (Nagpal, 2019). Several researchers have used this theory to try to quantify the link between the pattern and changing structure of retailing and a wide variety of socioeconomic characteristics such as urban shape, the pace of growth, per capita income, employment, population size, and density (Findlay and Sparks, 2012). However, this theory overlooks the fact that some retail organizations can change independently of environmental changes (Aggarwal, 2013).



Another major retail theory is the Conflict theory. According to conflict theory, within a wide retail category, there is always a conflict between the selling of similar formats, which leads to the emergence of new formats (Dawson, 2017). Thus, new retail forms emerge through a dialectic process of merging two models, and retail organizational evolution results from the inter-institutional competition (Aggarwal, 2013). The idea is remarkable for its recursive nature, which implies that not only do traditional institutions respond, but the new institution also takes counter-measures (Dawson, 2017). The combination of these reactions and counter-measures determines the post-conflict institutional structure.

It is evident from the foregoing discussion that no single theory can efficiently and sufficiently examine the changes observed in the development of retail formats. Hence, the emergence of

various retail theories and concepts mostly employed multifariously in understanding the retail environment (Fairgray and Auckland, 2015).

2.9 Conceptual Framework

Having discussed the various concepts and theories underlying retail development, the stage is set to outline a framework to guide the problem under investigation. Hence this section presents and discusses the conceptual framework for the study. To achieve the objectives of this study, the conceptual framework for the study was informed by the ideas of the Environmental Theory. The main idea underpinning environmental theory proposed by Gist (1968) is that retail firms will evolve and change in response to changes in the environment (cited Ozuduru and Guldman, 2013). Thus, the interaction of prevailing conditions in a given location which may include economic, demographic, cultural, geographic, local planning regulations, and technological conditions, determines the location preferences and spatial layout of outlets in that location (Ozuduru and Guldman, 2013). These environmental factors are described by Gupta et al (2013) as all conditions, events, and influences that surround and affect the distribution of retail outlets. These conditions are not mutually exclusive but interact to generate the general observable spatial distribution of retail outlets (Gupta et al., 2013).

In this regard, the conceptual framework for the spatial distribution of retail outlets presented in Figure 2.1 is divided into two main components, the decision-making environment, and the spatial outcome environment. The decision-making environment describes the most important factors that drive the distribution of retail outlets in an urban environment (Baker and Wood, 2010).

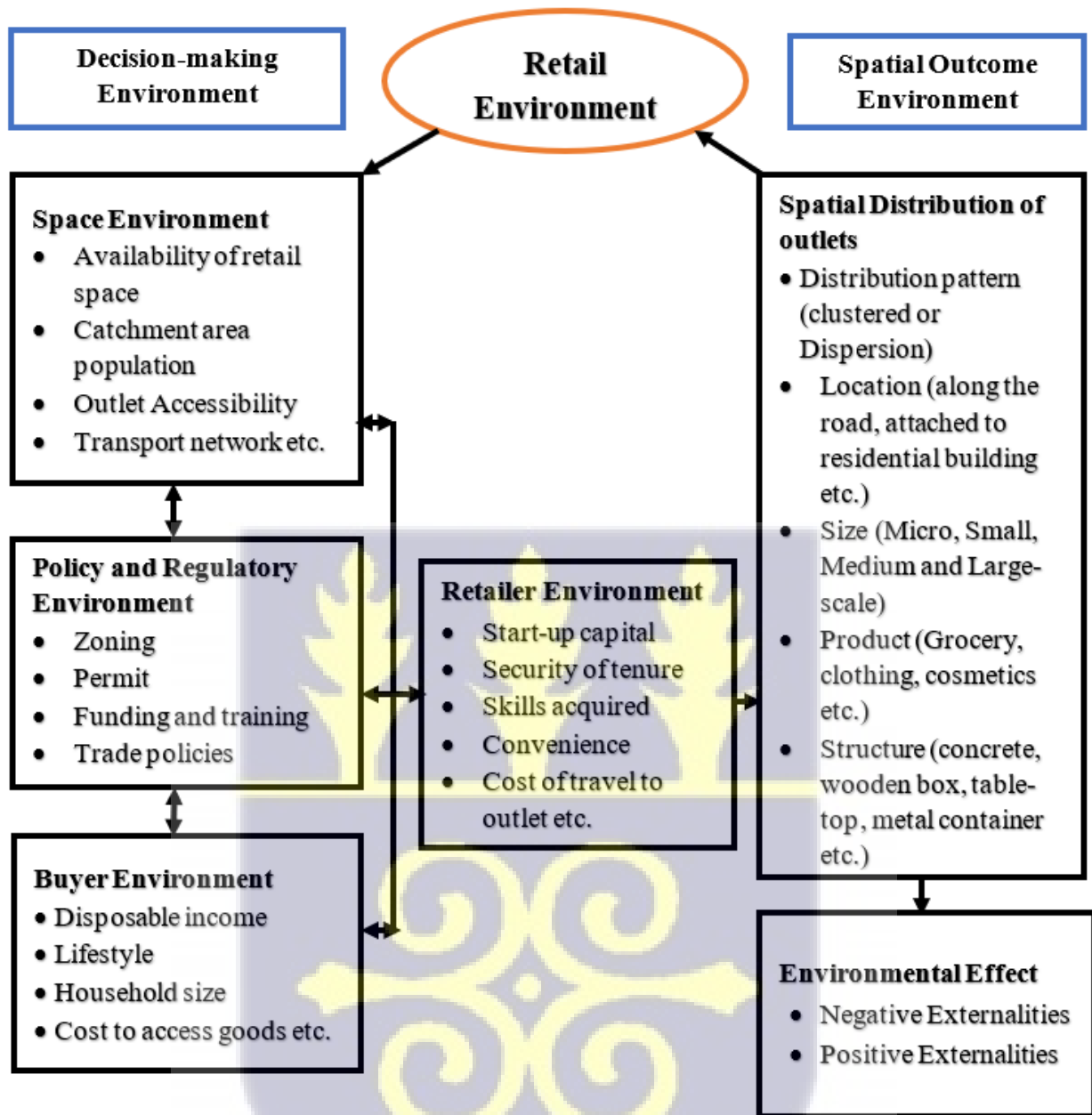


Figure 2 1: Conceptual Framework for Explaining the Spatial Distribution of Retail Outlets

Source: Author's construct

Edvinsson and Falk (2019) also described this group of decision-makers as the influencing group on the formation of retail outlet locations and characteristics. There are various actors and factors

that influence the decision-making environment (Hart et al., 2013). Consequently, the spatial distribution of retail outlets is not produced by the retailer's initiative alone but by the interplay of a number of factors (Teller and Elms, 2011). From Figure 2.1, the decision-making environment contains four (4) key factors that are likely to affect the location and distribution pattern of retail outlets at a location. These factors include the policy and regulatory environment, the space environment, the buyer environment, and the retailer environment (Teller and Elms, 2011; Gupta et al., 2013; Hart et al., 2013; Öner, 2017). These decision-making factors interact in complex ways to produce the observable spatial outcome of the retail environment. The assumption is that retailers may consider or may be affected by one or more of the sub-factors mentioned in the framework and then rationally decide the location and retail outlet format (Gupta et al., 2013; Sevtsuk, 2014).

From Figure 2.1, the retailers' environment consists of a complex mix of tangible and intangible variables that influence the siting of retail outlets (Sevtsuk, 2014). These may include factors such as the retailer's start-up capital, security of tenure, motives, or skills acquired, and knowledge of other external decision-making factors (Culley, 2020). The type of location and outlet formats eventually produced are perceived differently by every individual retailer, depending on the level of functional factors in the retailer environment, but collectively produce the observable distribution of retail outlets (Ciari et al., 2008). The retailers' environment not only plays a crucial role in managing its environment to establish an outlet but manages as well other external factors operating in the space environment, regulatory environment, and buyer environment (Onstein et al., 2020). These external factors may either provide opportunities or threats to the retailer environment (Aventze et al., 2005).

For instance, the composition of the buyer environment including sub-factors like the location of the buyers, household size, lifestyle, disposable income, and the cost to access goods informs the retailer of the location and sales performance of retail outlets. The policy and regulatory environment also indirectly or directly present constraints or shocks to retailers and thereby inducing what the retail environment produces (Keter, 2012). For example, various government agents and institutions act to determine suitable areas and specific retail activities to be located (Li and Hu, 2012). These include urban planners, municipal authorities, and funding institutions among others. Also, a sudden change in permission on the location of retail outlets within residential enclaves like banning the activity may result in a shock and as such upset the spatial distribution of retail outlets (Evers, 2004). Similarly, complaints and frustrations from retailers and the business environment can put pressure on the city authorities to amend the operation and location of retailers (Edvinsson and Falk, 2019; De-Juan-Vigaray and Segui, 2019). The space environment includes factors such as the catchment area population and characteristics, transport network, outlet accessibility (geology and topography), as well as the location of available retail space. These spatial characteristics influence location, type of retail format, and the distribution pattern of retail outlets (Gupta et al., 2013).

The interactions of the decision-making factors produce the spatial outcomes observed in the retail environment of residential areas. Thus, the spatial outcome environment describes the result of the interacting activities in the decision-making environment (Cox and Brittain, 2004). The extent of influence of these conditions and the capacity for retail businesses to respond to the opportunities and threats posed by these factors determine where retail outlets are located, the distribution

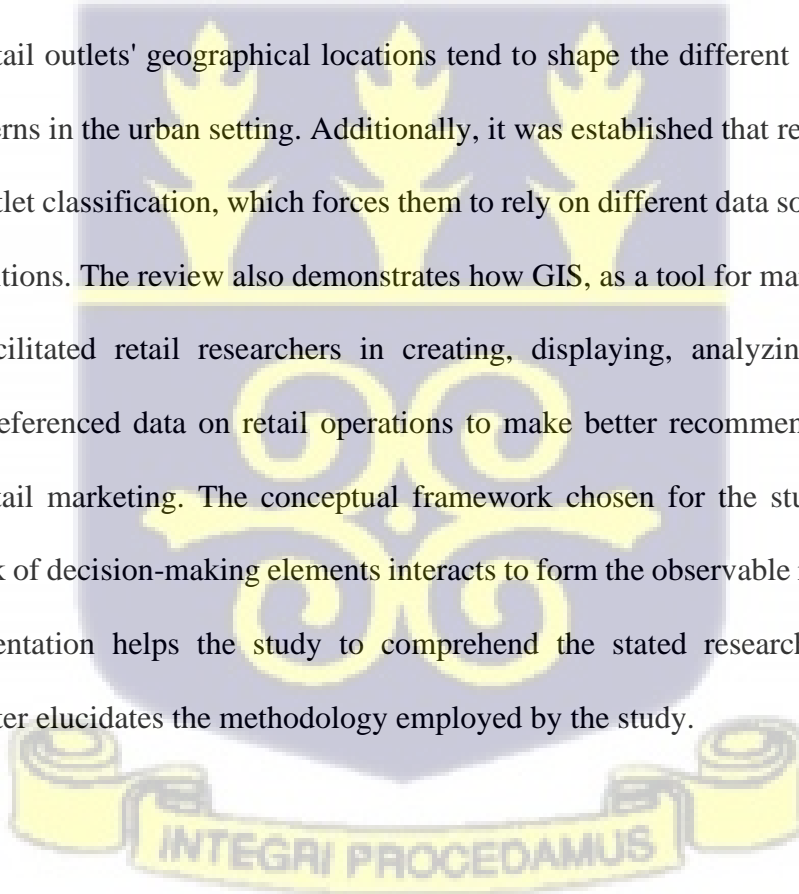
pattern, the density of outlets, the type of structure adopted, and the products offered. Regarding the location pattern of retail outlets, the interacting factors in the decision-making environment typically result in two main patterns, thus clustering or dispersion. However, the former is more noticeable in urban areas (Oner, 2014). Culley (2020) also summarized the spatial outcome produced by the interaction of the decision-making factors in the retail environment, these include roll-out (expansion in retail space), relocation of outlets (moving of retail outlets due to competition), rationalization (closure of outlets), re-fascia (altering image of outlets), refurbishment and re-merchandising (altering of product range). Also, the location and operations of retailers may result in negative and positive environmental externalities. For instance, when retail operations are not adequately managed or regulated by authorities, it may propel negative environmental externalities, including loss of residential aesthetic landscape and sanitation issues (Datta and Sudhir, 2013). The degree of these externalities is heavily dependent on the decision-making environment. This, in turn, feeds back into the decision-making environment for amendment or improvement, eventually forming the basis for a subsequent round in the decision-making environment for modifications to be made in the spatial environment (Datta and Sudhir, 2013). The intensity of these interacting factors in a given environment results in the distinct retail spatial patterns observed (Murigi, 2016).

The conceptual framework in Figure 2.1, thus demonstrates that the spatial distribution of retail outlets is influenced by a complex array of a network of decision-making factors that are interacting to produce the retail spatial outcome of the retail environment. The framework takes into account the influence of the various decision factors to bring to light how they drive the spatial

distribution of retail outlets. Consequently, the conceptual framework ultimately aids the study to understand the research objectives thus examining the spatial patterns of retail outlets, factors that influence the spatial patterns observed, and investigate the environmental effects induced by the distribution as well as the policy environment guiding the retail sector.

2.10 Summary

The chapter was devoted to a review of the literature on the study's relevant themes as well as the theoretical and conceptual framework that was used. The review revealed that the diverse driving forces behind retail outlets' geographical locations tend to shape the different observable spatial distribution patterns in the urban setting. Additionally, it was established that researchers struggle with defining outlet classification, which forces them to rely on different data sources, resulting in competing definitions. The review also demonstrates how GIS, as a tool for marketing geography research has facilitated retail researchers in creating, displaying, analyzing, and managing geographically referenced data on retail operations to make better recommendations for urban planning and retail marketing. The conceptual framework chosen for the study reveals that a complex network of decision-making elements interacts to form the observable retail environment and its implementation helps the study to comprehend the stated research objectives. The subsequent chapter elucidates the methodology employed by the study.



CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

Similar to the preceded chapter which articulately outlined existing literature on the topic under investigation, this chapter as denoted by the heading, discusses the methodological aspect of the study. The chapter begins with an overview of the study area. The chapter then proceeds with the discussion of the underpinning philosophical orientation adopted for the study and followed by the research methods employed to collect data, analyze, and interpret the study findings.

3.2 Profile of Study Area

Accra is Ghana's national capital and the capital city of the Greater Accra Region. It is a coastal and mangrove town in the country's southern zone. Accra is the most populated city in Ghana, with a population of 2,240,658, and a daily influx of 1 million people who commute to the city for different socioeconomic activities (GSS, 2014). For instance, during peak hours, Accra hosts about 25% of the national population for economic activities aside from the residential dimension (GSS, 2019). The concentration of social infrastructure in the city of Accra compared to other cities in the country remains a pull factor for people (Amoako and Cobbinah, 2011). Also, Accra is noted as the economic hub of the country (Amoako and Cobbinah, 2011). The city is a mixed economy with both local enterprises and transnational companies operating. Besides, the high population in the city provides a large market base for investors (GSS, 2012). The majority of Accra's population is employed in informal sectors, with retail trade dominating (GSS, 2019). The retail sector provides employment opportunities to both residents and non-residents (GSS, 2014).

Accra is suitable for the examination of the problem under investigation because Kompil and Celik (2006) mentioned that the changes and variations in the retail sector are mainly due to the increased urbanization with changes in demography and increase in economic status among others. Not only is Accra having the highest proportion of urban dwellers in the country, but it also employs the largest proportion of persons in the retail sector and comprises mixed-income communities (Oltmans, 2013). This population, not only increases the demand for goods and services but increases the number of entries into the retail sector which is visible through the proliferation of retail outlets in the city (Osei-Boateng and Apratwum, 2011). This provides the platform to study the spatial distribution and drivers of these enterprises as well as substantially add to a better understanding of the variation of retail outlet organization in the different income communities. The concentration of the diverse social groups all over Ghana in Accra makes it also an excellent choice to study the various factors which influence retail distribution. Also, the presence of various retail activities has posed several challenges to the city, including sanitation problems, waste management as well as traffic congestion, especially during the peak hours of the day (United Nations Development Programme, 2007). Accra is an interesting case study for examining the urban retail environment in a developing country due to the combination of the factors outlined.

In the selection of study areas in Accra, the city was classified into income groups according to Songsore et al (2009) residential classification of Accra, which broadly classifies Accra into three residential classes namely the low, middle, and high-income zones. Therefore, Airport Residential Area (High-income), Abelemkpe (Middle-income), and Nima (Low-income) (see Figure 3.1) were randomly selected for the study. The succeeding sub-sections briefly outline the profile of the three selected communities.

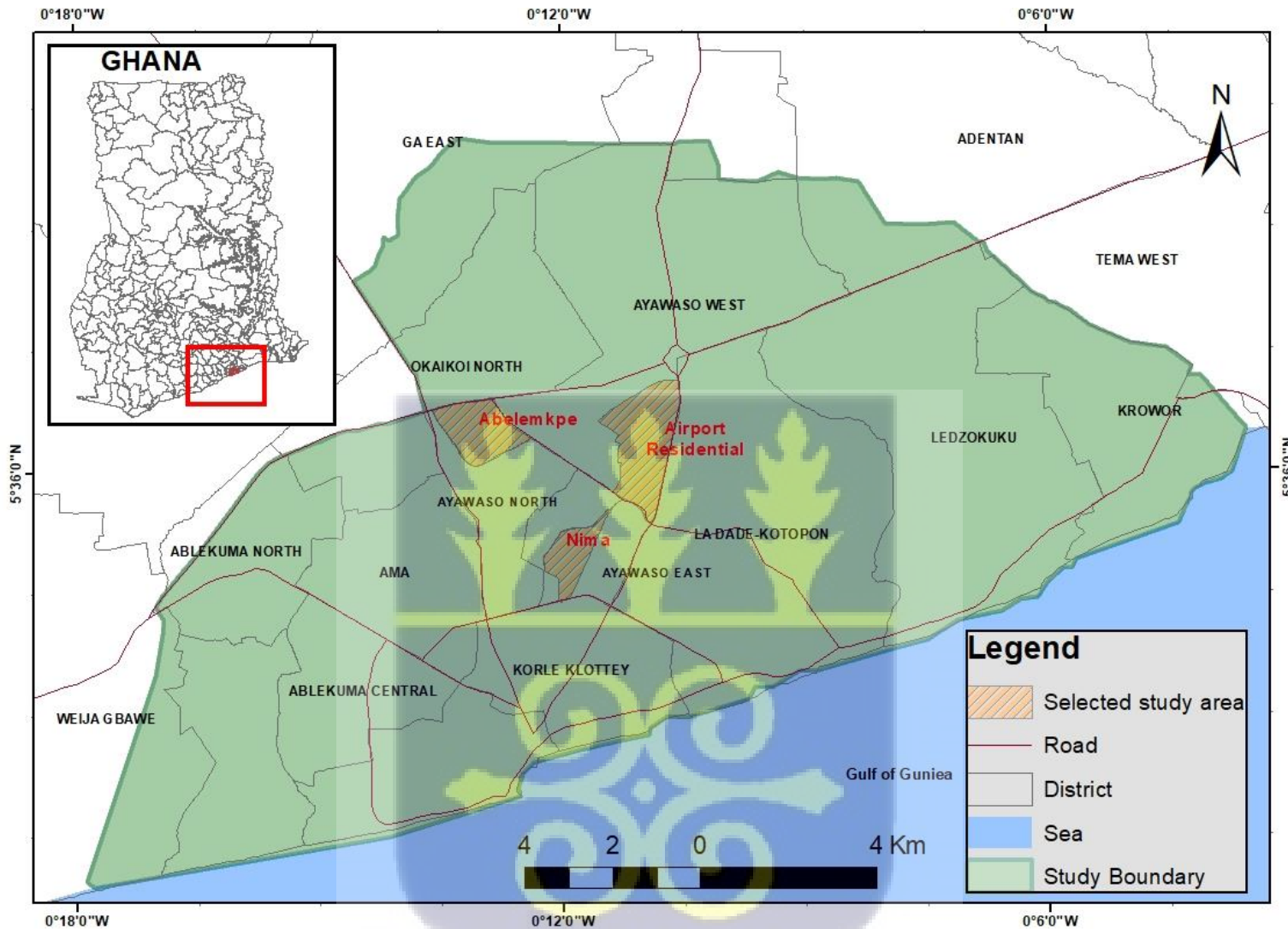


Figure 3.1: Map of Accra showing the selected study areas

Source: Author's construct

3.2.1 Airport Residential Area

Airport Residential Area is a high-income and well-planned community with a population of 5,079 people (GSS, 2014). The area is situated to the northeast of Accra and bounded by Dzorwulu and the Accra Mall to the north, 37 Military Hospital Area to the south, Roman Ridge to the west, and the Kotoka International Airport to the east. The area is inhabited mostly by affluent Ghanaians and foreign nationals. Airport Residential Area has offices, including those of international nationals and a few embassies, including the embassy of China, Spain, and Zimbabwe. Housing is mostly high-rise apartment blocks (such as the Tang Palace and Mirage) and detached single-family dwellings. Roads are well-defined with drainage systems. The area has few but a wide variety of retail outlets including supermarkets within short driving distance and malls near the neighbourhood providing goods and services.

3.2.2 Abelemkpe

Abelemkpe is a middle-income residential area located about 6km north of Accra with a population of 7,383 people (GSS, 2012). The area shares common boundaries with Dzorwulu, Alajo, and Abofo (GSS, 2012). Abelemkpe is a planned residential neighborhood that is still undergoing development and is occupied by mixed-income groups. Residents of middle and low-income status mostly live in compound houses (single or chamber and hall houses inhabited by large families) in the Western part of Abelemkpe. Those of high-income status live in modern low-rise apartment blocks and executive houses in the Eastern part of the area (GSS, 2012). Abelemkpe has various administrative, social, and religious infrastructures. These include Lincoln Community School, a modern mosque, churches, basic schools, clinics, and a handful of offices. The area also has several retail outlets at vantage points within the area that provide goods and services.

3.2.3 Nima

Nima is a low-income community located in the north-east of Accra with a population of 80, 843 people. It is bounded to the north by Mamobi, the east by Kanda, and the west by Accra New Town. Similar to other low-income communities in Accra, housing infrastructure is characterized by single rooms and compound courtyard houses (which vary in size and can contain as many as 20 rooms) (Agyei-Mensah and Owusu, 2012). Songsore (2008) showed that Nima is largely a migrant community and has a local economy characterized by low skills and high unemployment among the youth. The occupation of the residents is mainly trading with some form of production such as palm-kernel oil extraction (GSS, 2012). The area has a few major roads that are not in good condition. Streets connecting to these roads are often unpaved and without gutters and either disappear at sections into people's homes or are reduced to footpaths. Predominantly along the main roads are small retail outlets. Nima is also beset with many social and environmental problems with sanitation challenges as the most dominant problem (GSS, 2012).

