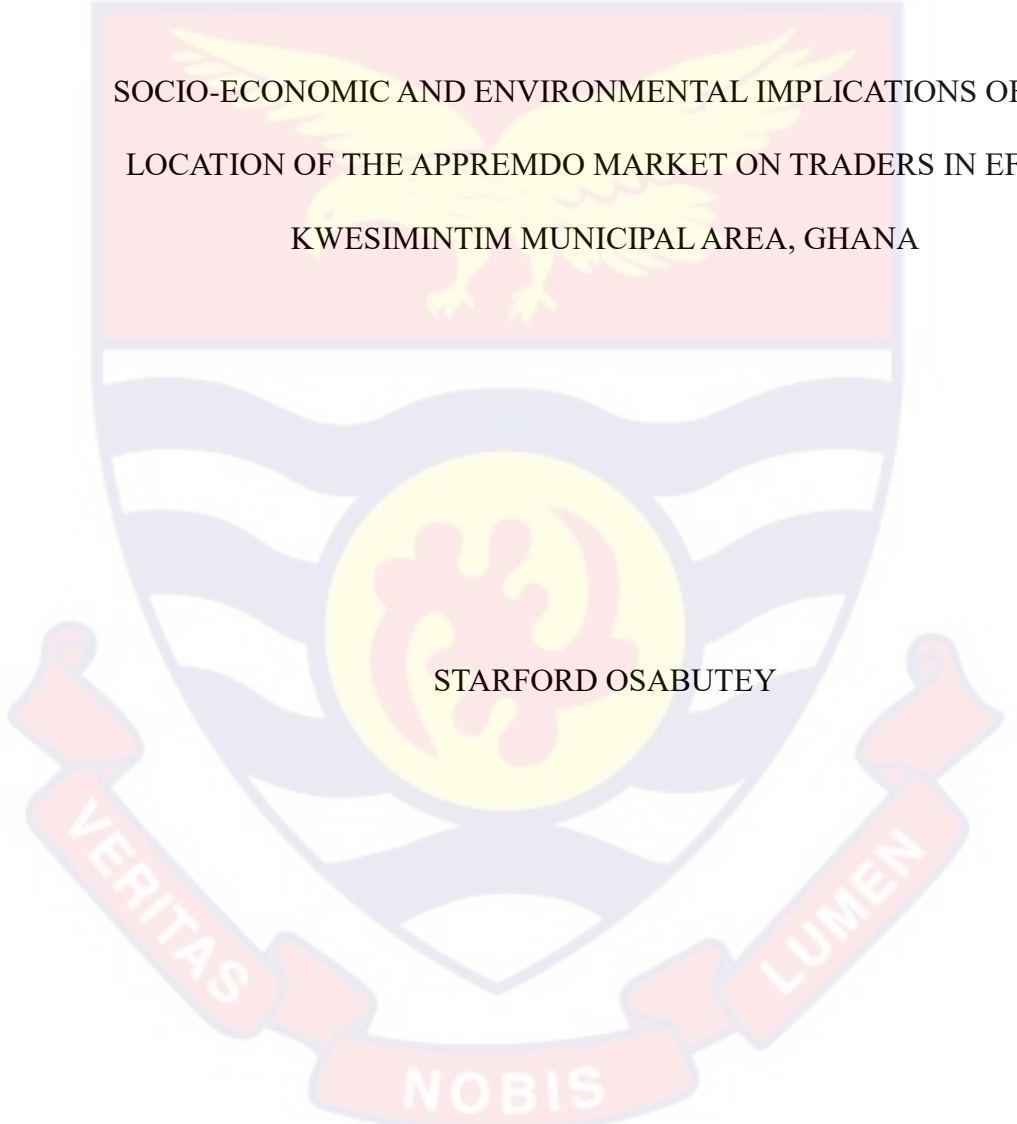


UNIVERSITY OF CAPE COAST

The background features a large, faint watermark of the University of Cape Coast crest. The crest is a shield with a red top section containing a yellow eagle with wings spread. Below the eagle are blue and white wavy lines. In the center is a yellow circle with a red stylized figure. At the bottom, a red ribbon contains the Latin motto 'VERITAS LUMEN NOBIS' in white capital letters.

SOCIO-ECONOMIC AND ENVIRONMENTAL IMPLICATIONS OF THE
LOCATION OF THE APPREMDO MARKET ON TRADERS IN EFFIA-
KWESIMINTIM MUNICIPAL AREA, GHANA

STARFORD OSABUTEY

2023

UNIVERSITY OF CAPE COAST

SOCIO-ECONOMIC AND ENVIRONMENTAL IMPLICATIONS OF THE
LOCATION OF THE APPREMDO MARKET ON TRADERS IN EFFIA-
KWESIMINTIM MUNICIPAL AREA, GHANA

BY

STARFORD OSABUTEY

Thesis submitted to the Department of Geography and Regional Planning of
the Faculty of Social Science of the College and Humanities and Legal
Studies, University of Cape Coast in partial fulfillment of the requirement of
the award of Master of Philosophy Degree in Geography and Regional
Planning

JUNE 2023

DECLARATION

Candidate's declaration

I affirm that this thesis is the result of my original research and that no portion of it has ever been submitted for consideration for any other degree at this University or elsewhere.

Name: Starford Osabutey

Candidate's signature..... Date.....

Supervisor's declaration

I hereby attest that the thesis was prepared and presented under supervision in compliance with the standards for dissertation supervision established by the University of Cape Coast.

Name of supervisor: Professor Kwabena Barima Antwi

Supervisor's signature..... Date.....

ABSTRACT

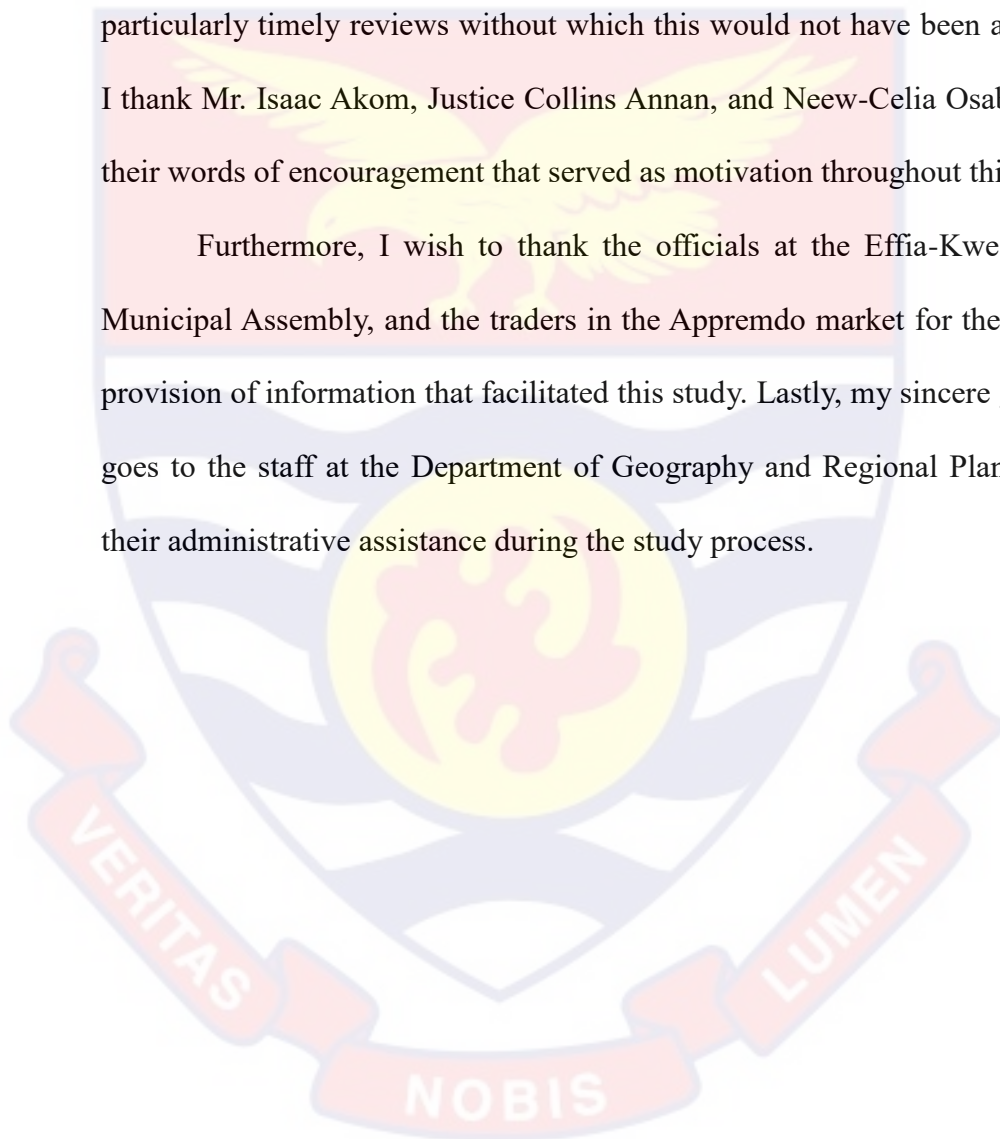
To revitalize market congestions in Ghana, governments in recent times have resorted to building new and renovating old markets mostly in the regional capitals to suit modernity. Since the construction of the Appremdo market in 1996, it has not been able to reach its target leading to few visitations, and low patronage. This study examined the Socio-economic and Environmental Implications of the location of the Appremdo Market on Traders in the Effia-Kwesimintsim Municipal Area (EKMA). The study involved a descriptive case study design with a mixed-method approach. Purposive and convenient sampling was used for the qualitative study while simple random sampling was used for the quantitative study. The study involved 24 and 151 participants for the qualitative and quantitative data respectively. Descriptive analysis and thematic analysis were used for the quantitative and qualitative analysis respectively.

The results showed that critical physical factors: openness, absence of streams, and pollution were considerable factors but the distance between the Takoradi Market Circle and Appremdo market location, was not. Human factors such as suppliers and the availability of financial facilities were not considered. The existence of strong bonds among traders strengthens their social connections. Traders do not earn an adequate income from trading in the market. Dust and muddiness affect the market environment. It is recommended that there should be continuous advertisements on radio stations and mounting of billboards to show the existence of the market and organize programs within the market to create awareness of the market's effective functioning. Additionally, the government should provide a loan scheme to the traders to enhance their businesses.

ACKNOWLEDGEMENTS

I want to offer my sincere appreciation to everyone whose contributions have enabled the completion of this thesis. In the first place, I would like to thank my supervisor Professor Kwabena Barima Antwi for his intellectual capabilities and constructive criticisms, patience, guidance, and particularly timely reviews without which this would not have been achieved. I thank Mr. Isaac Akom, Justice Collins Annan, and Neew-Celia Osabutey for their words of encouragement that served as motivation throughout this study.

Furthermore, I wish to thank the officials at the Effia-Kwesimintim Municipal Assembly, and the traders in the Appremdo market for their timely provision of information that facilitated this study. Lastly, my sincere gratitude goes to the staff at the Department of Geography and Regional Planning for their administrative assistance during the study process.



DEDICATION

This work is dedicated to my mother, Ntaah Cecilia for her extraordinary motherly role played in my life and to Neew-Celia Osabutey (daughter).

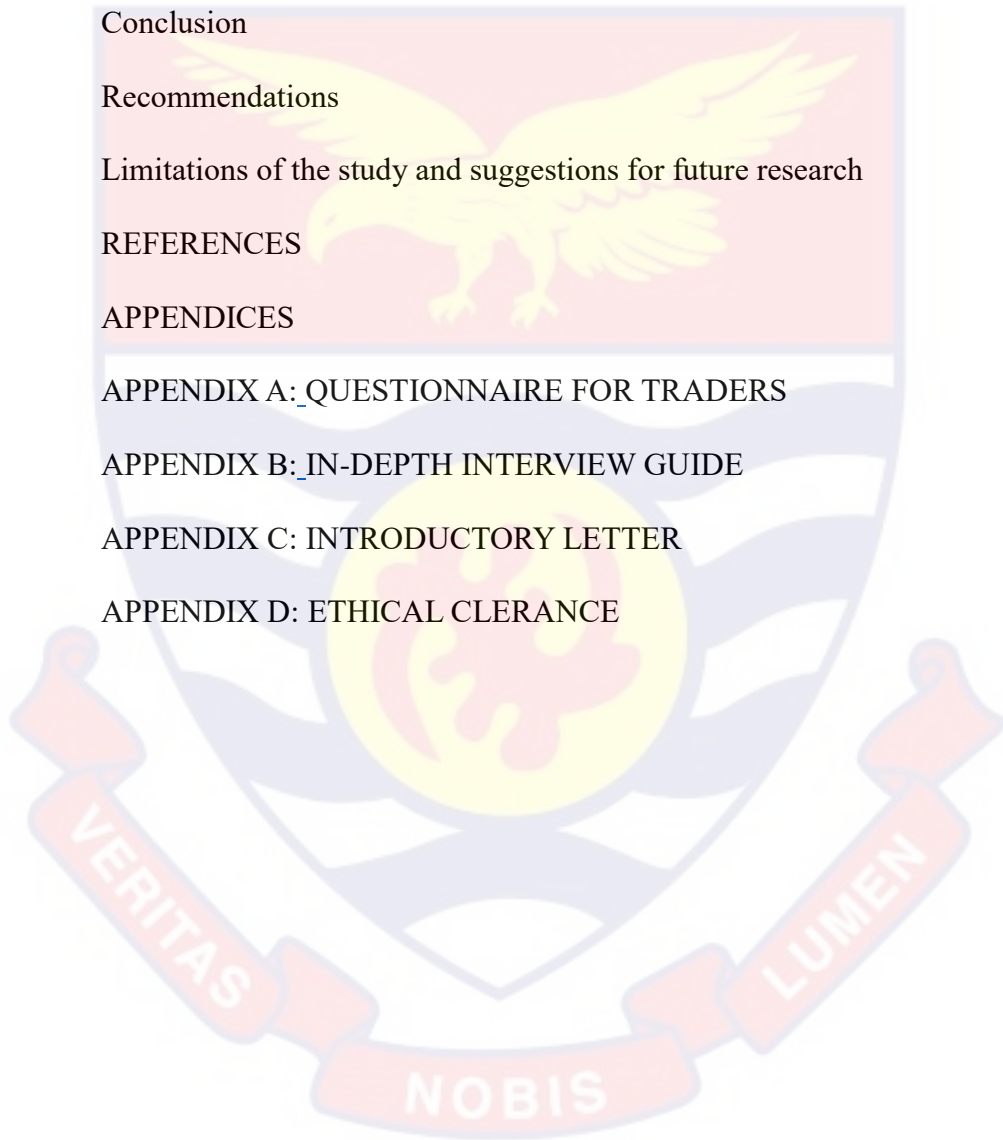


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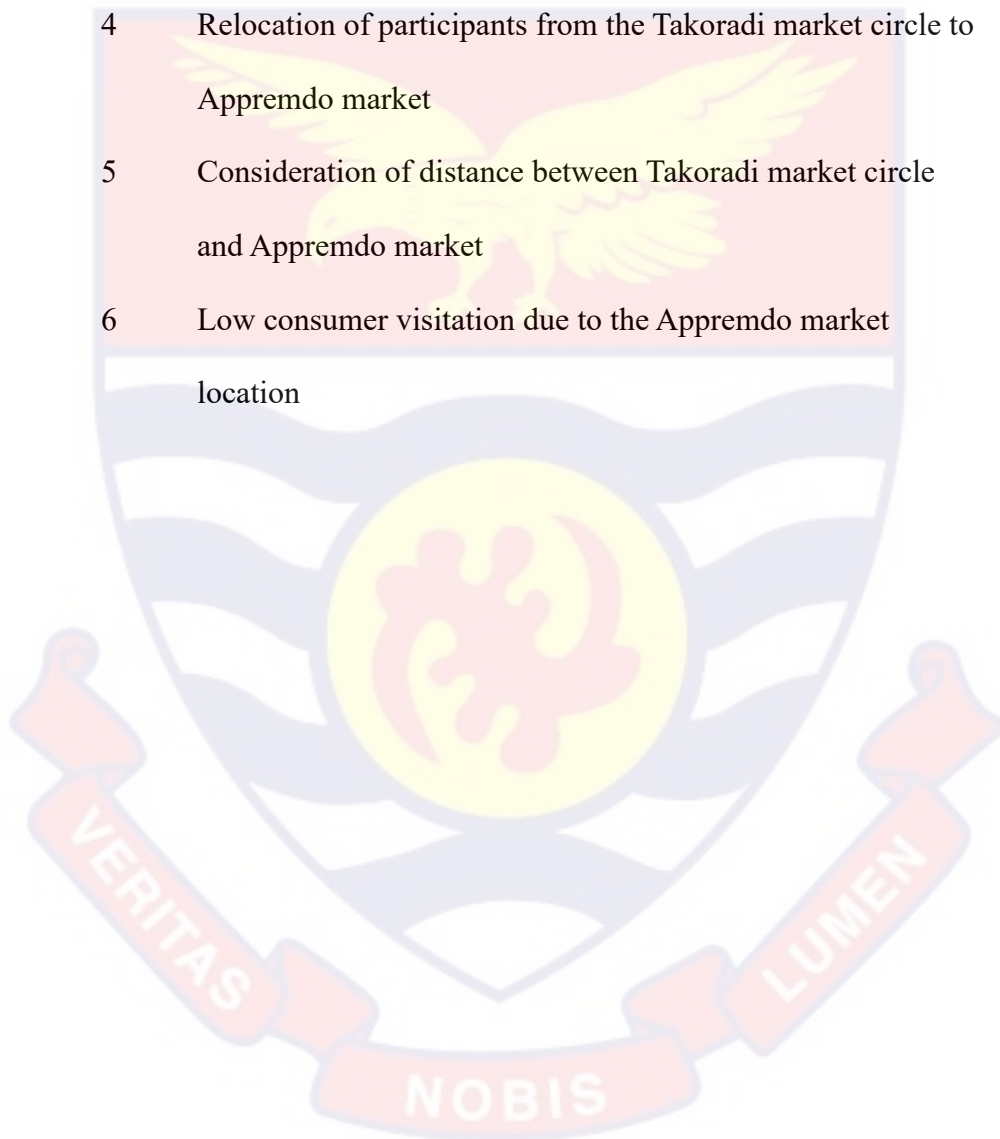


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CHAPTER ONE

INTRODUCTION

Background to the study

Gao, Janowicz, and Couclelis (2017) describe the concept of location as the position or place of a specific point, area, or feature on the Earth's surface. It is a fundamental concept used to identify and describe where something is placed spatially. Quayson, Bai, and Osei (2020) explain that a market is a place, either physically or electronically, where consumers and sellers interact to exchange goods, services, or other assets. Therefore, a market location is the process of choosing a considerable place for buyers and sellers to meet to engage in the exchange of goods and services.

Market operations focus on widely visible locations that affect brand perceptions, consumer behaviour, and investment decisions (such as annual meetings and retail stores), as well as the backstage corporate and pundit offices where economic strategies are developed and evaluated. (Hamilton, 2013). Van-Meeteren and Poorthuis (2018) posit that the Central Place Theory (CTP) is one of the urban locational theories that has been used to explain the functionalities of urban economics. It aimed to explain the economic interactions between larger cities and more rural areas. It also aims to clarify why urban centers have a location where they are and how they offer specialized goods and services to nearby smaller populations. (Van-Meeteren & Poorthuis, 2018).

Considering the work of Weimer and Vining (2017), the central place theory uses two major concepts which include range and threshold to explain how economic activities such as markets can retain their maximum function or

be challenged considering their locations. A market threshold is explained as the minimum population that is needed for a market to function effectively (Chakraborty, 2012). The range is the farthest distance that a consumer will cover to consume goods and services (Chakraborty, 2012). The choice of a location for a market is therefore dependent on these key concepts identified by Christaller (Capello, 2014).

In the view of Allison and Horemans (2006), the Sustainable Livelihood Framework is a paradigm that has aided developing economies in their pathways to achieving sustainability. It establishes a link between individuals and the larger supportive environment that affects how livelihood strategies turn out. According to Chan and Bray (2014), the Sustainable Livelihood approach is not opposed to the market and the private sector; nonetheless, it has been claimed that it has not stressed or produced an adequate response. However, because the Sustainable Livelihood approach emphasizes the significance of individual change, access to various assets, the vulnerability of the poor, and the multifaceted nature of livelihoods, it has much to offer to more market and private-sector-based approaches to alleviating poverty.

Rakodi (2014) explains that the critically functional market factors that include social networks, human capacity, physical environment (infrastructure), land, and financial capacity are linked to the main assets defined in the Sustainable Livelihood Framework. Asante and Helbrecht (2020) argue that a place to establish a market is dependent on determining whether the well-being of the market players (traders, suppliers, consumers, private actors, and residents) can be enhanced without compromising the

natural environment. Therefore, a location of a market can affect the market in terms of both humans and the physical environment.

The growing global population and peoples' urge to meet their financial, cultural, and political interests have harmed the world's natural environment. The worldwide ecological effect was estimated to be 11 percent of world Production (\$6.6 trillion) in the year 2010, with the planet's 3,000 largest companies accounting for a third of the total (Carbonnier, 2011). Without additional initiatives, the Organization for Economic Cooperation and Development (OECD) predicts that greenhouse gas emissions will rise by another 37 percent by 2030, and 52 percent by 2050. Around 2050, this might culminate in a 1.7-2.4° Celsius temperature rise resulting in extreme heat, shortages, thunderstorms, and floodwaters, as well as serious harm to essential infrastructure and agriculture.

A large fraction of today's identified species of flora and fauna is anticipated to perish because of increased urbanization and agriculture, as well as global warming. Water scarcity will worsen because of inefficient resource use, and climate change and the population of places experiencing water scarcity is expected to rise from 1 billion to over 3.9 billion. According to the World Health Organization, the proportion of early mortality linked to ground-level ozone will treble, while those linked to aerosols will more than double.

Soelistiyono, Adrianto, and Kurniawati (2018) conducted a study to ascertain the effects of Mranggen's local market location on both vendors and the neighborhood. The study showed that the location from the Mranggen market to the temporary shelter located in the Mranggen field had an impact on traders' behaviour, as evidenced by five indicators: the number of items,

quality of goods, working hours, stall location, and convenience of reaching places were impacted.

Wua-Wua Central Market in Kendari City in Indonesia also caught up with several challenges, including reduced consumers, which influenced traders' desire to go back to Pasar Panjang, an old market. The large proportion of vendors who chose to re-stitch stalls resulted in many empty stalls, which reduced interest in shopping at the market (Asiah, Moita, & Supiyah 2020). The location had three major consequences: decreased income, decreased investment, and decreased business activity. Asiah et al. (2020) indicate that due to a shortage of visitors, vendors' income after a transfer to the Wua-Wua Central Market in the Kendari Metropolitan area was much lower than expected.

Furthermore, a renowned Mile-12 Market in the Lagos Ketu neighborhood in Nigeria was without a doubt the country's retail and wholesale food market. Erize (2016) indicates that 80 percent of the meals eaten in Lagos state were obtained from the market. Due to congestion of the market, the Lagos State government announced the transfer of the market to Imota in the Ikorodu axis of the state. Erize (2016) indicates that chronic traffic mayhem and other allied difficulties were reduced after the new location but there was low patronage. According to Stacey, Grant, and Oteng-Ababio (2021), the Komkomba Tuber Market in Accra has grown into one of Ghana's four major crop production areas, handling between 900 and 2000 tons of tubers every week, depending on the season and this has been attributed to the market's location.

David (2017) argues that a market is a type of societal form of governance that, through time, intertwines with human social life. Consequently, a market has fashioned itself in opposition to other social systems throughout human history. The growing global population and people's urge to meet their financial, cultural, and political interests have harmed the world's natural environment (Francis, 2019).

The Appremdo market was constructed in 1996 to enhance the economic activities in the Effia Kwesimintsim Municipal Area (EKMA) in terms of revenue mobilization to develop the area (Ghana News Agency, 2020). Another purpose of the market construction was to ease congestion in the main Takoradi market circle in the Central Business District (CBD) in Takoradi, Kwesimintsim station market, and the hawking around Ajep roundabout in Takoradi (Ghana News Agency, 2020).

The traders in the Appremdo market believed that the reconstruction of the main Takoradi market circle would make the city authorities in both the Sekondi-Takoradi Metropolitan Assembly (STMA) and the Effia Kwesimintsim Municipal Assembly force some of the traders at the market circle to relocate to the Appremdo market, but this did not happen. Some parts of the market that were designated for the second cloth dealers have started deteriorating because they are not being used. The traditional leaders in the Effia Kwesimintsim have appealed to the city authorities within the area to force the traders who have illegally congested the Jubilee Park in Takoradi to relocate to the Appremdo market to ensure its full operation.

Statement of the problem

As a way to curb urban expansion in the Sekondi-Takoradi Metropolitan Area and its related implications such as congestion, and environmental pollution, the Appremdo market was constructed in 1996 to help move some of the traders who have congested the Takoradi Market Circle, Kwesimintim station market, and Ajep roundabout. The market was also established to serve as a nodal trading center to link other communities around the Kwesimintim area.

According to the Ghana News Agency (2020), “the Appremdo market construction has not enjoyed much patronage by traders and patrons making the investment non-profitable”. Despite the many stores that have been provided within the Appremdo market and have been taken by traders, they are not open. The main market has many of its sheds closed leaving few numbers of traders that carry out trading activities in the market. All efforts made by the community leaders to ensure that traders who left for other market centers within Takoradi come back into the market have not yielded a positive result. As King (2020) explains in the central place theory, the market has not been able to reach its threshold which is the minimum population that would enable it to function effectively.

Glänzel and Scheuerle (2016) define socio-economic impact investment as all activities that employ financial resources to achieve social, economic, and ecological goals, including loans and conventional charitable grants and donations. According to Amoako (2019), a market environment provides a conducive atmosphere that enhances commuting, trading, health, security, and socialization among market operators. Therefore, choosing a

location for a market is a considerable factor since it affects all the stakeholders of the market setting.

Abdul (2013) researched the “Effects of the Relocation of the Anlonga Wood Market on Wood Workers in Ghana”. The researcher used a case study design and incorporated purposive and convenient sampling. The study revealed that there was an initial customer base loss, but a subsequent rise in income was linked to price rises in broad terms. In 2013, Weng et al. researched the best ways to accommodate Taiwan's street sellers through urban expansion. The findings of the study showed that street vendor associations are essential to the relocating effort.

A market is a type of societal form of governance that, through time, intertwines with human social life. Consequently, a market has fashioned itself in opposition to other social systems throughout human history. As a result, markets have always played a role in people's social lives. It indicates that the market value does not only entail the buying and selling of goods and services but also how it helps to facilitate human social lives (Sandel,2012).

The destruction of the environment costs Africa's national assets almost USD 195 billion annually. In the case of Ghana, the cost of environmental damage measures the social costs of environmental protection. The consequences on the environment were reflected in Ghana's 2017 Gross Domestic Product (GDP), which was 59 billion US dollars. The cost of environmental degradation (CoED) in Ghana was calculated at US\$6.3 billion, or 10.7 percent of its 2017 GDP.

A study of the available literature reveals that research efforts on a market have focused on regulatory procedures, the relocation implications of

street vendors, and unlicensed trading venues in the city core. There is less knowledge of how market location socio-economically, and environmentally affects the lives of people within a market setting. Against this background, the researcher sought to explore the socio-economic and environmental implications of the location of the Appremdo market on traders in the Effia-Kwesimintsim Municipal Area (EKMA).

Research Questions

The study aimed to find answers to the questions below.

1. What critical factors informed the location of the Appremdo market?
2. How has the Appremdo market location affected the social lives of the traders in the market?
3. How has the Appremdo market location affected the economic conditions of the traders in the market?
4. What are the environmental challenges of the Appremdo market?

Objective(s) of Study

The main goal of this study was to explore the socio-economic and environmental implications of the location of the Appremdo market on traders in the Effia-Kwesimintsim Municipal Area (EKMA).

To understand the phenomenon, this study sought to investigate the following specific objectives:

- 1. Explore the critical factors that informed the location of the Appremdo market;
- 2. Assess the social effects of the location of the Appremdo market on the traders;

- 3. Assess the effects of the Appremdo market location on traders' economic conditions; and
- 4. Explore the environmental challenges of the Appremdo market location on the residents.

Significance of the study

The study would provide the following benefits.

In terms of policy formulations, this study would provide insight into the need for critically analyzing location factors and incorporating participatory approaches to arrive at a conducive place to locate a market. This study would provide an analysis of infrastructure, and space, including the distance between two major markets, proximity to suppliers, and availability and accessibility of credit facilities. Assessing these factors would help market stakeholders evaluate the feasibility and efficiency of establishing or expanding their operations in a particular location.

Additionally, this study would provide insights into market potentials and demands in specific areas. By analyzing factors such as population size, income levels, consumer behavior, and market trends, businesses can gauge the demand for their products or services by considering choosing a suitable market center. By understanding the demographics of this specific market location, businesses can tailor their products, services, and marketing strategies to meet the needs and preferences of the target customer base. Again, the study would contribute to theoretical frameworks on market location for future research on market location.

Furthermore, the results of this study will be used to determine supply and demand patterns, customer preferences, and competitive environments.

Businesses that want to grow, innovate, and invest need this information to support Ghana's economic development. Again, in terms of luring investment, thorough market studies can do so by presenting promising business opportunities and market potential across a range of industries, all of which contribute to Ghana's overall economic growth.

Organization of Study

This study is organized into five chapters. Chapter one consists of the background to the study, the problem statement, the purpose of the study, research questions, research objectives, and the significance of the study. Chapter two involves the reviews of theories underpinning the study, discussing relevant themes that have been elaborated on in previous works, an empirical review of the previous studies, a conceptual framework, lessons learned from various empirical reviews, and a summary of the literature. Chapter three presents the methodology which covered the study area, research philosophy, research design and approach, population, sampling, sample size, data collection instruments, and ethical issues. Chapter four covers the results and discussion of the key findings and Chapter five provides a summary, conclusion, and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

This chapter elaborates on the review of the available literature for the work. It enabled the researcher to get a comprehensive understanding of studies that form the basis of the intellectual argument for this work. The chapter therefore centered on the following: a review of the Sustainable Livelihood Framework, a review of the Central Place Theory, conceptual reviews-market classification, factors influencing market location, social effects of a market, economic importance of a market, environmental implications of market location, environmental challenges in Ghana, empirical review, lessons learned from the empirical review, relevance of the empirical review, conceptual review, interconnectedness of the conceptual review and the summary of this chapter.

Sustainable Livelihood Framework

The sustainable livelihood framework aims to conceptualize livelihoods holistically, considering their multiple intricacies as well as the possibilities and restrictions they are faced with (Morse & McNamara, 2013). These limitations and opportunities influence a wide range of variables, including more community norms and practices, assets that the residents or person has a total connection to, and patterns and frameworks at the national or international level across which people have no control and might not be aware (Jones & Boyd, 2011).

McCubbin, Smit, and Pearce (2015) posit that the external environment wherein individuals reside is referred to as the vulnerability

context. This includes trends (such as global or local economic swings, shocks (such as disease or death, military warfare, or extreme weather), changes in technology infrastructure and political structures, and seasonality (of prices, production cycles, and other factors) (Mohamed, 2017). The vulnerability context is crucial because these three elements directly affect how likely it is for people to experience both temporary and permanent poverty (McCubbin et al., 2015).

Every one of them has the potential to change the vulnerable situations and the resources accessible to the poor. The concept of assets is essential to the strategy for sustainable livelihood. The sustainable livelihoods approach considers the resources that impoverished individuals still have to secure to ensure an adequate income to exist rather than viewing poverty as simply a lack of income (Rakodi, 2014).

Rakodi (2014) purports that poor people can engage in a variety of livelihood strategies and processes and end up deciding the results of their livelihoods based on these assets, the vulnerability setting, and shifting structures and processes. People may engage in many activities, and different individuals in a family may reside and work in various regions (Berry, 2005). Poor people are typically forced to mix a variety of techniques in an attempt just endure (Berry, 2005). If all goes well, they might accomplish outcomes like higher income, improved well-being, lowered vulnerability, and improved food security. In the view of Eastin (2018), sometimes one result might have a detrimental impact on another; for instance, when low-income individuals participate in riskier but lower-paying activities to reduce their vulnerability to shocks.

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In the view of Eastin (2018), sometimes one result might have a detrimental impact on another; for instance, when low-income individuals participate in riskier but lower-paying activities to reduce their vulnerability to shocks. Human capital: includes abilities to work, knowledge, and excellent health. Of course, being in good health is a goal in and of itself and not just a means to an end (Hout & Molenaers, 2022).

Social capital: is a term used to describe the social resources that individuals use to support themselves, such as affiliations with organizations or groups as well as relationships with people that are either more powerful than them or more like them (Hout & Molenaers, 2022). Relationships are built on trust, reciprocity, and interchange that the underprivileged can rely on when they are in need and that cut down on the expenses of cooperating to produce results (Hout & Molenaers, 2022).

Like human capital, social capital has intrinsic value; healthy interpersonal connections serve as both a means and an aim. Natural capital is the wealth of resources that humans can use to sustain themselves, including

land, water, woodlands, and air. The facilities and instruments people need to support their daily lives are referred to as physical capital (Girard, 2020).

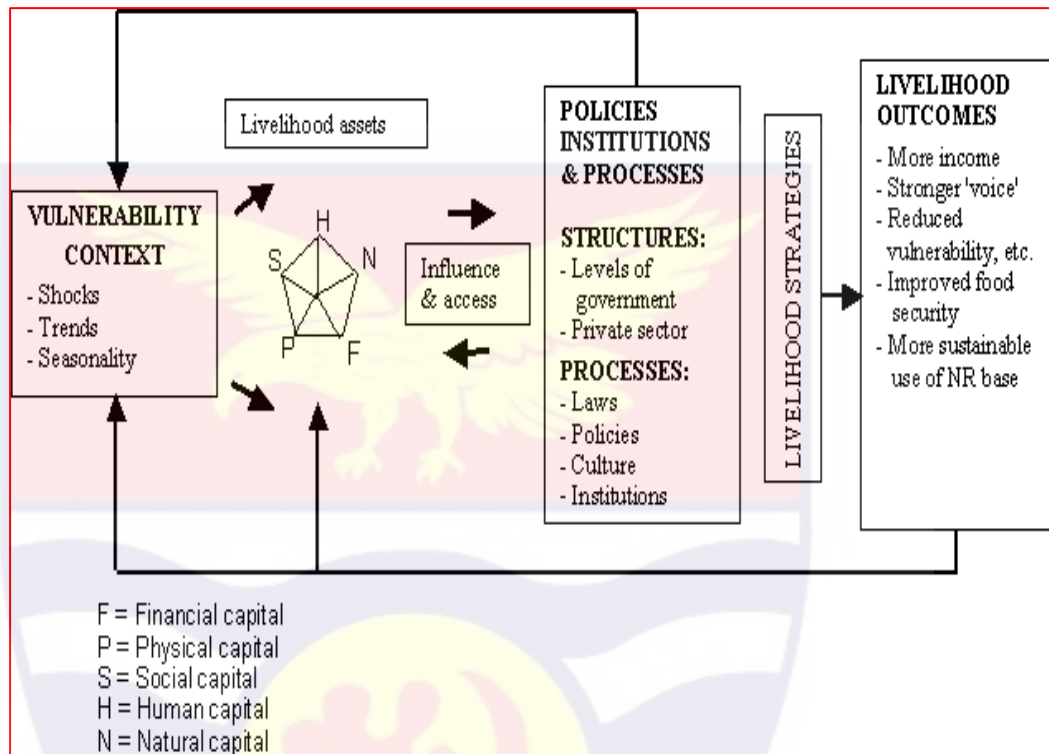


Figure 1: Sustainable Livelihood Framework

Source: Department for International Development (1997)

Among these are systems for housing, water and sewage systems, transportation and communication, and energy (Srinivasu & Rao, 2013). Financial capital involves having access to credit, receiving regular financial inflows, and having savings of any kind.

Critique of the Sustainable Livelihood Framework

The importance of the five capitals has recently come under fire from development professionals for focusing excessively on the microeconomic level and neglecting the higher governance structures, the regulatory structure, and both national and international economic growth (Scoones, 2015).

Because of this, people are generally unaware of how markets function and how policies have little to do with the lives of the poor but have a big effect on their capacity to earn a stable living (Blattman & Ralston, 2015). Nonetheless, the linkages between the five capitals and the larger environments in which people live have led to numerous people using the idea of the five capitals increasingly than they had previously (Su, Saikia & Hay, 2018).

Naturally, these problems are addressed within the larger framework for sustainable livelihoods, within the "vulnerability context" and it is altering and moving systems and procedures. The environment has an impact on both the assets that users may acquire and the outcomes that can be generated using those resources, and this is an important point to remember (Smyth & Vanclay, 2017).

Additionally, the framework contains coercive and hierarchical interactions that explain how super-low persons' options are limited, regardless of whether these linkages are more lateral than vertical, the responsibilities they entail can be burdensome (McGregor & Christie, 2021). Without question, the arguments are correct. The approach aims to reduce the enormously complex and wide-ranging causes of poverty and its remedies to a single collection of diagrams and related terms. When put into use, it is inherently burdensome, and depending on the users' preferences, some parts will be emphasized more so than others (Waycott, Jones & Scanlon, 2005). Yet, this module is very beneficial for analyzing both the larger environment in which the livelihoods of the poor operate and the specifics of those livelihoods (Call, Gray & Jagger, 2019).

Relevance of Sustainable Livelihood framework to this study

Livelihood Assets: Market location affects the availability and access to different types of assets required for livelihoods. Proximity to markets can provide access to economic capital, including opportunities for income generation, employment, and trade. The Appremdo market proximity also influences access to social capital, such as networks, information, and support systems that are crucial for livelihood activities.

Livelihood Strategies: The location of markets plays a significant role in shaping the livelihood strategies employed by individuals and households. Market access and opportunities influence the choice of livelihood activities, such as production, trading, and services. Proximity to markets can determine the viability of certain livelihood options and the ability to participate in value chains or supply networks.

Market Linkages: Markets serve as important nodes for the exchange of goods, services, and information. The location of markets affects the ability of individuals and households to connect with buyers, suppliers, and other market actors. Access to markets can facilitate the sale of products and services, improve market information, and enable the acquisition of necessary inputs or resources.

Value Chains: Market location influences the integration of livelihood activities into wider value chains. Value chains encompass the various stages of production, processing, distribution, and consumption of goods and services. Proximity to markets can impact the opportunities for value addition, processing, and the capture of value along the chain. Market access can

provide opportunities for higher prices, improved marketability, and enhanced competitiveness.

Livelihood Outcomes: The location of markets has implications for the outcomes and well-being of individuals and households. Access to markets can generate income, employment, and economic growth, which are essential for improving livelihoods. Market location can also influence factors such as food security, social cohesion, and environmental sustainability, all of which are key components of sustainable livelihoods.

The Central Place Theory

Christaller, a German, developed the Central Place theory to explain geographical patterns of economic activity using research on urban settlement trends in Southern Germany (King, 2020). The assumptions made by the theory are stated below.

Assumptions

First, Christaller's initial presumption was that there was a boundless, uniform plain with consistent soil fertility and other natural resources. Farmers on this plain shared the same incomes, and there was an equal demand for goods and services everywhere (King, 2020). From every direction, it was possible to travel the entire plain, and the cost of travel and the shipment of commodities depended only on the distance traveled.

Second, Christaller believed that businessmen in cities who produced goods and services and farmers who served as their consumers were both sensible people who aimed to minimize their costs (such as transportation and production costs) and increase their earnings. From the customers' perspective, this would mean that they would restrict their mobility to the nearest central

location that offered the goods and services they desired. For entrepreneurs, this meant that if a product or service could not turn a profit, it would not be produced or offered for sale. It was anticipated that they wouldn't offer the service or produce the good if, for instance, there isn't enough demand for them to at least break even.

Thirdly, Christaller also presupposed that central locations would evenly supply all the inhabited regions, which is related to the presumption of rational behavior and the idea that new businesses may spring up anywhere and whenever they pleased. Christaller's goal was to create a central place layout that satisfied the different economic and behavioral limitations while still including the fewest possible urban locations after these simplifications. Fourth, a good or service could be sold from any location while traveling in any direction.

The Concept of Range

Christaller introduced and define a few more concepts thus range and threshold before delving into greater detail about his supposition. The range of a central location performance proved to be the most important out of each of them. There are upper and lower limits to this range (King, 2020). As He and Giuliano (2018) have noted, the notion of the upper limit, which was generally defined as "the farthest distance the varied individuals would be ready to go to consider buying a good made accessible at a place-a central place," played a significant role in Christaller's composition of the hexagonal pattern of geographical markets and the hierarchy of city centers (King, 2020).

According to Hoeschele (2016), when consumers become increasingly willing to go further for a more expensive commodity or service, the upper-

limit range widens. The upper-limit range would be narrower for less-priced, more widely used items. Although Christaller concentrated on the demand side when creating the concept of the upper limit of a good's range, he accepted that providing supply and demand would have an impact on the range (King, 2020). He made the point that a company will need to broaden its scope of economic operations far enough into the region to achieve this criterion if it needs a specific number of client interactions to break even (King, 2020). The minimum amount of demand for this basic good necessary for covering the cost of its production may be conceived of as the lower limit of the range.

The Concept of Threshold

This was explained as the minimum population that would make an economic activity viable. Christaller explained that a market requires a sizable number of consumers to develop market power to function efficiently (Clougherty & Skousen, 2021). Christaller had to specify the products and services offered to identify the locations of each central point. He assessed the amount of distance that consumers would be willing to go to obtain various goods and services. He predicted that cities would be regularly spaced, with the distance between the key locations where the same good was offered at the same price. He reasoned that if it were possible to purchase an item at another location for less than 11 miles, a person would not be required to drive that far (Clougherty & Skousen, 2021).

Christaller's research was distinctive in that it used centrality to describe the urban location (Meeteren, & Poorthuis, 2018). According to Meeteren, and Poorthuis (2018), several articles that claimed to engage with the urban system popped up even though the basic argument of central

location theory within the field of urban study has changed over the course of the 20th century. However, these articles largely failed to recognize the significance or potential of central place theory and instead simply mentioned Christaller in getting passed. Although there have been many various approaches to urban studies since the early 1990s, only a small number of them have employed central place theory as a conceptual framework.

Mulligan et al. (2012) continued to assert, with some validity, it can be said that central place theory and global economic geographies are better understood as complements than as adversaries. They also looked at some of the theory's applications to regional and urban planning, suggesting that it is currently enjoying a revival. Without a doubt, many authors with an interest in urban studies have used the general ideas of central place theory to examine Chicago's growth in the nineteenth century (Mulligan, D'Errico, Stees, & Hughes, 2012).

Critique of Central Place Theory

Despite having a significant impact on urban and regional development, CPT has come under fire on several grounds. Several objections to the Central Place Theory concerning market dynamics: Homogeneity and Uniformity: CPT assumes that economic activity, consumer behavior, and spatial distribution are all homogeneous. This may not accurately represent the complexity and diversity of real-world marketplaces. Heterogeneity in customer preferences, economic activities, and geographical layouts are common in markets. Static Analysis: According to the idea, markets, and settlements are in a static equilibrium where they stay that way across time.

Markets are dynamic and subject to shifts in consumer tastes, technological progress, and macro-economic conditions.

The Central Place Theory assumes that transportation costs are isotropic, or uniform, and ignores differences in transportation infrastructure, costs, and accessibility that have a substantial impact on market dynamics and spatial patterns. Market Competition: The theory exaggerates the dynamics of competition and market interactions. In reality, competition in markets is driven by factors like pricing, product differentiation, marketing tactics, and service quality, in addition to geographic distribution.

Ignorance of Social and Cultural Considerations: Central Place Theory ignores social elements that affect market behavior and placement decisions in favor of economic considerations and market distribution efficiency. These social aspects include cultural preferences, social networks, and community relationships. Due to the theory's focus on spatial optimization and economic efficiency, environmental factors including ecological sustainability, land use planning, and the effects of market activity on natural resources may be overlooked.