3.3 Philosophical Orientation of the Study

Research philosophy is the first layer and most important component of research (Zefeiti and Mohamad, 2015). Research philosophy is the orientation or concept regarding the gathering, interpretation, and analysis of data (Singh, 2019). The orientation includes the positivist and interpretivist philosophies (Bryman and Cramer 2011).

Interpretivists argue that reality or research facts are determined by the meaning assigned to them by the researcher, and this ideology is connected with qualitative research (Gorton, 2010). Thus, the approaches used to understand the human and social sciences cannot be the same as those used to understand the physical sciences since humans interpret their environments and then act on

them, while the world does not (Hammersley, 2013). As a result, interpretivists embrace a relativist ontology in which a single event might have several interpretations rather than a single fact that can be measured (Kivunja and Kuyini, 2017). Therefore, researchers that use an interpretivism approach are more likely to obtain a better knowledge of the phenomena and its complexities in their context rather than attempting to generalize the base of understanding to the entire population (Creswell, 2007). Hammersley (2013) also stated that the interpretivist viewpoint has a significant advantage in that it allows for a variety of perspectives to be taken into account while investigating a phenomenon. As a result, researchers do more than just describe objects, people, or events; they also fully comprehend them in their social context. Despite its strengths, the interpretivism paradigm is limited in its ability to generalize findings to other individuals and situations (Cohen et al., 2011). This technique also tends to leave a gap in the verification of the validity and use of research findings. Again, its ontological perspective is subjective rather than objective; as a result, study findings are directly influenced by the researcher's interpretation, cultural preference, or belief system, resulting in some biases (Mack, 2010).

The positivist, on the other hand, believes that knowledge about the world may be acquired objectively without the researcher attaching meaning to it and is linked with quantitative study (Creswell and Plano, 2011). This approach helps positivist researchers in gaining a thorough understanding of things through empirical experiments, sampling, measurement, and the use of a questionnaire (Taylor and Medina, 2013). According to Johnson and Onwuegbuzie (2004), the technique has a high level of reliability and validity, and the results may be extended to a broad population. Furthermore, research based on objectivism epistemology assists researchers in making scientific assumptions (Johnson, 2014). Notwithstanding its many advantages, the method

has some drawbacks. The first problem with employing the positivist paradigm in social science research is that it may be hard to quantify a phenomenon linked to human intentions, attitudes, and ideas since these notions may not be directly seen or quantified (Hammersley, 2013). The second drawback stems from its core theoretical approach to research. Because positivism's goal is to generalize the results of research to a significant extent, there is a risk that individuals whose knowledge and interpretation of any occurrences, a phenomenon that may disclose a lot of truth about reality, would be overlooked. Similarly, when it comes to generalizing study findings, it will be difficult for researchers to immediately adapt their understanding of a phenomenon to another local setting (Johnson and Onwuegbuzie, 2004).

While each philosophical viewpoint has merits and limitations, it is recognized that each serves a specific purpose in providing academics with a comprehensive framework and diverse perspectives to address key societal issues. Recognizing the shortcomings of these two research methodologies, this study employs the combination of the positivist and interpretivist philosophies, termed the mixed methods approach (Teye, 2012). The rationale for employing a mixed-method approach within single research stems from the fact that neither qualitative nor quantitative techniques are adequate to describe the patterns of a situation on their own. When employed in tandem, quantitative and qualitative techniques complement one another and allow for more robust analysis by leveraging each other's strengths (Teye, 2012).

3.4 Research Strategy

Regarding the two philosophical perspectives discussed in the preceding section, the present study employs a mixed-method in both the collection and analysis of data. The choice for this technique

is based on the acknowledgement that the retail environment is multifaceted and using just one technique in studying the problem under investigation may not provide a full understanding of the issue. Again, the prevailing environmental effects emanating from the distribution of retail outlets as well as policy challenges, are crucial in the transformation and variation in the sector, and therefore these factors need to be understood from the perspective of the individual but not just an examination of spatial trends.

3.5 Research Design

A complementary mixed-methods design was employed for the study. The complementary mixed method design refers to the situation whereby the results from one method are used to enhance the performance of another method (Sale et al., 2002 cited in Teye, 2012). The design also offers validation of results by applying different methods, or as a combination of methods and/or data to investigate a phenomenon more comprehensively and explain it better with the help of different but complementary results (Tashakkori and Teddlie, 2010; Creswell, 2013). In this regard, the study used the design to supplement quantitative data with qualitative surveys. The study first collects data using a quantitative strategy and then followed the collection of data with a qualitative strategy to elaborate on the quantitative results (Subedi, 2016). The current study is based on the assumption that the spatial distribution, size, and pattern of retail outlets must first be determined. This is then followed by the drivers of the distribution, environmental effects, and policy implications. Thus, a quantitative approach was used to understand the spatial aspects of the study problem, and the qualitative approach was used to provide an understanding of the individual viewpoints of retailers, buyers, and regulatory authorities on the distribution of retail outlets.

3.6 Retail Outlet Classification

Several criteria are used, often in combination to classify retail outlets including the number of employees (GSS, 2016), outlet size (Guy, 1998; Clarke et al., 2002), shopping trip purpose (Guy, 1998), primary activity or product and services rendered (Winkler, 2008), location (Moore and Diez Roux 2006; Gordon, et al., 2011), outlet ownership (Guy, 1998) price surveys (Temple et al., 2011) and type of outlet (Guy, 1998; Moore and Diez Roux 2006). The study adapted Guy's (1998) classification of retail outlets and classified retail outlets into location, product or service offered and structure elucidated in Table 3.1. The study recognized that a retail outlet may offer a variety of goods and services which may have little in common. Therefore, the classification of the products was done based on the main service and non-service products offered by the retailer. Also, products and services that were similar were combined and categorized. For example, auto mechanics/electricians/sprayers, and air condition mechanics were classified as repair services.

Table 3.1: Classification of retail outlets

CATEGORY	DESCRIPTION	EXAMPLES
Product/ Service Offered	Relates to the types of goods sold or services rendered by a retail outlet.	Provision, Recreational outlets, Repair services, Grocery and out-of-home food services, etc.
Location	Relates to the geographical siting or positioning of an outlet in a residential area.	Isolated along the road, attached to residential buildings, in front of houses, etc.
Structure	Relates to the physical format in which a retail outlet is organized. Thus, the nature and material make-up of retail outlets.	Metal container outlets, table-top outlets, concrete building outlets and open space area.

Source: Adapted from Guy (1998)

3.7 Sampling size and technique

According to Singleton and Straits (2010), sampling is the selection of a subset of examples from the total number of units to make general inferences about the whole body of units. It is critical when the population is big, as it is uncommon for a research study to survey the whole population owing to time and cost restrictions (Creswell and Plano, 2011).

For the selection of the study areas, a multistage sampling technique was employed (Yiran et al., 2017). Alvi (2016) defines multistage sampling as a process in which two or more probability approaches are used when the elements of a population are distributed throughout a large geographical region and obtaining a representative sample with only one sampling technique is not achievable.

In the first stage, a stratified sampling method was used to stratify towns within Accra into low, middle, and high-income areas following the previous classification by Songsore et al (2009), Appeaning-Addo (2012), and the Ghana Statistical Service (2015). According to Creswell (2009), stratification sampling is based on the assumption that the population within a specific class would have comparable socioeconomic characteristics. When a researcher seeks to focus on a specific subset of the population, stratified random sampling is used. This approach is beneficial in this research since it ensures that the key sub-group is present in the sample (Etikan and Bala, 2017). As noted by Kompil and Celik (2006), the main factor contributing to the variation and transformations in the spatial distribution and retail outlet formats include mainly prevailing socioeconomic conditions. Notwithstanding, Songsore et al (2009) contended that stratification of communities into these three income strata can be problematic, bearing in mind that some wealthy

people in Accra live in low-income areas, hence comparing these income communities may be overlapping some features. In this regard, the stratification of the communities was also based on preliminary field observation of the current structural conditions and infrastructural service provision. These include housing habitation type (i.e. single-family dwelling and compound housing system) and infrastructure network (well-planned or poorly-serviced) which are typically associated with specific income group communities (Appeaning-Addo, 2012).

The second stage involved the simple random selection of three study areas each from the income classification. Thus, the names of the communities from each income zone were written on pieces of paper and placed into boxes. The boxes were shaken several times and one piece of paper with a community name from each box was picked randomly to form the sample for the study. Nima was chosen for the low-income neighbourhood, Abelemkpe for the middle-income neighbourhood, and Airport Residential Area for the high-income neighbourhood.

Since it is impracticable and costly to reach out to all retailers to administer questionnaires, the sampling frame of the study was drawn from the total number of retail outlets mapped as a representative of the number of retailers in the study areas. The Yamane (1967) formula was employed to select the appropriate sample size for questionnaire administration as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where n is the sample size, N is the total number of retail outlets in the study areas, and e is the level of precision (0.07). A total of 1,992 (Nima-1138, Abelemkpe- 614, Airport Residential-240) retail outlets were identified and mapped from the study areas. When this formula is applied to the

population size, the result is 185. However, the sample size was increased to 200 in case of non-responses (see Israel, 1992; Bujang, 2021). Using proportionate sampling, this sample size was proportionally distributed between the study areas for fair representation as presented in Table 3.2.

Table 3.2: Distribution of Respondents

Study Location	No. of Outlets	Sample Size for Questionnaire Administration	Buyers Interview
Nima	1138	114	10
Abelemkpe	614	62	10
Airport Residential	240	24	10
Total	1992	200	30
Key Informants Interview			
Ayawaso West Municipal Assembly		5	
Ayawaso East Municipal Assembly		3	
Total		8	

Source: Author

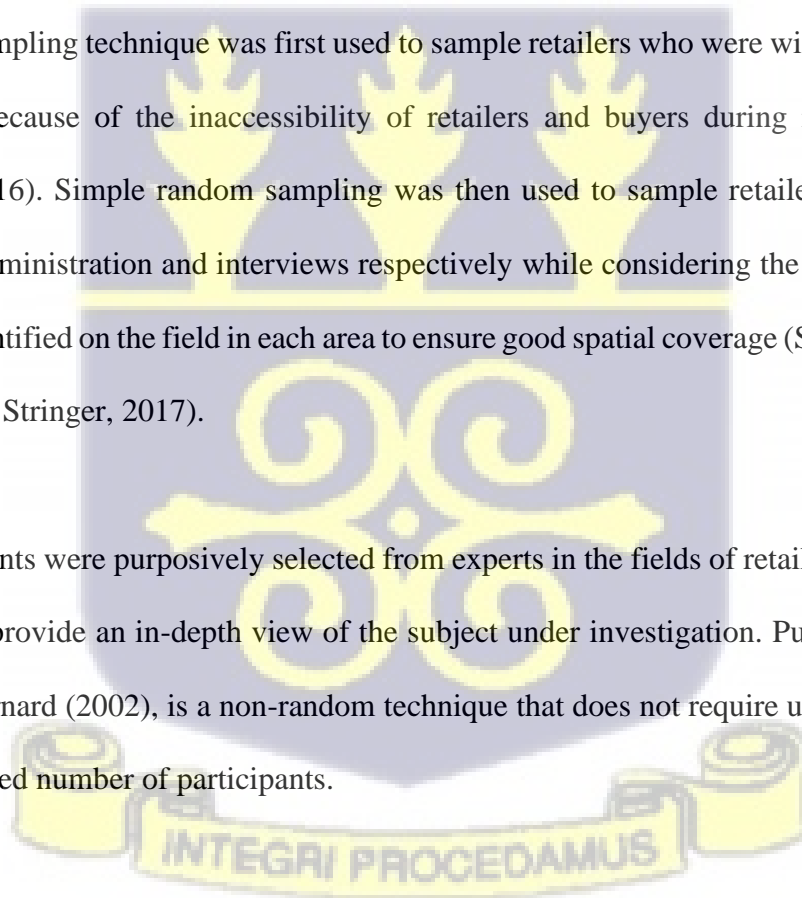
The study also conducted a total of thirty (30) interviews with buyers (see Table 3.2), comprising ten (10) respondents from each study area (see Morse, 1994; Kuzel, 1999; Malterud, 2001). Kuzel (1999) recommended that interviews with 6 to 8 participants in a study that seeks to examine a phenomenon from the experiences of people in a given location is sufficient. Kuzel (1999) further explained that this is a good number, particularly if interviews are supplemented with researcher observation. Malterud (2001) also noted that saturation is often reached after interviewing ten participants. The objective of this study also seeks to examine the effect of the distribution of retail outlets on residential environments from the experiences of buyers who lived in the study areas for more than five years and can adequately provide an in-depth view of the issue under examination. Hence the selected sample size for buyer interviews is appropriate to attain accurate results. To avoid retailers' biases and reluctance to explain in detail the actual effect of their

activities on the residential environment out of trepidation of being accused of doing something wrong, it is important to examine the environmental effect of the distribution of retail outlets through the lenses of buyers.

Eight (8) key informant interviews were also conducted with personnel from the Ayawaso West Municipal Assembly and Ayawaso East Assembly where the study areas are located (Table 3.2). Specifically, from the Physical Planning Department, Development Control Unit, Environmental Health Department and Works Department.

Convenience sampling technique was first used to sample retailers who were willing to participate in the survey because of the inaccessibility of retailers and buyers during retail transactions (Taherdoost, 2016). Simple random sampling was then used to sample retailers and buyers for questionnaire administration and interviews respectively while considering the various classes of retail outlets identified on the field in each area to ensure good spatial coverage (Stevens and Olsen, 2004; Yiran and Stringer, 2017).

The key informants were purposively selected from experts in the fields of retail governance, who can adequately provide an in-depth view of the subject under investigation. Purposive sampling, according to Bernard (2002), is a non-random technique that does not require underlying theories or a predetermined number of participants.



3.8 Data Collection

The study used both primary and secondary methods to gather information. Primary data, according to Creswell (2009), is information obtained directly from the participants or situations under investigation, whereas secondary sources are views of the persons or events published by others.

The primary data was gathered through the collection of coordinates of retail outlets. Research assistants were assigned to cover a sub-section of the study areas to identify and collect the coordinates of retail outlets using the Global Positioning System (GPS) as well as their attribute data. These included products sold, location, and outlet structure (see Table 3.1). The mapping of the retail outlets was necessary since it provided a spatial point pattern and visual aid of where retailers were located, hence forming a cluster or being dispersed. Spatial data collection was conducted between October 2019 and January 2020. A digital camera was used to take pictures of the different types of retail outlets identified in the study areas to provide photographic evidence which is a powerful tool for qualitative data collection (Yiran and Stringer, 2017). This method of data collection was to answer objective 1 of the study which seeks to map and examine the spatial distribution of retail outlets.

A questionnaire was administered to retailers to collect data to answer objective 2 of the study. A questionnaire is a quantitative research instrument for the collection of data through structured questions given to respondents to solicit their responses (Roopa and Rani, 2012). A questionnaire facilitates the standardized collection of quantitative data, resulting in data that is internally coherent for analysis (Taherdoost, 2016). The questionnaire included both closed-ended and open-

ended questions. Open-ended questions are those that do not require respondents to choose from a set of alternatives or basic response categories for each inquiry but instead allow them to freely express their subjective opinions regarding topics. As a result, a free text option was included to allow respondents to better clarify their selections. Closed-ended questions, on the other hand, present respondents with a set of options or basic response categories from which to pick (Bryman and Cramer, 2011). This provides an easy basis to analyze responses from respondents (Kuranchie et al., 2014). The questions were centred on the demography of retailers, location, and the physical character of outlets, products, and services. The questionnaire was administered by the researcher to explain some technicalities that may be associated with the completion of the questions. This was also to ensure a high recovery rate and completion of the questionnaire. However, retailers who were reluctant to answer the questions in front of the researcher were given the questionnaire to respond to, provided they could read and write in English.

Interviews were conducted with buyers and key informants from the local Assemblies to obtain data to explain the observations in objective 1 and to answer objectives 3 and 4 of the study. An interview is asking a smaller group of people a series of questions to learn more about their opinions on a specific concept, program, or problem (Boyce and Neale, 2006). This study aims to gain a deeper understanding of the environmental effect of retailers' location and operations on the residential landscape from the perspective of buyers as well as examine the policy environment regulating their activities. Therefore, detailed and honest information is required devoid of the researcher's views (Quad, 2016). A semi-structured interview was selected in particular. According to Qu and Dumay (2011), this approach entails asking prepared questions that are led by

recognized themes to generate a more complex answer. The researcher can use the same theme approach in every interview while yet reacting flexibly to the respondents' replies (Quad, 2016).

Field observation is an effective method for identifying behaviors (Fisher and Durrance, 2005). Tewksbury (2009) defines observation as the methodical collection of meaningful knowledge about people, places, and objects via surveillance and interactions. Therefore, direct observation of the retail environment, as well as retailers' behaviors throughout the time spent on the field, was done. This was to primarily understand the geography of the retail environment of the study areas and also identify the various structures of retail outlets and services rendered. It was also necessary to determine the peak retail transaction period within the three communities to know the period retailers are less busy to schedule an appointment as it was disturbing to intrude during the transaction period.

Secondary data were reports collected from the Ministry of Trade and Industry (trade policy reports), Municipal Assembly (by-laws), Ghana Statistical Service (retail reports), and National Board for Small Scale Industries (retail outlet classification report).

To investigate objective 4 of the study which seeks to examine the policy implication of the distribution of retail outlets, content analysis (Wesley, 2010) was used to analyze related retail policies in Ghana. Content analysis is a key tool for evaluating government papers (Wesley, 2010). Thus, a technique for concluding by objectively and methodically identifying characteristics of textual content. First, there was an overview of related policies to identify and note the main thematic areas directly addressing retail. Second, there was a thorough review of the selected

documents. This was necessary to identify the objective, actions, and outputs of the policy documents (Yiran and Stringer, 2017). The implementation of the actions of the policies and expected outcomes were substantiated through interviews with relevant institutional heads and the administration of open-ended questions to retailers.

3.9 Data Processing and Analyses

3.9.1 Spatial Data Analysis

The spatial data collected from the field survey was analyzed using ArcGIS 10.8. The software allows the organization, manipulation, analysis, and visualization of spatial data. The map of the three study areas was first digitized and extracted from Google-earth. The extracted image was then imported into ArcGIS 10.8 software. The road attribute shapefile was also generated with the Google-earth application and overlaid on the study area while delineating them into major and minor roads. The spatial and attribute data were captured and presented in an excel format (.csv) by the Global Positioning System (GPS) device. This data was inputted into ArcMap 10.8 and converted into shapefile format.

To answer the first objective of the study which sought to map the spatial pattern of retail outlets, two particular spatial statistics analyses were performed. Thus, kernel density analysis and nearest neighbour analysis. These analyses are significant as they provide an understanding of the distribution pattern of retail outlets in the study communities. Kernel density analysis gives a numeric value as well as visual presentation capabilities that demonstrate a concentration of points, mainly estimated with a regular moving quadratic (Allen et al., 2021). In performing the kernel density analysis, the point data of retail outlets were added in the input point feature option in

ArcGIS 10.8. All other fields were set by the software default position. The area was calculated in Square Kilometres.

The average nearest neighbour index (ANNI) was used to compare the computed average distance between nearest neighbours to the average distance in a randomly dispersed mode value (Lee et al., 2018). In conducting the ANNI, the point data of retail outlets was selected as the input feature class, with the distance method being the Euclidean distance since ANNI deals with the straight-line distance between a point feature and its nearest neighbour.

3.9.2 Questionnaire Analysis

The questionnaires were analyzed using the Statistical Package for Social Sciences (SPSS) software version 16.1. Responses to the questionnaire were numerically coded based on the research questions and objectives in the SPSS. Some open-ended questions were manually coded and entered into SPSS while others were presented as direct quotations from respondents. Data were analyzed and interpreted using descriptive statistical techniques such as frequencies, percentages, mean and standard deviation. The results were then presented in the form of well-interpreted and easy-to-understand tables, graphs, charts, and percentages. Variables analyzed included the socio-demographic characteristics of retailers, the level of influence of locational factors, and underlying locational factors.

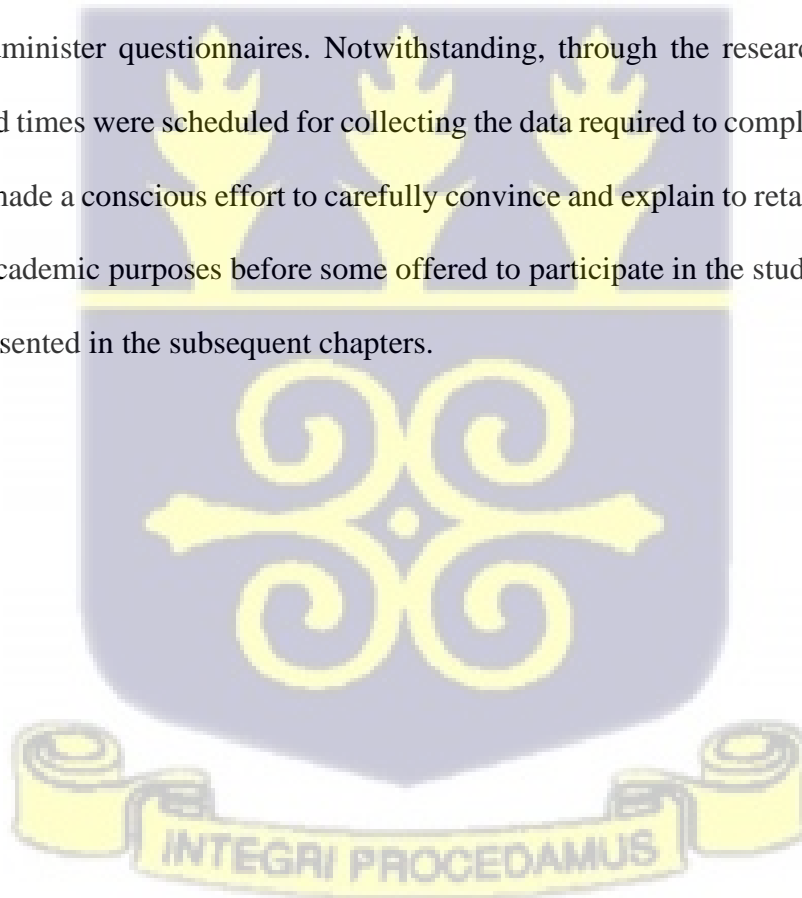
3.9.3 Interview Transcription

The recorded interviews, including those done in Ghanaian languages, were transcribed and translated into English. Following the transcription, the data was thematically arranged. Thus,

themes based on the research objectives were coded to reduce the data set into smaller meaningful segments. The qualitative data was generally presented as direct quotations to corroborate the spatial data.

3.10 Limitations

A major challenge encountered during the study was the hesitance or refusal of some retailers to participate in the study, believing the exercise was for taxation purposes and investigation of illegal activities. While others were reluctant to explain the details of their enterprise as they do not want their secrets to be made public. Also, the inaccessibility of retailers during retail transactions made it difficult to administer questionnaires. Notwithstanding, through the researcher's persistence, different date and times were scheduled for collecting the data required to complete this study. The researcher also made a conscious effort to carefully convince and explain to retailers that the study was purely for academic purposes before some offered to participate in the study. The findings of the study are presented in the subsequent chapters.