The application and relevance of the Central Place Theory have been criticized for oversimplifying real-world complexities, ignoring social and cultural factors, and not fully adapting to contemporary economic dynamics, despite the theory's foundational role in understanding the spatial organization of markets and settlements. An even more thorough understanding of market processes and spatial planning in contemporary situations can be achieved by incorporating insights from various theories and methodologies.

Relevance of Central Place Theory to this study

According to the Central Place Theory, communities act as hubs for the distribution of products and services to the local populace. The central points (places) vary in size and function, with larger settlements offering a broader range of goods and services compared to smaller ones. Christaller proposed a hierarchical arrangement of central places, where smaller settlements are nested within larger ones.

This study analyzes how Central Place Theory functions in determining the spatial distribution and accessibility of markets within a settlement hierarchy of the Effia-Kwesimintim Municipal Area. In this context, a market has been explained as a place where goods and services are exchanged between buyers and sellers. Factors including population size, purchasing power, transportation infrastructure, competitiveness, and distance have an impact on where marketplaces are located. Larger and more prosperous settlements are likely to have a greater number of markets, offering a wider variety of goods and services. These larger markets attract customers from surrounding areas, resulting in a more extensive trade network and higher economic activity.

Central Place Theory suggests that markets are strategically located to maximize their reach and capture a significant share of potential customers. Market locations are often determined based on the principle of central accessibility, aiming to minimize travel costs and time for both consumers and producers. The theory also introduces the idea of a threshold population, or the lowest possible number of people needed to sustain a specific kind of market,

and this helps the researcher to understand how the population distribution of the Effia-Kwesimintim matches with the expected functionalities of the Apremido market. Markets with higher threshold populations tend to be in larger central places, while smaller settlements have markets serving basic needs.

In summary, the Central Place Theory provides insights into the spatial organization of markets within a settlement hierarchy. It explains how market locations are determined based on factors such as population size, accessibility, and economic factors. Understanding the link between Central Place Theory and market location is valuable for urban and regional planning, as it helps identify optimal locations for markets and facilitates the efficient distribution of goods and services.

Conceptual Review

The Concept of Location

Gao, Janowicz, and Couclelis (2017) defined the concept of location as the position or place of a specific point, area, or feature on the Earth's surface. It is a fundamental concept used to identify and describe where something is placed spatially. There are two primary aspects of location: absolute location and relative location. The absolute location describes a place's exact coordinates using latitude and longitude or a specific address. It provides an exact reference point on the Earth's surface and is often represented using global positioning systems (GPS) or geographic coordinate systems. Relative location: relative location describes the position of a place about other places or landmarks. It is based on the surrounding context and provides a more qualitative understanding of a location's position (He & Chan, 2015. Relative

location often involves describing a place's proximity to nearby cities, bodies of water, physical features, transportation routes, or cultural landmarks.

Conceptualizing Market

Quayson, Bai, and Osei (2020) explain that a market is a place, either physically or electronically, where consumers and sellers interact to exchange goods, services, or other assets. It can be a physical location such as a marketplace, shopping mall, or bazaar, or it can be an online platform or website where transactions occur. Pan and Dong (2022) argue that in a market, buyers seek to acquire products or services they need or desire, while sellers offer their goods or services for sale. The dynamics of supply and demand govern how consumers and sellers interact. Negotiations or the effects of supply and demand are used to set prices and markets play a crucial role in economic systems as they facilitate trade, allocate resources, and determine prices (Pan, Y., & Dong, 2022). They give businesses a way to connect with customers and people a way to find the commodities and services they need. Market conditions, including competition, consumer preferences, and economic factors, influence the behavior of buyers and sellers within a market.

Factors that Influence market location

Quayson, Bai, and Osei (2020) explain that a market is a specific place or area where economic transactions occur between buyers and sellers. It is the physical location where goods, services, or commodities are exchanged, and where businesses or vendors offer their products to consumers. Factors that influence market location are demographics and population distribution: the size, density, and characteristics of the target market population are essential considerations. Nagle and Muller (2018) explain that companies often locate

to markets where there is a sufficient consumer base with the desired purchasing power and demand for their products or services. Nagle and Muller (2018) further state the following considerable factors of market location:

Competitiveness and Market Saturation: The competitive environment and market saturation affect decisions on where to locate markets. Companies may choose to locate in areas with less competition or where there is a gap in the market that they can exploit. Market saturation, on the other hand, may lead to companies seeking untapped markets or areas with growth potential.

Cost of Operations: Factors such as land and real estate costs, labor costs, taxes, regulations, and utilities can significantly impact market location decisions. Businesses often seek locations that offer cost advantages and a favorable business environment.

Proximity to Suppliers and Resources: Some industries require proximity to specific suppliers, raw materials, or resources. Locating markets near these sources can reduce transportation costs and ensure a reliable supply chain.

Market Research and Consumer Behavior: Detailed market research and analysis of consumer behavior help identify optimal market locations. Understanding consumer preferences, shopping patterns, and cultural factors can guide decisions about where to establish markets.

Government Policies and Incentives: Government policies, regulations, and incentives can influence market location decisions. Some regions offer tax incentives, grants, or subsidies to attract businesses, while others may have specific regulations or restrictions that impact market viability.

Infrastructure and Amenities: The availability of necessary infrastructure, such as utilities, telecommunications, and internet connectivity, is crucial for market operations. Additionally, the presence of amenities like shopping centers, entertainment facilities, and educational institutions can attract consumers and enhance market potential.

Market Expansion and Global Considerations: Companies considering international markets or expanding their operations globally consider factors like cultural compatibility, political stability, trade agreements, and economic conditions of potential target markets.

Market Classification

According to Afrane (2002), markets might be characterized as smaller, medium, or large in this sense. Other elements that go into classifying markets include selling capability (expressed in the number of shops and stalls), market infrastructure availability, total building cost, and an aggregate number of people involved (expressed in terms of producers and consumers), according to Owusu and Lund (2004).

Gillespie (2016) explains that Ghanaian marketplaces identify a considerable diversity of enterprises in addition to economic activities (various types of businesses). Institutional classification based on factors like modernity, competition, capitalist ideology, legality, or size cannot sufficiently convey this variety. Markets can sometimes have operations that are reflected in their scale, although this is not always the case. Regarding capacity, the availability of utilities, and the typical number of attendants, markets in rural towns in the country are typically notably smaller than those in metropolitan regions (Kjellén & McGranahan, 2006).

Boamah, Amoako, and Asenso (2020) purport that markets in Ghana can be categorized hierarchically into central markets, retail locations or satellite markets, and rural markets based on their size and a range of other variables. Among the locations where they have been placed, the most important ones are a few huge marketplaces. They frequently function as daily public places with a range of frequency overlaying (market days) (Boamah, Amoako & Asenso, 2020).

They frequently run out of the heart of the city and provide a wide range of retail and wholesale services. The Makola Market in Accra, the Kumasi Central Market, the Takoradi Market Circle, and the Kotokuraba Market in Cape Coast are just a few examples of central markets that Asante and Mills (2020) provide. Many central markets can be found in several cities, such as Accra. A metropolitan market, like the Kumasi Central Market, may be categorized as such because it serves consumers from all over the country (Burkina Faso, Mali, and Niger) (Darko-Koomson, Aidoo, & Abdoulaye, 2020).

Comparable to central markets, retail establishments like Accra's Nima and Nungua markets and Kumasi's Bantama and Asafo markets are typically medium-sized and serve the requirements of local communities (Asante & Mills, 2020). There are also small and, as was already indicated, somewhat irregular village markets. According to Boamah, Amoako, and Asenso (2020), the way the market economy operates is such that the central markets are the densest and provide higher-order commodities and services, keeping them competitive with the community, regional, and rural markets.

Without consideration of market location and properties, it can be observed that several factors associated with an enterprise's capacity to operate successfully in a certain place cannot be overemphasized. Market may be classified based on the availability of what is known as upstream (input) linkages which are the cost and accessibility of essential commodities, their proximity to producers, the presence of capable distributors, supplier management costs, and the quality of the inputs (Asante & Mills, 2020). Also, it considered labor costs, human capital, and the availability of critical skills such as managerial prowess and semi-skilled labor (Hout & Molenaers, 2022). The value of infrastructure and particular services, as well as a typical benefit (including geography and climate), alongside a usual criterion (which includes skills, labor, and material inputs, which include physical capital, financial capital, and the cost of land), were also mentioned. Future earnings were also mentioned (Hout & Molenaers, 2022)

According to Brimble and Hodgson (2007), location decisions were influenced by a variety of public issues, including taxes, currency rates, investment incentives, marketing efforts, learning incentives, environmental standards, special economic zones, and trade protection. These elements also included the infrastructure's durability, efficiency, and walkability. In addition to the factors relating to markets and locations that impacted the location of economic activity, Brimble and Hodgson (2007) point out that several fields of study also focused on how the following stages affect locational results.

Following economic geography studies, site agglomerations must shift significantly to induce modifications in competitive strategy (Phelps, Atienza & Arias, 2015). Nonetheless, if a location is significant enough to

warrant a change, the results might be immense. Furthermore, Capello and Kroll (2016) argue that earlier studies have demonstrated that key factors to consider comprise location like specialization spillovers for service organizations and the consequence of innovative developments.

Social Effects of a Market

Social effects are any major or desirable improvements that resolve or at least recognize existing inequalities among people across space. These organizations achieve objectives that involve making purposeful actions in their processes and governance. Social effects constitute the consequence of welfare, unemployment, psychological and physical well-being, resource endowments, and cultural events. Providing enough and dependable channels for social benefit investments is one way to improve ramifications. Glänzel and Scheuerle (2016) define social impact investing as "all kinds of initiatives that use financial capital to accomplish social and ecological goals," encompassing loans and traditional philanthropic grants and donations. Depending on their social cohesion, a group of individuals and agencies may cooperate and generate funds for investment in various businesses to improve their living.

The market is a type of societal form of governance that, through time, intertwines with human social life. Consequently, the market has fashioned itself in opposition to other social systems throughout human history. As a result, markets have always played a role in people's social lives. It indicates that a market value does not only entail the buying and selling of goods and services but also how it helps to facilitate human social lives (Sandel,2012). Human societies are merging to meet the challenges of social activity that

individuals engage in. The market, like most other organizations in modern culture, has its distinction where certain kinds of decisions can be carried out. As a result, the market had become a controller of people's social engagements driven by the worth of money and its functionalism.

The marketplace system can be viewed as a dynamic having two important roles, given the dichotomy between the market as a location and the market as a structure. According to a study conducted by Nikoleta et al. (2020) to investigate the function of "location and social impacts of protected areas on subjective well-being" in Greece, Protected Areas or places have a favourable impact on subjective well-being levels. Another major benefit of a market in terms of its location in the social sphere is that it reduces the costs and hazards that people may inflict on one another, such as thievery, aggression, and fraud. Additionally, based on its laws and expectations, the market as a socioeconomic system functions to organize to meet people's needs.

Economic Importance of Market

Income Distribution

According to Rosen (2004), the money earned because of economic activity is referred to as "income." Defining income in a thorough, rigorous, and cohesive manner, according to Brooks and Brooks (2018), is extremely difficult, if not impossible. For more than a century, economists, tax experts, legislators, and others have grappled with the income idea, with no clear solution in sight. Income, according to Brooks and Brooks (2018), is a manufactured concept driven by policy goals and pragmatic concerns.

Smallholder market participation has long been hailed for boosting farmer output, earnings, food security, and poverty alleviation (Barrett, 2008; Radchenko & Corral, 2018; Sibhatu et al., 2015). Others have looked at the consequences of market involvement on income, food security, and poverty in addition to determinants (Muriithi & Matz, 2015; Ogotu & Qaim, 2019).

Farmers sell their marketable surplus cowpeas in small quantities to rural assemblers and intermediaries, who accumulate them into 100 kg bags and sell them to urban wholesalers, or in large amounts directly to urban wholesalers (Langyintuo et al., 2003; Langyintuo et al., 2003; Langyintuo et al., 2003; Langyintuo et al., 2003) Rural traders play an important part in this trading system by purchasing cowpea from markets in remote areas that are inaccessible to larger traders.

Nigeria is the world's largest producer of cowpeas, as well as the continent's largest consumer and importer (Akibode et al., 2012). Small-scale farmers benefit from the crop in terms of soil fertility management, cash revenue, high-quality protein food, and animal fodder.

Revenue

Many state and municipal governments often use economic development rewards to induce business relocation, enlargement, or start-ups, according to Lee (2008). State and municipal governments have continued to increase their economic development operations over the last three decades, mimicking one another's initiatives with a variety of tax and financial incentive packages. According to Lee (2008), while manufacturing firm placement decisions may have significant implications for local government's

ability to raise income and provide services, there have been few studies on whether state and local governments can impact firm relocation decisions.

Lampón (2020) states that even though some studies, such as those by Carlton (1983) and Gabe and Kraybill (2002), have looked at plant locations, business births, and plant expansions, they do not specifically evaluate current firm relocation decisions. Lee (2008) presents more empirical results on the trends of plant relocations and the effect of state development reward systems than earlier studies. Lampón (2020) used proprietary data from the United States Bureau of the Census, which covers the whole universe of manufacturing establishments in the United States.

Environmental Implications of Market Location

A market's location can have a variety of environmental consequences on the surrounding area as well as the sustainability of the environment as a whole. The following are a few significant environmental consequences linked to a market's location: Markets draw a lot of people, which increases the amount of traffic in the area. This may exacerbate traffic congestion, particularly in the absence of suitable infrastructure and traffic control measures. Higher levels of air pollution, such as particulate matter (PM), nitrogen oxides (NO_x), and volatile organic compounds (VOCs), can be caused by an increase in traffic from market attendees. Both the ecosystem and human health are significantly impacted by poor air quality. Marketplaces frequently have louder environments because of the activity of vendors, conversations from patrons, and traffic.

Excessive noise pollution can lower the standard of living in the region, upset local wildlife, and annoy residents. Plastic bags, containers, and

wrappers are among the many packaging waste products that markets produce. Environmental contamination and littering can result from improper waste management procedures. Produce that has gone bad or is unsold may produce organic waste in food markets. Food waste can draw pests and increase greenhouse gas emissions if it is not properly managed.

Pollution from runoff can result from improper waste management and poor stormwater management. Pollutants can damage aquatic ecosystems and groundwater quality by contaminating nearby water bodies and soil with substances like oils, chemicals, and organic debris. Pesticides, herbicides, and fertilizers used in agricultural markets may seep into the soil and waterways, endangering human health and biodiversity. Transporting things to and from markets requires a lot of energy, especially when it's over large distances. This adds to the energy and carbon emissions. Urban markets can absorb and retain heat, which adds to the urban heat island effect if they have a lot of paved surfaces and little green areas. High temperatures have the potential to modify regional climate patterns, aggravate health problems associated with heat, and raise energy consumption for cooling.

Environmental Challenges in Ghana

According to Adams (2019), there has been a recent increase in understanding of the serious challenges that environmental issues pose to metropolitan regions' ability to survive, particularly in developing countries. Gebreslassie, Gashaw, and Mehari (2014) explain that the stability of urban environmental assets including location, conservation areas, wetland areas, aquatic ecosystems, and recreational areas is threatened by dangers. Environmental issues are going to keep playing a role in droughts and extreme

weather events, stronger storms, and increasing temperatures in the setting of global warming and growing urbanization (Wang & Gu, 2021).

They also provide threats to urban infrastructure and generally weak amenities in urban Africa. They include, among other things, a mounting burden on open space in cities, a greater risk of decreasing natural assets, damage to water resource-protected areas, and increased demand for disaster response. According to Cobbinah, Poku-Boansi, and Peprah (2017), the latest studies have shown how environmental issues have ruined urban communities and claimed lives in growing economies. The historical context of environmental issues in urban Africa faces a variety of major ecological concerns, such as floods, poor hygiene, pollution in the water and air, and deterioration of green spaces (Puplampu & Boafo, 2021).

Yet, attempts to address these issues have been hampered by a genuine failure to understand their nature and potential solutions. Sarfo-Mensah, Obeng-Okrah, and Abraham Arhin (2019) purport that according to conventional opinion, urban Ghanaians are very careless with the environment and constantly demand help from the national and local governments. According to urban research on Ghana rapid urbanization, poverty, suburban development, and operation are frequently to blame for the majority, if not all, of the country's environmental problems.

Yet, neither the succeeding national nor municipal administrations have shown any real awareness of environmental issues, nor is there any actual proof that Ghanaian urban people have been especially unaware of its importance. According to Almulhim and Cobbinah (2022), protecting Ghana's urban ecosystem services in this age of climate change and rising urbanization

is undoubtedly a problem that must be looked at more closely and included in a comprehensive plan for sustainable urban development. Practically significant urban area in Ghana is declining on almost every progress metric in these first few decades of the 21st century (Abass, 2022).

The problem may be partially ascribed to Ghana's specific description of urban centers, which is limited to places having a population of 5000 or more (Ghana Statistical Service [GSS], 2012). According to Cobbinah and Korah (2016), this notion disregards the socioeconomic and environmental aspects of urban expansion or urbanization. In this situation, it is not surprising that simple urban life has grown more challenging; it has become extremely complicated to prevent overusing ecosystem services (such as destroying natural areas for human occupancy and socioeconomic purposes) and damaging the urban environment.

In the view of Asumadu et al. (2023), to comprehend the complexity and interrelation of elements that cause an unpredictable possible future and to fully appreciate the scope of the environmental concerns, it will be important to first evaluate the variables that lead urban Ghana to serious environmental deterioration. This will enable a thorough analysis of the environmental issues brought on by human activity as well as an emotive comparison between those issues and those brought on by natural occurrences. In understanding the overview of how urbanized centers are dealing with the challenges, it would then be feasible to tackle the matter of environmental regulation from the perspective of urban sustainability in the country.

Asumadu et al. (2023) further explain that policy recommendations are also made for what metropolitan regions should do right now to transition

from a posture of environmental vulnerability to one of greater adaptability and sustainability. The current scenario offers a critical window of opportunity to refocus development strategy in a way that would not only increase the socioeconomic well-being of Ghanaian urban residents but also raise the standard of the urban environment they live in.

Empirical Review

Ferreira, Fernandes, and Raposo (2017) undertook a study to determine the degrees to which location has an impact on the ability of businesses operating in manufacturing activities to innovate. Ferreira et al. (2017) claim that corporate location does affect an organization's capacity for innovation and that this makes it pertinent to fill this existing gap in knowledge. The study reviewed various location theories from 1826 to the contemporary theories (Evolutions of business locations theory) of location for economic agglomerations. Considering the methodology, the study employed a cross-sectional study where a sample size of 884 businesses from the Lisbon metropolitan on Portugal's landmass participated in the survey.

The result of the study supported the notion that an organization's ability for innovation increases with geographic proximity to urban areas. However, it is evident from the study that, socioeconomic and environmental consequences of the location of the business were not incorporated into the study.

Mejia-Dorantes, Paez, and Vassallo (2012) research to evaluate the effect of a new Metro line in the Madrid Suburbs and the influence of transportation infrastructure on firm location. Meji-Dorantes et al. (2012) suggest looking at location trends by various economic sectors to see if the

future Madrid metro line 12 has aided in the development of a Metrosur spatial economy. The study's findings suggest that aggregation and scale economies play a significant influence on the relationship between the location of business activity and urban mobility. The study did not incorporate primary data by engaging participants on their personal experiences on the effects of location on their transport accessibility to inform a clarity the impact of the study. This study concentrated on the transportation effects of firm location, but it ignored how firm location could socioeconomically and environmentally impact the livelihoods of residents.

Furthermore, Sharma, Bhatta, and Poudyal (2011) describe a scenario in which the forest-dwelling inhabitants of Padampur Village in Chitwan National Park in India were relocated. The purpose of the research was to determine the impact of such relocation schemes on biodiversity conservation and human livelihood. Secondary sources of information, mostly from the literature, were also examined. With a 5 percent (total household number of 1689) sampling intensity, a questionnaire survey was conducted with a stratified random sample to include all sorts of caste and ethnicity.

Women made up half of the respondents in the samples (Sharma et al, 2011). Villagers' sentiments regarding nature conservation and park maintenance in Chitwan National Park (CNP), as well as the resettlement program and their aspirations for a new life in New Paddmpur, were also surveyed. The descriptive analysis included categorizing impacts and dynamics over resource uses, as well as comparing them to the scenario in the past when the studied groups of people lived within the park (Sharma et al., 2011).

The study revealed that after the relocation program, people's ownership of natural resources was restricted, and their involvement in forest control expanded. Relocated people were found to have both chances and problems in their quest for a better life. The study suggested that relocation programs based on dialogues encouraged people to adopt more conservationist attitudes and that annexations should begin after the establishment of some basic infrastructure in the relocation area, which was missing in Padampur. Again, the study just as other related work indicated mixed responses in that positive and challenging outcomes were noted. However, the findings could not identify the consequences of the relocation on income and revenue levels and the nature of responsiveness to the people.

As a country's population increases, its related congestions in cities are indispensable. Abdul (2013) explains that as part of the Kumasi Roads and Urban Development Project, a 37-million-euro southeast ring road was going to be built in Ghana to get rid of one of the key congestion spots at the city's entry. Abdul (2013) evaluates the location effects in terms of the involvement of the furniture makers, the impact on their customers, and, consequently, average incomes, as well as their contribution to the long-term viability of the Kumasi Metropolitan Area (KMA) program.

The article utilized mixed methodology to evaluate the relocation exercise in terms of characteristics including engagement, impacts on the population and income brackets, and program stability. The selection of respondents for the interview was done using a semi-structured questionnaire that was influenced by the sampling technique. Based on these methods, a

total sample size of 93 furniture makers expressing a 90 percent level of confidence was calculated among 1300 employees.

Abdul (2013) demonstrates in the article's finding that there were some preliminary disadvantages of location and a decline in client base from a commercial perspective. Their average incomes did, however, rise, which was explained by the prevailing price rises. The study recommended that the Kumasi Metropolitan Assembly's (KMA) revenue collection department educate woodworkers on the value of tolls collected and offer extra structures in the Wood Village to accommodate employees who wish to grow their businesses. However, the study omitted natural and human factors before considering the relocation. It did not also cater to the environmental implications of the relocation.

South Africa's geopolitical, societal, and economic landscapes have been quickly changing since the mid-1990s (Donaldson et al, 2013). These changes, which were mostly driven by government policy, particularly after 1994, have provided tailor-made possibilities for knowledgeable and resourceful black South Africans. Donaldson et al., (2013) undertake a study about why only certain black middle-class township inhabitants (black diamonds or BDs) do not relocate to previous white-only suburbs. The research, which was done on Black Diamonds in the suburbs of Bloemfontein, Cape Town, Port Elizabeth, and Pretoria, highlighted the importance of cultural, social, geographical, political, and economic elements in the black middle class's residential location decisions (Donaldson et al., 2013).

The study employed two different methodologies. To begin, a review of the available literature (of which there is a paucity), with consumer reports

accounting for many published studies on the emergence of the context for the analysis was supplied by that review. Secondly, despite the repeal of racial legislation in 1994, face-to-face interviews were performed with BDs who chose not to relocate to the old whites-only areas after 1994. In total, 180 BDs were interviewed in four provinces, each in the townships of a large urban region (Cape Town, Bloemfontein, Port Elizabeth, and Pretoria). In total, 45 interviews per city were done. As the initial selection criteria for a purposive sample, observable markers such as ownership of stylish vehicles, large modern houses, and digital television dishes were considered.

Donaldson et al., (2013) in describing the key findings noted that black diamonds prefer to stay in townships to avoid being labeled as such and hence remain hidden riches in the social makeup of cities. Some object to the phrase since it suggests superiority and strives to separate them from their peers. However, the study did not focus on the effects of location which affected other Black diamonds' refusal to relocate.

Also, Weng (2013) looks at why the Hsinchu municipal authority in northern Taiwan managed to move street vendors into a new location (the Zhu Lian market), but not in another (the Guan Dong market). According to a survey of the literature, street vendor moving processes confronted two primary obstacles: (1) a bad site; (2) bureaucratic compliance. The fieldwork included observations and interviews and semi-structured interviews. All the interviews were performed by the researcher in Chinese. Weng (2013) explains that the Guan Dong Public Market Vendor Association (GDVA) of the Guan Dong public market and the Hsinchu Street Vendors' Union (HSVU) of the Zhu Lian public market were utilized as research cases to examine the

function that Street vendor groups play during the street vendor relocation process (Weng, 2013).

The importance of street vendor organizations during the relocation process was discovered to be a major finding. They brought street merchants together and brought people with different interests together, while also forming their social conventions and etiquette. The article also highlighted the dangers of depending on strong vendor associations to manage the city's street sellers. Again, this study gave clear explanations for the reason for the disparities in the relocation processes but failed to account for the aftermath of choosing a new location.

Soelistiyono, Adrianto, and Kurniawati (2018) conducted a study whose objective was to ascertain the effects of Mranggen's local market location on both vendors and the neighborhood. The study employed a comprehensive single case study research approach. A qualitative technique was applied in that research. The forms and data collection techniques used in this inquiry were primary and secondary data. The research was carried out at Mranggen village's temporary shelter in Indonesia.

However, it was found that the influence of location on product quantity in the work of Soelistiyono et al. (2018) was a drop in product quantity ranging from 30 percent to 50 percent. Only 6-8 hours a day were cut from the operating hours, according to the data. Soelistiyono et al. (2018) state that the stall's location, the discomfort of the stalls' location, the irritating scent of garbage, the fact that the rainy season frequently floods, and the lack of security were all constraints consequences. In terms of accessibility, the

traders complained about the remote location and the tiny road leading to it which influenced the buyers' declination to buy.

Soelistiyono et al. (2018) determine that the move from the Mranggen market to the temporary shelter located in the Mranggen field had an impact on traders' behaviour, as evidenced by five indicators: the number of items, quality of goods, working hours, stall location, and convenience of reaching places. The research failed to address essential aspects of traders' businesses, such as income creation, as well as consumer reactions to the new location.

Moreso, Kapitsinis (2019) investigates the effects of the crisis and the subsequent government regulation on firm-internal resettlement factors like size, sector, and resettlement incentive, as well as the effects of resettlement on business results. She did this by using a proper assessment of Greek migrants' pre- and post-crisis mobility to Bulgaria. Kapitsinis (2019) uses arguments from the behavioural theoretical approach to corporate mobility. The work included both questionnaires and interviews. Owing to the absence of a database, the 176 closed questionnaires that were completed with owners and managers of Greek Small and Medium-sized Enterprises (SMEs) in Bulgaria represented a sizable sample size. According to Kapitsinis (2019), the findings showed that, whereas many Greek businesses saw relocation to Bulgaria as an entrepreneurial opportunity for organization extension before the crisis, relocation has become a necessity for many Greek entrepreneurs to continue in business since 2007.

Nevertheless, there is proof to support an identifiable distinction between businesspeople who manage strong and medium-sized firms and pursue business expansion. and stronger competitiveness and entrepreneurs

who own small, ineffective businesses and have a capacity to sustain a business without first obtaining quality enhancement. The study, on the other hand, overlooked the environmental implications of the new locations which were chosen for the Greek SMEs.

The government of Kendari City in Indonesia had set a goal to locate the Pasar Panjang Markets as part of its attempts to use space for development in many sectors, one being the economic sector to boost the community's economy. Asiah et al., (2020) state that a study aimed at determining the process of Pasar Panjang traders being relocated to the Central Market of Wua-Wua Kendari City and the impact generated by the move was not negotiable. The study included a complete literature review that included locating supporting facts in works of literature such as books, documents, research journals, papers, and other research-related reference materials.

The study took a qualitative approach, with data being gathered through observation, interviewing, and recording. The study purposefully chose its participants, a process based on the determination that the respondents have the necessary ability, knowledge, and trustworthiness to respond to questions in the interview guidelines. The informants included up to 15 traders who had previously traded in Pasar Panjang, with officials from Wua-Wua Kendari's Central Market serving as the major informants. The descriptive qualitative analysis technique was employed to analyze the data in this study.

The study's result showed the relocation had social consequences, as the well-established contact between traders and the fact that some locations were not accorded much consideration due to poor sanitation and the lack of

visitors had a negative economic impact on merchant income. The study concluded that because of the low visitor traffic, some traders preferred to re-sell in the Pasar Panjang, while others opened kiosks in front of the Wua-Wua Central Market building to attract customers and raise their income. The study, however, did not consider the role of traders as important market players in the location processes.

Lastly, Rany et al., (2021) reveal that one of Pekalongan's markets and Banjarsari Market in Indonesia had been hit by a fire outbreak. After that, the Banjarsari market was moved to Patiunus Street. Rany et al., (2021) use a qualitative descriptive method to investigate the “Impact of Market Relocation to Roadway and Sidewalk Functions at Patiunus Street Pekalongan”. The study showed that the relocation affected the function of roads and sidewalks and four standards of sidewalks existed.

In conclusion, Rany et al., (2021) purport that the function of the walkway had changed and was no longer the same as the previous design of the secondary collector street. Because one side of the pavement was covered by street vendors and another side was worse and nonstandard, pedestrians' safety tended to deteriorate. The researcher proposed that the government enhance the sidewalk at South Park and redesign the street vendor, as well as convert the road classification from secondary collector street to Secondary Street. It is worth noting that the study only looked at the nature of pathways, ignoring the impact of the relocation on traders and the overall receptivity of the public.

Summary of Empirical Review

Table 1: Summary of the empirical review

Author/ Year	Study focus	Region/ Location	Study Design	Sampling	Key findings	Remarks/Gap
Sharma et al (2011)	Impact of relocation of forest communities in a case from Chitwan	India- Padampur Village	Mixed method	Stratified random / Field observation	Natural resources were restricted. Relocated people were found to have both opportunities and problems	The study ignored the impact of the relocation on traders and the revenue
Meji-Dorantes et al. (2012)	Transportation infrastructure impacts on the firm location: the effect of a new metro line in the suburbs of Madrid	Spain Madrid	Case study Spatial statistical techniques and micro-level data		The pattern of economic activity location is related to urban accessibility and that agglomeration, through economies of scale	Effects of firm location there ignored how firm location could socioeconomically and environmentally impact the livelihoods of residents
Abdul (2013)	The Effects of The Relocation of the Anloga Wood Market on Wood Workers in Ghana	Ghana-Kumasi	Case study approach	Purposive sampling approach	Customer base loss, but later increase in income level attributed to the general price increases	It ignored relocation's impact on government revenue generation.
Donaldson et al (2013)	Relocation: To be or not to be a black diamond in a South African township?	South Africa- Cape Town, Port Elizabeth, and Pretoria	A case study/ Mixed method	purposive sample/ snowballing (180)	Black diamonds preferred to stay in townships to avoid being labeled as such and hence remain hidden riches	The study ignored relocation effects
Donaldson et al (2013)	Relocation: To be or not to be a black diamond in a South African township?	South Africa- Cape Town, Port Elizabeth, and Pretoria	A case study/ Mixed method	purposive sample/ snowballing (180)	Black diamonds preferred to stay in townships to avoid being labeled as such and hence remain hidden riches	The study ignored relocation effects

Weng et al (2013)	Accommodate Street Vendors during the Urban Development Process	Taiwan-Hsinchu	Case study Qualitative	Purposive	Street vendor organizations play a crucial role during the relocation process.	Failed to account for the aftermath of the locations
Ferreira et al. (2017)	The Effects of Location on Firm Innovation Capacity	Portugal Lisbon	Cross-sectional study	Sample of 884 companies	The study also confirmed that the greater the geographic proximity of a company to urban centers, the greater it's capacity to innovate	The socioeconomic and environmental consequences of the location of the business were not incorporated into the study.
Kurniawat (2018)	Analyzing the impact of traditional market relocation on surrounding traders and communities	Indonesia-Mranggen	Holistic single case study approach	Purposive/ Convenient	There was a drop in product quantity ranging from 30 percent to 50 percent	Ignored revenue generation and consumers responsiveness
Kapitsinis (2019)	The impact of the economic crisis on firm re-location	Bulgaria	Case study/ Qualitative method	Multiple sampling methods	Many Greek businesses saw relocation to Bulgaria as profitable	It overlooked the economic impacts
Asiah et al (2020)	The Socio-Economic Impacts After Re-location of Pasar Panjang Traders to the Wua-Wua Central Market Kendari City	Indonesia-Kendari	Qualitative approach	Purposive/ Descriptive qualitative analysis	Connections between traders were not enhanced, and the lack of visitors negatively impacted merchant income.	Traders' role in the process of relocation and impact revenue were ignored
Rany et al (2021)	The Impact of Market Re-location to Roadway and Sidewalk Functions at Patiunus Street Pekalongan	Indonesia-Banjarsari	Qualitative descriptive method	Purposive, Convenient, simple random	The relocation affected the function of roads and sidewalks and four standards for sidewalks existed	Findings ignored the impact of the relocation on traders and the revenue

Lessons learned from the empirical reviews.

Careful consideration of the various empirical studies reviewed explains the diversifications of theories, approaches, and concepts to locations and relocations and their aftermath implications. The studies showed that different theories on locations were employed under the empirical studies that have been discussed in this work. Theories such as Behavioural Theory Approach and Urban Design Process Theory were the main theories that were captured in the empirical studies discussed. Notably, most of the authors reviewed other literature which consisted of books, journals, academic papers, and documents to inform their understanding of previous works on locations and relocations by considering their process and long-term effects.

In terms of the methodologies, a single case study with its related qualitative approach was the commonest research design even though there were few cases where mixed methods that incorporated both qualitative and quantitative analysis were also used. The empirical review showed a varying sample size with various data sampling techniques such as purposive, convenient, snowballing, simple random, and data collection methods: interviews, focus group discussions, observations, and questionnaires that facilitated the analysis of the studies.

There is clear evidence that different key findings ensued throughout the various empirical studies. Generally, there were mixed responses in terms of the positive and negative consequences of market relocations and locations. The relocations mostly led to decongestions and created easy commuting. However, there were very few reports on the implications of market locations, particularly on income on traders and government revenue and considerable

factors on the site chosen for the locations. These lessons were learned to inform the understanding of the formulation of a conceptual framework.

Relevant to the Empirical Review

Empirical review provides practical implications and recommendations for practitioners, businesses, and organizations. They provide information on methods, techniques, and best practices that can be used to accomplish goals in practical contexts. By considering elements like cultural variations, economic situations, social dynamics, and environmental variables, the empirical review aided in the comprehension of complicated phenomena within particular contexts. These important considerations also helped me anticipate potential study problems. Both quantitative and qualitative research methodologies were used as the various studies' primary methodology, which allowed for a thorough grasp of the problems from several angles. While qualitative studies gave in-depth examination and interpretation of social phenomena, the numerous quantitative studies presented numerical data and statistical analysis. The empirical review aided in my formulation of the problem statement by pointing out gaps in current knowledge, proposing fresh lines of inquiry, and encouraging collaborative research between disciplines.

Conceptual Framework

A conceptual framework is an expressive or visual representation of how elements are expected to interact, according to Morais, Jansen, Andrade, and Dragicevic (2020). They are characteristics or properties that you want to research using elements that are already established. Given that, this framework showcases and describes key variables about the impact of market location which this study is underpinned.

Choosing a location is one of the important stages in establishing an economic activity for which the market is one. In doing so, both natural and human factors that may affect the location and relocation of a market are very considerable. For the natural factors, the Sustainable Livelihood approach explicitly describes the need to incorporate ecological concerns that should be pivoted on sustainability. This together with a favourable environment, which is made up of the absence of a water body, but friendly vegetation that can impact the market in terms of beautification and healthiness must be considered. The distance that traders and consumers would have to travel to engage in trading is an equally significant factor in that the farther the market is away from the consumer, the more they (consumers) find alternative sources of engaging in trade. There should also be the availability of space to ensure easy commuting within the market. Major human factors such as population, social capital, physical capital, and financial capital are means to enhance the livelihoods of the traders.

Figure 2 shows a controlling connection to market location based on various theories and empirical studies that the author has reviewed in this work.

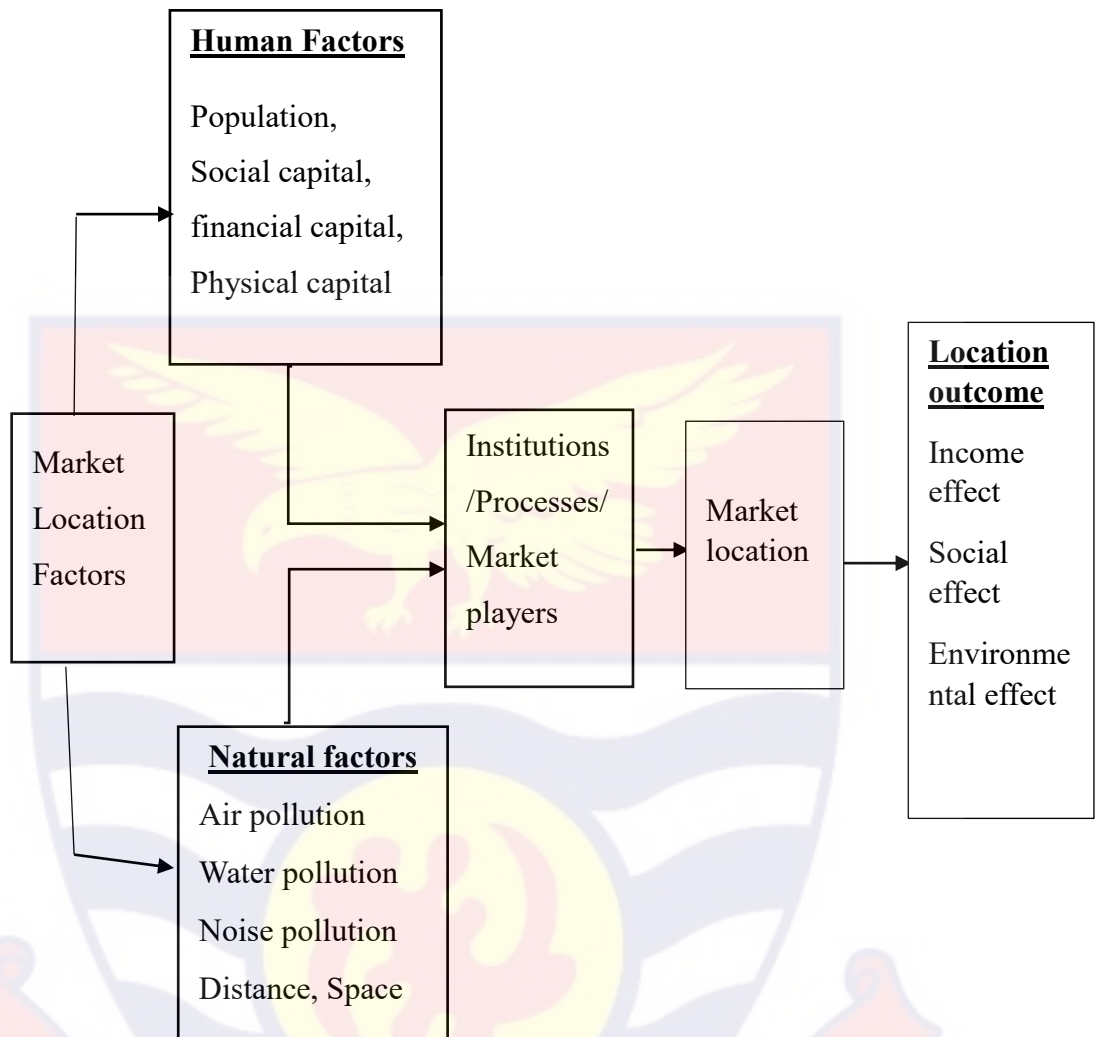


Figure 2: Conceptual Framework on Market Location

Adapted from Sustainable Livelihood Framework (1999) and King (2020)

These said factors must undergo a rigorous process in terms of decision-making that includes major stakeholders of the market. In this case, governments, traders, consumers, and community members ought to be given platforms to have their inputs incorporated for a final determination on a chosen location.

Key Issues of the Conceptual Framework Explained

Financial Capital

Market expansion and successful operation depend on financial capital. It has a significant impact on market operations in multiple ways. To begin operations, new enterprises require financial resources. It pays for upfront expenses like equipment purchases and property security. Financial capital is necessary for established businesses to grow their operations, penetrate new markets, create new goods, and increase output. Capital availability enables companies to take advantage of expansion prospects. To handle daily activities, such as paying suppliers, staff, and energy bills, businesses need working cash. Enough operating capital guarantees seamless and continuous operations.

Financial capital enables companies to keep their inventory levels at ideal levels, guaranteeing that they can satisfy client demand without going overboard or experiencing stockouts. Access to money reduces exposure to specific asset risks and improves financial stability by enabling investors and firms to diversify their holdings. Financial firms give customers credit so they may afford big purchases like homes, vehicles, and schooling. This increases consumer spending and boosts the economy.

Social Capital

Social capital guarantees networking and the development of trust. The development of social capital among market players can lower transaction costs and promote more seamless corporate operations by fostering trust and cooperation. Long-term commercial collaborations are facilitated by trustworthy relationships, which also reduce the danger of fraud and increase

the efficiency of exchanges. In a community, a high degree of social capital can improve the information flow. Strong social networks give businesses in those areas better access to market data, opportunities, and trends, which can help them make more informed decisions and gain a competitive edge. Higher levels of corporate collaboration may be observed in markets with substantial social capital. This can result in collaborative efforts, pooled resources, and group problem-solving, which will increase the market's general creativity and productivity.

Physical Capital

Physical capital, which encompasses infrastructure, technology, and buildings, has a big impact on market functioning in a lot of different ways. The effective flow of products and services is facilitated by physical infrastructure such as highways, railroads, ports, and airports. Effective transportation networks shorten delivery times and save costs, increasing market penetration and enhancing supply chain dependability. Enhancing market accessibility is physical capital, such as stores and warehouses. In addition to consumers having easier access to goods and services, businesses can reach clients more effectively, which improves market efficiency overall.

Institution

Institutions offer a system of laws that establishes and protects property rights. Trade and investment are stimulated by this legal certainty because it gives people and companies confidence in their ownership and transactions. Institutions create and implement laws to safeguard consumers, promote fair competition, and preserve the integrity of the market. Good regulation levels the playing field for all players by preventing monopolies,

fraud, and other market abuses. Banks and stock exchanges are examples of financial institutions that offer the infrastructure required for capital allocation and mobilization. They make it easier to obtain loans, investment possibilities, and financial services—all of which are critical for the expansion of markets and the growth of businesses.

Distance

Under the Central Place Theory, two main concepts have been explained, the upper limit range and the lower limit range. The upper limit range has been explained as the longest distance that consumers are willing to travel to access or consume a good while the lower limit range is being explained as the vice versa. Market operations can be greatly impacted by the distance between two markets in several ways. These are a few of the main effects. Transporting goods between markets usually costs more when the distance is greater. Consumer prices may increase as a result, while enterprises' profit margins may shrink. Delivery times are frequently longer when distances are greater. This may have an impact on perishable goods' freshness, cause production schedules to be delayed, and result in stockouts or overstock scenarios.

It could be more difficult for companies in far-off markets to enter each other's markets. This might diminish possible consumer bases and limit market reach, particularly for small and medium-sized businesses that cannot handle long-distance logistics (upper limit range) as explained under the Central Place Theory. Increased distances have the potential to worsen information asymmetries. Companies might have a harder time getting fast

and reliable market information, which could result in less-than-ideal decisions being made.

Population

Market operations are greatly impacted by the population threshold, which is the minimum population number required to support a specific sort of market or business. Market viability requires a threshold of population large enough. For businesses to continue operating and making money, they require a minimum number of potential clients. If a market doesn't cross this barrier, it could have trouble drawing in and keeping companies. A greater population usually results in a more steady and reliable demand for products and services. Businesses can plan more efficiently, control inventories, and make growth-oriented investments thanks to this consistency. Increased population density can result in economies of scale, which allow companies to distribute fixed costs over a greater number of clients and reduce costs per unit. Consumer prices may drop as a result, and company profit margins may increase. Due to perceived reduced risks and better potential returns, investors and financial institutions are more likely to support firms in markets with larger population thresholds.