CHAPTER 4

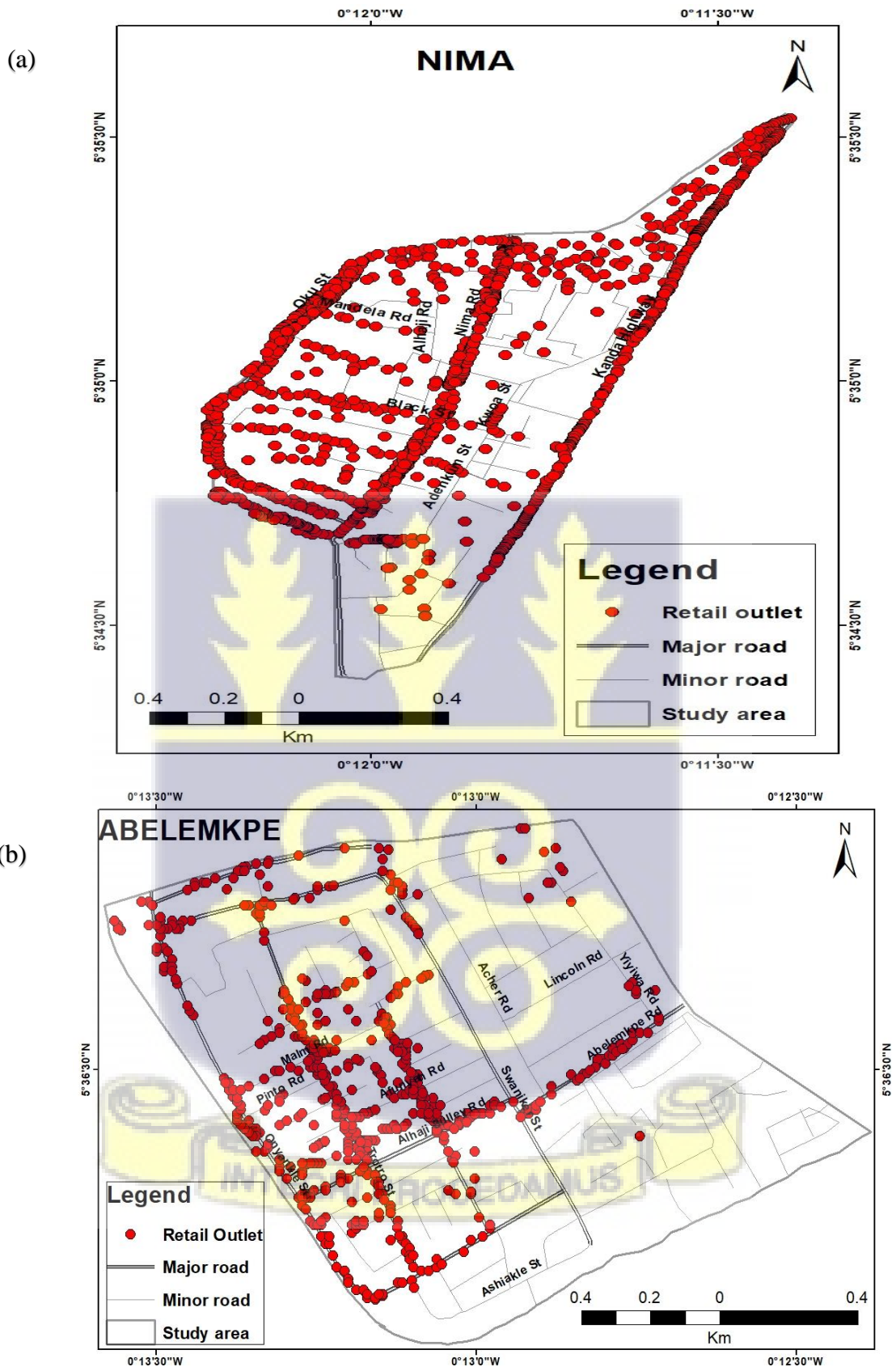
SPATIAL DISTRIBUTION OF RETAIL OUTLETS

4.1 Introduction

This chapter commences discussions of the findings of the study. As stated in objective 1, the study was to map retail outlets in the study areas. Mapping retail outlets provide a pictorial representation of the spatial pattern and the types of retail outlet formats present in order to determine the differences and similarities between the study communities. In this regard, the chapter is divided into four sections that discuss the spatial pattern of retail outlets, retail outlet location formats, products sold, and retail outlet structures in the study communities.

4.2 Spatial pattern of retail outlets

From Figure 4.1, the locations of retail outlets are evident in the study communities. Implying that regardless of the differences in the socio-economic status of the three study communities, there is a retail activity present. The presence of retail outlets also suggests that they are an essential component of the residential environment, offering a source of income and services to its residents. Figure 4.1 also shows a significant variation in the density of retail outlets among the three study areas. Nima has the highest density of retail outlets at 882.17/ km², followed by Abelemkpe with 321.47 /km², and Airport Residential Area has the least density at 70.80/ km² (see Table 4.1). This density positively correlates with the population density in the study communities, where the areas with higher population density tend to have a higher distribution of retail outlets.



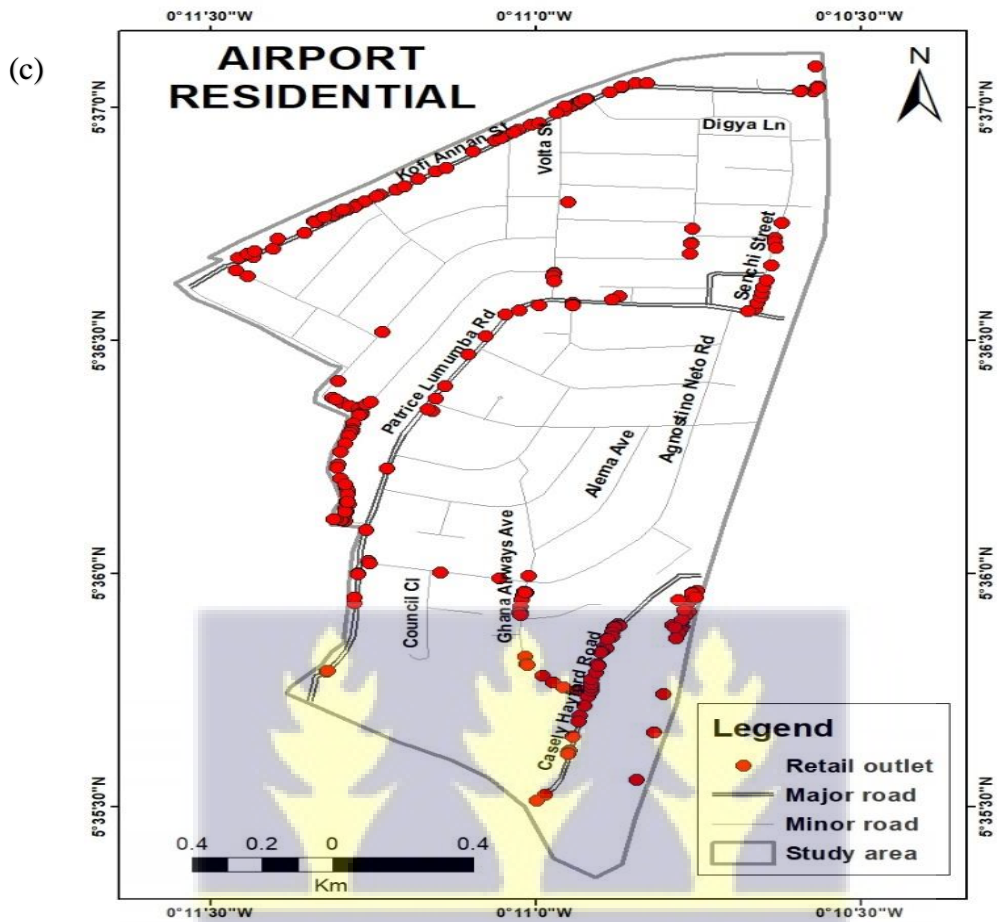


Figure 4. 1: Distribution of retail outlets in the study communities

Source: Field survey (October 2019- January 2020)

Table 4.1: Number of retail outlets in the study communities

Study Area	Population	Area (km ²)	Number of outlets	Number of Outlets/km ²	Population/km ²
Nima	80,843	1.29	1138	882.17	62,668.99
Abelemkpe	7,383	1.91	614	321.47	3,865.45
Airport Residential	5,079	3.39	240	70.80	1,498.23

Source: Author

It can be discerned from Figure 4.1 and Table 4.1 that the high density of retail activities occurs in the high population density community of Nima. As the population grows in an area, demand for goods increases, and retail activities are attracted to areas with high population density (Thuku et al., 2013). It was also indicated by retailers that, the high population density of the area induces a high labour force participation and impacts economic growth in the area. This could imply that the majority of residents engaged in retail activities, and could explain the high distribution of retail outlets in Nima compared to the other two study communities. Further, it was explained by some buyers that Nima's growth as a settlement for traders from Ghana's northern areas as well as those from neighbouring countries like Togo may also have contributed to the high number of retail outlets.

The modest concentration of retail outlets in Abelemkpe can also be ascribed to the area's moderate population density as compared to the other two study communities. According to some retailers in the community, the modest distribution of retail outlets can also be attributed to the occupation of residents, for whom the majority were employed in different forms of informal and formal labour rather than retail. It was further explained by retailers that some property owners in the area controlled their spaces and barred retailers from using them resulting in a steady establishment of retail outlets in the area.

On the other hand, the relatively low distribution of retail outlets in Airport Residential Area is attributed to the low population density. The low population distribution is due to the few housing infrastructures in the area which are mainly occupied by single to few family sizes. This directly

influences the population composition of the area and may explain the few siting of retail outlets as is not profitable to locate an outlet in an area with low demand (Iton, 2015). It has been previously argued that, next to population density, high income also exerts a great influence on retail distribution. This has been noted in some studies where retailers locate not where the population is dense but where income is high (see Hwang et al., 2010; Arreola et al., 2019). While it may be appealing to locate where income is high, this study shows that the distribution of retail outlets and aggregate income may not necessarily be correlated. As observed in Airport Residential Area, residents are averse to high concentration of retail establishments.

The same observations were gathered from in-depth interviews with buyers. The majority (7 respondents) mentioned that the low distribution of retail outlets in the area is attributable to the majority of residents owning cars and preferring to shop in nearby malls. A 37 years old female buyer expressed that *“Most people in the area are very wealthy with cars and prefer to shop in the Marina and Accra Mall. Some prefer to order their goods online and have them delivered to them. Only a few of us purchase from the shops around here. As a result, retailers choose to locate their outlets elsewhere because they will not earn a lot of money here”*. This remark implies that, while the area has strong consumer purchasing power, there is very little demand, making it plausible to infer that residential neighborhoods are not closed systems, but buyers move across markets and do not necessarily purchase within their community. Responses from the local Assembly also indicated that property and zoning restrictions imposed by the area's development scheme do not allow large distribution of retail outlets but just a few corner shops. This could further explain why there are few outlets in the area. Other studies have also found that population density and the

socio-economic status of an area are important determinants of retail outlet distribution (e.g. Marros, 2005; Gough, 2010; Onyebueke, 2013, Mester, 2017).

The spatial pattern of the distribution of retail outlets across the study communities is marked by variations. From Figure 4.1 retail outlets in Nima are nucleated mainly in a linear pattern within the community, particularly at the centre and fringes. Some outlets are also located in patches and scattered over a wide range in the community. The wide spatial spread of retail outlets in Nima is expected due to the high density of retail outlets present. Unlike Nima retail outlets in Abelemkpe are located in specific parts of the area. As seen in Figure 4.1, retail outlets in Abelemkpe are mainly nucleated in a linear pattern in the Western part with a few of them scattered in the Eastern part in patches. In Airport Residential Area, retail outlets are nucleated mainly in a linear pattern at the fringes with a few isolated and scattered at the centre.

Again, from Figure 4.1, the distribution pattern of retail outlets within the three study communities to a large extent is not geometrically consistent. Thus, the distribution of retail outlets in the study areas is spatially not regular, such as circle, square, or polygon patterns akin to market centres which are purposefully designed. Interviews with local authorities indicate that the distribution of outlets can be deemed unplanned or spontaneous since the areas are residential areas without initial plans of accommodating such scales of commercial land uses. Rather, the distribution pattern seen in the study areas is defined by a number of spatial factors including correspondence to the distribution of the population within the areas, road networks, and supplementary businesses. This is further discussed in subsequent sections.

4.2.1 Average Nearest Neighbour Index

The result from the average nearest neighbour index (ANNI) is presented in Table 4.2. From Table 4.2, the ANNI of the study areas at a p-value of 0.001 is less than 1.0, passing the significance level. Thus, 0.41 (Nima), 0.52 (Abelemkpe), and 0.31 (Airport Residential Area), which implies that the distribution pattern of retail outlets in the study areas is statistically significantly clustered. Interestingly, though Airport Residential Area has the lowest distribution of retail outlets, it has the highest clustered pattern of retail outlet distribution, followed by Nima and Abelemkpe. This indicates that the distance between retail outlets in Airport residential area is the closest compared with the other study areas. The relatively highly clustered pattern in Airport Residential Area is due to the area's zoning restrictions, which limit the available retail space, resulting in a high concentration of outlets on the limited space.

Table 4. 2: ANNI of retail outlets in the study communities

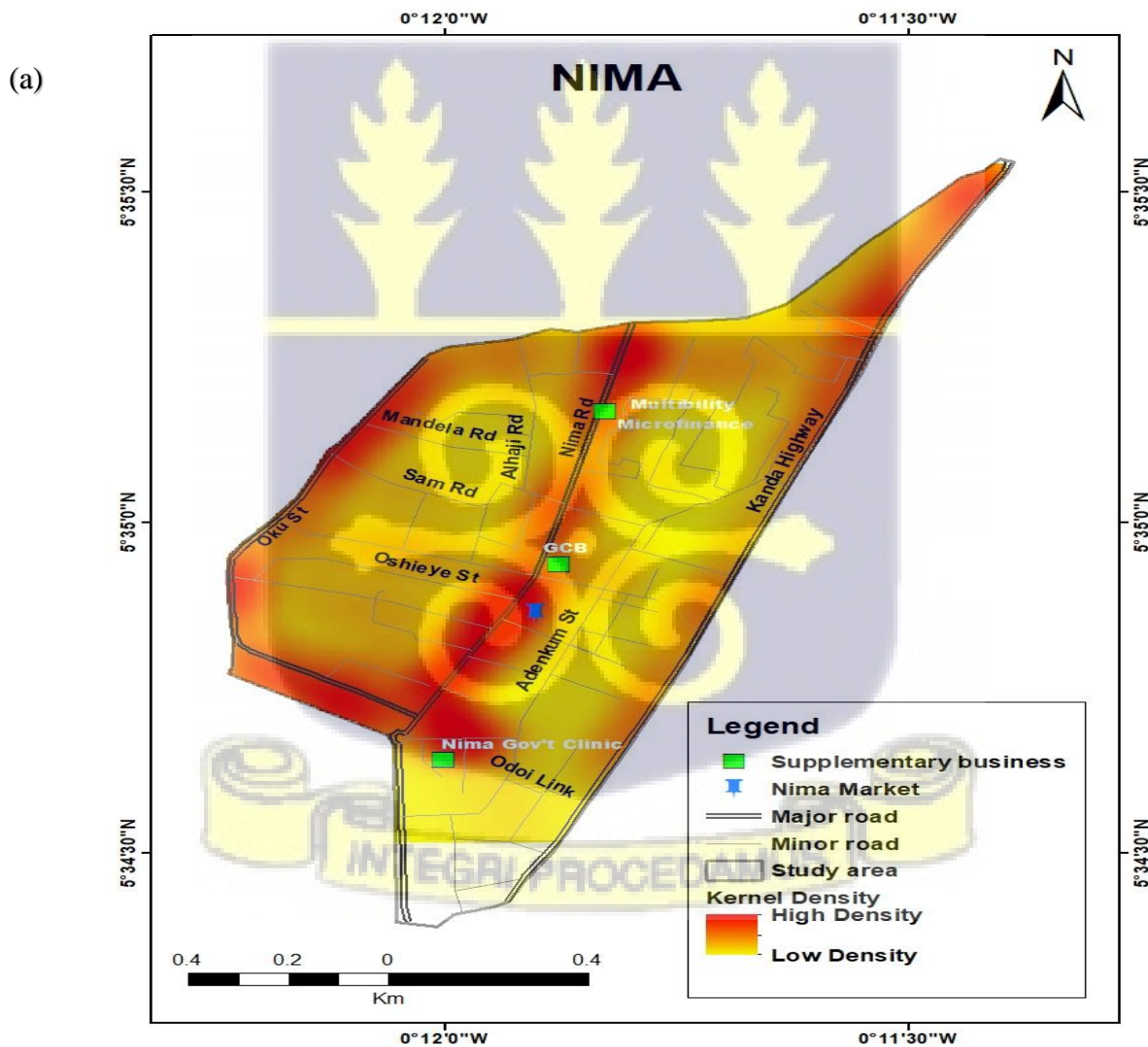
Study Area	ANNI	Z-value	P-value
Nima	0.41	-38.25	0.001
Abelemkpe	0.52	-22.69	0.001
Airport Residential	0.31	-20.58	0.001

Source: Based on ArcGIS values computed by the Author

4.2.2 Cluster Analysis

The result of the kernel density analysis of the distribution of retail outlets is presented in Figure 4.2. The densest areas are indicated with a reddish colour. It can be seen from Figure 4.2 that the

clustering pattern of retail outlets varies among the study communities as each community depicts a density of varying intensities. Figure 4.2 shows that Nima has the highest concentration of retail outlets compared to the other study communities. The high clusters are mainly in a linear layout, predominantly at the centre and fringes. There are also some minor clusters spread across the community. In Abelemkpe, the high clustered areas are located in the Eastern part of the area in a linear pattern with few minor clusters scattered at the fringes. While in Airport Residential Area, the high clustered areas are scattered at the fringes with some minor clusters scattered at the centre.



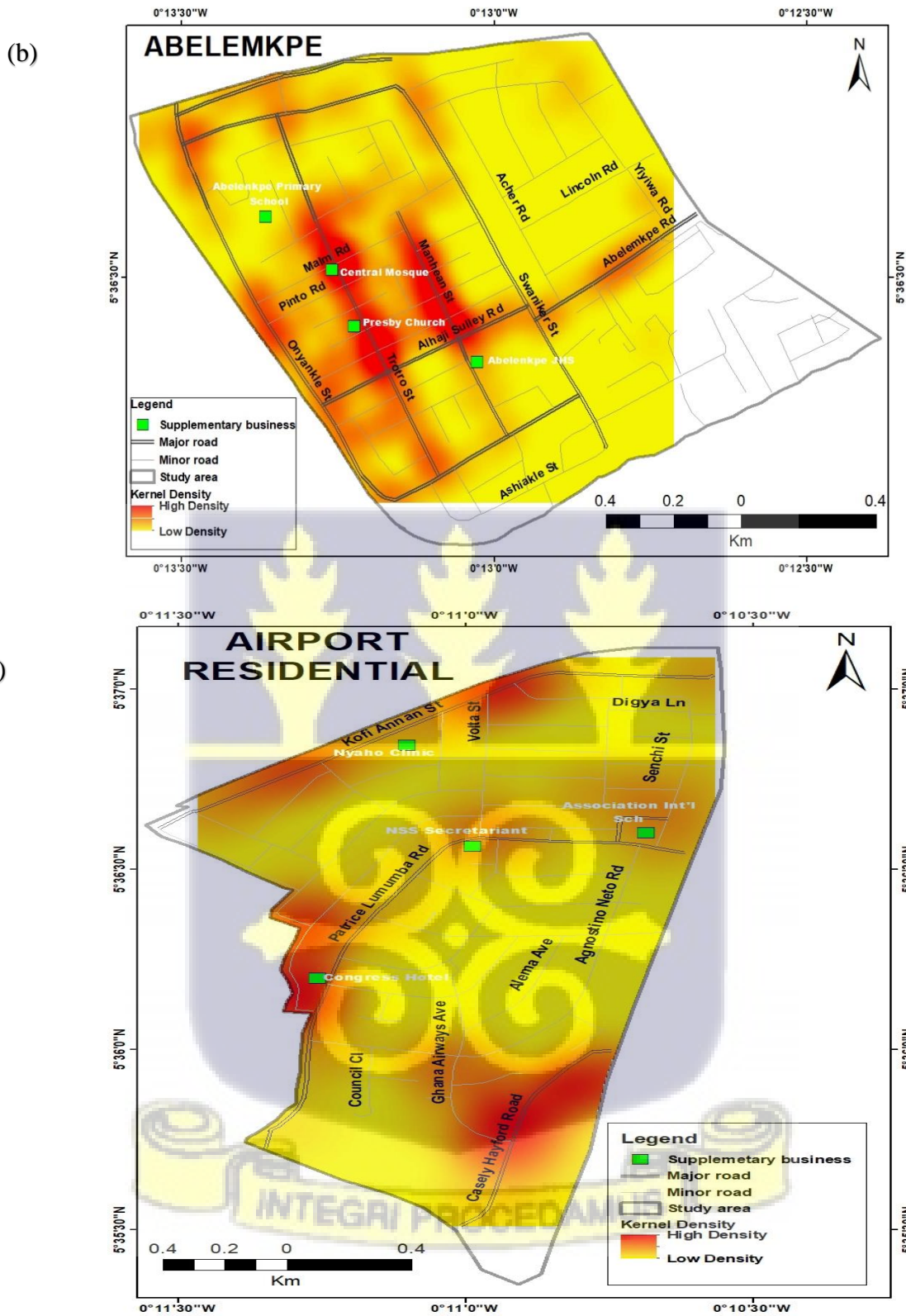


Figure 4 2: Result of kernel density analysis of the distribution of retail outlets
 Source: Author's construct

It is also seen from Figure 4.2 that high clusters are mainly located at the central and fringes of the study areas except for Airport Residential Area which has minor clusters at the central and high clusters at the fringes.

Although the clustered pattern varies between the study communities, the distribution of these clusters follows a similar pattern across the study communities. As noted earlier, the distribution of retail outlets corresponded to the distribution of the road networks, supplementary businesses and population within the study communities. From Figure 4.2, the clusters are primarily located along key transportation corridors across the study communities. For instance, in Nima, the high clustered areas are located mostly along the Kanda Highway, Nima Road, and Oku Street, in a linear layout. Likewise, the high clustered areas in Abelemkpe are along Trotro Street and Manhean Street, as well as minor clusters along Swaniker Street, Onyankle Street, and Abelemkpe Road. Airport Residential Area, similar to Abelemkpe and Nima, is also characterized by high clustered areas along the roads located at the fringes of the area including Kofi Annan Street and Casely Hayford Road.