Market Location

Favorable conditions for business operations, growth, and profitability are provided by a suitable market location. Easy access to suppliers and customers is ensured at a location with a well-developed transportation infrastructure, including ports, airports, railroads, and roadways. By cutting down on delivery times and costs, efficient transportation improves market efficiency as a whole. Businesses need to be near a sizable and varied

consumer base. It makes it possible to respond to client needs more quickly, cut distribution costs, and better understand them. Greater prospects for company success are found in areas where there is a robust and expanding market for goods and services. It's critical to comprehend consumer preferences and local market trends. Being close to important partners and suppliers lowers transportation costs and boosts supply chain effectiveness.

Market Players/Stakeholders

A market cannot function at its full potential without its stakeholders, including suppliers, dealers, consumers, and institutions. Every group contributes in a unique and significant way to making sure the market runs well. Traders facilitate the trade of products and services by acting as middlemen between producers and customers. They aid in balancing supply and demand. Traders participate in the process of price discovery by engaging in buying and selling activities, which aid in the establishment of market prices that accurately represent supply and demand situations. By ensuring that there are always people prepared to purchase and sell, traders contribute to an improvement in market liquidity. The market's ability to operate smoothly depends on this liquidity.

Production and market activities are driven by consumer demand for goods and services. Innovation and market trends are influenced by their choices and purchases. By influencing product quality, diversity, and innovation, consumers contribute feedback through their purchase decisions. Businesses can modify their offers based on this feedback to better serve customer needs. Competition among enterprises is fueled by consumer

demand, and this enhances the quality of products, customer support, and pricing effectiveness.

The components, raw materials, and other inputs required for production are supplied by suppliers. Sustaining constant output and satisfying consumer demand require dependable suppliers. Stronger ties with suppliers facilitate more efficient supply chains, lower prices, and increased productivity. To maximize production schedules and inventory management, suppliers frequently work with enterprises. By providing innovative materials, technologies, and solutions that enhance the quality and performance of products, suppliers may stimulate innovation. Their efforts are essential to the market's continued competitiveness.

Environmental Resiliency

The capacity of a market to endure and bounce back from environmental changes and strains is known as environmental resilience, and it has a big impact on how markets operate. High environmental resilience markets can continue operating both during and after environmental shocks (such as severe weather and natural catastrophes). This continuity ensures stable market functioning by averting significant disruptions in production, distribution, and supply networks. Companies operating in robust markets are better equipped to handle environmental risks. Robust infrastructure and emergency readiness plans are two examples of effective risk management techniques that lower possible losses and guarantee a speedy recovery. Because they perceive fewer dangers, investors are more willing to place their money in markets that have significant environmental resilience. This may result in more cash coming in, which would help small enterprises and the

market expand. Stable and dependable supply chains are guaranteed by resilient surroundings. Companies can rely on reliable product and raw material delivery, which minimizes delays and upholds production schedules.

Summary of Chapter

This chapter reviewed relevant literature on the Socioeconomic and Environmental Implications of the Appremdo Market's Location in the Effia-Kwesimintim Municipal Area. The main theoretical frameworks reviewed were the Sustainable Livelihood Framework and the Central Place Theory. Again, this chapter contains a review of empirical studies and the conceptual framework. Major concepts such as market classifications, income, and social effects were also discussed. However, the various empirical reviews showed that location and relocations led to decongestions in general but there were mixed responses in terms of positive and negative consequences. The understanding gained from the various literature reviews led to the formulation of the conceptual framework in Figure 1 for this study. The next chapter will discuss the methodology of this study.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter explains how the data for this study was obtained. It specifies procedures that include profiling of the study area, research philosophy and design, research approach, study population, sampling technique, sample size, data collection instruments and procedures, data analysis techniques, ethical consideration, and field data validity and reliability.

The Study Area Profile

There are fourteen Metropolitan, Municipal, and District Assemblies (MMDAs) in Ghana's Western Region, and one of them is the Effia-Kwesimintsim Municipality. Until the western portion of the district was divided off to create Effia-Kwesimintsim Municipality on March 15, 2018, it was a part of the larger Sekondi Takoradi Metropolitan Area, which at the time was established on February 29, 2008 (Atta-Boateng, 2017). The remaining portion of the district has since remained as Sekondi Takoradi Metropolitan Area. Kwesimintsim, the municipality's capital, is in the southeasterly corner of the Western Region (Atta-Boateng, 2017). Considering the recent data from the Ghana Statistical Service (GSS) for the population and housing census in 2020, the municipality's total area is 109.94 square kilometers with a population of 310,280 people.

Acquah (2019) indicates that the district hospital serving Takoradi's Effia-Kwesimintsim Municipal Assembly is the Kwesimintsim Government Hospital. The hospital was built to address the healthcare requirements of the neighborhoods around Kwesimintsim, but it now also provides care to several

neighborhoods outside of that region, including those in Ahanta West, Mpohor, Wassa East, and Tarkwa Nsuaem Districts (Acquah, 2019). Food security and the livelihoods of locals are at risk due to the loss of forests and urban green zones. As a result, to secure a more sustainable future for everyone, the residents are dedicated to preserving and increasing vegetation across the town (Tottimeh, 2017).

Considering the location, Effia-Kwesimintim Municipality is absolutely located on latitude 4.906° North, and longitude -1.679° West. Relatively, it is located to the west of Sekondi-Takoradi, which is a major city in the Western Region. Effia-Kwesimintim is bordered by Sekondi-Takoradi to the east and the Atlantic Ocean to the south (Atta-Boateng, 2017). The climate in this region is generally classified as tropical. It experiences a wet and dry season throughout the year. The wet season in Effia-Kwesimintim typically occurs between April and October, with the heaviest rainfall usually falling between June and September. During this period, temperatures tend to be slightly cooler, ranging from around 23°C (73°F) to 28°C (82°F). The dry season, on the other hand, extends from November to March. During this period, rainfall is significantly reduced, and temperatures can rise to around 30°C (86°F) or higher (Atta-Boateng, 2017).

In terms of relief, Effia-Kwesimintim is located along the coast of Ghana, and therefore, a significant portion of its land consists of coastal plains. These areas are relatively flat and low-lying, stretching along the shoreline. They are often influenced by tidal patterns and can be subject to erosion and sediment deposition. Figure 3 is the map of the Effia-Kwesimintim Municipality which shows rivers, towns, and road networks within the area. The map in Figure 3 below shows the study area and its

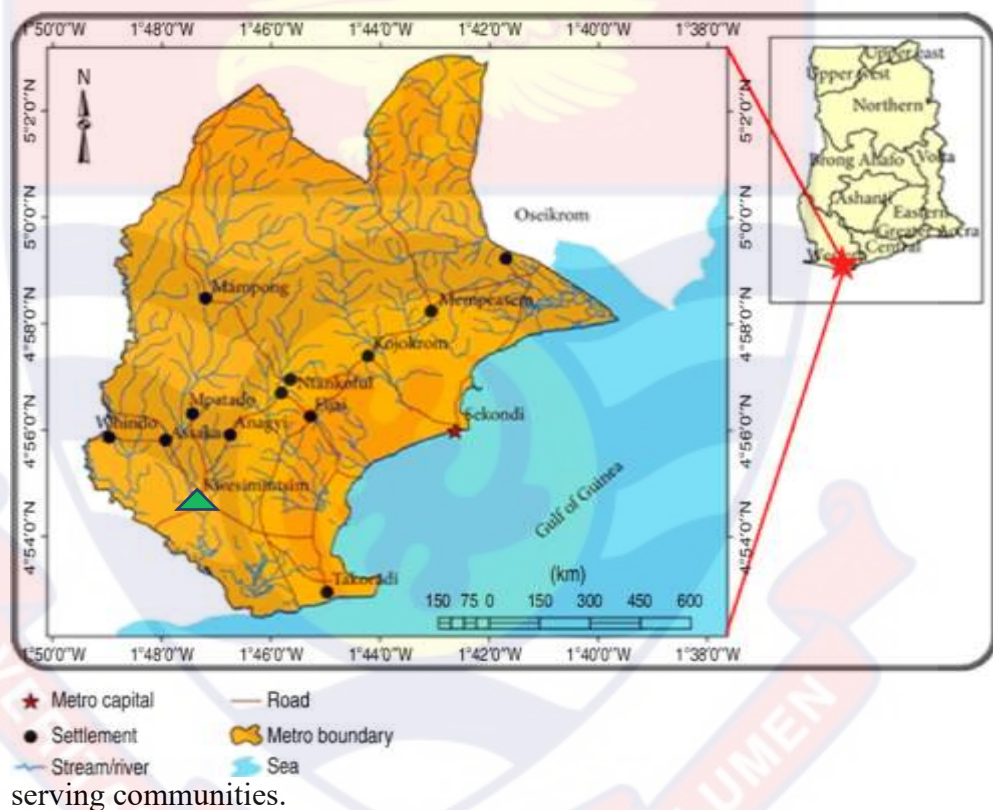


Figure 3: Map of Effia-Kwesimintim Municipality

Source: Effia-Kwesimintim Municipal Assembly (2021)

Research Philosophy

This study employed the pragmatism philosophy of scientific inquiry. Its adherents contend that all beliefs, knowledge, and scientific notions are only provisionally true and are determined by their practical application in

continuing experience rather than by agreement with an earlier truth or reality (Rubin and Babbie, 2016). Several of the most recent organization studies frontiers, including the linguistic- and practice turns, processual conceptions of reality, and experimental approaches to inquiry, are grounded in pragmatic theory (Lorino, 2018). Therefore, academic conjecture and conceptualization must not only be grounded in the past and fundamental to the present but also possess prospective traits that will be applied to how individuals live their lives in experiences to come. Since the most practical strategies to aid in the achievement of the specified objectives became the core focus of this study, pragmatic philosophy was used in this research.

Study Design

According to Tracy (2019), in research investigations, study designs are techniques for gathering, examining, analyzing, and producing reports. They represent various study models, each of which has its own set of names and processes. The researcher adopted a descriptive case study design which incorporated a mixed-method approach. In the view of Cahyadi and Prananto (2015), a descriptive case study is a design used for gaining a comprehensive, multi-faceted insight into a complicated subject in its real-world setting. The researcher chose a descriptive case study design because it enables data to be acquired in a variety of ways and there is the easiness of communicating results to non-specialists, and the capability of capturing participants' context and experienced reality.

Study Population

A significant group of people or objects that serve as the main object of a scientific investigation is known as a research population (Asiamah, Mensah,

& Oteng-Abayie, 2017). Considering the recent data by the Ghana Statistical Service (GSS) for the population and housing census in 2020, the population of Effia-Kwesimintim is about 310,280. This research focused on the following targeted population: both women and men traders, consumers (buyers), metropolitan authorities, residents in which the market is located, and private sector actors.

Data Sources

This study employed only primary data which was made up of information obtained from traders in the EKMA officials, a tax collector, Appremdo market traders, a community leader, and consumers.

Sample and Sampling Procedure

Taherdoost (2016) defines a sample as a subset of information that a researcher selects using a predetermined selection procedure from a larger population. The researcher employed a mixed-method approach, therefore, used simple random sampling for the quantitative data and purposive and convenient sampling for the qualitative data.

Firstly, for the quantitative approach, the researcher derived the sample following Yamane's 1967 sample size determination formula. According to the Ghana News Agency (2020), there are 243 registered traders in the Appremdo market. In consideration of Yamane's formula for sample size determination, with a confidence level of 95% and precision of $\pm 5\%$, $n = N/1 + N(e)^2$, where n is the sample size, N is the total population of traders, and e is the precision. $n = 243/ 1 + 243 (0.05)^2 = 151$, therefore the sample size for the quantitative study was 151 traders.

For the qualitative data, the researcher selected 24 participants which included 10 women traders, four men traders, six consumers, two metropolitan officials, a tax/revenue collector, and a community leader. Purposive sampling was used to select eight key participants that constituted a metropolitan official, a community (resident) leader, three market queens, a market king, a private sector leader, and a tax collector. The researcher used a convenient sampling to select 17 participants which was made up of five female traders, five men traders, four consumers, and three residents that he could comfortably get to partake in the study.

In the view of Bhardwaj (2019), sampling is the process of choosing a group of people, a person, or a big community for a certain type of study. Sampling makes it possible to estimate sampling errors. As a result, it helps with gathering data on the traits of populations (Acharya, Prakash, Saxena & Nigam, 2013). The researcher used a simple random sampling method for the quantitative study and used purposive and convenient sampling methods for the qualitative study. A simple random sampling was chosen for the quantitative study because of the homogenous nature of the population that facilitated the data collection. It was used to engage the traders to collect the quantitative data. Rahi (2017) explains that purposive sampling allows the researcher to select just knowledgeable participants from among participants who can provide answers to questions of interest. For the qualitative study, a purposive sampling technique was used since some of the researcher's questions were aimed at specific groups that could better address them. Therefore, the researcher purposively engaged key participants (metropolitan officers, traders' leaders, traders, revenue officials, and a community leader)

for the study. Furthermore, the researcher used a convenient sampling to engage the selected number of traders and consumers for the qualitative data. The convenient sampling enabled the researcher to engage participants at a considerable time.

The researcher included the metropolitan official in the study because they are involved in the decision-making process of the municipal assembly and were able to: provide an account of the critical factors that informed the location of the Appremdo market, give information on the tax returns from the market, give information on the economic conditions of the traders, and give information on environmental effects of the market and the measures that the city authorities have put in place to address them.

Furthermore, the researcher involved the community leader in the qualitative study to provide information on critical factors that informed the Appremdo market location and give an account of the environmental effects of the Appremdo market since he oversees some of the processes of the developmental projects, particularly land provision. To ascertain the relevant information on how traders' social and economic conditions are impacted, as well as environmental effects on the Appremdo market, the researcher involved the traders since they are the direct people who engage in trading within the market.

Again, the researcher included a private sector leader in the study because he represents the private sector players, and he was aware of some of their concerns about their trading in the Appremdo market. Furthermore, the tax collector was involved in this research because he interacts with traders and was aware of how traders responded to tax payments, this enabled him to

provide an account of traders’ economic conditions and the environmental effects of the Aprembo market. Again, the consumers were part of this study because they were able to give important information about their social (their interaction with the traders), and environmental effects of the market.

Table: Summary of the Sample Size and Sample Method Employed

Research Approach	Targeted Population	Sampling Method	Sample size		Total
			Male	Female	
Qualitative	EKMA official	Purposive	1	1	2
	Tax collector	Purposive	1	-	1
	Traders’ leaders	Purposive	1	3	4
	Traders	Convenient	3	7	10
	Consumers	Convenient	2	4	6
Total	Communal leader	Purposive	1	-	1
			9	15	24
Quantitative	Traders	Simple random	151		151

Source: Author’s compilation (2022)

Instruments of data collection

The data collection instrument of the study was a collection of well-validated in-depth interview guide and a designed questionnaire on the Kobo Toolbox online platform.

(i) In-depth interview guide

An in-depth interview guide, according to Dodds and Hess (2020), is a set of structured questions created to assist interviewers, investigators, and research professionals in acquiring knowledge or information about the subject at hand. The execution of an interview is made easier with the use of

an in-depth interview guide. The questions were prepared ahead of time that were focused to get to the heart of the subject, specifically, the research questions. This was ensured by critically taking into consideration the various specific objectives that were to enable the main goal of this research attained.

(ii) Questionnaire/Interview schedule

An interview schedule is a valuable tool for acquiring information about participants' qualities, behaviours, and attitudes (Evans & Mathur, 2018). The researcher used the Kobo Toolbox to generate an online interview guide/questionnaire. The generated online questionnaire was classified under five sections (A to E), and the sections contained the five major themes. Section A contained the socio-demographic information of the participants with variables such as age, gender, educational level, and number of years in the market. Section B contained information on the critical factors that informed the location of the Appremdo market. Section C solicited information on the social implications of the Appremdo market location on traders. Section D sought to obtain information on the economic implications of the Appremdo market location on traders and Section E was to gather the relevant information on the environmental effects of the Appremdo market location. The four specific objectives of this study were captured under sections B, C, D, and E on the questionnaire.

While traders went about their business, the researcher sought their consent and then engaged them by using his personal phone and computer to access the questionnaire on the online Kobo toolbox and administered the questionnaire. Depending on how often we were interrupted or whether the

participants had assistants, the interviews lasted anywhere from 25-30 minutes.

Pre-Testing of instruments

The developed instruments for data collection were piloted at the Kotokuraba Market in Cape Coast, Central Region. The purpose of this exercise was to assess the validity of the instrument and to allow for the necessary corrections to be made to the data collection instruments. Thirty participants were used for the quantitative data whilst six participants were also used for the qualitative data using simple random and purposive and convenient sampling respectively. The researcher used one week, starting on 8th May, Monday for this activity. On Monday, from 9:00 am to 1:00 pm, the researcher went to the Kotokuraba market to familiarize himself with the environment and sought consent from the participants who were involved in the study. From Tuesday, from 9:00 to 1:00 pm, to Friday, from 9:00 am to 1:00 pm, the researcher would engage the selected participants for both quantitative and qualitative data. On Saturday and Sunday from 1:30 pm to 4:30 pm, the researcher would analyze the data to determine the validity of the instruments.

Data Collection Procedures/Fieldwork

This described how the data was obtained for the study. It involves a process by which an interviewer gets responses from participants or individuals (Jenner & Myers, 2019). Firstly, on 15th May, I distributed the consent form to seek participants' acceptance and willingness to participate in the study. After consents were being sought, on 22nd May, I started with the quantitative data collection. I used my phone and computer to access the

interview schedule/questionnaire that I had generated on the Kobo Toolbox on the online platform to collect the data. While the traders went along with their businesses, I paused, depending on the effect of interruptions, and gained the attention of the participants before I continued to administer the online questionnaire.

For the qualitative data, I used the in-depth interview guide and engaged the specified key participants under the specific objectives. Depending on the objective, I used purposive sampling and used the in-depth interview to collect data from key participants such as metropolitan officials, traders' leaders, a community leader, and tax collectors. Again, I used convenient sampling to engage the other selected participants who considering their appropriate time were available for the in-depth interviews.

To obtain the first objective of the study, which was to explore the critical factors that informed the location of the Apremdo market, the researcher used a purposive sampling technique to engage the key participants (metropolitan officer, traders' leaders, traders, revenue official, and private sector leader, community leader) with in-depth interviews by using the in-depth interview guide to obtain the relevant information. The researcher sought participants' consent to use his phone and a notebook to record salient points during the in-depth interview which was later transcribed for the qualitative analysis.

Concerning the second objective of the study, to assess the social effects of the location of the Apremdo market, the researcher used both qualitative and quantitative approaches. For the qualitative data, the researcher used the in-depth interview guide and purposefully interviewed the key

participants (metropolitan officers, market queens, market kings, and a private sector leader). Furthermore, the researcher used convenient sampling and used in-depth interviews to gather the needed information from the selected number of traders and consumers. In terms of quantitative data, the researcher used his phone and a personal computer to access the questionnaire prepared on the Kobo Toolbox to obtain the needed information from the 151 randomly selected participants.

In the third objective, assessing the effects of the location of the Appremdo market on traders' economic conditions, the researcher used both qualitative and quantitative approaches. For the qualitative approach, the researcher used the in-depth interview guide to purposefully interview the key participants (metropolitan officers, market queens, market kings, traders, and a revenue official, a private sector leader). Convenience sampling allows researchers to conduct interviews or get responses at more expense, but it may be criticized for sample bias due to disparities in the target population (Rahi, 2017). Again, through convenient sampling, and with the in-depth interview guide, the researcher used an in-depth interview to engage the other traders to obtain the data. The researcher sought participants' consent to use his phone and a notebook to record salient points during the in-depth interview which was later transcribed for the qualitative analysis.

To obtain the quantitative data, the researcher used a simple random to select 151 participants from the 243 traders for the quantitative study. West (2016) indicates that a simple random sample is a situation where every individual in the sample has the same unbiased chance of being chosen. The researcher used the lottery method and followed the listed steps. Firstly, all

243 participants (traders) were assigned numbers. In the second step, all the numbers were written on cards with the same colour and size and were put in a container and mixed them thoroughly. Lastly, the slips were taken out randomly without looking at them until the required number (151 traders) was selected.

After the selected sample, the researcher used his phone and a personal computer to access the data with a questionnaire prepared on the Kobo Toolbox on the online platform which has been structured on major themes such as participants' sociodemographic characteristics, critical factors of Appremdo market location, the effect of the market location on traders' economic conditions, social effects of the market location on residents and environmental effects of the market location.

The last objective of the study which aimed to identify the environmental challenges of the Appremdo market location on the residents was obtained considering both qualitative and quantitative means. Concerning the qualitative data, the researcher used the in-depth interview guide and purposefully interviewed the key participants (metropolitan officers, market queens, market kings, private sector leaders, and community leader) to gather the relevant information. Additionally, the researcher used convenient sampling to solicit vital information from the selected number of traders, consumers, and residents. On the part of the quantitative data, the researcher used his phone and a personal computer to access the questionnaire prepared on the Kobo Toolbox to obtain the needed information from the 151 randomly selected participants.

Ethical Consideration

Ethical issues were seriously taken into consideration during the study. The researcher sought approval from the University of Cape Coast Institutional Review Board (IRB). Before administering of questionnaire and interviews, the researcher ensured informed consent. The researcher obtained informed consent from participants by clearly explaining the purpose of the research, how their data will be used, and any measures taken to ensure confidentiality. Participants were made aware of any potential risks and benefits involved in the study.

Upon a participant's approval for voluntary participation, any information provided by participants was treated as confidential. To avoid plagiarism, I referenced other information that had been helpful and used in the study. I ensured that the questions formulated were not emotionally harmful to the participants. The data collected were handled with care by placing them in a file and were kept far from being reached by any third person. The results of the study were reported without distortion or falsification of information.

Reliability, validity, and trustworthiness

The significance of the study's validity and dependability cannot be overstated. According to Carman (2000), reliability is the degree to which consequences are constant over time. On the other side, the study's validity specifies if the study tests what was designed to test or how honest the study findings are (Carman, 2000). The study ensured validity and reliability by using a descriptive case design that uses a mixed-method technique (Likert scales).

Understanding how a researcher could persuade their participants that the study's findings are significant is the aim of credibility or trustworthiness in qualitative research (Stake, 2000). One method to assure the validity of qualitative research is to let participants read their comments and validate that it matches what they intended, and this research did just that. The trustworthiness of the data for the presented study's qualitative approach was assured by having participants repeat what they had initially said to verify that what they had written and properly recorded matched their responses.