It was observed that these roads functioned as major intra and inter-transit hubs within the study communities (see Figure 4.2), especially used by commercial vehicles and have a large number of commuters using them. Therefore, implies that these routes have links that have the flow of a large number of potential customers and equally attract a large number of retailers. This was corroborated by retailers that, the location along the roads is strategic to expand the spatial reach of customers, thus enabling them to tap residents from other parts of the city. A 44 years old female

seamstress indicated in an in-depth interview with her that *“I place my shop along the road because not only do I want to attract people within the community but also from outside the community who use the road. My location also serves as an advertisement for me since people passing by can see the display of my clothing and come back later for my services”*. By this statement, the study further notes that retail outlets located along the roads also serve as a marketing and advertisement strategy for retailers in the study communities.

Retail outlets were also strategically clustered near supplementary businesses and prominent public centres within the study areas. These include outside the boundaries of schools, hospitals, offices, mosques, churches, and near traditional market centres. These places were observed to be a major generator of potential buyers due to their activities that attract a large number of people. Therefore, retailers capitalize on the footfall of people who visit these centres. For instance, in Nima, retail outlets are dense around the Nima market, the Nima Government Clinic and offices such as the Multibilty Microfinance (see Figure 4.2). An 81 years old woman buyer who is also a retired retailer in Nima recounted the reasons for the emergence of the high concentration in these parts of Nima in an in-depth interview. According to her, few retail facilities existed in the area in the 1950s and were mostly concentrated in the Nima market, making that place the earliest commercial centre. She further indicated that from the year 2000, commercial activities in the Nima Market became very concentrated, and some commercial facilities started to leave due to insufficient retail space. As a result, commercial subcentres began to develop along the Nima Road and other arterial roads within the area, and over time the number of commercial facilities at the fringe area of the Nima Market increased. This narration confirms the results shown in Figure 4.2,

where the highest concentration of retail outlets is around the Nima Market and along the major road corridors. In addition, Abelemkpe and Airport Residential Area displayed a similar distribution pattern, with retail outlets clustered around supplementary businesses such as the Abelemkpe Junior High School (JHS), Abelemkpe Central Mosque, the National Service Scheme (NSS) Secretariat, the Association International School and Congress Hotel.

Conversations with retailers further suggest that the presence of the clustered retail areas is because these locations have better accessibility and high demand than other locations, rendering it more rational for them to locate at these points. This implies that retailers strive to find sites having great demand potential and the highest retail sales, hence tend to agglomerate. Also, a reason gleaned from the responses of retailers indicates that clustering allows them to form a sort of one-stop-shop for buyers, as these clustered areas provide a variety of goods and services. It was also deduced that the buyers also take advantage of the clustering of retail outlets, as majority of the buyers interviewed indicated that it is convenient to buy all they needed within a short time because they do not have to walk a long distance from one outlet to another. This suggests that the co-location of outlets tends to reduce buyers' costs to access and search for products among outlets. Hence serving as multi-purpose shopping.

Again, field observation shows that the concentration of retail outlets in the study communities corresponds to the recognized areas of high population density within the study areas. For instance, in Abelemkpe, there is a high clustering of retail outlets in the Western part. The Western part of Abelemkpe is characterized by a mix of low and middle-income groups living mostly in compound

houses with high population occupancy. Unlike the Western part, the Eastern part of Abelemkpe has less population and hence the few concentrations. This observation was similar in Nima and Airport Residential Areas. The location of the cluster centres identified in this study aligns with Sander's (1987) affirmation that commercial agglomerations are driven by proximity and generative hypotheses. Whereas the former indicates their propensity to cluster near key marketplaces and densely populated locations, the latter indicates that supplementary businesses create opportunities for businesses to thrive.

4.3 Retail Outlet Location

The study shows that retail outlets in the study areas were located in five major points (Table 4.3). There is no marked variation in the location of retail outlets in the communities except in Airport Residential Area which had no retail outlets located in the alley. Overall, the dominant retail location type in the three study areas is the isolated along the road, constituting 53.8%. This is followed by in front of the house and attached to house along the road constituting 18.6% and 18.1% respectively.

Table 4.3 Location of retail outlets

Retail Outlet Location	Nima	Abelemkpe	Airport Residential	Total
Attached to house	189 (17%)	124 (20%)	49(20%)	362(18.1%)
Isolated along the road	546(48%)	362 (59%)	163(68%)	1071(53.8%)
In front of the house	257(23%)	97(16%)	17(7%)	371(18.6%)
In the Alley	85(7%)	8(1%)	0(0%)	93(4.7%)
Within the courtyard of the house	61(5%)	23(4%)	11(5%)	95 (4.8%)
Total	1138(100%)	614(100%)	240(100%)	1992 (100%)

Source: Field survey

The responses from retailers revealed that the dominance of the isolated along the road was retailers' quest to be accessible and visible to their customers. It was further noted from retailers that the dominance of the isolated along the road retail location is because the majority of them live in rented houses and are not permitted to attach their outlets to the houses or locate within the courtyard. This implies that property owners have the advantage to secure spaces over tenants in the study areas. The limited space and uneven access to retail space have ramifications for the choice and the scale of the distribution of retail outlets in residential areas. Thus, the increasing location of retail outlets away from homes. As a result, retail outlets are spreading widely to outlying areas, such as along the road. Retailers also stated that the location of retail outlets attached to the house along the road and isolated along the road was strategic and intended to attract more customers from other communities. This implies that the location of retail outlets along the road is a desirable area for retailers due to the access to a diverse customer base.

The absence of retail outlets located in the alley at Airport Residential Area was because there were no alleys present. This is due to the housing design which sought to provide a sense of privacy to residents by keeping the area behind one's house inaccessible through the construction of walls. The different locations of retail outlets encountered in the study areas are shown in Figure 4.3.

Interviews with the Physical Planning Officers of the Assemblies indicated that irrespective of the type of residential area, they do not permit the siting of retail outlets with the exception of structures located within the perimeter of the residential property or a space demarcated for commercial purposes. According to the officers, the siting of retail outlets is a major factor deteriorating the aesthetic of Accra, and therefore banning the construction of these structures is considered to protect residential environments from negative externalities such as congestion,

noise, and litter. Therefore, the Assemblies are making efforts to minimize their development by desisting from giving permits.



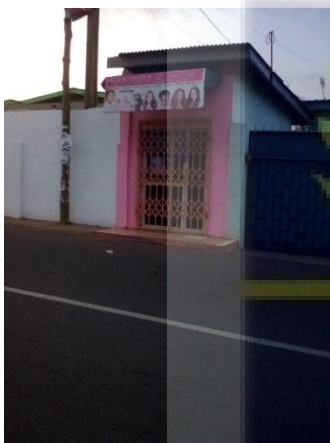
a. An isolated outlet along the road



b. An outlet located in the alley



c. A table-top outlet located in front of the house



d. On the road attached to house



e. A beverage depot located within the courtyard of the house

Figure 4 3: Types of retail outlet locations

Source: Field survey, 2020

It was also noted by a Works Engineer that, spaces in front of houses and along the roads are reserved for the erection of service poles and burying fiber optic cables. The officer added that the spaces especially in front of the houses are only large enough for these services and however people site their outlets at these places extending into the roads, this obstructs development. It was also recognized by the Planning Officers that, the land tenure system within residential areas had

implications for the proliferation and siting of outlets at unauthorized locations. It was pointed out that lands within residential areas were individual or family-owned, and they decide on its usage. This results in the siting of outlets without due consultation thereby crippling the efforts of local authorities. The officers added that people who site retail structures without permission and at unauthorized places are asked to remove the structures or stop work and produce a permit. Those who do not comply with the notice are stopped by the Works Department's task force by demolishing the structures. However, from the findings in this study, the majority of retailers do not comply with the regulations of the municipal authorities as most of the retail outlets mapped in the three study communities are located outside residential parcels, except for those attached to the house and located within the courtyard of the house (see Table 4.3).

4.4 Products and Services Rendered

The study identified and classified products offered by retailers into 17 categories (Table 4.4). From Table 4.4, the distribution of retail products and services offered was similar among the three study communities, as the study recorded the presence of all the product categories in the study areas. This implies that the products and services sold in retail outlets did not depend on the socio-economic differences between the three study communities. Comparing the product categories across the study communities, grocery and out-of-home food services had a substantial scale in the three study areas, with Nima having 31.8%, Abelemkpe having 29%, and Airport Residential Area with 40%. This was closely followed by the provision outlets and footwear, clothing, and accessories outlets. Responses from retailers across the study areas indicated that these products were in high demand and form the basic needs of people. Low start up capital and domestic skills acquisition was also stated by retailers for the dominance of these outlets. More than half of the

buyers interviewed from each of the study areas (Nima, 9; Abelemkpe 7 and Airport Residential Area, 6) expressed that they mostly purchase grocery and out-of-home food services, and provisions. The buyers also attributed the dominance of these products to the increasing number of women working outside the home, distances to market centres, affordability, convenience, and long hours spent at work and in transit by many city dwellers. This finding re-echoes Maslow's (1943) assertion that basic needs are the first and most essential requirement for the survival of people and therefore people will satisfy these needs before anything (cited in Jerome, 2013).

Table 4. 4: Distribution of products and services

Product and Services	Nima	Abelemkpe	Airport Residential	Total
Grocery and out-of-home food services	362(31.8%)	178(29%)	96(40%)	636(32%)
Provision	285(25%)	113(18.4%)	37(15%)	435(21.8%)
Footwear, clothing, and accessories	105(9.2%)	70(11.4%)	15(6.3%)	190(9.5%)
Cosmetic, perfume and beauty care	63(5.5%)	72(11.7%)	9(3.8%)	144(7.2%)
Electronic appliances	53(4.7%)	19(3.1%)	7(3%)	79(4%)
Recreational outlet	21(1.8%)	36(5.9%)	10(4.2%)	67(3.4%)
Repair services	41(3.6%)	15(2.4%)	9(3.8%)	65(3%)
Stationery	11(1%)	10(1.6%)	6(2.5%)	27(1.4%)
Health product	10(0.9%)	12(2%)	8(3.3%)	30(1.5%)
Laundry and washing bay	9(0.8%)	7(1.1%)	6(2.5%)	22(1.1%)
Lottery staking	21(1.9%)	8(1.3%)	9(3.8%)	38(2%)
Furniture and home furnishing	10(0.9%)	9(1.5%)	5(2.1%)	24(1.2%)
Fashion and tailoring	42(3.7%)	29(4.7%)	7(3%)	78(3.9%)
Café and telecommunication	91(8%)	21(3.4%)	11(4.6%)	123(6%)
Building material and garden equipment	7(0.6%)	6(1%)	3(1.3%)	16(0.8%)
Automobile	1(0.1%)	4(0.7%)	1(0.4%)	6(0.3%)
Photography	6(0.5%)	5(0.8%)	1(0.4%)	12(0.6%)
Total	1138(100%)	614(100%)	240(100%)	1992(100%)

Source: Field survey

From Table 4.4, building materials and garden equipment, automobile and photography account for a small proportion in each study area. These products are thought to be durable and capital-intensive and therefore were rarely purchased by consumers. It will therefore be unprofitable to have more of these outlets in the study communities. It was also noted by retailers that the distribution of the different products across the study areas is attributed to their desire to limit competition and provide for the different needs of customers. Figure 4.4 shows some of the products sold by retailers.



Figure 4 4: Some goods sold in retail outlets

Source: Field Survey

4.5 Retail Outlet Structures

Five different types of retail outlet structures were identified and classified as concrete building outlets, metal container outlets, wooden boxes, table-top outlets, and open areas as shown in Figure 4.5. Overall, Table 4.5 shows that the dominant retail outlet in the three study areas is metal

container outlets, constituting about 32.4% of retail outlets. This is followed by concrete outlets (27.1%), table-top outlets (24.2%), wooden-box outlets (13.3%) and open spaces (3%).



a. Concrete building outlet



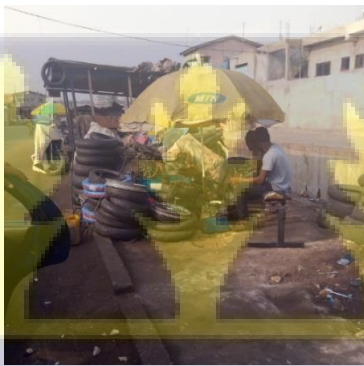
b. Metal Container outlet



c. Wooden-box outlet



d. Table-top outlet



e. Open area outlet

Figure 4 5: Types of retail outlet structures

Source: Field survey

Table 4.5: Retail outlets structures in the study communities

Retail outlet structure	Nima	Abelemkpe	Airport Residential	Total
Concrete building outlet	273 (24%)	252 (41%)	15(6.3%)	540 (27.1%)
Metal container outlet	330(29%)	203 (33%)	113(47%)	646(32.4%)
Wooden-box outlet	148(13%)	76 (12%)	41(17.1%)	265(13.3)
Table-top outlet	341(30%)	79 (13%)	63(26.3%)	483(24.2%)
Open area	46(4%)	4 (1%)	8(3.3%)	58 (3%)
Total	1138(100%)	614(100%)	240(100%)	1992 (100%)

Source: Field survey

There are, however, variations across the three study communities. For instance, in Nima, the survey showed that the dominant outlet structure is table-tops constituting about 30% and the least outlets were open areas constituting 4%. Most respondents from Nima indicated that due to the relatively small amount of start-up capital they had, they opted for the table-top as it was less expensive to purchase and maintain as compared to the other type of structures. Retailers also pointed out that due to the limited spaces in the community to locate their outlets they preferred to use the table as it was more convenient to move and occupy relatively small spaces. A female Waakye seller in Nima expressed that, *“I sell my waakye using a table because it is less expensive and I can carry it back home with me as the space am using is not mine”*.

In Abelemkpe, the dominant retail outlet structure was the concrete building outlets (41%) and the least outlet structure was open areas constituting only 1%. Responses from retailers in Abelemkpe indicated that retail space in the area is highly competitive due to a variety of land uses. As a result of the restricted space, the construction of structures in front of residences and housing extensions for retail outlets have become more dominant in the area. This is to supplement space because spaces along the roads are either congested by other retail outlets, for other land uses activities or restricted from being used. It was expressed by a retailer in the Western part of Abelemkpe that she attached her outlet to her home due to the unavailability of space. She stated that *“even when space is available, it is either expensive or far from home and therefore inconvenient”*. Retailers who rented outlets for their business also revealed that most landlords in the area are now transforming the frontage of their houses into retail outlets for rent purposes because most retailers prefer the concrete format. During the fieldwork, it was observed that some landlords were in the process of converting the frontage of their houses in Nima and Abelemkpe into retail outlets and

this may further add to the proliferation of the retail outlet distribution in these areas (see Figure 4.6). Some retailers also indicated that though the concrete building structure is expensive to afford, they opted for it because of its durability, inherent robustness and low maintenance.



Figure 4.6: Uncompleted building extension for a retail outlet in Abelemkpe

Source: Field survey

In Airport Residential Area, nearly half (48%) of the retailers operated from metal container outlets, with only a few retailers (6%) operating from open areas (Table 4.5). From the responses of retailers, they explain that, the metal container outlet is mostly preferred due to its durability and mobility especially in times of termination of land rent agreement. It was noted by some respondents in the area that due to the limited space as a result of local Assembly regulations on the zoning of the area, the location of retail outlets is limited along the major road and it is,

therefore, prudent to use metal containers as the spaces are temporal and authorities may any time ask them to leave.

Similarly, in all three study areas, open area outlet structures were the least, constituting small fractions (Table 4.5). Retailers who used these structures indicated they chose open areas because their products and services were bulky and heavy, and needed large spaces as a result. These outlet structures were observed to be used mainly by vulcanizers, car garages, automobile repairers, and carpentry shops. These outlets structures were also observed to be mostly located at the fringes of the study areas. The predominant location of these structures at the fringes of the study areas was explained by an automechanic is to give easy access to customers from outside the area and the location give them enough space as most land use activities are concentrated at the centre.

Interaction with the officers from the Works Department revealed that they do not prescribe the design of retail outlet structures but only in the case where it has to do with block works. The retailer or developer is expected to provide proof of ownership of the residential property and a sketch or plan of the building, while other structures are to be placed on constructed concrete platforms. This infers that the type of retail outlet structure retailers choose to operate from to a large extent was not dependent on local regulations but the availability of space, start-up capital, security of structure, durability, type of product, and mobility of structure. These factors mentioned by retailers reflected in the significant variations that emerged in the frequency of the distribution of retail outlet structures in the study areas.

CHAPTER 5

FACTORS EXPLAINING THE LOCATION OF RETAIL OUTLETS AND ENVIRONMENTAL EFFECTS OF THE DISTRIBUTION OF RETAIL OUTLETS

5.1 Introduction

Having described the spatial distribution pattern and formats of retail outlets, this chapter focus on factors that drive the location decision of retailers, and the environmental effects of retail activities on the residential environment. This is to address objectives 2 and 3 of the study. The chapter first presents the background information of the survey respondents. This is followed by the factors that influence the locational choices for retail outlets and the environmental effects of the distribution of retail outlets.

5.2 Background Information of Respondents

From Table 5.1, each study community recorded a high number of females in the operation of retail outlets. This suggests that neighbourhood differences did not influence female dominance in residential retailing. The dominance of females in retailing across the study areas has been attributed to the limited economic opportunities for women in other sectors, gender bias in education, and augmenting of income (Mutillah, 2003). Retailers also indicated that the flexibility of selling appeals to women in particular. Thus, women may easily integrate residential retailing with other household work, such as child care.

Table 5 1: Demographic characteristics of respondents

Demography	Categories	Nima	Abelemkpe	Airport Residential	Total/Percentage (%)
Gender	Male	31	18	9	58 (29%)
	Female	83	44	15	142 (71%)
Age	Less than 20	11	4	1	16 (8%)
	20-29	17	8	3	28 (14%)
	30-39	41	25	12	78 (39%)
	40-49	21	11	4	36 (18%)
	50-59	14	8	2	24 (12%)
	Above 60	10	6	2	18 (9%)
Marital Status	Married	56	41	25	122(61%)
	Divorced	3	1	2	6 (3%)
	Widowed	13	9	0	22 (11%)
	Single	18	11	21	50 (25%)

Source: Field survey

Concerning the age of retailers, the result from Table 5.1 shows that the majority of study participants across the study areas have ages between 30-39 years constituting 39% of the total sampled respondents. The least age group was those who are less than 20 years old, indicating that they are teenagers involved in retailing. They were, however, asked for their reasons for selling. The majority of them stated that they were assisting in the running of the family business, while some stated that they owned the business to sustain themselves. This implies that some retailers rely on teenagers to support their businesses as part of their economic coping strategy. Again, from Table 5.1, the study revealed that a substantial number of respondents across the study communities were married with an appreciable number being single. Conversations with married retailers showed that retailing was a means to support their family income.

The educational attainment of the retailers was also explored (Table 5.2) because the retail sector was previously considered a preserve for people without formal education (Strassmann, 1987; UN-Habitat, 1995). But overall, the survey revealed that a higher number of retailers had some formal education across the study areas. This means that the retail sector does not only absorb illiterates as claimed by earlier researchers but also literates. The high number of people with formal education in the retail sector can be attributed to the limited number of formal jobs or low remuneration in their formal employment and consequently falling on retailing as a livelihood strategy.

Table 5.2: Level of education of respondents

Categories	Nima	Abelemkpe	Airport Residential	Total/Percentage (%)
Tertiary	2	8	4	14 (7%)
Senior High School	10	20	8	38 (19%)
Junior High School	34	12	6	52 (26%)
Primary School	22	8	2	32 (16%)
Technical/Vocational Training	28	8	4	40 (20%)
No Education	18	6	0	24 (12%)

Source: Field survey

Figure 5.1 shows that the majority of the respondents across the study areas had operated their retail business for more than 10 years while an appreciable minority operated for less than 1 year. This implies that residential retailing is not a recent phenomenon in the study communities. This also implies that the conditions within residential areas are favorable to the performance and sustenance of retailing. Overall, Airport Residential Area had the least number of respondents

engaged in the retail business for more than 10 years. This may be accorded to the high restrictions and compliance level as well as constant demolition exercises conducted by the Municipal Assemblies. This results in a high mortality rate of retail businesses and their inability to pass the ten years mark.

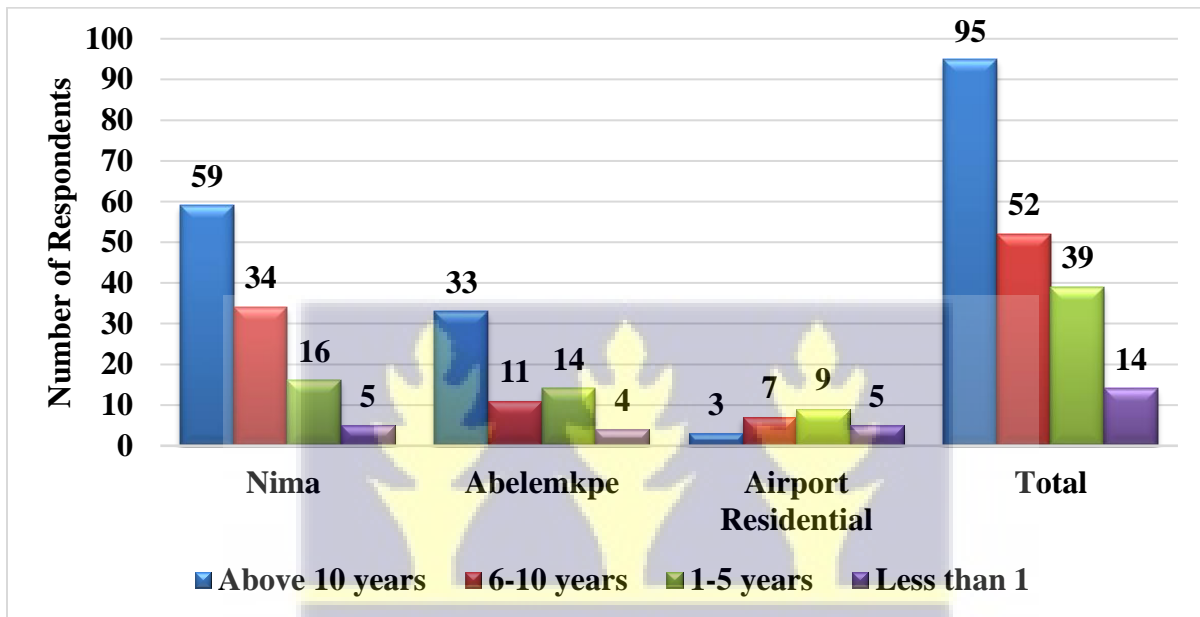


Figure 5.1: Number of years in retailing

Source: Field survey

From the survey (Table 5.3), the majority of the respondents in Nima (68%) and Abelemkpe (55%) indicated that they have not registered their outlets. This was attributed to the cumbersome procedures and financial constraints. Others also admitted they were not aware they were required to formally register their enterprises. However, the majority of respondents in Airport Residential Area (54%) indicated they have registered their outlets. This means that retailers in Airport Residential Area were relatively more compliant with the registration of their retail outlets as required by the law than the other two study communities.

Table 5.3: Registration of retail enterprise

Study area	No	Yes	Total
Nima	77(68%)	37(32%)	114
Abelemkpe	34(55%)	28(45%)	62
Airport Residential	11(46%)	13(54%)	24
Total	122(61%)	78(39)	200

Source: Field survey

Retailers were asked about the sources of capital for setting up their outlets. Three sources of start-up capital were listed as presented in Figure 5.2. These included self-funded using personal savings, loans, gifts, and remittances from relatives and friends, as well as institutional credits from banks or governmental institutions. The majority of retailers, 34%, 17%, and 6% in Nima, Abelemkpe, and Airport Residential Area respectively indicated they self-funded their enterprises. Only an appreciable minority of retailers used institutional credits to establish their outlets. Respondents explained that the lack of knowledge, burdensome requirements and formalities imposed by institutions such as the banks and credit co-operatives are accountable for the lack of interest in seeking institutional assistance.

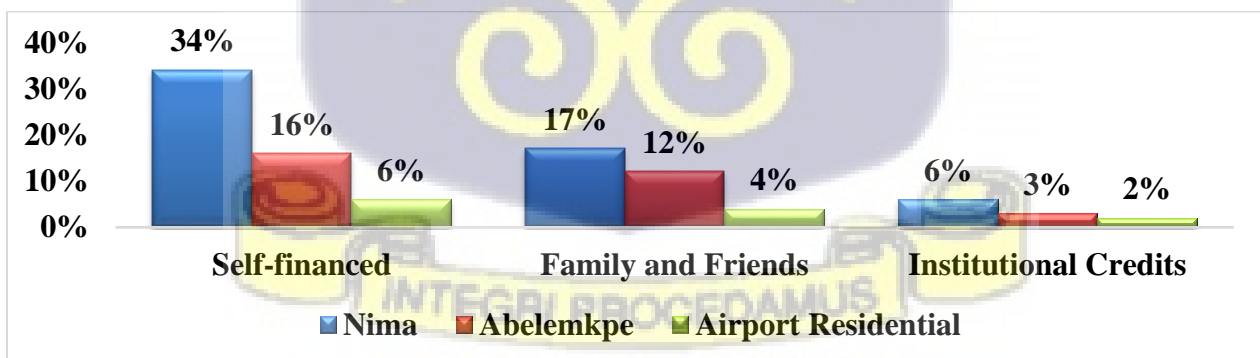


Figure 5.2: Sources of start-up capital

Source: Field survey

With respect to retailers' residential status, the study also revealed that most (75%) retailers reside in the study communities (Figure 5.3). Those retailers who lived out of the study communities indicated they live in the neighbouring communities, including Dzorwulu, Achimota, Roman Ridge, Mamobi, Alogboshie, Tesano, Pig Farm, New-town, and Kanda, among others. This shows that not all retail outlets are owned by residents but also by people who lived outside the community as 24% of retailers sampled reside outside the study communities. Some of the retailers who resided outside the communities stated they formerly stayed in the communities but had to leave due to the expiration of their tenancy agreement. The lack of available space in the current residency pushed some retailers to seek retail space in their neighbouring communities while others stated it was due to the sphere of influence of the community in retailing. By implication, the movement induces the proliferation of retail outlets in some urban communities as well as a key indicator of the overall economic fitness of the community.

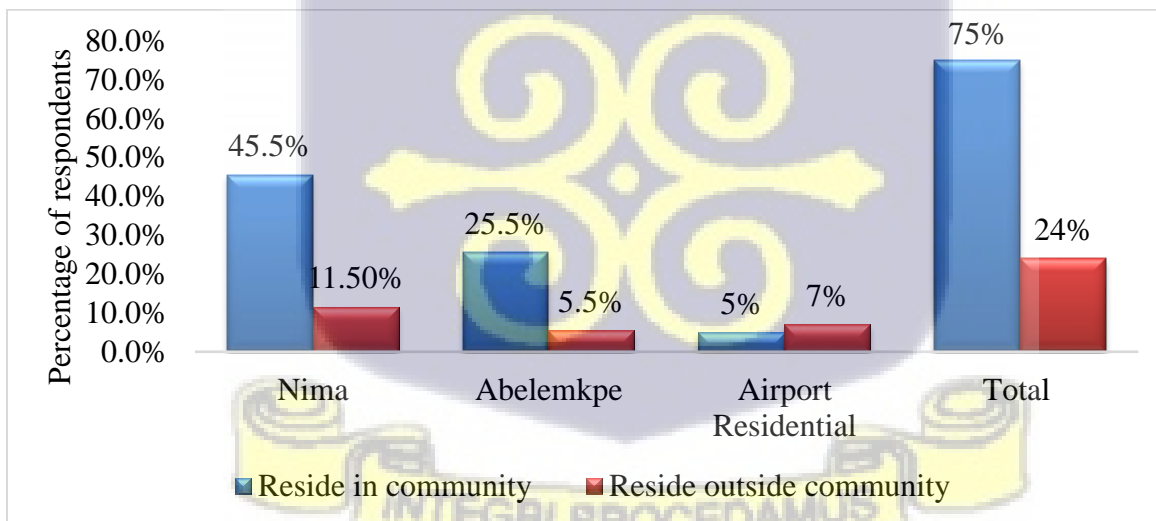


Figure 5.3: Residency of retailers

Source: Field survey

5.3 Retailers' Reasons for Operating Retail Outlets

People engaged in retail are influenced by several reasons. Therefore, there is a need to ascertain the reasons behind the engagement in a retail business by retailers, to enable the study to identify the significant contributing factors leading to the spatial proliferation of retail outlets. To assess these reasons, retailers were asked an open-ended question about the reasons that made them establish a retail outlet. Unquestionably, the underlying aim of every business is to make money or profit. It is noted earlier by Chu (2007) that income or profit is the primary reason for entrepreneurship in Ghana. Therefore, the study excluded monetary reasons given by retailers from the analysis. Beyond the monetary reasons, the 7 (seven) key reasons mentioned by retailers are presented in Table 5.4.

Table 5 4: Retailers' reasons for setting up retail outlet

Motivational Factor	Nima	Abelemkpe	Airport Residential	Total
Unemployment	39(34.2%)	17(27%)	7(29.2%)	63(31.5%)
Market niche/opportunity	7(6.1%)	8(10%)	3(12.5%)	18 (9%)
Supplementary income	5(4.3%)	7(13%)	2(8.3%)	14(7%)
Lack of skills and opportunity	21(18.4%)	5(8%)	3(12.5%)	29(14.5%)
Freedom and independence	9(8%)	7(13%)	0(0%)	16(8%)
Formal job dissatisfaction	8(7%)	11(18%)	6(25%)	25(12.5%)
Skills and knowledge acquired	25(22%)	7(11%)	3(12.5%)	35(17.5%)
Total	114(100%)	62(100%)	24(100%)	200 (100%)

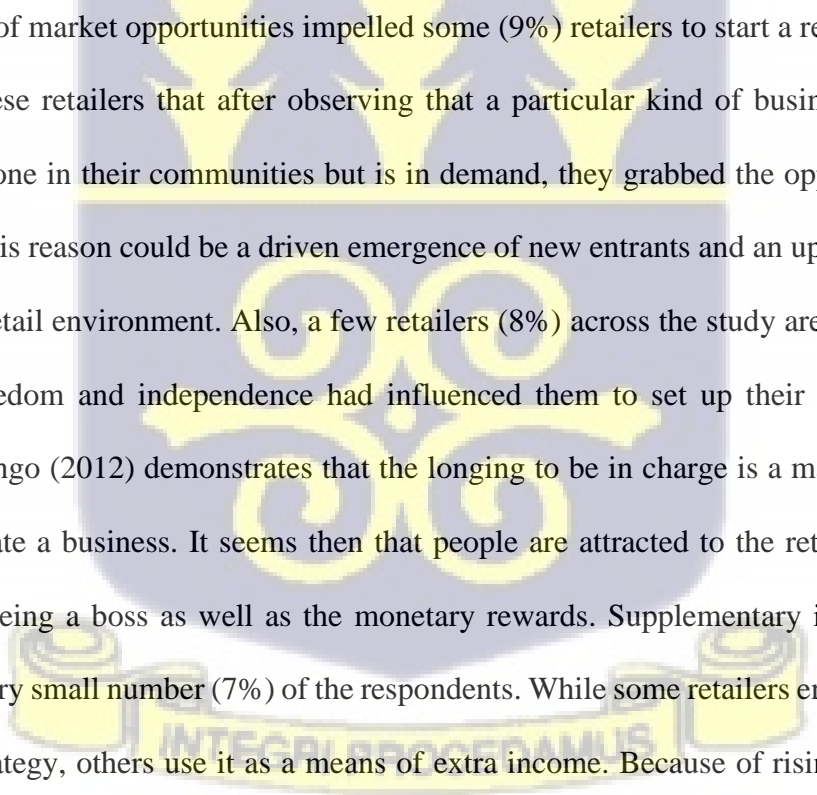
Source: Field survey

From Table 5.4, the majority of respondents in the study communities, thus 34.2%, 27% and 29.2% in Nima, Abelemkpe and Airport Residential Area respectively indicated unemployment as the major reason that propelled them to establish a retail outlet. This implies that socio-economic

differences between the three communities had an insignificant influence on unemployment rates. This phenomenon has resulted in an increase in people's entrepreneurial orientation, which is encouraged by conditions such as an increase in the residential population, which naturally generate the economic climate and market required by retail outlets to operate. This also means retail trade plays an important role in reducing unemployment and poverty among the growing urban populations.

Skill and knowledge acquired was mentioned by 17.5% of retailers as their reason with Nima having the highest response rate (22%). This could be because an appreciable number of retailers in Nima obtained apprenticeship training compared to the other study communities (see Table 5.2). In interactions with the retailers, some elaborated that the product and services they rendered in their retail outlet relate to the skills they have gained through domestic responsibilities or apprenticeships. This infers that skills are important in running some retail businesses and therefore retailers tend to set up their outlets based on available knowledge and skills, particularly those that focus on providing services such as hairdressing, dress-making and repair services. Contrarily, 14.5% of respondents indicated a lack of skills and opportunity as the reason for setting up a retail outlet. They further explained that starting a retail business was the only available option since securing a formal job demands some level of formal education and proficiency. In Nima, this response is not surprising as the profile of retailers shows that most of them had no or low level of education in comparison to the other two study areas.

Another 12.5% of retailers cited various job dissatisfaction as a driving force behind their decision to open a retail outlet (Table 5.4). These include low remuneration from formal employment, job insecurity, disagreements with management, and retrenchment among others. Some respondents added that retailing has been profitable for them since leaving their formal positions. For example, a female provision retailer in Abelemkpe who lost her employment in the formal sector indicated that she is not dissatisfied because she is generating more income than she did previously. This suggests that formal sector work is steadily becoming a distant option for urban dwellers as a result of the poor conditions of service.

The crest of the University of Ghana is a watermark in the background. It features a shield with three golden flames at the top, a central golden emblem, and a banner at the bottom with the Latin motto "INTEGRITAS PRIMUS".

The availability of market opportunities impelled some (9%) retailers to start a retail trade. It was explained by these retailers that after observing that a particular kind of business is not being operated by anyone in their communities but is in demand, they grabbed the opportunity to start that business. This reason could be a driven emergence of new entrants and an upsurge of product categories in a retail environment. Also, a few retailers (8%) across the study areas indicated that the urge for freedom and independence had influenced them to set up their outlets. A study conducted by Singo (2012) demonstrates that the longing to be in charge is a major factor in the decision to initiate a business. It seems then that people are attracted to the retail sector by the opportunity of being a boss as well as the monetary rewards. Supplementary income was also indicated by a very small number (7%) of the respondents. While some retailers engage in retailing as a survival strategy, others use it as a means of extra income. Because of rising job insecurity and poor wages, especially among salaried workers, the latter reason for working multiple jobs is becoming important. Therefore, this response may suggest that some people especially wage

workers are motivated to set up a retail outlet as a means to make an additional income to offset low remuneration. It was also reported by the Ghana Statistical Service (2014) that, in Ghana, about 13.9% of the working population was engaged in multiple jobs in 2013.

Based on the responses pointed out, it is clear that retailers have different reasons to establish retail outlets depending on the prevailing opportunity and constraints in their environment. These are both necessity-driven and choice-driven, as shown by the responses and therefore people will continue to open retail outlets as long as these reasons prevailed

5.4 Factors influencing the choice of location to set up retail outlets

Knowing the reasons that drive retailers to set up retail outlets, this section presents the factors that informed the retailer's choice of location. This is imperative for understanding the factors influencing the spatial dynamics observed in the distribution of retail outlets in the study areas. In light of this, the subsequent sections present the factors that influence the location decisions of retailers when siting up their retail outlets in residential communities.

5.4.1 General Location Factors

The study examined four general factors that are likely to influence retailers' decision to locate their retail outlets in the study communities, and this includes retailers' environment, space

environment, buyer environment, and policy and regulatory environment¹. Respondents were asked to indicate which of these factors influenced their decision to locate their retail outlets (Table 5.5).

Table 5 5: Main locational Factors

Factors	Nima		Abelemkpe		Airport Residential	
	Yes	No	Yes	No	Yes	No
Retailer environment	78%	22%	73%	27%	67%	33%
Space environment	88%	12%	82%	18%	95%	5%
Buyer environment	93%	7%	89%	11%	92%	8%
Policy and regulatory environment	52%	48%	59%	41%	81%	19%

Source: Field survey

Table 5.5 shows that more than 50% of retailers across the three study communities agreed that all the factors influenced their decision to locate. By implication, retailers in the study communities operating like rational beings, select retail sites based on observations and available information in these decision-making environments. The results also suggest that the consideration of these factors in the decision to locate is not contingent on differences in the socio-economic status of the communities as the majority of the sampled retailers agreed that their retail outlet location was influenced by these factors. The result also shows that an overwhelming proportion of retailers across the study communities agreed that the buyer environment and the space environment have a significant influence on the decision to locate. This may be attributed to the fact the retailers are

¹ Refer to the explanation of these concepts under section 2.9 in Chapter 2.

aware that the composition of these environments in the communities plays a significant role in the location, operations and success of their retail business.

Despite the high response rate of agreement, there were variations across the study communities that can be observed in Table 5.5. For instance, the percentage of respondents who agreed that the policy and regulatory environment influenced their decision to locate was highest in Airport Residential, with an 81% response rate. It can be suggested therefore that retailers in Airport Residential tend to agree with policies and regulations governing the location and operation of retail outlets as compared to Abelemkpe and Nima. One case of compliance with the policy and regulatory environment is observed in Table 5.3 where the majority of retailers had registered their outlets in Airport Residential Area. This could imply that relatively more retailers in Abelemkpe and Nima are not in compliance with government policies and regulations on siting outlets.

5.4.2 Level of Influence of Factors

The study also asked respondents to indicate to what extent retailers' environment, space environment, buyer environment, and policy and regulatory environment influenced the decision to locate their outlets. The findings in this section are significant because they provide light on the degree to which mediating neighbourhood characteristics impact retailer decision to locate as shown in Table 5.6.

Table 5.6: Extent of influence of the main locational factors

Factors	Study Area					
	Nima		Abelemkpe		Airport Residential	
	Mean	SD	Mean	SD	Mean	SD
Retailer environment	3.51	1.22	3.21	1.44	3.54	1.47
Space environment	3.45	1.21	2.76	1.52	3.56	1.26
Buyer environment	3.59	0.36	3.47	0.41	3.79	0.81
Policy and regulatory environment	1.81	2.07	2.91	1.50	3.73	1.33

Cronbach's $\alpha = 0.859$ SD: Standard Deviation

Source: Field survey

Generally, the result from Table 5.6 shows that most respondents in Nima, Abelemkpe, and Airport Residential Area indicated buyer environment as the utmost important factor that influenced their decision to locate their retail outlets. The high priority placed on the buyer environment in the study areas was quite expected since it has been recognized and ranked as one of the most significant factors in determining the geographical distribution of retail outlets (Alieva, 2017). The knowledge of the demographics of the population of an area such as the location of population, lifestyles, disposable income, and household size are imperative as it does not only inform the location of an outlet but also influences other outlet formats such as product to offer, marketing styles, and outlet structures among others (Turhan et al., 2013; Onstein, et al., 2020). This could therefore imply that retailers in the study communities ultimately seek to identify and understand the characteristics of potential customers in their communities before setting up a retail outlet. Further, the results demonstrate that regardless of the socio-economic differences of the study areas, the buyer environment is the primary and most important factor for the location of retail outlets. However, the influence of the buyer environment is highest in Airport Residential Area than in the two other study areas. It was revealed by retailers in Airport Residential that zoning restrictions limiting access to retail space, resulted in taking a keen interest in the dynamics of the

buyer environment. Therefore, they focused on identifying potential buyers as well as their demographic features such as location, lifestyles, income level, occupation, family characteristics, religion and culture to decide on retail outlet location and formats.

Comparatively, there were marked variations in the ranking of the other factors across the three study communities. For instance, the policy and regulatory environment was ranked the second most important factor in Airport Residential Area, while in Abelemkpe was the third factor and ranked the least factor in Nima. This further indicates that retailers in Nima pay little or no attention to policies and regulations in siting their retail outlets compared to Abelemkpe and Airport Residential Area. Therefore, the levels of adherence to government policies, laws, and regulations reflect in the residential differentiation.

5.4.3 Underlying Location Factors

Retailers were asked an open-ended question to indicate specific factors that influenced their decision to locate their retail outlets. The results from Table 5.7 shows the majority of respondents, thus, about 30%, 29% and 32% in Nima, Abelemkpe and Airport Residential Area respectively indicated that the most common factor that influenced the decision to locate their outlets was proximity to customers. This was expected as it reaffirms the earlier importance given to the buyer environment. This explains why majority of retail outlets were found to be located in densely populated areas.

Table 5 7: Factors influencing the choice of retail outlet location

Factors	Nima	Abelemkpe	Airport Residential	Total
Proximity to customers	34 (30%)	18(29%)	10(42%)	62(31%)
No rent for space	18(16%)	14(23%)	4(17%)	36(18%)
Existing cluster of retailers	22(19%)	10(16%)	6(25%)	38 (19%)
Inherited	2 (2%)	4(6%)	0(0%)	6(3%)
Lack of alternative location	16 (14%)	6(10%)	2(8%)	24(12%)
To minimize competition	14(12%)	4(6%)	0(0%)	18(9%)
To cater for domestic responsibility	8 (7%)	6(10%)	2(8%)	16 (10%)
Total	114(100%)	62(100%)	24(100%)	200 (100%)

Source: Field survey, 2020

It also reinstates that, irrespective of the residential neighbourhood, retailers recognized customers as the backbone that keeps the retail business in residential areas afloat. This finding to some extent confirms the assumption of the central place theory that consumers act rationally by visiting the nearest centre that offers the goods and services they require, and as such, retailers also act rationally by strategically locating their target consumers and positioning their outlets accordingly (Reigadinha et al., 2017). In turn, the desire to be close to customers promotes the clusters of outlets observed in the three study communities (see Figure 4.2).

Another factor mentioned by the respondents to inform the site selection of their retail outlets was the existing cluster of other retail outlets within the community. This implies that retailers are aware of locations that have high demand thresholds, and this is usually located around the existing business cluster. Hence for a new entrant, locating far away from the cluster may induce lower patronage. However, there were variations in the explanations given by retailers for locating near

existing retail clusters. For instance, in Airport Residential Area, retailers noted that they had no choice of retail space, as the area is limited by zoning restrictions as well as restrictions from landowners limiting the use of their premises for retail trade. And therefore, had to locate near the established retail centre in the area. This explains the high clustered pattern in Figure 4.2 along the road corridors at the fringes of the area and the lowest average nearest neighbour index recorded. In Abelemkpe and Nima, retailers indicated that their choice to locate near existing retail clusters was to tap into the existing distribution of consumers, reduce costs and increase profits. In Nima, some of the respondents stated that they were located near the existing cluster for a sense of security.

While locating near other retailers influenced the location for some retailers, some 9% of respondents located at their current location to minimize competition. Thus, some retailers strive to locate far away from retail clusters, especially from locations selling similar goods to establish local monopoly power. At the community level, there was a significant difference in this response. Abelemkpe and Nima recorded 6% and 12% respectively, while there was no record of this response in Airport Residential Area. A hairdresser from Abelemkpe explained that at her previous operating site, there were too many hairdressers, so she chose to relocate her outlet home to improve her clientele and profit margins. This implies that the high density of retail outlets located in Abelemkpe and Nima tends to induce a high number of retailers selling similar goods and services, and therefore some new entrants thrive to find a location within the neighbourhood with less competition to make profits. The absence of this response in Airport residential Area may be

attributed to the limited retail space in the area and therefore retailers do not have the luxury of alternative space to minimize competition.

Further, about 18% of retailers across the study communities mentioned that their decision to locate at their current site was because they did not have to pay rent for the use of space. Some retailers stated that because they own residential properties or family/friends' properties, they do not worry about rent payments. This also indicates that social ties also influence the location of retailers. In Nima, some retailers explained that renting space for business in Accra can be quite expensive, especially for poor households, who mostly do not have enough start-up capital, and would rather use available spaces in their abode to save on rent. They also indicated that the use of their retail space rent-free adds massively to their profit margin. In Abelemkpe, it was also revealed that the need to cut down on rent compelled some people to build an extension to their residential property or convert the frontal of their properties for commercial activities. Interviews with the Municipal Authorities indicated that one of the key elements of the establishment of retail outlets in residential neighborhoods is the operators' rights of ownership, which allows them to freely engage in economic activities at home. Consequently, the need to enjoy the freedom of security of tenure may partly account for the proliferation of retail outlets in the study areas.

Again, 12% of respondents (Table 5.7) mentioned a lack of alternative locations to have influenced their locational decision. To these retailers securing a convenient retail location within their residential abode was imperative as city authorities in their previous retail sites tend to harass them, especially in cases of occupancy of public spaces and public right of way. This suggests that

retailers would have preferred to have their retail outlets at the most suitable locations if they had that opportunity but due to the absence of retail space options some of them are compelled to locate at their current locations. The inability of the retailers to obtain operation sites elsewhere partly accounts for the proliferation of retail units competing with houses in residential neighbourhoods. For instance, it was indicated by some retailers in Nima that the overflow and congestion in the Nima Market, compelled some of them to locate at their current sites. Overa (2007) for instance correlated that, in 1972, home-based trading in Accra expanded when the Makola market was demolished. This forced most sellers to relocate along the corridors of residential areas. In Abelemkpe, a retailer recalls that her decision to locate at her current retail point is to avoid harassment from the city authorities following the prohibition on street hawking on some principal streets of Accra. This could mean that the restrictions on street hawking in the central business district by the Accra Metropolitan Assembly have caused a redistribution of retailers towards residential enclaves.