Data processing and Analysis

The researcher incorporated both quantitative and qualitative data, which were analyzed separately. For statistical illustrations, the quantitative data was coded in Excel and evaluated in the form of a chart and tables. The socio-demographic data was made up of traders' ages, educational and ethnic backgrounds, and years of dealing at the Appremdo market, and the other data was on the various objectives of the study. The researcher used the Statistical Package for Social Science (SPSS version 20) to undertake descriptive statistics for the quantitative data analysis.

In processing and analyzing the qualitative data, the researcher adopted Braun and Clarke's (2019) six stages of thematic analysis which involve, familiarity, generating initial code, searching for themes, reviewing themes, defining, and naming themes, and producing reports. Responses were transcribed to determine themes and sub-themes about the research questions, which were derived for the debate of this study. The researcher analyzed the data and explained it using the conceptual framework that has been developed.

The analyzed data (soft copy) was stored on my personal computer and the hard copy was kept in my thesis bag (data collection bag).



Summary of the Methodology

Table 2: Summary of methodology

Specific objectives	Data type	Data source	Target population	Sampling		Instrument	Analytical method
				Size	Sampling		
1. Explore the critical factors that informed the location of the Appremdo Market.	Qual Quant	Prim	EKMA official, traders, private actors, communal leaders,	25 151	Purposive Simple random	In-depth interview guide questionnaire	Thematic analysis Descriptive statistics
2. Assess the social effects of the location of the Appremdo market on the residents.	Qual/ Quan	Prim	EKMA official, traders, Communal leaders, residents	25 151	Purposive Convenient Simple Random	In-depth interview guide Questionnaire	Thematic analysis Descriptive statistics
3. Assess the effects of the Appremdo market location on traders' economic status.	Qual/ Quant	Prim	EKMA official, traders, Communal leaders, residents	25 151	Purposive Convenient Simple Random	In-depth interview guide Questionnaire	Thematic analysis Descriptive statistics
4. Analyze the environmental challenges of the Appremdo market location in the community.	Qual/ Quant	Prim	EKMA official, traders, Communal leaders, residents	25 151	Purposive Convenient Simple Random	In-depth interview guide Questionnaire	Thematic analysis Descriptive statistics

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents the analysis and the results that provide the understanding and evidence for the general aims of the study, which was to examine the socioeconomic and environmental implications of the Appremdo Market location in the Effia-Kwesimintsim Municipal Area (EKMA). The study sought to find answers to the following research questions; First, what critical factors were considered before the location of the Appremdo market; second, how has the location of the Appremdo market affected the traders' economic condition; third, how has the location of the Appremdo market socially affected the residents of Appremdo; and fourth, what are the environmental challenges emanating due to the location of the Appremdo market?

The chapter profiles the socio-demographic characteristics of respondents, examines the critical factors considered before the location, presents the economic condition of the traders, analyzed the social effects of the market on residents, and finally focused on the environmental challenges due to the location. The study's targeted population was EKMA officials, traders, revenue collectors, consumers, and communal leaders. An in-depth interview guide was used to conduct 25 in-depth interviews for the qualitative data and 151 questionnaires were used to collect the quantitative data for the study

Socio-demographic characteristics of the participants

Sex and Age of Respondents

The sex distribution of the participants for the study was recorded as follows. Females dominated the sex distribution with 132 out of the total sample of 151 while males constituted only 19. The dominance of females could be linked to the commodities sold in the market which are mainly foodstuffs. In terms of the age distribution of the participants, the data revealed that only one participant was between the age of 20-29, four participants were between 30-39, nine participants were between 40-49, 107 were between 50-59 and 30 participants were between 60-69. This indicates that the age group 50-59 dominated the participants in the Appremdo market with 107 participants while 20-29 constituted the least represented age group as illustrated in Table 3 below.

The dominant age group (50-59) which constituted 95 females and 12 males is attributed to the fact that considering their age, coupled with physical weaknesses, they cannot go to the other market centers to struggle for spaces with the young ones. The dominant age group of the participants affects their ability to take initiatives that would enable the effective running of the market. They expressed concerns that the congested nature of other market centers could affect their commuting within those markets. During an in-depth interview with one of the market queens, she said:

“I am very weak and do not have the energy to be fighting over spaces in the other markets. There is congestion and this does not promote easy commuting”

Table 3: Sex and age distribution of the participants

		Age					Total
		20-29	30-39	40-49	50-59	60-69	
Sex	Male	0	2	3	12	2	19
	Female	1	2	6	95	28	132
Total		1	4	9	107	30	151

Source: Field data (2023)

Marital Status of Respondents

The marital status of the participants of the study was indicated as follows, two participants (1.3 percent) were single, 106 participants (70.2 percent) were married, 35 participants (23.2) were separated, and eight participants (5.3) were widows/widowers. Since 106 participants are married and by far dominate the entire participants' population, it can be concluded that most of the participants of the study population are married, and this compares them to undertake basic responsibilities to their families. Their livelihoods depend on their trading in the Appremdo market, and the ineffective nature of the market affects their family income. Table 4 shows the marital status of participants.

Table 4: Participants' marital status

Marital status	Frequency	Percent
Single	2	1.3
Married	106	70.2
Separated	35	23.2
Widow/widower	8	5.3
Total	151	100.0

Source: Field data (2023)

Level of Education

The data showed that 14 (9.3 percent) participants do not have formal education, 11 (7.3 percent) have basic education, 74 (49.0 percent) have elementary education, 45 (29.8 percent) had vocational education, four (2.6 percent) had secondary education, and three (2.0 percent) received tertiary education. From Table 5, most of the participants (49.0 percent) of the study had elementary education. The finding indicates that the traders in the Aprembo market are generally literate and would therefore be able to read and this can promote their understanding of educational messages provided by the assembly.

Table 5: Participants' Level of Education

Level of education	Frequency	Percent
No formal education	14	9.3
Vocational education	45	29.8
Basic education	11	7.3
Secondary education	4	2.6
Tertiary	3	2.0
Elementary school	74	49.0
Total	151	100.0

Source: Field data (2023)

Length of stay in the market

In determining the number of years that traders have stayed in the market, the data revealed that participants have stayed in the market for a different number of years, and this range from 6 to over 25 years. In Table 6, the least number of years, 6-10 years formed 1.3 percent while the greatest number of years, 21-25 constituted 79.5 percent.

Table 6: Years spent in the Appremdo market

Traders' years in the market	Frequency	Percent
6-10 years	2	1.3
11-15 years	5	3.3
16-20 years	24	15.9
21-25 years	120	79.5
Total	151	100.0

Source: Field data (2023)

In gaining insight into why most of the traders have lived in the market for such a long period despite its low patronage, through in-depth interviews, it was revealed that the market is dominated by traders whose ages range from fifty-one to sixty years. This age dominance is because they do not have enough strength to be struggling with other traders in the various markets in Takoradi such as Jubilee Park, Ajep roundabout, etc.

The queen of the tomato sellers provided insight by hinting that:

“I have lived in this market for more than twenty years. I do not have any alternative in terms of where to go. Considering our respective ages and comparing the scarcity nature of the job in this country we better remain in this market. Sometimes, we are forced to come back because we cannot survive in other market centers in Takoradi”

Relocation of traders from the Takoradi market circle

In ascertaining whether traders were relocated from the Takoradi market circle to the Appremdo Market, the data revealed that only 39 (25.8 percent) relocated from the Takoradi Market Circle. However, it was further

shown that the 112 (74.2 percent) participants rather relocated from the old Kwesimintsim station, and the Ajep roundabout. This is shown in the Figure below.

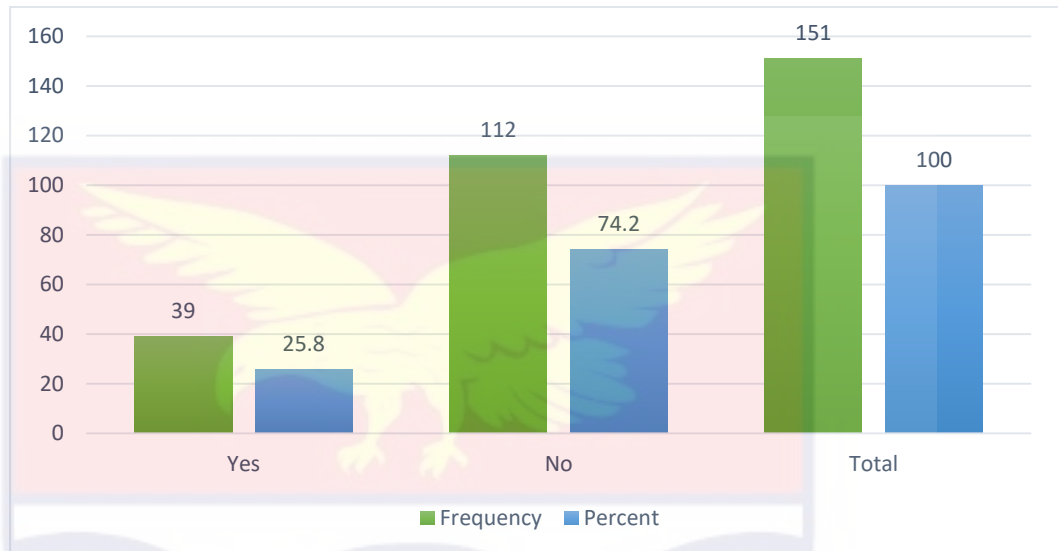


Figure 4: Relocation of participants from the Takoradi market circle to the Appremdo market
Source: Field data (2023)

Critical factors that informed the present location of the Appremdo market

For a market to function effectively, critical factors need to be considered. According to Jain, Kothari, and Kumar (2016), market size, progress, trade obstacles, the cost and availability of labour, transportation, information expenses, infrastructure, and government initiatives must be prioritized when choosing a location for a market establishment. The researcher in trying to find out about the critical factors that were taken into consideration before the location of the Appremdo market asked the participants to rate their responses on a Likert scale of five divisions which was classified as strongly disagree (1), disagree (2), neutral (3), agree (4) and strongly agree (5). Considering the distance between the Appremdo market

and the Takoradi market circle, the participants were to respond to whether such a distance informed the location of the Appremdo market. From Table 7, only one participant (0.7 percent) out of the 151 participants indicated that he strongly agrees that distance from the Takoradi market circle was considered before the location of the Appremdo market. Most of the participants, 118 (78.1 percent) disagreed that the distance to the Takoradi market circle was considered before the location of the Appremdo market.

Table 7. Consideration of the distance between the Takoradi market circle and the Appremdo market

Levels of agreement	Frequency	Percent
Strongly disagree	9	6.0
Disagree	118	78.1
Neutral	4	2.6
Agree	19	12.6
Strongly agree	1	0.7
Total	151	100.0

Source: Field data (2023)

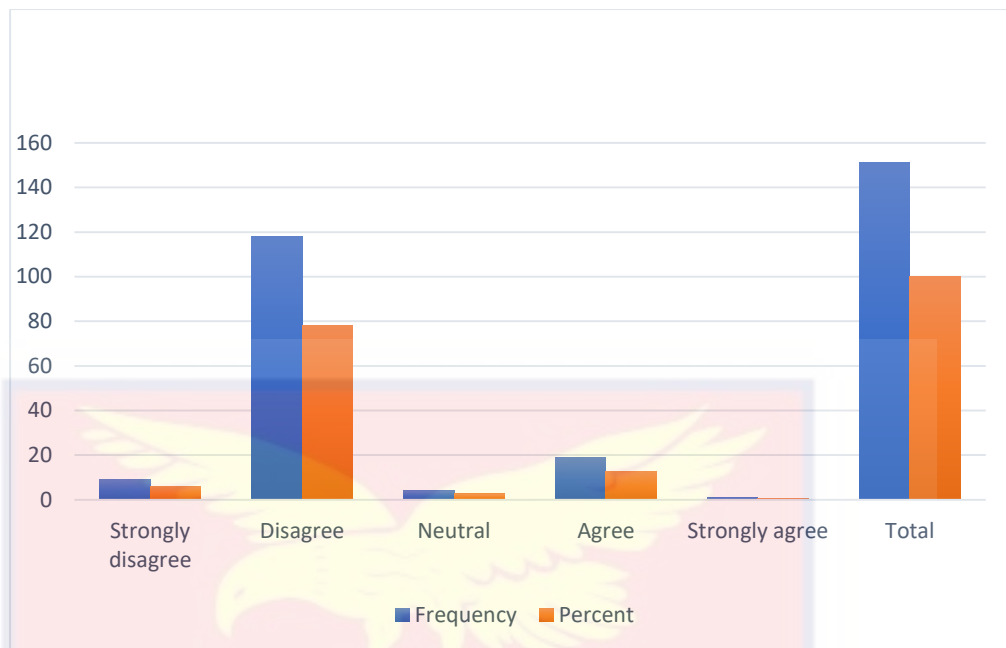


Figure 5: Consideration of distance between Takoradi market circle and Appremdo market

Source: Field data (2023)

The researcher sought to find out more about how distance influenced the Appremdo market’s location and through in-depth interviews, it was revealed that considering the closeness between these two markets, consumers prefer going to the main market because they do not have to pay any high transport costs comparing trading in the Appremdo and the market circle.

During the interview, one of the market queens said:

“The Takoradi market circle is not far from this market and consumers think since they cannot get all that they need from the Appremdo market, they prefer going to the main market”

In Christaller’s central place theory, the upper limit range was generally defined as the farthest distance the distributed population is willing to travel to buy a good offered at a place (King, 2020) and this negatively affects a market functionality. It can be argued that when a smaller market is established close to a larger market, the smaller market would be affected with

an upper limit range whilst the larger market experiences a lower limit (where the market makes more profit because of the high demand). The Appremdo market, therefore, experiences an upper limit of the range leading to many consumers not willing to patronize goods from the market.

Availability of spaces or openness for trading

The openness or adequate spaces of markets enables easy commuting within the market environment. In the view of Agenda 2015, adequate space in a market setting ensures easy transportation of goods and services within the market and promotes consumers' accessibility of goods. The researcher engaged the participants to ascertain whether the availability of space was considered before the location of the market. From the quantitative data, only 2 participants (1.3 percent) disagreed that there was a consideration of the availability of spaces in the Appremdo market. It was revealed by most of the participants, 140 (92.7 percent) out of 151 agreed that space availability was considered. This is shown in Table 8.

Table 8: Availability of space in the Appremdo market

Availability of Space	Frequency	Percent
Disagree	2	1.3
Neutral	8	5.3
Agree	140	92.7
Strongly agree	1	0.7
Total	151	100.0

Source: Field data (2023)

However, the qualitative data further proved that the traders expressed satisfaction with how spacious the market is. They believed that adequate

space provided in the market enables easy commuting in the market. During an in-depth interview with one of the traders, she said:

“The issue of space was a critical factor in this market location. The assembly made provisions for spaces where for example food suppliers such as plantain, and cassava could be met to exchange their goods. It also ensured that they would be an easy flow of both consumers and goods transport in the market”

Easy accessibility to suppliers influenced the location

An effective supply chain in a market makes trading activities in the market viable. Xu, Zhao, and Wang (2017) explain that market inefficiency results from price and quantity deviations from the equilibrium of supply and demand. Less market power (the inability of the market to function effectively) can render the market unattractive which causes a limited supply of goods from producers. In determining whether the accessibility of suppliers of goods and services influenced the location of the Appremdo market, most of the participants, 119 (78.8 percent) disagreed that easy accessibility of suppliers influenced the location of the market (See Table 9). Only ten (6.6 percent) participants agreed that the easy accessibility of suppliers influenced market location.

Table 9: Ease accessibility of suppliers influenced the Appremdo market location

Levels of agreement	Frequency	Percent
Strongly disagree	13	8.6
Disagree	119	78.8
Neutral	9	6.0
Agree	10	6.6
Total	151	100.0

Source: Field data (2023)

During the qualitative study, the traders expressed worry that the Appremdo market's location does not promote the supply of goods since the low patronage does not allow suppliers to get their monies quickly from traders after supplying them with goods. During the interview, one of the market queens indicated that:

“We hardly get suppliers because they (suppliers) think that they cannot get their money quickly when they even give the goods to us on credit bases. Aside from that, we cannot buy in bulk from them, so they are not motivated to come and supply us with goods”

Availability and easy accessibility of financial facilities

The Sustainable Livelihood Framework which forms a pivot of this study considers finance as one of the major assets to ensuring sustainable livelihood among individuals. Molenaers (2006) explains financial capital as access to credit, consistent inflows of cash, and savings in any form. The study, therefore, determined whether the availability and accessibility of financial institutions played a role in the location of the Appremdo market. From Table 10, 95 (62.9 percent) of 151 participants strongly disagreed that such consideration was made. Again, 55 (36.4 percent) of the participants disagreed, except for one (0.7 percent) who remained neutral to this statement.

Table 10: Availability and accessibility to financial facilities

Levels of agreement	Frequency	Percent
Strongly disagree	95	62.9
Disagree	55	36.4
Neutral	1	0.7
Total	151	100.0

Source: Field data (2023)

Social Implication of the Market

Considering the conceptual framework of this study, Jacobs and Hofman (2020) define social assets as the relationships, institutions, and social standards that exist between and within social groups and communities, as well as the reciprocity and trust that underpins them. One of the social factors that were taken into consideration was an institution. To ascertain whether there is an existing institution that regulates the activities of the market. From the quantitative data, 143 (94.7 percent) of the participants agreed that there is an existing institution that regulates the market’s activities. This can be seen in Table 11. It also indicated that only two participants remained neutral.

Table 11: Existence of institutions that regulate activities in the market

Levels of agreement	Frequency	Percent
Neutral	2	1.3
Agree	143	94.7
Strongly agree	6	4.0
Total	151	100.0

Source: Field data (2023)

The qualitative data supported the finding of the quantitative study in that most of the participants indicated that there is only one institution which is the Effia-Kwesimintim Urban Planning Council which regulates the market activities. They do so by providing some needs such as ensuring the security of the market, providing a safe environment for trading, and giving out information when necessary. One of the market queens indicated that:

“The only institution that helps in the running of the activities in the market is the Effia-Kwesimintim Urban Planning Council. They provide us with

information regarding what we should be doing, and this is when new things come up”.

The Appremdo market, therefore, lacks sufficient institutions which can boost its operations in terms of formulation of policies and strategies to ensure its effectiveness.

The location of the market results in low consumer/customer visitations

For a market to effectively function, there is the need for it to reach a lower limit of the range as explained in Christaller’s central place theory where there would be high consumer visitation. Abdul (2013) evaluates the location effects in terms of the involvement of the furniture makers, the impact on their customers, and consequently, average incomes, as well as their contribution to the long-term viability of the Kumasi Metropolitan Area (KMA) program. Abdul (2013) demonstrates in the article that there were some preliminary disadvantages of location and a decline in customer base from a commercial perspective.

In finding out whether the location of the Appremdo market results in low consumer visitation, the quantitative data revealed that most of the participants 109 (72.2 percent) strongly agreed that there is low consumer visitation leading to low patronage due to the location of the Appremdo market. This was further supported by 41 (27.2) who strongly agreed with this concern leaving only one (0.7 percent) participant disagreeing with that. This is illustrated in Figure 6

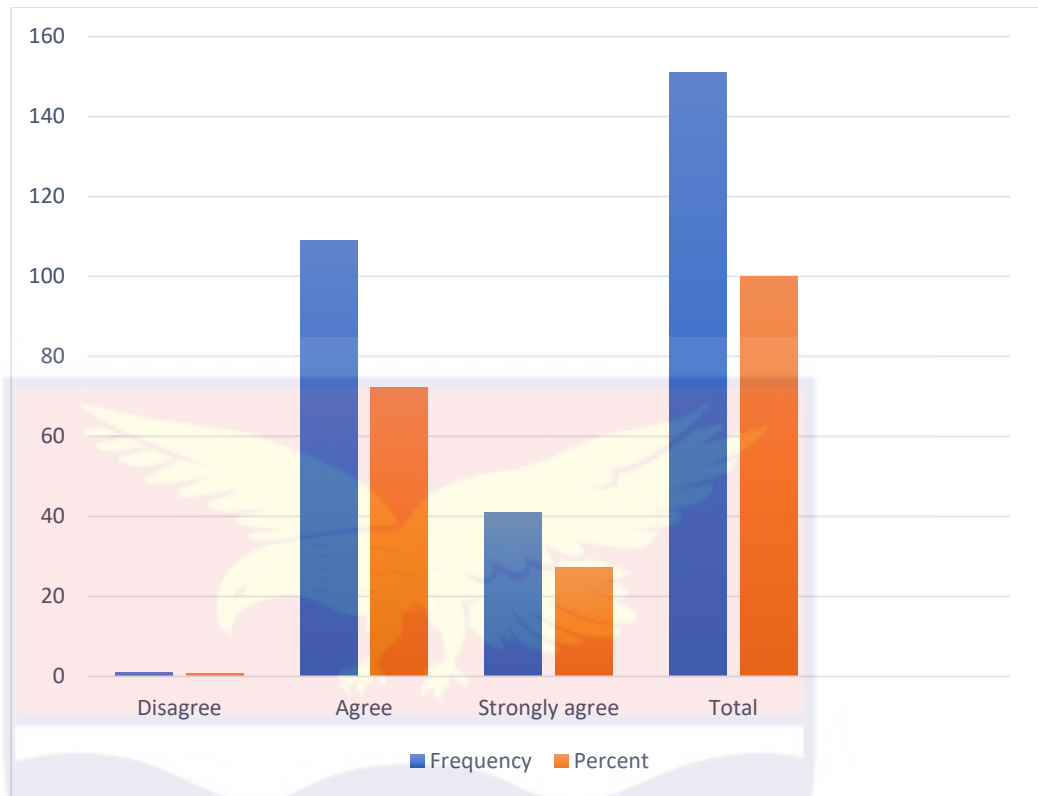


Figure 6: Low consumer visitation due to the Appremdo market location

Source: Field data (2023)

The researcher solicited more information and thereby interviewed some of the key informants and it was revealed that the market is surrounded by buildings that are not necessarily part of the market. This prevents people to realize or know that there is an existing market, or the market is operating. During an in-depth interview, one cassava queen reported saying:

“The market itself is hidden. Many people do not know that the market is still operating because it is surrounded by buildings. It does not make consumers notice that trading activities are going on here, hence they all go to the main markets in town...”