For 10% of retailers, domestic responsibilities influenced their retail location. Retailers explained that operating from their current location has made it easier to combine work with domestic responsibilities. A 36 year old female respondent in Nima explained that she formally had her stall at Tudu but had to relocate to her house to help take care of her father who had a stroke. This suggests that the increasing number of retail outlets in residential neighbourhoods is also as a result of retailers' quest to perform family and household duties. This response is also not surprising as most retailers sampled across the study neighbourhoods were females and married. And implies extra family and domestic responsibilities. Some respondents explained that it also makes it easier

for other household members to get involved and support the running of the outlet. This may reinstate the reasons for the engagement of teenagers in retailing.

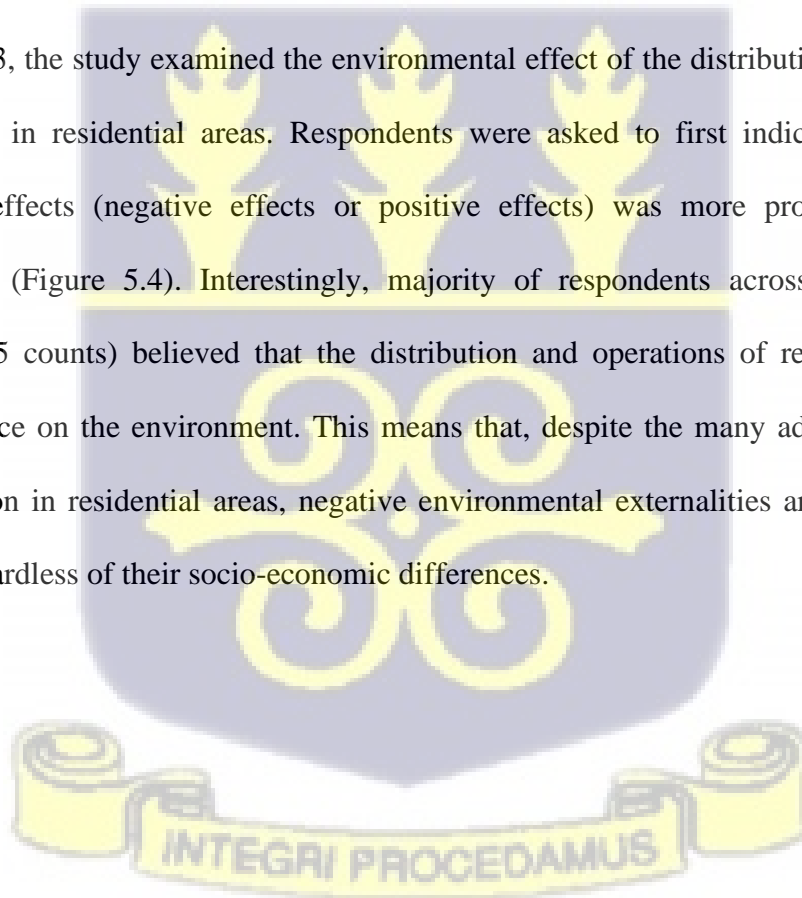
A few respondents (3%) owned their retail outlet location by inheritance. For example, in Nima, a 34 years old woman indicated that her house and her business were inherited from her parents. She further stated that managing the family business was easy as since her childhood, she has been accustomed to observing the processes involved in the business. This finding implies that inherited retail outlets number among the reasons for the growth, sustainability and a positive spread effect of retail activities in residential areas. This reason, however, was not recorded in Airport Residential Area. This might be because high-income neighbourhoods and high family incomes provide children with more opportunities to work in other sectors of the economy, making them less interested in running their parents' retail businesses. Prior study has demonstrated how young people have taken over their parents' home retail businesses, ensuring its long-term viability (Gough, 2010).

Conclusively, it can be discerned generally from the discussion above that unlike designated markets and business centres which are planned clusters, the location of outlets within residential areas as suggested by Widaningrum et al (2018) is spontaneous. However, as the sustainability and profit margin of a retail business is strongly dependent on the location (Ciari et al., 2008), retailers do not locate haphazardly in their residential areas but do so based on some information, experiences, or observations. And these location decisions have influenced changes in the spatial

and economic environment of residential areas, as well as created sustainable growth for retail outlets.

5.5 Environmental Effects of the Distribution of Retail Outlets

The availability of a variety of retail establishments within walking distance of homes or workplaces has become a critical factor in creating economically sustainable residential neighbourhoods around the world (Sevtsuk, 2014). However, the distribution of these establishments could have a different environmental effect on the residential landscape. To address study objective 3, the study examined the environmental effect of the distribution and operations of retail outlets in residential areas. Respondents were asked to first indicate which of the environmental effects (negative effects or positive effects) was more pronounced in their neighbourhoods (Figure 5.4). Interestingly, majority of respondents across the three study communities (25 counts) believed that the distribution and operations of retail outlets had a negative influence on the environment. This means that, despite the many advantages of retail outlet distribution in residential areas, negative environmental externalities are very evident in urban areas, regardless of their socio-economic differences.



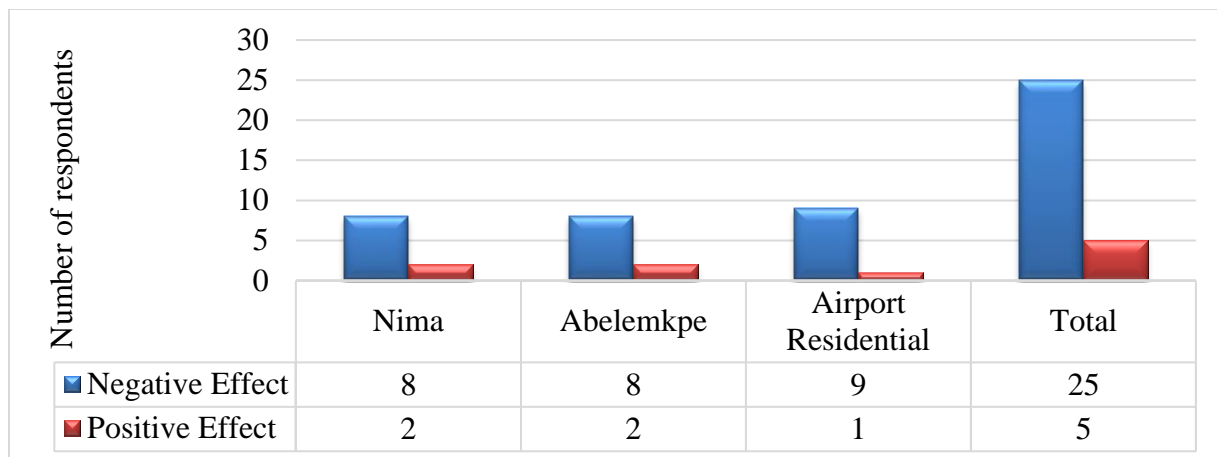


Figure 5.4: Responses on the environmental effect of retail outlets

Source: Field survey

Comparatively, a larger proportion of buyers in Airport Residential Area agreed that retail outlets have negative effects on their residential environment. This may be a reference to the fact that the majority of residents frown upon the activities of retailers. Previous studies have also shown that negative environmental externalities tend to outweigh positive environmental externalities in Sub-Saharan cities, as most negative challenges arising from retail distribution are either ineffectively controlled or ignored (Nguluma and Kachenje, 2015; Chirisa and Bobo, 2018). However, this finding is not consistent with retailers' responses as most (78%) of them indicated that their activity had a minimal negative effect on the environment. This response may be a result of the fear that retailers want to appear doing the right thing to avoid any contradictions from the study. The few (22%) that agree stated sanitation issues as a challenge emerging with the distribution of retail outlets. The succeeding section outlines various responses of the buyers on the effect of the distribution of retail outlets on the residential environment.

5.6 Buyers' opinion on the environmental effects

As shown in Table 5.8, more than half of the respondents across the residential neighbourhoods reported various forms of environmental pollution associated with the distribution of retail outlets. These include air pollution, noise pollution, and littering. It was expressed by a 41-year-old male respondent in Abelemkpe that, *“Retailers throw refuse into the gutters which chokes the drains and over time has induced health and flood challenges in the area. For example, near my home, there is a provision outlet owner who always leaves the cartons and rubbers after her sales without disposing of them, and the winds eventually scatter them all over. It sometimes takes a Zoomlion woman to sweep them”*.

Table 5.8: Effect of retail outlet distribution on residential environment²

Impact	Nima	Abelemkpe	Airport Residential	Total
Pollution Challenges	9	6	7	22
Aesthetic Deterioration	5	4	8	17
Development of squatter area	-	3	0	3
Traffic Congestion	7	3	2	12

Source: Field survey, 2020

“The drinking spot behind my house plays loud music until the early hours of the morning and is a great nuisance to the people around. Concerning this, we have written to the local authorities. Their presence often invites strangers into the community, posing a significant security risk”, says another 28-year-old female respondent from Airport Residential Area.

² Totals in the table may exceed sampled number as respondent indicated multiple responses

“When retail activities were minimal, there was a little challenge with gutters being choked with refuse, but now the rise in outlets has also increased rubbish around, choked gutters, and increased the noise in the area,” said a 59-year-old male respondent from Nima.

The statements above demonstrate that the presence of retail outlets in the study communities is steadily undermining the purpose and livability of these areas, and go further to imply that without retail outlets, the residential areas would have been less polluting. It also suggests that environmental pollution increase with the proliferation of retail activities. And these forms of pollution are not conducive in a domestic setting. Comparatively, the levels of pollution were observed to vary due to neighbourhood differences. It was observed that Airport Residential Area had the least environmental pollution compared to Abelemkpe and likewise, Abelemkpe has the least compared to Nima.

The low levels of environmental pollution in Airport Residential Area may be accorded to the fact that most retailers complied with environmental regulations as compared to the other two study neighborhoods. It was also revealed by the buyers that retailers were obligated to keep a hygienic environment to attract the high and affluent within the area as well as avoid complaints from residents. Conversely, the high environmental pollution in Nima may imply that environmental hygiene practices were less followed. For instance, in Nima, field observations revealed that foul odors were present, particularly in areas where food was prepared and sold. The odors came from the customer latrines and sullage or greywater. The majority of retail points in Nima were covered

in refuse from retailers' daily waste (see Figure 5.5). The unmanaged refuse creates an unsightly urban vista.



Figure 5.5: Rubbish left after sales in Nima
Source: Field survey

Furthermore, waste from daily sales is typically disposed of in the same manner as household waste, so where waste collection systems are disorganized or ineffective, retailers may exacerbate the problem. Loud music was also heard primarily from recreational establishments such as drinking bars. Similarly, dust from charcoal operators was a common sight, particularly in Nima and Abelemkpe, influencing not only the quality of air for residents but also the aesthetic landscape of the areas where they were sold (see Figure 5.5). The situation deteriorates when the wind blows, as dust can get into people's eyes, and houses, and contaminate exposed edible commodities, posing health implications to residents. Similar findings were almost non-existent in Airport Residential Area except along Casely Hayford Street and Kofi Annan Street where there was some litter around the retail points.

Again, about 12 respondents stated that traffic congestion is related to the distribution of retail outlets. Responses from Table 5.8 shows that traffic congestion is comparatively higher in Nima than in the other two study communities. This might be ascribed to the high number of retail outlets in the area, which are mainly positioned along the roadways. Respondents also indicated that traffic congestion was caused by retailers' wares spilling out onto the street and the unavailability of parking space for their customers, who must park on the street to make their purchases and was commonly associated with eateries and drinking bars. This was observed during field mapping as presented in Figure 5.6, where retailers were seen displaying their wares on the roads obstructing both pedestrian and vehicular movement.



a. Airport residential Area



b. Abelemkpe



c. Nima

Figure 5.6 Retailers displaying their wares on the pedestrian walkways

Source: Field Survey

It was also communicated by a 41-year-old female respondent in Nima that fumes from vehicles were a major environmental concern that stemmed from traffic congestion which in turn affected

the quality of products of retailers located very close to the roads. She went on to say that retailers have been repeatedly asked to move their outlets backward to reduce contamination from the fumes, but this has fallen on deaf ears. In a related point, some respondents explained that the placement of retail outlets on every corner of the streets is causing accidents because drivers are unable to see incoming objects or people. Pedestrians also risk their lives as a result of being forced to walk on the road's edge to avoid harassment from retailers or pushing down or stepping on their goods. For instance, it was stated by a 39-year-old male buyer in Abelemkpe that the location of outlets along the road has a significant effect on retailers, as he recalls that, *"Last year (2019), we witnessed two crashes on the road where the drivers drove into a cosmetic shop and a hairdressing salon. Drivers whose brakes fail, frequently collide with retailers whose containers are very close to the road"*.

Another three respondents mentioned the development of squatter areas and its associated environmental impacts as a result of retail outlet distribution. Interestingly, this viewpoint was only expressed in Abelemkpe. In comparison to the other two study communities, Abelemkpe was found to have some open areas that are encroached upon owing to a lack of or ineffective developmental control. A 64-year-old male respondent in Abelemkpe expressed that,

"About 15 years ago, retail outlets were not pronounced as now, every corner in the area is occupied by one form of outlet. I remember the open area near the Primary school was a vibrant area to come and sit to watch football games, but now the place has been taken over by squatters and is popularly known as Mawa, this is because vendors who sell in front of the park have turned the place into both their workplace and residential abode. It

started with one kiosk and then another, now the place is a complete shanty area. The people there have poor garbage collection plans and the absence of sewers in this area sometimes caused raw sewage to be passed into the drains. This is accompanied by prolific houseflies in that area. This produces unsanitary conditions and health risks to residents''.

This statement implies that retailers, particularly those without housing units, tend to use their outlets as living spaces. Field observations in Abelemkpe Mawa confirmed this. This was confirmed further by the ariel view of Mawa from Google Earth, as shown in Figure 5.7

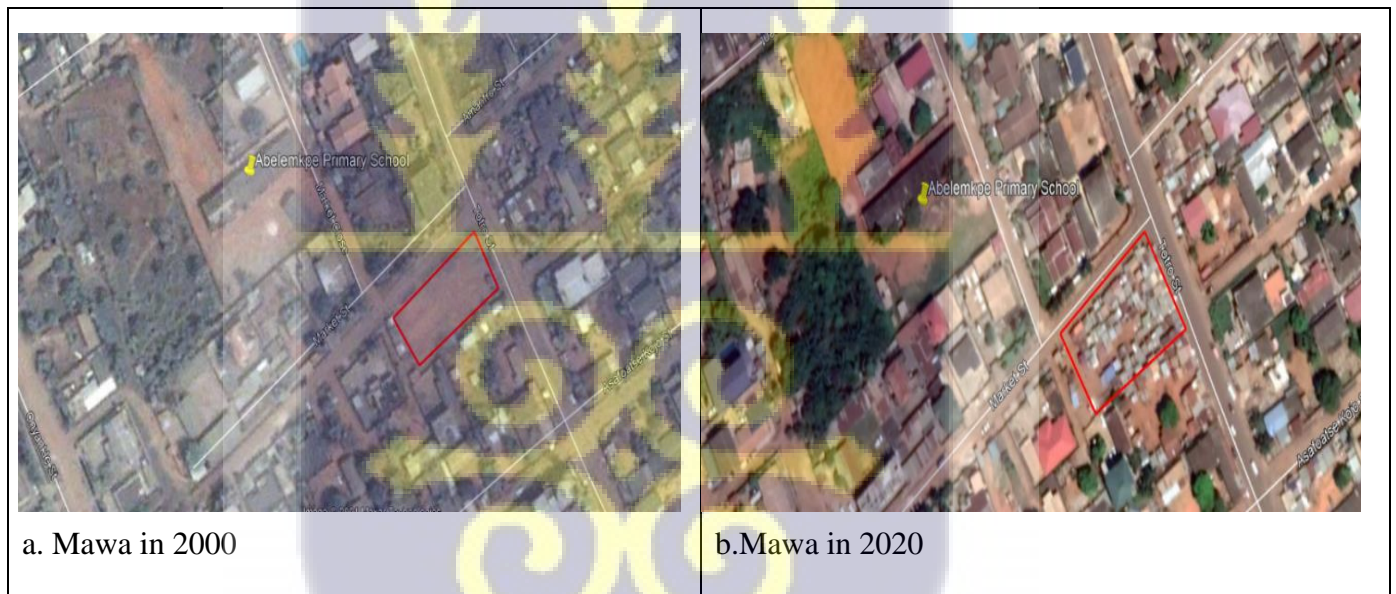
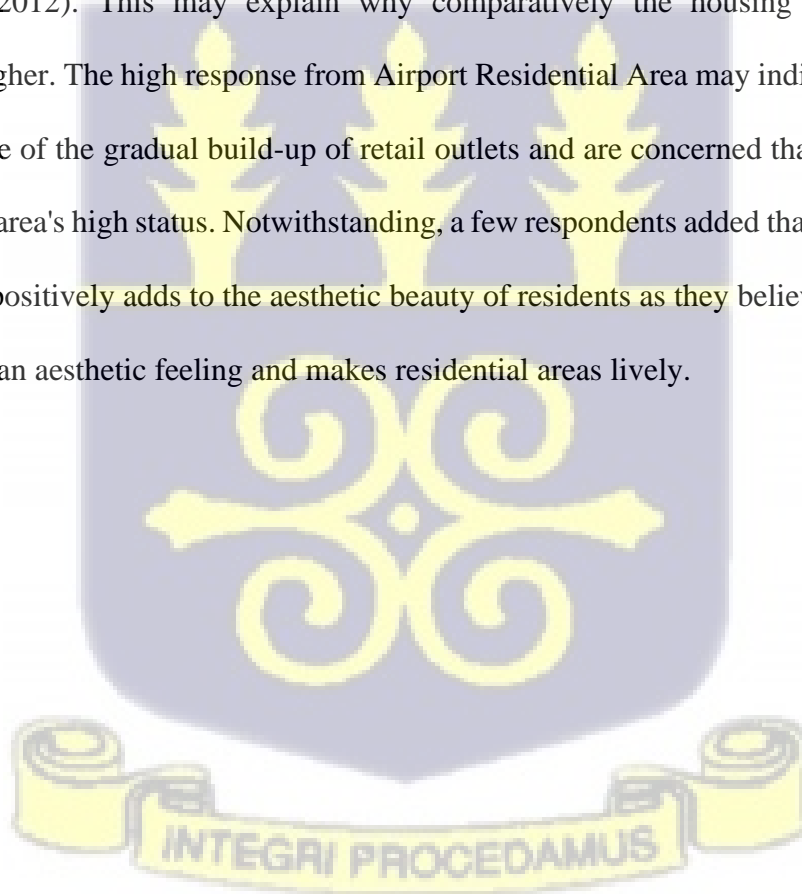


Figure 5.7: Satellite image showing Mawa in 2000 and 2020

Source: Google Earth

About 17 respondents mentioned various aesthetic deterioration issues as an effect of the location and operation of retail outlets in the study areas (Table 5.8). Some respondents explained that dwelling alteration and extensive use of temporary structures such as table-tops exhibit a high nuisance of aesthetic defacement. It was also explained by a respondent in Airport Residential Area that the increasing density of retail outlets in the area sometimes decreases the residential value. This is no surprise as it was found earlier by Strassmann (1987) that neighbourhoods where the aesthetic landscape has been deteriorated by many retail enterprises, the value of buildings was considerably lower, especially in low-income areas in comparison with high-income areas (cited in Ezeadichie, 2012). This may explain why comparatively the housing value in Airport Residential is higher. The high response from Airport Residential Area may indicate that residents have taken notice of the gradual build-up of retail outlets and are concerned that the proliferation will devalue the area's high status. Notwithstanding, a few respondents added that sometimes siting of retail outlets positively adds to the aesthetic beauty of residents as they believe that some retail design provides an aesthetic feeling and makes residential areas lively.



CHAPTER 6

POLICY IMPLICATION OF THE PROLIFERATION OF RETAIL OUTLETS

6.1 Introduction

In response to the fourth objective of the study, this chapter examines relevant retail policies and regulations to determine policy implications of the proliferation of retail outlets and identify ways for ensuring effective retail outlet distribution in urban areas. In light of this, the following sections examine and analyze current legislation governing the operation and siting of retail outlets in Accra's urban residential areas, drawing widely on the Trade Policy, National Micro, Small and Medium Enterprise Policy, Spatial Planning Policies, Accra Metropolitan Assembly (A.M.A) by-laws, Public Health Policy, and Local Government Act 462.

6.2. Trade Policy

The trade policy is a framework that set guidelines for the implementation of domestic and international trade agenda. The primary premise behind the policy is that the private sector is the engine of growth, with the government creating a trade-enabling environment to actively encourage private sector activities. This will be accomplished using the complete range of trade policy tools across seven thematic areas; however, two thematic areas which are related to the distribution and operation of retail outlets in residential areas have been selected for examination. These include domestic trade and distribution, and consumer protection and fair trade. Under the selected themes, major-related retail policy components were identified and presented in Table 6.1. Each thematic area is postulated into components, output and action.

Table 6.1: Summary of related retail policy

Component	Context	Output	Action
Thematic Area: Domestic Trade and Distribution			
Encouraging Domestic Trade	A considerable proportion of domestic trade is undertaken on an informal basis which limits the scope for growth, development and efficiency gains.	To bring traders into the formal sector, broaden the tax base and enable micro and small traders to access formal institutional support to expand their businesses.	Government will improve the speed and efficiency of business registration and licensing through computerization and simplification of procedures.
			Government will introduce lower tax rates for micro and small traders so that taxation is not a disincentive to formalizing business.
Thematic Area: Consumer Protection and Fair Trade			
Health and Safety of Consumers	Poor quality, dangerous content and poor handling of products can endanger the health and safety of consumers.	To ensure the health and safety of consumers.	Government will ensure the enforcement of legislation that prevents the sale of unsafe and poor-quality goods on the local market which creates health hazards to consumers.
			Government will continue pre-market controls and phase in the more efficient and effective post-market control system as and when both public and private sectors acquire sufficient capacity.
Consumption and Environment	Long-term growth in Ghana depends on maintaining a fair balance between economic interest, consumption patterns and environmental protection.	To contribute to sustainable development and long-term growth through the promotion of sustainable consumption patterns.	Government will promote environmentally-friendly consumption.

Source: Ghana's National Trade Policy (2005)

The actions are relevant to residential retailing because it seeks to provide an efficient formalize retail sector by registering and licensing businesses in a computerized and simple procedure. This is necessary for extending the government revenue base and enabling retailers to gain access to formal institutional assistance to help them grow their businesses. It also sought to foster an atmosphere that keeps track of retailers, protects customers, and preserves the environment. From the survey, the majority of retailers however indicated that they have not registered their retail enterprise (Figure 5.3). This was also affirmed by local government officials. An officer expressed that,

“Many of the outlet owners especially those operating within the residential communities do not know that per the enterprise they want to operate, they have to first register with the Registrar General Department, obtain a tax identification number (TIN) from the Ghana Revenue Authority, register with the Ghana Investment Promotion Centre (GIPC) as well as seek an operating permit from their respective Assemblies. This helps us know their intended business and location for us to advise accordingly” (Local government officer, Ayawaso East Assembly).

While some retailers pointed out that they did not know they are required to register, it was also gathered that, in cases where retailers were aware they have to formally register and seek authorization before locating their outlets, they are not privy to the procedures and legal requirements. The respondents that registered also complained about the onerous and ambiguous procedures involved in registration and obtaining permits. Due to this some retailers purposely decide to be informal. By implication daunts the government’s aims of regulating the location of retailers and formalizing all businesses in the country.