The Appremdo market location attracts low consumers, and this confirms the study that was carried out by Abdul (2013).

Incidents of thieveries in the Appremdo market

Zhou and Shin (2017) posit that one of the major challenges that affect market centers is incidents of thievery. As a social effect, this study aimed to find out about incidents of theft in the Appremdo market by asking participants to rate the concern that there is a high incidence of thieveries in the market. From the study, most of the participants 134 (88.7 percent) agreed that there is an incident of thievery in the market, and this is indicated in Table 12.

Table 12: Incidents of thieveries in the market

Level of agreement	Frequency	Percent
Disagree	1	0.7
Neutral	8	5.3
Agree	134	88.7
Strongly agree	8	5.3
Total	151	100.0

Source: Field data (2023)

The researcher used an in-depth interview to gain more insight into this from the qualitative data. The qualitative data revealed that the open nature of the market makes it easy for thieves to go into the market to steal traders' goods since there are no gates. The market queen for vegetable sellers hinted that:

“The market has recorded a lot of theft cases and it continues. This is because it has no gates and is therefore unlocked. We have been reporting any thievery cases to the authorities. Even though EKMA has provided security, we sometimes experience an incident of thieveries...”

Presence of a network of associations helps support one another in the market

In a social setting for which a market is one, there is usually the formation of associations to cater to members' interests. Molenaers (2006) explains social capital as resources that individuals use to support themselves, such as affiliations with organizations or groups as well as relationships with people who are either more powerful than them or more like them. The study, therefore, found out whether there is a network of associations that support one another in the Apremido market.

Through in-depth interviews and per Braun and Clark's (2019) six stages of thematic analysis for qualitative data. It was revealed that there are no networks of associations established in the market to support one another. However, traders have been contributing some monies to support one another in times of need. This is usually when a trader in the market is bereaved. Some of the traders go to support their close friends in the market to undertake some activities that need a helping hand. During an in-depth interview with the market queen, she said:

"We do not have any form of association in this market which has been formed to support traders. However, we contribute some amount to help one another depending on a specific need. For example, when one is bereaved, traders in this market make contributions and give it to the bereaved trader".

Considering the work of Schuldt and Taylor (2018) they sought to ask whether the presence of trade associations can facilitate cartel success in dimensions beyond just the formation process. The study revealed that the existence of a trade association affects the success of a cartel in at least two ways. Firstly, since firms already had a channel for communication and

coordination open to them, the trade association's existence may have aided businesses in the sector in developing more useful codes. Second, the presence of a trade association might have aided in the industry's effectiveness in reaching the collusive outcome by aiding in the monitoring of cheating. It is therefore imperative to consider the formation of associations in the Apprendo market to ensure influencing decision making to help make the market function effectively.

Social bonds among respondents in the market

This study's framework emphasizes the establishment of social capital in ensuring the active operation of the Apprendo market. Molenaers (2006) defines social capital as the assets people utilize to support themselves, such as memberships in organizations or groups. According to David (2017), a market is a type of societal form of governance that, through time, intertwines with human social life. In this study, the researcher found out about the nature of social bonds among the traders in the Apprendo market. The responses from the qualitative study revealed that trading in the market leads to the establishment of social bonds among traders, consumers, and some suppliers.

Trading in the market enables traders to interact with other traders and share common feelings such as economics, and emotions that they would not have experienced if they were not engaged in trading in the market. They can seek assistance from one another due to their connectedness in the market which would have been difficult if they were not engaged in trading in the market. Due to their social bond, some of the traders can sell their friends' goods when they are not around or undertake other activities. During an in-depth interview one trader indicated by saying that:

“I have no friends apart from those in this market. Due to our cordialness, I can leave my things for them to sell while I undertake other errands. We communicate to discuss our economic, and social lives too”

Therefore, there are strong social bonds among traders in the Appremdo market.

Economic Effect of the Appremdo Market Location

The study sought to bring into bear the economic implications of the Appremdo market to traders. Given that, the researcher enquired whether the traders could earn a substantial amount of monthly income. The participants were to respond to the statement, **“I can earn adequate income monthly”**. The data revealed that most of the participants, 73 (48.3 percent) out of 151 disagreed with that statement, while 64 (42.4) strongly disagreed. No participant agreed with this statement as shown in Table 13.

Table 13: Participants’ adequate monthly income

Level of agreement	Frequency	Percent
Strongly disagree	64	42.4
Disagree	73	48.3
Neutral	14	9.3
Total	151	100.0

Source: Field data (2023)

The researcher further engaged the participants in in-depth interviews to find out more about their income generation. The qualitative data was in line with the quantitative finding in that the traders do not make any adequate monthly income from their trading in the Appremdo market. They do not have alternative jobs and trading in the market earns them returns that are relatively

better than staying home and that is the only reason they continue to go to the market. During the interview, one trader indicated by saying:

If I can get another job, I would not be here because I do not earn much for trading here. I do not earn more than Gh1000 monthly. Sometimes, you come to the market, and they do not buy anything. I have children and I cannot afford to stay home because being in the market is better than staying home”

Again, a plantain queen said: *“It is only better to come to this market to trade than to stay home because I have children. The amount I earn monthly (Gh850-1000) is nothing to write home about. Life has been very difficult for me. Considering my age, I cannot go to the main market to struggle there so I remain here...”*

Considering the empirical review of this study, Asiah et al., (2020) undertook research that aimed at determining the socioeconomic impacts after relocating Pasar Panjang traders to the Wua-Wua Central Market Kendari City, the result of the study showed the traders loss most of their customers because they did not find the new market to be convenient and that led to a fall of traders’ income. This study’s finding affirms the negative consequences of relocating traders from the Takoradi market circle, Kwesimintim station to the Appremdo market since there is a loss of customer base leading to a low-income generation of the traders.

Provision of family basic needs

The study further sought to discover the participant’s ability to provide for their family’s basic needs considering trading in the Appremdo market. The researcher, therefore, asked the participants to provide their responses to the statement “I can provide my family with their basic needs”. The

quantitative data showed that 121 out of 151 (80 percent) participants disagreed with that statement. In Table 14, 5 (3.3 percent) participants also strongly disagreed. However, 18 (11.9 percent) remained neutral leaving only 7 (4.6 percent) agreeing to the statement that they can provide for their family’s basic needs.

Table 14: Provision of family basic needs

Level of agreement	Frequency	Percent
Strongly disagree	5	3.3
Disagree	121	80.1
Neutral	18	11.9
Agree	7	4.6
Total	151	100.0

Source: Field data (2023)

In getting more understanding of this phenomenon, the researcher engaged some of the participants in in-depth interviews for the qualitative data. The data supported the quantitative finding in that most of the participants are challenged in meeting their family’s basic needs. Some of them indicated that they have large family sizes that make them find it difficult to meet their basic needs. They are not able to take their children to better schools, and even those who complete senior high school are not able to further their education to the tertiary level. Most of the participants expressed worry that they are unable to meet the three daily meals due to unreliable economic returns.

Again, most of the participants indicated that they live in rented apartments with no hope of building their own houses because of their returns

from their businesses. During an in-depth interview, one of the market queens (plantain) indicated that:

“My ability to meet my family’s basic needs has always been my challenge. Unfortunately, I have two other children aside from my four children that I am catering for. Sometimes, what to eat becomes a challenge. None of my children have been able to attain a tertiary institution because I cannot afford that being a single parent....”

In the case of Abdul (2013) in which he demonstrates in the article that there were some preliminary disadvantages of location and a decline in client base from a commercial perspective. Their average incomes did, however, rise, which was explained by the prevailing price rises. The finding of this study is on the contrary since there have not been any price hikes to induce the income generation of the traders in the Appremdo market. The traders’ economic conditions are rather impoverished.

Regular payment of taxes to the Effia-Kwesimintim Metropolitan Authority

According to Lee (2008), state and municipal governments have continued to increase their economic development operations over the last three decades, mimicking one another's initiatives with a variety of tax and financial incentive packages. In ascertaining whether traders can pay their taxes to EKMA regularly, the researcher asked the participants to rate the statement “I regularly pay my tax to the EKMA officials considering the Likert scale of 1-5. From Table 15, most of the participants, 115 (76.2 percent) disagreed with that. Again, 18 (11.9 percent) strongly disagreed with only two (1.3 percent) strongly agreeing.

Table 15: Regular payment of taxes to the Effia-Kwesimintim Metropolitan Authority

Level of agreement	Frequency	Percent
Strongly disagree	18	11.9
Disagree	115	76.2
Neutral	10	6.6
Agree	6	4.0
Strongly agree	2	1.3
Total	151	100.0

Source: Field data (2023)

Furthermore, the researcher used in-depth interviews to solicit more information on the traders' tax payments. It was revealed that despite traders' encouragement to pay taxes, this target has not been achieved. They hardly pay taxes when revenue collectors visit them. They usually complain of low patronage which makes them not earn much to regularly pay their taxes. For the traders not to leave the market for other market centers, the city authorities do not force the payment of taxes on them. During an interview with one of the EKMA officials, it was revealed that:

"We get less revenue from the Appremdo market because traders do not regularly pay tax or buy tickets. We noticed that if we forced tax payments on them, some closed their stores, and others left the market outright. Because of that, we do not always go there for taxes just to motivate them to remain in the market"

Omondi (2013) in sharing the proposition of Inasius (2018) purported that numerous elements affect both tax compliance and non-compliance. These elements can be categorized into economic factors, which are made up

of tax rates, tax audits, and perceptions of government spending, and institutional factors, which include the role of the tax authority, clarity of tax returns and management, and likelihood of identification, and social factors, which include political groupings, changes in governmental policy, perceptions of equity and fairness, and ethics and attitude. However, none of the critical factors that Omondi (2013) and Inasius (2018) enlisted come into play with the Appremdo's traders' reasons for not paying their taxes. Their inability to comply with tax payments is a result of low consumer visitations leading to a low-income generation hence, their reluctance to pay taxes.

Availability and easy accessibility of financial facilities

The conceptual framework that guides this study captures finance as a critical element of market functionality. According to Rakodi (2014), poor people can engage in a variety of livelihood strategies and processes and end up deciding the results of their livelihoods based on existing assets which finance is one. For traders to effectively carry out their trading activities, their ability to access financial aid is non-negotiable. This study, therefore, determined whether there is the availability and accessibility of financial institutions to support traders in the Appremdo market. From Table 16, 134 out of 151 (88.7 percent) of the participants strongly disagreed that there are availability and easy accessibility of financial facilities that provide financial assistance to the traders. This is followed by 16 (10.6) percent disagreeing with that statement. This shows that there is no availability and accessibility of financial institutions in the Appremdo market.

Table 16: Availability and accessibility of a financial institution in the Appremdo market

Levels of agreement	Frequency	Percent
Strongly disagree	134	88.7
Disagree	16	10.6
Strongly agree	1	0.7
Total	151	100.0

Source: Field data (2023)

Additionally, the qualitative data indicated that there are no availability and easy accessibility of financial facilities provided by any institution to the traders in the Appremdo market. Some of the traders build or establish their financial networks outside of the market. The traders seek financial aid from friends and other relatives or join other loan groups elsewhere but not in the market. The researcher engaged the assistant market queen to get a deep understanding of this issue and she disclosed this information by indicating that:

“We do not have any financial institutions that provide us with loans in this market. When an individual or group of traders need some financial assistance, they contact friends in town or go to different places where they can access that financial aid but there is no such means of assistance to traders here”

Environmental Implications of the Appremdo Market

The study considered the environmental implications of the Appremdo market to critically analyze its effects on the market operators. Given that the researcher sought to find out whether vehicular pollution affected the market’s operation. The participants were asked to respond to the statement that

“vehicular pollution affects the market operations”. The data revealed 118 (78.1 percent) out of 151 participants strongly disagreed with that statement. It was further supported by 31 (20.5 percent) of participants disagreeing with that leaving only two (1.3 percent) participants agreeing to that concern. This is shown in Table 17.

Table 17: Vehicular pollutions affect the market

Level of agreement	Frequency	Percent
Strongly disagree	118	78.1
Disagree	31	20.5
Agree	2	1.3
Total	151	100.0

Source: Field data (2023)

In gaining a deeper understanding of this issue, the researcher engaged some of the participants in an in-depth interview concerning vehicular pollutants and it was revealed that even though the station is very close to the market, fumes from the cars do not cause air pollution in the market. Even when the station was under full operation and many cars were around, the traders did not experience such a thing. The station is surrounded by buildings while the market is behind the buildings so many vehicular pollutants are not felt. During the in-depth interview, the assistant market queen indicated by saying that:

“As you can see, the market is behind the station, which is surrounded by buildings, so we do not experience such vehicular pollutants. We even want the station to be under full operation so that we can get more customers”.

The Institute for Environment and Sanitation Studies at the University of Ghana carried out research in 2011 to ascertain the environmental impacts of marketing and trading activities. The study revealed that markets could serve as both disease transmission routes and disease infection locations. In the case of the Appremdo market, vehicular pollutants which are a major cause of airborne disease have less impact on the market, therefore, the market does not pose a hub for disease transmission.

Occasional flooding of the market environment

The Appremdo market is located near a stream which is about 300 meters. As part of the environmental implications, the researcher sought to determine whether flooding of that stream negatively affected the market's environment. The participants were to indicate their concern on the statement that "Occasional flooding of the stream negatively affects the market environment". From Table 19 below, 108 (71.5 percent) out of 151 participants disagreed while 42 (27.8 percent) strongly disagreed. Considering Table 18, the Appremdo market is not affected by flooding.

Table 18: Occasional flooding of the Appremdo market environment

Level of agreement	Frequency	Percent
Strongly disagree	42	27.8
Disagree	108	71.5
Neutral	1	0.7
Total	151	100.0

Source: Field data (2023)

The qualitative data further reaffirmed the finding of the quantitative data in that during an in-depth interview, the participants indicated that the

Appremdo market is quite far from the stream, and because of the gutter that has been constructed along the stream, it does not flood the market even during the rainy seasons.

During a one-on-one in-depth interview with the main market queen, she hinted that:

“The market is not affected by flooding because of the stream in Kwesimintsim. Gutters have been constructed along the stream and that prevents flooding” Even the market is free from bushes...”

Effect of noise pollution by moving cars/other workers on market operations

The researcher tried to get a deeper understanding of this issue, therefore, subjected some of the key participants such as main market queens, traders’ queens, and the EKMA officials to one-on-one in-depth interviews for the qualitative study. The qualitative data revealed that the market is not affected by noise pollution by moving cars or other workers such as fitters, and vulcanizers around the market. When the station was initially established, it positively induced trade since some of the passengers passed by and traded with them. They wished that station thrived to enable more cars in the station to enhance their trade. A fish queen indicated by saying:

“We do not experience noise pollution from a moving car or workers around the market. When the station was in full operation, it promoted trading rather. There was no such noise pollution felt”

Dust and muddy nature of road networks in the market

One major negative environmental effect of the Appremdo market is the issue of the dusty and muddy nature of the road network within the market

depending on the time of the year. During the rainy season, the roads become muddy, and this affects easy commuting within the market. The dry season causes the dusty nature of the market environment which affects most of their uncovered products. The dust affects the price of their goods particularly when it makes some of the products appear old and dirty. During the interview, one trader said:

“One major environmental challenge in this market is the dust during the dry season and how muddy the road become during the rainy season. The dust makes our goods appear old and dirty and this negatively affects pricing...”

Dealing with the environmental challenges in the Appremdo market

Considering the work of Asumadu-Sarkodie and Owusu (2017) in which they sought to examine the impact of energy, agriculture, macroeconomic and human-induced indicators on environmental pollution as evidenced from Ghana, one of their key findings showed that an exponential rise in Ghana’s economic growth could result in a decrease in environmental pollution because a 1% rise in GDP will result in a 0.46% decline in carbon dioxide emissions.

In this study, the researcher explored how environmental challenges are dealt with in the market, the key participants indicated that their major environmental challenge has been dust which is due to the untarred nature of the roads in the market. Depending on its severity, they sometimes sprinkle water on it to reduce it. Again, the EKMA has provided various garbage bins that are regularly used to collect waste from the market. The traders always sweep the market, especially every morning, and dispose of the refuse into the provided dust bins where the EKMA waste collectors go for them.

During an in-depth interview with one of the EKMA officials, he stated that:

“The assembly has provided various garbage bins to the traders in which they dispose of their refuse. We also have workers who sweep the streets and around the market. We make sure that the market and its surroundings are mostly kept clean”

The finding of this study on environmental control in the Appremdo market supports the claims of Asumadu-Sarkodie and Owusu (2017) on a decrease in environmental pollution because a 1% rise in GDP will result in a 0.46% decline in carbon dioxide emissions in that the city authorities in Effia-Kwesimintim Municipal Area have provided mechanism such as provisions of garbage bins, regular cleaning of the market which ensure the reduction of environmental pollution in the Appremdo market.

Chapter Summary

This chapter provided the findings and the discussion of this study whose main goal was to ascertain the socioeconomic and environmental implications of the Appremdo Market location in the Effia-Kwesimintim Municipal Area. It presented the sociodemographic characteristics which mainly focused on sex, age, marital status, educational level, and length of stay in the Appremdo market of the respondents in the market. The chapter revealed the findings on the following specific objectives; first, explore critical factors that informed the location of the Appremdo market; second, assess the social effects of the location of the Appremdo market on the traders; third, assess the effects of the Appremdo market location on traders' economic conditions and fourth, identify the environmental challenges of the Appremdo

market location on the residents. The chapter juxtaposed the findings of this study with empirical evidence and other scholarly works to gain a comprehensive view of the issues relating to the location of markets.



CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATION

This chapter provides a brief account of the entire study whose aim was to examine the Socio-economic and Environmental Implications of the Location of the Appremdo market on traders in the Effia-Kwesimintsim Municipal Area (EKMA). It presents a summary of the findings of this study, conclusions, recommendations, limitations, and suggestions for future studies. The implication of the finding of this study is to influence policy formulation. The recommendations were made considering the key findings and conclusions of the study.

Summary of Research Process

The main goal of this study was to examine the Socio-economic and Environmental Implications of the Location of the Appremdo market on traders in the Effia-Kwesimintsim Municipal Area (EKMA). The researcher used a case-descriptive design where a mixed-method approach was used for data collection. The study's participants were Effia-Kwesimintim Municipal officials, traders in the Appremdo market, private sector actors, and the EKMA community leader. A simple random technique was used to select 151 participants for the quantitative data and purposive and convenient sampling techniques were used to engage 25 participants through in-depth interviews for the qualitative data. The Statistical Package for Social Sciences (SPSS) version 20 was used to run descriptive statistics for the quantitative study and qualitative data was analyzed by using Braun and Clark's (2019) six stages of thematic analysis of qualitative data.

Main Findings of the Study

Considering the results and the discussions, the major findings of the study are summarized as follows.

Demographic Characteristics of the Participants

- Females dominated the study's participants with a total number of 132 (87 percent) out of 151. The dominant female population of the market is due to the types of goods sold which are mainly food stuffs leaving few stores around the market containing few males. The findings further showed that most of the participants (70.0 percent) were within the age group of 50-59 and this is because they cannot physically compete with the younger traders considering the frequent movements and struggles required of those market centers.
- Again, concerning marital status, most of the participants, 106 (72.2 percent) were married. The study's participants would be challenged in understanding policies regarding the improvement of the market in that most of them (49.0 percent) only had elementary education leaving only four and three participants having attained secondary and tertiary education respectively. It was also noted that most of the participants (79.5 percent) have stayed in the Appremdo market for over 21 years.

The critical factors that informed the location of the Appremdo market

- The first objective of the study was to explore the critical factors that informed the location of the Appremdo market. The findings showed that the critical factors that informed the location of the Appremdo market were both physical and human factors. The major human consideration was to ease congestion in the Takoradi Market Circle,

Kwesimintsim station, and hawking in the Ajep roundabout. The study however revealed that other human factors such as the ability of the market to attract more suppliers, availability, and accessibility of financial aid were not critically considered before the location of the Appremdo market.

- For the physical factors, it was revealed that clearance of vegetation, the inability of the presence of the water body to affect the market operation, availability of space/openness, and center position to link surrounding areas were considered. However, it emerged from the study that there was no consideration of the distance between the Takoradi market circle and the Appremdo market in that most of the participants, 118 (78.1 percent) out of 151 disagreed that the distance to the Takoradi market circle was considered before the location of the Appremdo market.

The social effects of the location of the Appremdo market on the traders

- Considering the second objective which was to assess the social effects of the location of the Appremdo market on the traders, the study revealed that the Appremdo market is linked to only one institution thus, the Effia-Kwesimintim Municipal Assembly which helps in the regulation of the market's activities. This was revealed when 143 (94.7 percent) of the participants noted (agreed) that there is an existing institution that regulates the market's activities. It can be argued that since the Appremdo market is regulated by only one institution it lacks the coordination with other institutions to strengthen policy formulations to help induce the effectiveness of the market. The study

further revealed that there is low consumer visitation to the market. This was evident from the quantitative data that revealed that most of the participants 109 (72.2 percent) strongly agreed that there is low consumer visitation leading to low patronage which the qualitative data further supported.

- Additionally, traders in the Appremdo market have not established any network of associations that help in seeking the welfare of members. However, the traders have good interpersonal relationships (strong bonds) with one another in the market and this enables them to help one another when the need arises, particularly when one is bereaved and other social functions.
- The major negative social effect of the Appremdo market is the high incidence of thievery. The market has no gates, and this makes it open to thieves who steal some of the goods of the traders. Despite the city authority's controlling measures such as providing security guards, and regular patrol for the market during the night, the issue of thievery remains eminent.

The effects of the Appremdo market location on traders' economic conditions

- The third objective was to assess the effects of the Appremdo market location on traders' economic conditions. The study showed that most of the traders do not earn adequate monthly income as it was evident that most of the participants, 73 (48.3 percent) out of 151 disagreed with that statement, while 64 (42.4) strongly disagreed that they earn adequate monthly income. The low monthly income earning is because

of the low consumer visitation. Due to the low-income earning of traders, they are not able to provide the basic needs of their children.

- Furthermore, the study showed that traders do not regularly pay their taxes and any enforcement of tax payment compares them to leaving the market to other centers. The study further revealed that there are no availability and accessibility of financial facilities to traders in the Appremdo market.
- This does not allow the traders to open up their businesses to serve the few consumers who visit the market. This emerged when 134 out of 151 (88.7 percent) of the participants strongly disagreed that there are availabilities and easy accessibilities of financial facilities that provide financial assistance to the traders.

The environmental challenges of the Appremdo market location on the residents

- The last objective of the study was to identify the environmental challenges of the Appremdo market location on the residents. The finding of the study showed that vehicular pollution, noise pollution, and stream flooding were not considered critical environmental challenges that affect the Appremdo market operation. This was proved when data revealed 118 (78.1 percent) out of 151 participants strongly disagreed that vehicular pollution affects the market and 108 (71.5 percent) out of 151 participants disagreed that stream flooding affects the market operation.
- Moreover, the study revealed that the major negative environmental effect of the Appremdo market is the issue of the dusty and muddy nature of the road networks depending on the time of the year. The dry

season causes the dusty nature of the market environment which affects most of their uncovered products. The dust affects the price of their goods particularly when it makes some of the products appear old and dirty.

- In solving the environmental challenges, the study showed that depending on the severity of the dust, the city authorities sometimes sprinkle water on it to reduce harm. Again, the city authorities have provided various garbage bins that are regularly used to collect waste from the market. The traders always sweep the market, especially every morning, and dispose of the refuse into the provided dust bins where the EKMA waste collectors go for them.

Conclusion

Considering the results of and discussion, and the key findings of the study, the following conclusions were made.

- The study has proven that in choosing a location for market functions, there is a need to consider critical physical and human factors. The interplay between these factors influences the effectiveness of the market. The Appremdo market is not affected by air pollution, noise pollution, and stream flooding. There is open space which promotes commuting and cleared bushes make the market environment serene. However, the market's closeness to the Takoradi market circle, low suppliers, and low consumer visitations negatively impact the market's effective operation.
- The Appremdo market has social consequences for the market operators, particularly traders. The low consumer visitation does not

promote consumer-trader interaction, there is a lack of network of associations in the market to help influence decision-making to enable the market to function effectively. The market is run by only one institution, and this has not strengthened the formulation of policies to induce its functioning. The market is faced with high incidents of thieveries because it has no gates that are closed. Notwithstanding the above social challenges, the traders have strong bonds, and this leads to contributions of monies and other assistance among traders when the need arises.

- Economically, there is no availability and accessibility of financial facilities to the traders in the market. The low consumer visitation leads to low-income generations among the traders causing their inability to provide for their families' basic needs. The traders do not regularly pay their taxes, and this affects government revenue generation in the long run, all the stakeholders in the market sphere should be considered throughout the decision-making processes to ensure a full-scale participatory approach to meet a desirable market outcome.
- There were critical environmental factors that were considered before the location of the Appremdo market. This has resulted in the market's favourable environment such as being clear of bushes, a low incidence of flooding, spaciousness, less air, and noise pollution. However, the untarred road networks in the market cause dust and muddiness depending on the time of the year.

- Upon a thorough analysis of the study, all four research objectives that guided this study have been adequately achieved.

Recommendations

Considering the small nature of the Appremdo market compared to the Takoradi market circle (bigger market) and the close distance between these markets, it was evident that traders preferred trading in the main market because they could get most of the goods that they needed compared to the Appremdo market. This study, therefore, recommends that a smaller market must not be located close to a bigger market if those markets provide or serve the same type of goods. The smaller market can be established close to a larger market provided it is purposed to serve different goods not offered in the main or bigger market.

Again, the study revealed that the Appremdo market being surrounded by buildings does not allow consumers or people to notice the existence and full operation of the market. It is therefore recommended that there should be continuous advertisements on radio stations and mounting billboards to show the existence of the market and organize programs within the market to create awareness of the market's effective functioning.

Furthermore, the empirical review indicated that the establishment of associations among traders enables a market to function effectively because it facilitates policy formulations by incorporating the view of association members. This study recommends the establishment of a network of associations among traders in the Appremdo market and this would not only strengthen the bonds among traders but to enhance their collaborations with other stakeholders to facilitate the effective running of the market. Concerning

the high incidence of thievery in the Appremdo market, the study recommends that the government and other stakeholders should mobilize funds to enclose the market by proving gates in the market and to increase the security checks.

This study revealed that there is no availability and accessibility of financial assistance to the traders in the Appremdo market. To increase the economic conditions of the traders in the Appremdo market, there should be establishment of financial institutions such as credit unions to provide loans to the traders in the market. Government must provide a loan scheme to the traders to enhance their businesses. It was also revealed that the Jubilee Park at the Ajeb roundabout has been illegally converted into a market center leading many traders from the Appremdo market to relocate there. This study, therefore, recommends the city authorities enforce laws to evacuate all the traders who have relocated to Jubilee Park to let some of the traders come back to the Appremdo market.

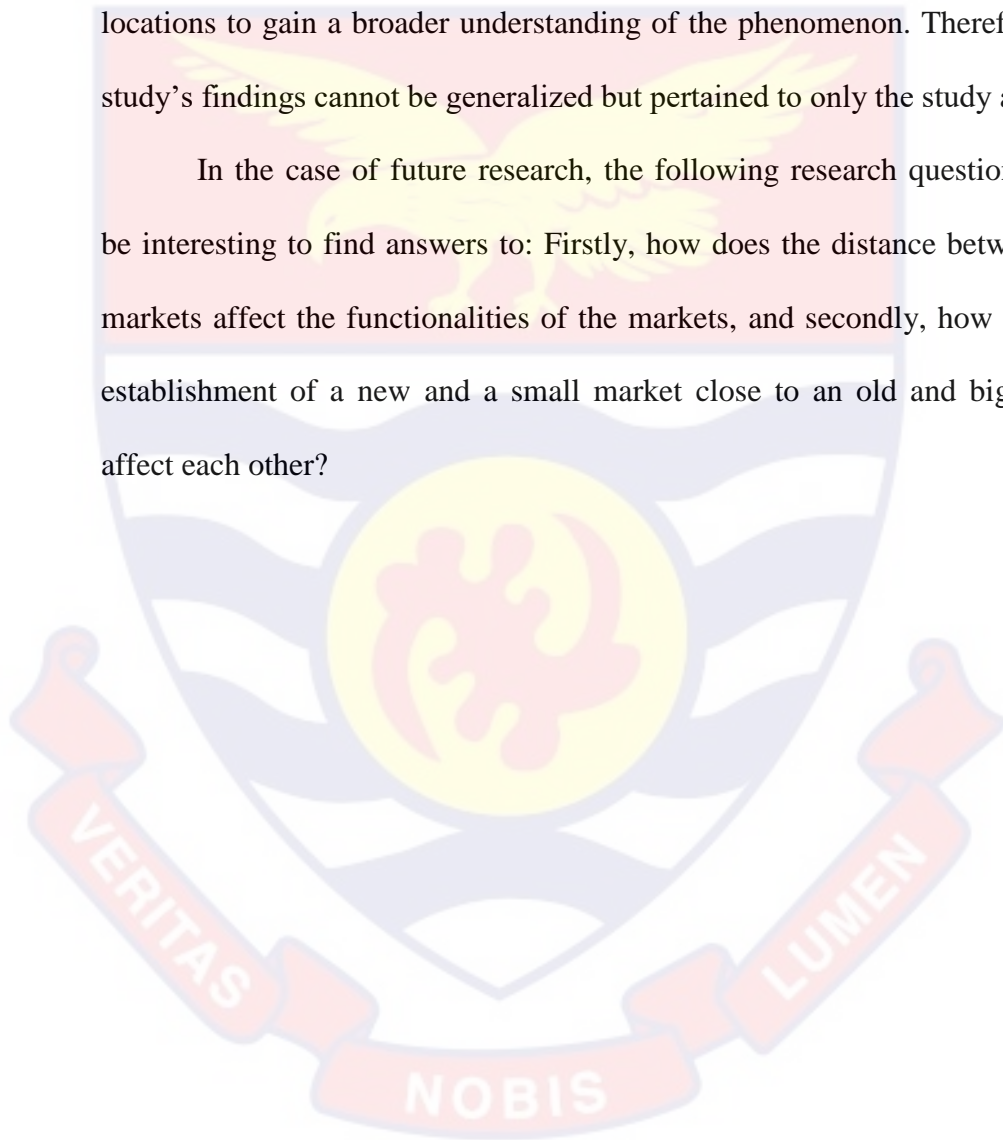
The muddy and dusty nature of the Appremdo market affects the market environment. The dust makes goods dirty, and this affects pricing. During the rainy season, the muddy nature of the road does not promote easy commuting. This study, therefore, recommends that the government should input into its budget the cost of constructing the road network in the Appremdo market to ensure effective trading activities in the market.

Limitations of the study and suggestions for future research

In understanding the critical environmental factors that informed the location of the Appremdo market, the researcher wanted to use secondary data thus a document from the Municipal Assembly to grasp a comprehensive view, however, since the market was constructed in 1996, the researcher could

not get the baseline document to gain understanding but relied on current city authorities for the needed information. Again, considering the time constraints and inadequate funds, this study only focused on the Appremdo market and could not look at other market centers in the region (Western) and beyond to ascertain the socioeconomic and environmental effects of various market locations to gain a broader understanding of the phenomenon. Therefore, this study's findings cannot be generalized but pertained to only the study area.

In the case of future research, the following research questions could be interesting to find answers to: Firstly, how does the distance between two markets affect the functionalities of the markets, and secondly, how does the establishment of a new and a small market close to an old and big market affect each other?



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APPENDICES

APPENDIX A

UNIVERSITY OF CAPE COAST

FACULTY OF HUMANITIES AND LEGAL STUDIES

DEPARTMENT OF GEOGRAPHY AND REGIONAL PLANNING

MPHIL GEOGRAPHY AND REGIONAL PLANNING

QUESTIONNAIRE FOR TRADERS

Please, I kindly wish that you assist me by responding to this questionnaire which is part of a data collection for my thesis in completion of a Master of Philosophy in Geography and Regional Planning, on the topic, **Socioeconomic and Environmental Implications of Appremdo Market Location in Effia-Kwesimintim Municipal Area**. This would take a maximum of forty (40) minutes of your time, and any information provided would be treated with high confidentiality.

SECTION A

Socio-demographic characteristics of participants

1. Sex: Male [] Female []
2. Age
3. Religion (a) Christian [] (b) Muslim [] (c) Traditional [] (d) Other []
(Please specify.....)
4. Marital status (a) Single [] (b) Married [] (c) Separated [] (d) Widowed []
(e) Divorced [] (f) Other, (Please specify).....
5. Level of education (a) No formal education [] (d) Vocational education []
(b) Basic education [] (e) Tertiary education [] (c) Secondary education []
(f) Other [], (Please specify).....

SECTION B

The critical factors that informed the location of the Appremdo market

6. How long have you been engaged in trading in this (Appremdo) market?

.....

7. *Did you relocate from Takoradi Market Circle? Yes [] No, []

8. Did you have prior information on the establishment of this market? Yes [], No [] if yes,

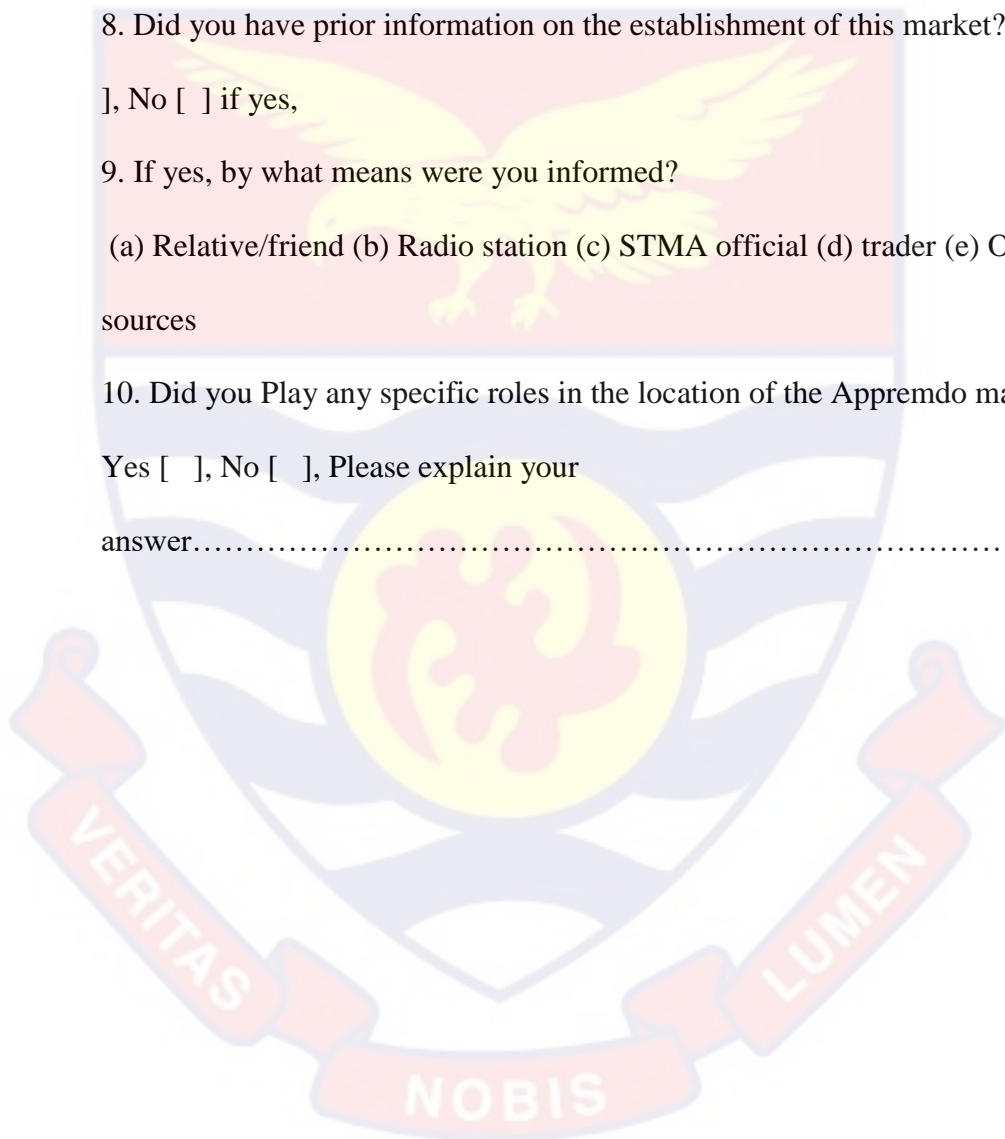
9. If yes, by what means were you informed?

(a) Relative/friend (b) Radio station (c) STMA official (d) trader (e) Other sources

10. Did you Play any specific roles in the location of the Appremdo market?

Yes [], No [], Please explain your

answer.....



Please, indicate from one to five by [√] that best suits the questions below

Keys: 1=Strongly Disagree, 2= Disagree,3=Neutral, 4=Agree, 5= Strongly agree.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
11	The distance to Takoradi market Circle was considered before locating the Appremdo market.					
12	The closeness to the Appremdo station was considered before the location.					
13	Critical environmental factors were considered before the location.					
14	The availability of spaces for trading was considered.					
15	The ability of the market to attract more visitation was considered.					
16	Incident of car accidents due to the closeness of the market to the Appremdo traffic was considered.					
17	Easy accessibility to suppliers influenced the location.					
18	Easy accessibility to financial facilities was considered before the location.					

SECTION C

Social implications of the Appremdo market location

Please, indicate from one to five by [v] that best suits the questions below

Keys: 1=Strongly Disagree, 2= Disagree,3=Neutral, 4=Agree, 5= Strongly agree

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
19	There is an existing institution that regulates activities in the market.					
20	Trading here builds friendships that increase my happiness.					
21	This market location results in low consumer/customer visitations.					
22	There is adequate patronage of my goods/services.					
23	There is a high incidence of thieveries in the market.					
24	There is the presence of a network of associations that support one another.					
25	Traders participate in group association meetings.					
26	There are activities that involve decisions about running the market.					
27	There is a stronger social bond among market operators.					

SECTION D

Economic implications of the Appremdo market location on traders

Please, indicate from one to five by [v] that best suits the questions below

Keys: 1=Strongly Disagree, 2= Disagree,3=Neutral, 4=Agree, 5= Strongly agree

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
28	I can earn adequate income monthly.					
29	I can provide my family with their basic needs.					
30	Trading activities are stronger here than in the market circle.					
31	I regularly pay my tax to the EKMA officials.					
32	Stores/lands were allocated with the active participation of traders.					
33	There is adequate patronage of goods/services.					
34	Financial facilities are provided in the market.					

SECTION E

Environmental implications of the Appremdo market location

Please, indicate from one to five by [v] that best suits the questions below

Keys: 1=Strongly Disagree, 2= Disagree,3=Neutral, 4=Agree, 5= Strongly agree

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
35	The Appremdo traffic has a negative effect on the market operation.					
36	Vehicular pollution affects market operations.					
37	Occasional flooding of the stream negatively affects the market environment.					
38	Fear of car accident due to the closeness to the station affect consumer visitations to the Appremdo market.					
39	Noise pollution by moving cars/other workers affects market operations.					
40	Irregular clearing of refuse dumps affects the sanity of the					

	Apprendo market.					
41	There is a regular collection of refuse in the market.					
42	Garbage beans have been supplied by city authorities					



APPENDIX B

UNIVERSITY OF CAPE COAST

FACULTY OF HUMANITIES AND LEGAL STUDIES

DEPARTMENT OF GEOGRAPHY AND REGIONAL PLANNING

MPHIL GEOGRAPHY AND REGIONAL PLANNING

**THESIS: SOCIOECONOMIC AND ENVIRONMENTAL
IMPLICATIONS OF APPREMDO MARKET LOCATION IN EFFIA-
KWESIMINTIM MUNICIPAL AREA, GHANA.**

IN-DEPTH INTERVIEW GUIDE

A. Effia-Kwesimintsim municipal official

1. How frequently have you been visiting the Appremdo market?
2. What role did any existing institution play in the establishment of the market?
3. What critical socioeconomic factors did you or your office consider before the location of the market?
4. What critical environmental factors did you or your office consider before the location of the market?
5. How would you describe the income generation of the market to traders, particularly on their payment of taxes?
6. How does Appremdo's market location affect traders' payment of taxes?
7. Are there networks of association that support one another in this market? If yes, how does it function?
8. What are the social implications of the Appremdo market on the traders and residents?
9. What are the critical environmental challenges of the Appremdo market?

10. What mechanisms have you put in place to check the environmental challenges?

B. Traders' Leaders/traders

1. How long have you been engaged in trading in this market?
2. What role did any existing institution play in the establishment of the market?
4. What specific roles did you play in the location of the market?
5. What were the factors taken into consideration before choosing this location for the market?
6. How does your income generation affect your economic condition and tax payment?
7. Is there a financial facility provided in the market, how effective is it?
8. How were the stores or land allocated to the traders?
9. What is the difference between trading in the market circle and this market?
10. Are there networks of association that support one another in this market?
If yes, how does it function?
11. How often do you engage in group associations to discuss the running of the market?
12. How has the market affected your social bond?
13. What are critically the environmental challenges of the Appremdo market to your life?
14. How to you deal the environmental challenges in the market?

C. Community leaders/residents

1. What is your duty in this community? (**leaders**)
2. What role did you play in the Appremdo market location and establishment? (**leaders**)
3. What were the factors taken into consideration before choosing the location for the market?
 - (i) Socioeconomic factors
 - (ii) Environmental factors
4. How has the Appremdo market location economically affected your life?
5. What are the social implications of the Appremdo market location to you?
6. What are the environmental effects of the market on this community?

D. Consumers/Visitors

1. How long have you been visiting this (Appremdo) market?
2. How often do you engage in trading in this market?
3. How has the market location socially impacted your life?
4. What are the critical environmental challenges of the Appremdo market to your livelihood?

APPENDIX C

INTRODUCTORY LETTER

UNIVERSITY OF CAPE COAST
COLLEGE OF HUMANITIES AND LEGAL STUDIES
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF GEOGRAPHY & REGIONAL PLANNING



Our Ref: GRP/G.4^A/20/V.3/90
Your Ref:

UNIVERSITY POST OFFICE
CAPE COAST, GHANA
WEST AFRICA
21st December, 2022.

The Chairperson
Institutional Review Board,
University of Cape Coast,
Cape Coast.

Dear Sir,

ETHICAL CLEARANCE FOR CONDUCT OF RESEARCH: STARFORD OSABUTEY- STUDENT IDENTITY NUMBER: SS/PGR/20/0010

We write to introduce **Mr. Starford Osabutey** who is pursuing a Master of Philosophy Degree at the Department of Geography and Regional Planning, University of Cape Coast. He requires ethical clearance to proceed with his data collection for thesis *Titled, Socioeconomic and Environmental Implication of Appremdo Market Location, Effia- Kwesimintim, Ghana*.

By this letter, we confirm that the Department has approved Mr. Osabutey proposal and has granted him permission to conduct and complete his thesis as part of the requirements for obtaining an MPhil degree.

We would therefore be most grateful if his thesis proposal could be reviewed to enable him carry out the research.

Thank you.

Yours faithfully

Dr. Jones Abreha Danquah
For: Head



APPENDIX D

ETHICAL CLERANCE

UNIVERSITY OF CAPE COAST
INSTITUTIONAL REVIEW BOARD SECRETARIAT

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IORG #: IORG0011497

2ND MAY 2023

Mr Starford Osabutey
Department of Geography and Regional Planning
University of Cape Coast

Dear Mr Osabutey,
ETHICAL CLEARANCE – ID (UCCIRB/CHLS/2023/06)
The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research on **Socio-economic and Environmental Implications of Appremdo Market Location in Effia-kwesimintim Municipal Area**. This approval is valid from **2nd May 2023** to **1st May 2024**. You may apply for a renewal subject to the submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit a periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

Kofi F. Amuquandoh
Ag. Administrator

SECRETARY
INSTITUTIONAL REVIEW BOARD
UNIVERSITY OF CAPE COAST

VERITAS **LUMEN**
NOBIS