Again, the Trade policy stipulates an introduction of a lower tax regime, especially for micro and small-scale businesses (Table 6.1). However, the tax regime in Ghana is still unfavorable for most retailers and sometimes impedes their development. This was revealed during the survey where some retailers complained of the too many taxation lines administered by different authorities including the Local Government Authorities and Ghana Revenue Authority. While business taxes are necessary for national economic growth, the current tax structure places a significant burden on retailers, particularly micro, small, and medium-sized retailers. It was also disclosed by a local government official that,

“Revenues are collected based on the nature and size of the business the retailer is operating. In addition to the normal taxes, they are also required to pay levies and environmental taxes. These taxes in my opinion are very moderate and are needed to run the country. Taxes are not just imposed on them but through careful considerations, but people complain that the taxes imposed on them are very high and this result in most of them evading taxes by staying informal and invisible” (Planning Officer, Ayawaso West).

This statement confirms retailers' claims of many taxation lines imposed by the government. Also, most retailers across the study areas correlated that the taxes and revenues imposed on them to some extent cripple their meager outlets and stunt their growth. By implication, the legal frameworks on trade are rather a contributing impediment to the establishment of businesses and explain why some retailers will prefer to be informal or operate without authorization. This could explain the low levels of compliance to the policy and regulatory environment by retailers, particularly in Nima and Abelemkpe. Consequently, local authorities are unable to regulate the

development of retail outlets within residential areas since most retailers operate without their consent. The situation is worsened since most credit and incentives drawn from the government for development and expansion are targeted toward formalized enterprises. Therefore, retailers who do not have enough capital tend to use makeshift structures and table tops, particularly in low-income areas like Nima. Nonetheless, for authorities to achieve a large-scale formalization and efficient regularization of the development of retail enterprises within residential areas, the executing approaches should be re-strategized. Thus, the registration and management of data on retail outlet operators should be made the joint responsibility of the various Municipal Business Advisory Units of the NBSSI, the Municipal Statistical Department and the Municipal Planning Department (Abebrese, 2015). The Municipal Business Advisory Centre should play the lead role to reach out to retailers at their various operating locations within the municipality to register their enterprises at affordable rates and collect their digital addresses. This is to make it easier and less cumbersome for retailers to register their enterprises as well as collect reliable and adequate data that will help to effectively assess the needs of retailers. This will also keep track of retailers' activities in relation to their location and the environment for effective and workable land use planning interventions.

Furthermore, the trade policy specifically sought to ensure pre-market controls and effective post-market control systems to promote the health and safety of consumers through the enforcement of legislation that thwarts the sale of poor-quality goods and services in an unsanitary environment. Its implementation will significantly contribute to sustainable development and promote environmentally friendly consumption. In light of this, other laws and guidelines have also been enacted. For instance, the Public Health Act 851(2012) section 52 prohibits the sale of goods and

services especially food under insanitary conditions. To ensure this, the Public Health Act 851 (2012) mandates the Food and Drugs Authority of Ghana to provide and enforce standards for the sale of food, cosmetics, herbal medicinal products and household chemical substances among others. This is to be monitored through the Metropolitan, Municipal, and District Assemblies (MMDAs), particularly the Environmental Health Department. The local authorities are expected to carry out this responsibility by identifying, registering and monitoring retailers especially concerning noise management, food preparation, and keeping a hygienic place of sale within their jurisdiction. However, local authorities have failed to enforce this law in any rigorous way, resulting in unregulated negative environmental effects as evident from field observation and responses from buyers.

From the survey, most retailers (Table 5.3), especially food retailers have not been registered. The commonest type of retail trade in Ghana is the sale of Grocery and out-of-home food services which are readily available in every community (Agbezuge, 2018). This is also evident from the field mapping as these product categories dominated the retail market in the study areas. And therefore, much has to be done to ensure the safety of these food items. From interviews with the Environmental Health Officers from the municipal Assemblies, they confirmed that the unhygienic conditions within residential areas were partly contributed by retailing activities. They mentioned indiscriminate disposal of daily waste, choking of drains with refuse, and foul smell from grey waters as some environmental challenges faced with the operations of outlets. This response is also in line with the responses from buyers. It was also noted by the officers that the inability of the department to enforce the laws was due to limited institutional resources and the unwavering non-compliance attitude of retailers. An officer also indicated that some retailers who failed to

comply with the laws sometimes offer bribes to officials who go out to enforce safety laws. The officers who compromise their duties consequently put the lives of consumers at risk. It is therefore recommended that state institutions should take notes from the Town Council System in the 1970s and the 1980s which ensured that product safety and environmental hygiene laws were well-enforced due to the commitment of the officers involved (Agbezuge, 2018). To avert potential disease outbreaks and a deteriorating urban environment as a result of the uncoordinated distribution of retail outlets, local authorities must ensure that the locations where outlets are sited are kept clean. Though some education on product safety has been done on various platforms, however on the grounds, this is not enough as many retailers still do not comply and therefore public education should be intensified especially on the shared responsibility of everyone. Thus, retailers must ensure compliance with the law, law enforcers must be responsible and the consuming public must avoid patronizing products and services that are not hygienically prepared or are sold in unsanitary environments.

6.3 National Micro, Small, and Medium Enterprises (MSME) Policy

In 2019, the Government of Ghana, recognizing the importance of the growth of the informal micro and small-scale sector as having the prospect to contribute significantly to reducing the high unemployment rate as well as contribute to the growth of the economy in the country, enacted the National Micro, Small, and Medium Enterprises Policy to enhance and develop MSMEs into a thriving sector. The general objective of this policy is to promote job creation and income generation through the promotion of new and existing MSMEs as well as to improve their competitiveness and contribution to the Ghanaian economy. Like the trade policy, the strategic objectives that underpin the vision of the MSME Policy relating to residential retailing include:

- To drive the formalization of the informal sector.
- Strengthening the National Board for Small Scale Industries (NBSSI) and other related organizations to create jobs to improve local economic development.
- Expanding access to finance.
- Encourage industry spatial distribution to eliminate urban and peri-urban imbalances.

To improve and ease access to finance for the operations of businesses in the country, the policy seeks to promote credit catalyst centres and engage relevant agencies and financial institutions to develop suitable business financing products for MSMEs. The key institution to stir up and assist the MSMEs is the NBSSI. The NBSSI is a non-profit public sector organization under the Ministry of Trade and Industry. Services offered by the NBSSI include:

- To contribute to the building of an enabling environment for the development of small-scale enterprises.
- To contribute to the establishment of an entrepreneurial culture in Ghana by enabling loan availability.
- Facilitate for MSEs to get access to large and high-quality Business Development Services for their growth.

From the survey, it was revealed that more than half of the respondents have no experience in the activities of any supporting government agencies like the NBSSI. This is evident in the use of personal capital in setting up retail outlets by the majority of retailers sampled (Figure 5.2). This implies that most retailers are not aware of the existence of the institution or are oblivious to the procedures to acquire capital assistance from the institution. This may also suggest that the education on the institution among residential retailers is very low.

Again, the inability to access financial assistance from government institutions is attributed to the failure of retailers to formally register with relevant institutions. This is because the policy and regulatory environment is generally unsupportive of informal retailing. This is evident in the emphasis by the government to transition from the informal economy to the formal economy. The formalization of MSME is very vital as this will ultimately aid to generate more and better jobs, decrease poverty and address the marginalization of the vulnerable in the informal economy (International Labour Organization, 2017). In terms of survival rate, size, growth, operating locations, and physical infrastructure, formal enterprises outperform informal enterprises (van Elk and de Kok, 2014). For the benefit of governments and society, the formalization of MSME help to keep track of physical development within municipalities (White, 2018). Formalized enterprises also reduce exposure to government penalties and fines. Besides, the call for the formalization of enterprises by the government is critical to meet and contribute to the Sustainable Development Goals (target 8.3 on decent job creation and the formalization and growth of MSMEs) (De Mel et al., 2013). For the government to achieve its formalization policy of informal enterprises, it is recommended that the underlying causes of informality have to be addressed. These include entry costs (lowering registration and licensing procedures and fees to be paid as well as improving the level of efficiency of personnel), taxes, and costs of compliance. Again, it is recommended that local authorities conduct intensive sensitization on the importance of businesses formalizing and the guiding procedures to do so.



6.4 Spatial Planning Policies

Spatial planning is often used to direct development on one of the most valued naturally endowed resources, land. Land is critical to a nation's socio-economic growth since nearly all human

activities take place in space. (Fuseini, 2016). Contemporary spatial planning in Ghana stemmed from two main developments. Thus, economic liberalization unleashed neoliberal and globalization forces that have had a significant influence on urban expansion, as has the rise of the idea of urban management which tried to address difficulties emerging from rapid urban growth. (Amaami et al., 2016). The 1993 Local Government Act 462 authorizes the Local Assemblies to enact by-laws permitting or prohibiting activities within their jurisdiction of which economic activities are inclusive. Thus section 10, subsection 3 of the Local Government Act states that the MMDAs are responsible for the development, improvement and management of human settlements and the environment in the district. Section 12, subsection 1 of the same Act further mandates the MMDAs as planning authorities in their areas of jurisdiction and assigned them to design by-laws or local plans. The content of the by-law guide what is to be located where within the districts.

However, at the time of engagement with the municipal authorities, there were no by-laws enacted by the Assemblies. This was ascribed to the fact that the Assemblies were newly carved out of the A.M.A as one of the 38 created and upgraded District Assemblies in 2018 and therefore were still in the process of drafting by-laws for their respective jurisdictions. And therefore, were still using the by-laws from the mother Assembly. In light of this, the study reviewed and analyze related residential retailing and spatial planning policies under the AMA By-law (2019). The A.M.A by-law of 2019 is an amendment of the 1995 by-law. The document was promulgated per section 181 of the Local Governance Act 936 (2016). The by-law comprehensively spells out regulations governing a total of 37 laws, however, in reviewing the document, it was noted that there is no law explicitly regulating residential retailing at the local level. Instead, the sector is regularized based

on a set of scattered and uncoordinated rules drawn from several by-laws, each one addressing different aspects including permits, urban planning and licensing. Related spatial planning by-laws on the siting of retail outlets in residential areas are outlined in Table 6.2.

From the A.M.A by-law, it was deduced that development permitting or licensing is the main instrument for controlling or managing physical development within districts. The Local Government Act 462 (1993) states that “a physical development shall not be carried out in a district without prior approval in the form of a written permit granted by the District Planning Authority” (p. V - 3474). This is entrenched in the A. M.A by-law (2019), also stipulates that the process of any business being obedient to the law starts with obtaining an operating permit. Further, Act 462, Section 64 (1) requires that “a person shall, before constructing a building or other structure or undertake any work, obtain a permit from the District Planning Authority which shall contain such conditions as the District Planning Authority may consider necessary” (Local Government Act 462, p. V - 3479). Hence the A.M.A by-law outlines the procedures of obtaining a permit before an outlet is sited, while on the grounds of changing a residential dwelling or making an extension to the building for commercial purposes the by-law further requires that one applies for a permit. It may be reasonable to argue that, the outlined regulation on development permitting stipulated in the by-law is useful for effective development management, public safety and to promote orderliness in the distribution of retail outlets in residential areas. However, in Ghana, the impact of development control is yet to be felt at the local levels, adjudging to the field survey and responses from respondents as well as findings from previous research (Andersen et al., 2015; Cobbinah and Darkwah, 2016).

Table 6.2: Related spatial planning regulation on the siting of retail outlets

Component	Action
Licensing	Any person shall not carry on any profession, occupation, trade, or business in or upon any premises or land within the area of authority of the Assembly without first applying for a Business Operating Permit (BOP).
	The fee is charged in line with the nature of business per the Assembly’s fee-fixing resolution.
	In the case of retailers who sells food, the BOP is issued by the health inspectors from the Environmental Health Department following an inspection of the hygiene of the place of operation and issued a valid personal Health Certificate by a recognized health institution.
	A person who contravenes this commits an offense and is liable on summary conviction to a fine, not more than one hundred penalty units, or a term of imprisonment of not less than thirty days and not more than six months or both. The Assembly may close down any business or suspend its activities until the permit fee is paid for the operation of the business.
Temporary Structures Permit	A person shall not construct or keep a kiosk container (means wooden and metal structures), temporal structures (means any removable structure without a permanent foundation) in the jurisdiction of the Assembly for the transaction of business without first applying to the Assembly for a license to construct and transact business
	The Assembly shall per its fee fixing mechanism determine the fee payable for the issuance of the license.
	A temporary structure that has been approved by the Assembly shall be constructed on concrete blocks.
	No temporary structure shall be used as a dwelling house
	A temporary permit that is granted by the Assembly shall be renewed every year.
	The Assembly may without prior notice, effect, or carry out instant prohibition, abatement, alteration, removal, or demolition of an unauthorized development carries out or being carried out that encroaches or will encroach on a community’s right of space (means a road, street, footpath, pavement, passenger terminal, parking area, public area, school ground, hospital ground, open space, playing field, market) or interferes or will interfere with the use of the space or obstructs watercourse.
Change of use or Building Extension	A permit may be granted for change of use, change of zoning, renovation and other land uses
	Applications for Change of Use of existing permit should include the following 1. Previous permit on the existing building. 2. Evidence of neighbourhood consultation and comments on the new use of premises 3. A written consent of the landlord.
	Non-adherence to the provisions of the Building Regulations (L I 1630), any unauthorized structure attached to any premises shall be demolished or removed on notice by the Assembly or shall be made to pay a penalty

Source: AMA By-law (2019)

From the field survey, less than half of the retailers indicated they were aware they had to visit their respective Assemblies to obtain a permit first before locating their outlet. Interestingly, less than 7% of the respondents who indicated awareness of the law complied with them before setting up their retail outlets with respondents from Nima having the most non-compliance level. By implication, the majority of retail outlets in the study communities were not legally approved by the local authorities. This was noted by all the planning officers interviewed. In the Ayawaso East Assembly, the planning officer conceded that *“Most retailers do not come to us for permits before they build and site their outlets within the municipality. Landowners do not as well consult us before giving out their space for commercial activity and this is a contributing factor to the haphazard location and increasing distribution of outlets.”*

The situation was no different in Ayawaso West Assembly, where one officer noted that: *“The fact that we continue to write stop work and produce permit on ongoing developments may be the clearest indication that people do not acquire any authorization from us before they build.”* Similarly, another officer also expressed that: *“The first thing that goes into the retailers' mind after acquiring space to trade is to dig the foundation or put their kiosks without appropriate planning permission. They are not in the known that even the material or the quantity of sand and gravels in preparation towards establishing a commercial centre has to be authorized”*. This finding is consistent with Mutillah's (2003) research study where she found out that in Kenya, Uganda, Cote d'Ivoire, and Ghana many retailers are unaware of the existence of by-laws, and have no access to them, while others know but choose to ignore them. Again, the A.M.A by-law specifically states that commercial establishments should not be used as a dwelling place, the study

confirmed from buyers that the uncontrolled distribution is resulting in some squatter areas (such as Mawa in Abelemkpe).

Furthermore, some regulations conflict with planning. For example, the National Building Regulations 1996(LI 1630), Section 8 (1, 2) state that where a person applies for a building or temporary permit, the District Planning Authority shall notify him within seven (7) days of the receipt of the application and shall within a period of 3 months thereafter notify the applicant whether the application is granted or refused. An applicant not informed of the grant or refusal of the application may after the expiry of the 3 months commence development on the basis that the application is accepted by the District Planning Authority. This is a clear contradiction to Section 55 of the Local Government Act of 1993 (Act 462), which gives the Planning Authority power to demolish any structure that does not conform to the approved scheme as well as contradicts Section 49 (1) which requires that a person obtain a permit before undertaking any physical development. In effect, the inconsistencies in the regulatory framework for urban planning limit its ability to support urban transformation in residential areas. Again, the AMA by-law prohibits the obstruction of public pathways or pavement by vehicles, goods, and items. However, from field observations and buyers' responses, some retailers flout the law with impunity.

The Zoning Guidelines and Planning Standards (2011) also provide the permissible uses of land and the space requirements that must be taken into account by anyone seeking planning permission or a development permit in specific residential areas as outlined in Table 6.3.

Table 6.3: Related permitted and prohibited commercial uses in residential classes

Residential Class	Residential Description	Permitted Uses	Prohibited Uses
High-class/Residential Zones A	The land is intended to remain as an area for low-density residential development, with a housing density of 10-15 dwellings per hectare. The predominant development will be detached houses on plot sizes of not less than 500m ²	<ul style="list-style-type: none"> ▪ Corner Shops (less than 250m²) ▪ House-based small family businesses (max 2 employees) 	<ul style="list-style-type: none"> ▪ Industrial Development ▪ Commercial Development over 250m²
Middle-class/Residential Zone B	The land is intended to provide for a variety of residential uses at net site densities of between 16 and 30 dwellings per hectare. The form of development will comprise a mixture of detached, semi-detached (duplex), row (terraced) and compound houses.	<ul style="list-style-type: none"> ▪ Some small retail development would be permissible in this zone in selected areas, to accommodate the day-to-day shopping needs of the population. ▪ Local Shop 	<ul style="list-style-type: none"> ▪ Major Industrial Development ▪ Major Commercial Development to minimize traffic congestion and preserve the residential character of the zone
Low-class/Residential Zone C	The land is intended for intensive residential development with densities above 30 dwellings per hectare. This zone comprises urban low-income and informal sector housing areas. These zones will be sited near major business centers and traffic corridors to facilitate easy access and reduce transport cost.	<ul style="list-style-type: none"> ▪ Local markets and mixed uses will be provided to enhance livability ▪ Home business ▪ Market for informal economic activities ▪ Home-Based Service Industries 	<ul style="list-style-type: none"> ▪ Heavy Industrial development including large service industries ▪ Major commercial premises

Source: Zoning Guidelines and Planning Standards (2011)

From the field survey, the nature and number of commercial activities permitted by the zoning guidelines in the various socio-economic classified residential area are to some extent consistent. For example, it was revealed that Airport Residential Area had very few retail outlets as compared to Abelemkpe and likewise Abelemkpe has fewer outlets compared to Nima. This also implies that the high distribution of retail outlets in Nima does not allude to the high population density only but also effort to provide livelihood opportunities to residents in low-income areas. Though the zoning guidelines have to some degree considered the socio-economic status of residential neighbourhoods in relation to the distribution of commercial activities, the non-responsiveness of the policy to the continuous growth and changes in urban development is perhaps a caveat to suggests that the spatial planning framework has failed to set a limit to the development of commercial activities within residential areas. For instance, in Airport Residential area, the zoning guideline allows for a corner shop and small family business but the present reality is the concentration of retail outlets in patches along the road corridors, non-conformity of some emerging developments such as the location of retail outlets along road reservations and open spaces. The increasing demographic growth coupled with unemployment in urban centres has resulted in the proliferation of survivalist retail outlets without permits as elucidated from the field survey, and defeating the purpose of residential neighbourhoods.

Again, the study communities comprised mainly of small-scale to micro-scale retail outlets as prescribed by the zoning guideline, as more than half of the retailers sampled were micro-scale enterprises. Also, many of the retailers operate in unauthorized and makeshift structures and open spaces across the study areas. The alterations and extensions to existing residential units for retail

outlets are also becoming increasingly common in recent years albeit the subject sites tend to be exclusively zoned originally for residential purposes. This practice of unauthorized extension is also a means of meeting the space requirement of retail activities in residential areas, which are often not encompassed in local plans. Most of these extensions are done without the authorization from the local Assembly and when not properly done weaken existing structures. This often results in occasional demolition exercises conducted by the local Assembly. An officer expressed that,

“Affluent residential areas like Airport Residential tend to restrict the number and location of outlets per the formal land-use planning laws, as these establishments do not fit into the neighbourhood characteristics. When these outlets are located in these areas it raises concerns and complaints from the residents about the additional automobile traffic generated and their negative environmental outlook. That is why demolishing exercises are mostly done in areas dubbed rich people’s areas and less in the low-income areas. I remember last year (2019) October, we had to demolish some retail structures along the National Service road and the first traffic light near Airport Junction due to complaints from the Headmistress of the Association International School”.

He added that some retailers go as far as to turn portions of their retail points into a refuse dump and construct illegal toilets on registered lands belonging to residents. These activities over time turn these public spaces demarcated for markets, schools, and clinics into squatters’ villages. Also, the Officer stated that owners of drinking spots flout the laws by playing loud music deep into the night to the discomfort of the residents and resulting in constant written complaints to the Assembly and the siting of the temporary structures without appropriate permission has resulted

in the blocking of access roads in some communities. These statements affirm buyers' assertions on the environmental effects of the distribution of retail outlets in residential areas.

Also, the emphasis on permitting at every stage of establishing a business pushes most retailers into the informal sector and sometimes operate illegally on the blind side of the local authorities. Retailers would readily regularize their informal activities but are prevented from doing so by complex regulations and lack of support or repressive action by authorities. The pragmatic step-by-step approach to approving permits may appear to be suitable, however, in a way, it has failed to ensure compliance with development and building regulations and therefore needs a review and re-strategizing as the approach has been argued to be bureaucratic and expensive (see Yeboah and Obeng-Odoom, 2010). Similarly, a move towards eradicating retailers from residential areas would surely have lots of social and economic ramifications that could exacerbate the existing economic hardship of unemployment.

While the above-mentioned policies directly or indirectly influence the retail environment, it is imperative to develop an explicit and comprehensive policy to regulate and manage residential retailing. This is because the location is becoming a haven for the ever-increasing number of urban residents who are unable to find employment in the formal sector and are unable to access locations in the central business districts. The policy should give adequate consideration to the prevailing socio-economic conditions of the residential population while making efforts to ameliorate the negative effects of the distribution of retail outlets. In this sense, it is quite easy to control rather than leaving it unregulated and using the limited state resources for demolition exercises.

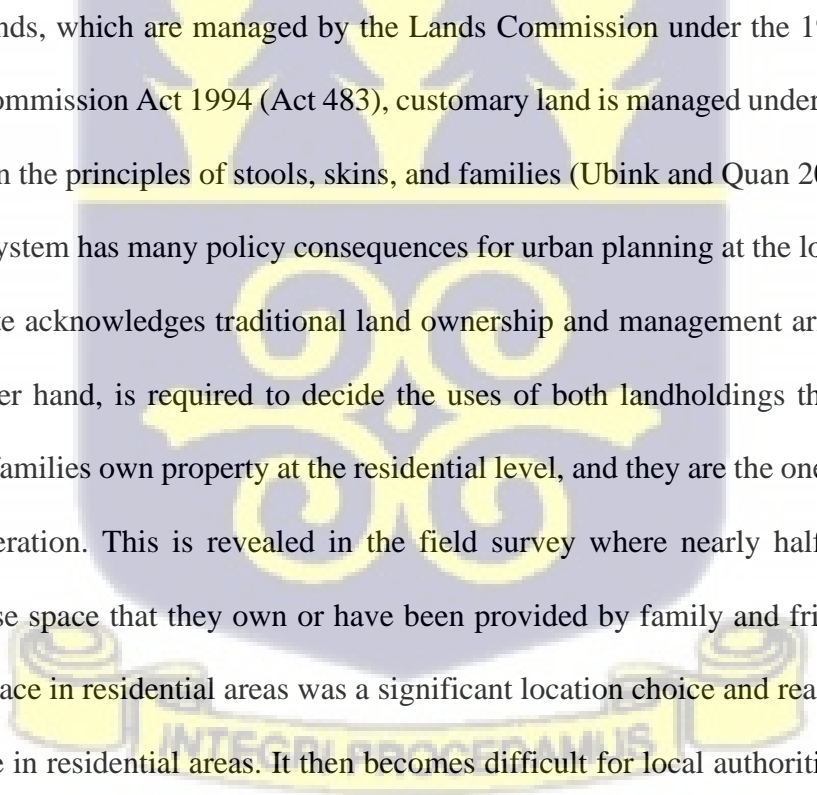
6.5 Regulatory Challenges

The study further asked stakeholders what they consider the challenges hindering the regularization of the distribution of retail activities in residential neighbourhoods. Responding to this, all the officers stated that the increasing siting of outlets in every part of residential areas is due to the lack of enforcement of the law and non-compliance with local plans and development management regulations. Non-compliance, according to the local authorities takes many forms, including the construction of new buildings or extensions made to buildings without a permit, placing of containers without authorization, development in areas where it is prohibited, non-adherence to technical and material specification during construction or siting of an outlet. This was affirmed by the field survey and has also been documented in earlier studies (Arku et al., 2016; Korah et al., 2016). The neglect of compliance has substantially led to unplanned and chaotic development, risks to public health as well as negative environmental consequences.

An officer expressed that the lack of execution of the law to the letter has contributed to the almost acceptance of the phenomenon. Therefore, most retailers perceive the siting of retail outlets in a residential area as a normal phenomenon, and any effort of regulating this activity is met with insensitivity and an attempt to deprive residents and their dependents of their sources of livelihood. This perception, the officer added undermines authorities' ability to fully enforce the law as efforts are being destabilized due to retailers' sentimentalities.

It was also disclosed that one of the underlying causes of non-compliance and the increasing distribution of retail outlets in residential areas is the current land ownership structure. Land is not

only a limited resource, but it also has several competing interests. In Ghana, lands are owned by the state, indigenous governance agencies, societies, families, and individuals. The land tenure system is divided into two types: public land and customary land (Opoku, 2010). The customary lands are complicated, with roots in the traditional extended family structure and community, and governance centered on the chieftaincy institution. Individuals and families with a customary freehold title to land are considered landholders under this scheme (Kasanga and Kotey 2001). Approximately 90% of Ghana's land is kept in various customary ownership arrangements (Kasanga and Kotey 2001).

The image shows a large, semi-transparent watermark of the University of Ghana crest in the background. The crest features three golden flames at the top, a central shield with a golden scroll, and a banner at the bottom with the Latin motto "INTEGRITAS PROVERBIS".

Unlike public lands, which are managed by the Lands Commission under the 1992 Constitution and the Lands Commission Act 1994 (Act 483), customary land is managed under indigenous rule, which is based on the principles of stools, skins, and families (Ubink and Quan 2008). As a result, the land tenure system has many policy consequences for urban planning at the local level. On the one side, the state acknowledges traditional land ownership and management arrangements. The state, on the other hand, is required to decide the uses of both landholdings through MMDAs. Individuals and families own property at the residential level, and they are the ones who decide on the land use operation. This is revealed in the field survey where nearly half of the retailers indicated they use space that they own or have been provided by family and friends. Again, the availability of space in residential areas was a significant location choice and reason for engaging in the retail trade in residential areas. It then becomes difficult for local authorities to foresee the planning and development of these spaces as landowners do not engage them. This is especially true in many low-density residential areas, where high land demand forces landowners to consider

short-term financial gains in exchange for long-term public benefits. It was expressed by a Physical Planning Officer at Ayawaso East Assembly that,

“Most landowners capitalize on monetary returns within the shortest possible time, and give away essential reserved land for open spaces, markets, schools, refuse dumps, road extension to augment the supply of building plots and commercial activities. The traditional authorities encroach on these lands without consultation because the lands are under their customary jurisdictions. The Assembly has to spend more money to relocate the encroachers before developing these lands for their purpose”.

Buyers' reactions to the encroachment of open spaces for the position of retail outlets are re-echoed in the statement above. Another officer disclosed that some Assembly members and landlords take matters into their own hands by collecting money from retailers and allowing them to set up outlets on reserved land. The officer voiced that:

“People go to see the Assembly members of their areas for space to locate their containers to sell. Because they do not want to lose electoral votes, they allocate without consultation with the Municipal Assembly, the government lands for them to operate. The landlords also think they can just allow any development on their lands without the appropriate permission. They give out the frontage of their houses without assessing the impact the container has on other residents. For example, we receive complaints from residents about a landlord who has given out the frontage of his house to a lady to sell indomie. She does not close early and makes a lot of noise which prevents the tenants from having good sleep” (Settlement Officer, Ayawaso West).

Another officer narrated that,

“Political leaders are only interested in their political benefits instead of aiding to enforce developmental plans. At the local level, they give instructions to people to do whatever they will. Sometimes places demarcated for open areas are given to retailers to operate to benefit from their electoral benevolence. The Assembly members are the most culpable of this act and this regresses the planning process” (Planning Officer, Ayawaso East).

These comments also imply that a lack of consultation and a high level of political interference are major causes of haphazard and illegal retail outlet construction in all statutory planning areas. It is not shocking that political pressure has sped up the distribution of retail outlets. For example, in 2009, Daily Graphic also reported that the demolition exercises at Sodom and Gomorrah were halted by the Accra Metropolitan Assembly when the residents threatened to defect en bloc to the opposition party (Gobah, 2009). Political meddling in the planning process, therefore, can lead to the ineffectiveness of urban planning.

It is therefore suggested that the government, through urban planners, educate retailers about the consequences of erecting structures without authorization, as well as the consequences of violating planning regulations. Also, understanding the current land tenure structure and its dynamics is critical to appreciating the obstacles that the spatial planning agenda faces in achieving the social, economic, and environmental growth goals that it is intended to undertake. Although Ghana's customary land sector presents significant challenges for spatial planning and land management,

experts in the field have concluded that overturning the scheme for outright nationalization is unrealistic and unworkable, with the potential to exacerbate existing problems (Kasanga and Kotey 2001). Since nationalization is not an option, the customary land sector must be supported while the government explores practical solutions to achieve the legitimate goal of ensuring an effective strategy. Given this, traditional authorities' roles in land use planning and management should be reconsidered beyond merely considering them as stakeholders (Acheampong, 2019). Similarly, the management of each Assembly should make clear to Assembly members and other stakeholders spatial planning laws for effective physical development. Again, consistent capacity-building training for local government officials is needed to ensure that they carry out their mandate in controlling and managing urban planning within their jurisdictions.



CHAPTER 7

SUMMARY, CONCLUSION AND RECOMMENDATION

7.1 Introduction

This chapter is devoted to summarize key findings, draw conclusions and recommendations for the study. The summary and conclusions sections sum up the major findings of the research while the recommendation section provides suggestions for policy consideration.

7.2 Summary of Findings

To examine the spatial distribution and drivers of retail outlets in Accra, four objectives were outlined under the following thematic areas: map retail outlets, examine factors that drive retailers' decision to locate retail outlets, the environmental effect of the operation and location of outlets, and policy implications of the proliferation of retail outlets. Based on the analysis conducted, the following sub-sections present the key findings.

7.2.1. Mapping the Distribution Pattern of Retail Outlets

The study established that the distribution pattern of retail outlets in the study areas is significantly clustered with an average nearest neighbour index of less than 1.0. The kernel density analysis also confirms that outlets were mostly concentrated along major roads and near supplementary businesses in the three study areas. These places were observed to be a major generator of potential buyers due to their activities that attract a large number of people. The study also revealed that retail outlets were situated at five (5) different locations within the study communities. These

include attached to the house, isolated along the road, on the street attached to a house, on the alley attached to the house, and within the courtyard of the house. Retail outlets isolated along the road were predominant in all the study communities. Also, the dominant retailing products in all three communities are grocery and out-of-home food service. The spatial distribution of the products sold in retail outlets did not depend on the socio-economic differences in the study areas. This is because similar retailing products were recorded in the three study communities.

7.2.2 Factors driving the location of retail outlets

The study found that retailers' reasons for setting up retail outlets are both necessity-driven and choice-driven. Unemployment was the topmost driver that propelled retailers to establish a retail outlet in the three study areas. This was followed by skills and knowledge acquired and supplementary income being the least reason for setting up retail outlets. Further, the study found that the factors that influenced the decision to locate retail outlet in the study communities were almost similar. And this was largely influenced by the conditions in the space environment, retailer's environment, buyer environment, and regulatory environment. Availability of customers largely informed the decision of retailers to locate retail outlets in all three study communities. No rent for space, an existing cluster of retailers, inheritance, and lack of alternatives location were also mentioned as the key factors that influenced retailers' decision to locate.

7.2.3 Environmental effect of the location of retail outlets

The majority of buyers in all the study areas thought that retail outlet distribution and operations had a greater negative effect on the community. Pollution problems, aesthetic degradation, traffic

congestion, and the growth of squatter areas were mentioned as the major negative externalities affecting the residential environment. These negative effects are blamed on the authorities' lack of effective legislation and retailers' poor operational attitude.

7.2.4 Policy Implication

The study revealed that there is no explicit law regulating the location and operations of retail outlets in residential areas. The study also found that, while some retailers are aware of their obligation to register their enterprise and obtain an operating permit from local authorities before locating an outlet, the uncoordinated process of certifications, costly application registration fees, and gross incompetence on the part of some officials are major sources of increasing informal residential retailing. It was also identified that some regulations were incompatible with planning. This included the National Building Regulations 1996 (LI 1630), Sections 8 (one and two), which contradicted Section 55 of the Local Government Act of 1993. (Act 462). In effect, the inconsistencies in the urban planning regulatory framework limit its ability to support urban transformation in residential areas. Further, the study found that the nature and number of commercial activities permitted by the zoning guidelines per residential area are consistent to some extent. However, the policy is unresponsive to the ongoing growth and changes in residential retail development. The study also revealed that the causes of non-compliance and the increasing distribution of retail outlets in residential areas are attributed to land ownership structure, a high level of political intervention, a lack of law enforcement, and retailers' non-compliance with local plans.

7.3 Conclusion

The study was motivated by the assumption that in light of growing urbanization and related urban planning challenges, the importance of retailing has grown in recent years, and as a result, there is a need to understand the factors that underpin retailers' occupation of space in Accra's residential areas, which are increasingly becoming a retail harbor. The following conclusions are drawn based on the discussions of the findings. With regard to the first objective, the analysis of the spatial pattern in this study shows that retail outlets in residential areas tend to cluster. This pattern emerges due to retailers' quest to gain access to central and viable locations within residential areas. These clusters are mainly located near residential infrastructures, supplementary businesses, public centres, and road networks. These areas were identified as prime locations of high-demand potential. Further, the product and services offered in residential neighbourhoods are diverse with grocery and out-of-home food services dominating the retail market.

Regarding the second objective, the study established pragmatically that the reasons that drive retailers to start a retail enterprise are on the increase, and therefore the proliferation in the distribution of residential retail outlets is a reality that is unlikely to go away. The study shows that the location of retail outlets in residential areas is not an arbitrary phenomenon but beckoned by carefully selected deterministic attributes. These include the interacting factors in the space environment, retailers' environment, buyers' environment, and regulatory environment. However, the regulatory environment though has a strong presence theoretically its impacts are not as pronounced as the other decision-making factors due to several enforcement challenges. Availability of customers and location close to the cluster of existing retailers featured as the most prominent factor for the choice of a retail location by retailers in all the study communities.

Objective three provides some interesting findings. It is evident from the study that the proliferation in the distribution of retail activities in residential neighbourhoods if not properly managed is prone to result in randomness and a deteriorating residential environment. Also, low-income residential neighbourhoods are particularly susceptible to a high incidence of retail outlet distribution, which consequently reflects in a high perpetration of aesthetically offensive alterations and negative environmental externalities, with sanitation being the topmost issue.

Result from objective four of the study indicates a great need for urban planning and calls on local authorities to provide an explicit retail distribution policy to adequately and efficiently manage the increasing siting of retail outlets in residential areas. The existing spatial distribution indicates that most retailers are not located at demarcated retail points within residential areas. As long as the pattern and determinant of the distribution of retail outlets can be estimated with relative certainty, suitable plans can be made ahead of time for its accommodation. The study, therefore, infers that the distribution and drivers of retail outlet locations are determined by the prevailing environmental condition at a given place and therefore the proposition made earlier in the study can be accepted.

The study benefits both empirical and methodological knowledge. The study demonstrates that the socio-economic dynamics in a community affect the spatial outcome of retail outlets. The study also shows that studies that attempt to analyze and explain the spatial pattern of retail activities should utilize a theoretical framework that combines the buyer's, retailer's, space, and policy and regulatory environment perspectives. These elements interact to shape the observed spatial

dynamic of the retail environment. The study also demonstrated that the mixed-method approach is viable in studies of the spatial patterns of retail activities in urban centres. Thus, qualitative approaches give a more comprehensive understanding of the observed spatial outcome of the retail environment from the perspective of various retail actors such as retailers, buyers, and urban planners, in addition to the field dominance by the quantitative approach of this area of studies. Retailers tend to also relate to how their choices of retail location and formats affect the spatial outcome in the retail environment. While this study reports several findings on the spatial location and retail formats, many areas remain unexplored. These include further empirical research into the relationship between retail outlet formats; and the specific analysis of the linkages of the road network, supplementary businesses, and population on the distribution of retail establishments. Also, further research is required to establish whether the restrictions on certain trade activities such as street hawking and displacement of retailers in the central business centre of Accra are exacerbating the proliferation of retail outlets in residential areas.

7.4 Recommendations

Based on the established findings of the study, the following recommendations have been made for consideration;

1. The 1993 Local Government Act 462 states that local government has to employ a by-law that deals with spatial planning and development in their respective jurisdiction. In the case of Ayawaso West and Ayawaso East Municipalities, such a by-law is yet to be promulgated. Therefore, a bylaw should be immediately enacted, taking into consideration

residential retailing and not only cater for the regulation of informal traders who are located on the demarcated trading areas as set out by the District Assemblies.

2. Local authorities should consider carrying out a cost-benefit analysis of various retail activities to identify policies that could minimize the negative environmental externalities associated with the distribution of retail outlets while maintaining their viability in residential areas.
3. The municipal authorities should conduct intensive education and sensitization of both retailers and landlords or homeowners on the importance of seeking advice and permission from the appropriate authorities before siting retail outlets as many people are oblivious of the laws governing the siting of retail outlets hence creating unplanned development in the sector.
4. Also, further research is called for on how urban planners could plan or redesign the urban space with appropriate consideration of residential retailing



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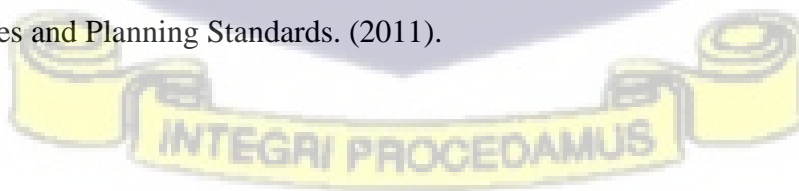
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APPENDIX
UNIVERSITY OF GHANA
DEPARTMENT OF GEOGRAPHY AND RESOURCE DEVELOPMENT
QUESTIONNAIRE FOR RETAILERS

This survey is being carried out by a post-graduate student from the above Institution as a requirement for the award of an MPhil in Geography and Resource Development. The study seeks to assess the Spatial Analysis of the Drivers of Retail Outlets in Accra.”

All information provided for this study is strictly for the intended academic purpose and respondents are assured of full confidentiality

Section A: Demographic Characteristics.

1. Gender: [1] Male [2] Female
2. Age: [1] Less than 20 [2] 20-29 [3] 30-39 [4] 40-49 [5] 50-59 [6] Above 60
3. Educational Level: [1] Tertiary.[2] SHS/Secondary [3] JHS/Middle [4] Primary School
[5]. Technical/Vocational Training [6]. No Education
4. Marital status: [1] Married [2] Divorced [3] Widowed [4] Single [5] Others.....
5. What is your household size? [1] 1 – 3 [2]. 3 – 5 [3] 5 and above
6. Residency: [1] In the community [2] Outside the community
7. If outside the community, please specify.....
8. Housing type: [1] Compound house [2] Single family detached [3] Self-contained
9. Tenure status of retail space: [1] Rent [2] Landlord [3] Free habitation (given by a family member or friend) [4] Caretaker [5] Others.....
10. How long have you been operating your outlet? [1] Above 10 years [2] 6-10 years [3] 1-5 years [4] Less than 1 year

11. How many outlets do you own in this area? [1] One [2] Two [3] Three or more
12. Source of start-up capital? [1] Self-financed [2] Friends and Family [3] Institutional Credits
[4] Others.....
13. What motivated you to set up a retail outlet?

SECTION B: RETAIL OUTLET CHARACTERISTICS

14. Type of outlet: [1] Sole-ownership [2] Partnership [3] Cooperative
15. Number of employees [1] None [2] 1-5 [3]6-29 [3] Above 30
16. Have you registered your enterprise? [1] Yes [2] No
17. If no why?.....
18. Type of retail enterprise: [1] Goods [2] Services [3] Hybrid (Goods and Services)
19. Type of goods and services provided:.....
20. Why the choice?.....
21. Nature of Physical outlet: [1] Temporary [2] Semi-temporary [3] Permanent [4] N/A
22. What type of structure do you use for your outlets? [1] Metal container [2] Concrete [3]
Wooden box [4] Table-top [5] Open space [6] Others, specify.....
23. Why the choice?

SECTION C: FACTORS INFLUENCING RETAILERS LOCATION

24. What informed your location decision? [1] Self-induce [2] Other-induced
25. Why did you choose to sell in this community?.....
26. Why are you currently located here?.
27. Is this your preferred retail location? [1] Yes [2] No
28. Does your present location suit your needs (s)? [1] No [2] Yes [3] N/A
Specify reason:
29. Do you consider the tenure of this location permanent? [1] No [2] Yes [3]N/A
30. How long is the journey time from home to the location of work?[1] Less than 1 hour [2]1
to 2 hours [3] 3 to 4 hours [4] More than 4 hours

31. How long have you been working from this location? [1] Less than a year [2] 1 to 5 years
[3] 5 to 10 years [4] Above 10 years

How did you get this location? [1] Own the space [2] Rental [3] Government land [4] Given
by friend or family [5] Others

32. To what extent do the following factors influence the location of your retail outlets?

Factors	Very low extent	Low extent	Moderate extent	Great extent	Very great extent
	1	2	3	4	5
Space environment					
Policy and regulatory environment					
Buyer environment					
Retailer environment					
Others					

33. Please tick the following factors that influenced your decision on your location, product, and structure in setting up your outlet.

Factor	Location	Product	Structure
Space environment (catchment area, transport network, space available, outlet accessibility, etc.)			
Buyer characteristics (disposable income, lifestyle, household size, etc.)			
Retailer condition (start-up capital, security of tenure, cost of travel to an outlet, skill set, etc.)			
Policy and regulation (zoning, permit, funding, etc.)			
Others			

34. Please specify exact reasons under the categorized above that influence your decision:

Space environment.....

Buyer Characteristics.....

Retailer Conditions.....

Policy and Regulation.....

Others.....

35. Who are your targeted or main buyers? [1] Residents [2] Pedestrians [3] Vehicle Users. [3] Others

36. What challenges have you experienced due to your retail location? [1] Evictions [2] Confiscation of goods [3] Relocation [3] Fines [4] Harassment [5] No specific problems experienced [6] Others:

37. Generally, with whom do you have challenges the most in relation to using this location? [1] Local government authorities [2] Police [3]- Other street retailers [4] Residents [5]N/A

SECTION D: ENVIRONMENTAL IMPACT

38. How do you think your operation affects the environment? [1] Positive [2] Negative [3] Neutral

39. What are the environmental challenges your operation causes?.....

SECTION E: POLICY AND REGULATION

40. Are you aware of any regulations on residential retailing? [1] Yes [2] No

41. If yes please specify.....

42. Did you seek permission from the local Assembly or any other authority before starting and operating your outlet? [1] Yes [2] No

43. Please specify your reason:.....

44. Have you registered your enterprise [1] Yes [2] No

45. Please specify your reason:.....

46. Are you aware of any illegality associated with trading from this location? [1] No [2] Yes

47. Do you pay taxes to the government? [1] Yes [2] No

48. Do you think commercial activities should be undertaken at your current location e.g. along the street, sidewalks, etc.? [1] Yes [2] No

49. What is your opinion on the proliferation of retail outlets and the outlook of the community?

50. Any other additional comments?

UNIVERSITY OF GHANA
DEPARTMENT OF GEOGRAPHY AND RESOURCE DEVELOPMENT

INTERVIEW GUIDE FOR BUYERS

Topic: Spatial Analysis of the Drivers of Retail Outlets in Accra.

All information provided for this study is strictly for the intended academic purpose and respondents are assured of full confidentiality.

1. Tell me about yourself? (Age, level of education, household size, frequency of purchase, outlet distance from home, etc.)
2. What is your view on residential retailing?
3. Why do you purchase items in retail outlets in this community?
4. What kind of retail format do you prefer shopping from? Why
5. What products do you mostly purchase?
6. What factors influence your buying behavior in retail outlets? (Income, lifestyle, household, age, etc.)
7. What is your opinion on the proliferation of outlets in this community
8. What do you think of the impact of retail distribution on the environment in the community?
9. How do you think it can be resolved?
10. Do you think the activities of retailers are a major urban management issue for the government?
11. Do you advocate for the restriction of commercial activities within the community?
12. Do you approve of the governments' present methods of regulating retailers in the community?
13. What do you suggest can be done by the
 - i. Authorities
 - ii. The Public and
 - iii. Retailers
14. Any other additional comments?

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INTERVIEW GUIDE FOR KEY INFORMANTS

Topic: Spatial Analysis of the Drivers of Retail Outlets in Accra

1. Please tell me about your status or position in this organization?
2. What is your opinion on residential retailing?
3. What is the existing policy or framework on the establishment of retail outlets?
4. What are the merits and practicability of current retail policy and regulatory strategy particularly on
 - a. Products
 - b. Location of retail stores
 - c. Outlet formats
 - d. Spatial distribution and pattern
 - e. Environmental sustainability in terms of outlook
5. How do you regulate and execute these policies?
6. What are your challenges and what structure is being put in place to curb these challenges?
7. How can retailers and policymakers offer incentives to mitigate the environmental effects of retailing?
8. Do you have any other opinions, views, or concerns about residential retailing?

