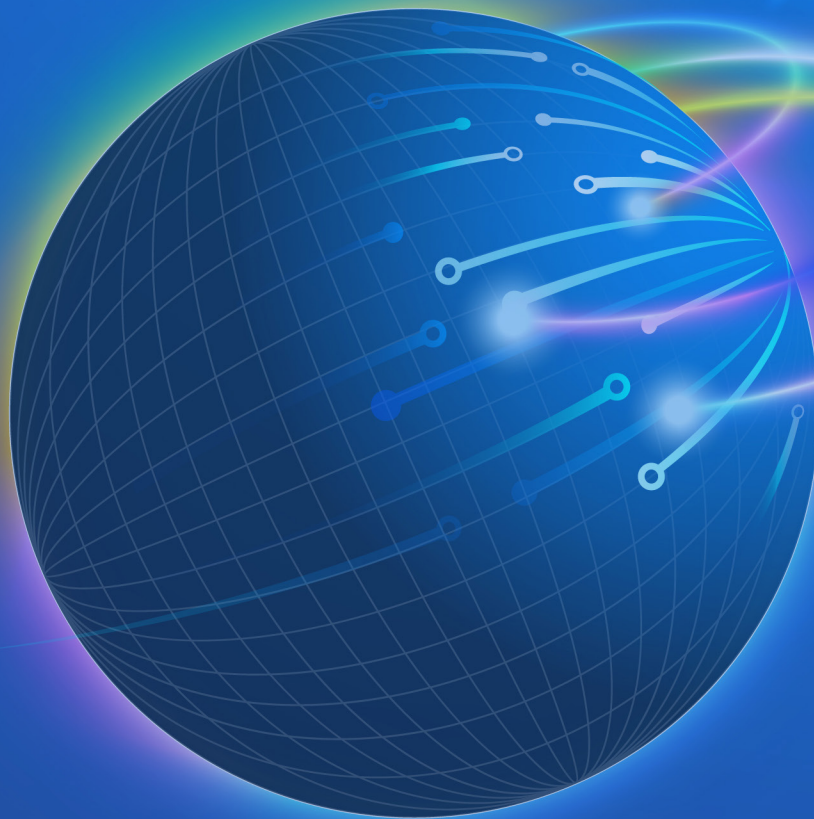




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Unlocking the Influence of Logistics Activities on Local Community Development in Ejura Municipality” Ghana-A Mediator Moderation Role of Economic Performance

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ABSTRACT

This research delves into the impact of logistics operations on the development of the Ejura-Sekyedumase Municipality in Ghana. With a focus on economic performance as a mediating and moderating mechanism, the study employs a quantitative research design to assess the influence of transportation, warehousing, and distribution on rural areas. Data was collected from logistics stakeholders using purposive and convenience sampling methods, and analyzed through statistical techniques such as regression and correlation in the SPSS software program. In addition to emphasizing the importance of ethical considerations and validation and reliability verification of research instruments, the results highlight the crucial role of logistics in enhancing both organizational efficiency and economic performance, leading to growth within local communities. This study offers valuable strategic insights for decision-makers looking to improve performance through optimized logistics management, ultimately fostering growth in rural areas.

INTRODUCTION

The logistics industry is important for global economic development, and it boosts the national economy by supporting production and trade processes. It also manages the acquisition of materials for production, provides support in manufacturing, and ensures that finished goods are efficiently delivered to consumers. The system comprises several activities such as information exchange from producers to consumers regarding goods movements between suppliers and customers. These encompass all aspects of transportation, customs clearance, warehousing, handling, insurance coverage, packing, inventory controlling and customer service inventory control, and customer service, hence making the logistics sector the major one globally (Sezer & Abasiz, 2017). In recent times businesses and society at large has increased attention on sustainability in logistics. For global manufacturers there is growing pressure to integrate economic, environmental and social issues into their strategies' procedures' structures and cultures' decisions making (Sohns *et al.*, 2023). Customers expect firms to address their environmental and social impact regarding their business activities (Ganesh *et al.*, 2024). This is considered as a crucial aspect for compliance purposes including in competitive markets by multinational corporations (Gao *et al.*, 2023). Managers involved with supply chains make vital decisions on supplier selection; transport mode choice; network routing; facility location; and packaging options among others that significantly influence environmental protection or enhancement of human welfare (Miklautsch *et al.*, 2022). The link between

sustainability and supply chain management hinges on operational factors that boost profitability while benefiting people and the environment (Duong *et al.*, 2022). Supply chain competencies thus have an incessantly important role in achieving long term sustainability (McDougal *et al.*, 2022). For sustainable agricultural practices, environmental degradation resulting from intensive farming practices, such as land degradation, pollution, and soil erosion, among others, can be mentioned here since it's common within the agriculture sector, necessitating this issue therefore Nematollahi *et al.* (2020) say.

Decreasing earnings from agriculture affect jobs and lives in rural areas; hence, the need for sustainable agro-industrial networks (Deconinck *et al.*, 2020; Deconinck *et al.*, 2022). In Ghana, cocoa production is highly prioritized by the government as a means of achieving economic growth and poverty reduction (Adwoa *et al.*, 2022). The economy of Ghana largely depends on cocoa export earnings thus involving a logistics system that helps to stabilize its regional economy by creating rural employment opportunities (Teye *et al.*, 2023). Poor logistics management may cause high costs and inefficiencies such as inadequate transportation, poor warehouse management, and lack of inventory control all these can affect the economic performance badly (Altekar *et al.*, 2023). These include efficient transport and distribution logistics that have been shown by Okumu *et al.* (2022) to enhance operational efficiency as well as overall economic performance. Economic productivity is diminished when there are issues such as product deterioration due to mishandling during transportation and warehousing (Ababu *et al.*, 2020).

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LITERATURE REVIEW

This study examines the relationship between logistics management operations and company efficiency in terms of economic performance as a mediator and moderator, with particular reference to rural economies. Although some research has approached the subject of logistics management in general, there is still a pressing need to understand how different types of economic performances could influence such outcomes in various settings especially rural areas like Ejura Municipality in Ghana (Duong, 2022; Liu *et al.*, 2020). Most of the current studies have concentrated on urban contexts thereby overlooking peculiar logistic challenges and opportunities in less developed regions (Pokhrel *et al.*, 2024; Korir *et al.*, 2023). Moreover, few investigations differentiate among transport warehousing distribution etcetera as well as their respective impacts on sustainable development vis-à-vis other aspects like income generation or poverty reduction potentials within these remote parts (McDougall *et al.*, 2022; Miklautsch & Woschank, 2022). This review focuses on logistics management which refers to the process involved in planning, implementing, and controlling the effective flow of goods/services from the point of origin through consumption so that they meet customers' requirements promptly (Christopher *et al.*, 2016; Kim *et al.*, 2022). It involves material planning, procurement, and transportation warehousing distribution which are all important for organizational performance and also economic growth (Wang *et al.*, 2020). Material requirement planning starts with sales strategies forecasting by assessing inventory levels monitoring production demands ensuring timely delivery planning procurement among others (Juhala *et al.* MRP); Cass MRPII), which integrates purchasing decisions with manufacturing costs global business environment (Lasrado *et al.*, 2023; Kumar *et al.*, 2020) where goods movement is managed to enhance time location efficiency. This significantly affects economic performance especially in rural areas through improved infrastructure for local economic development as it reduces costs and enhances accessibility (Fagerberg *et al.*, 2023; Korir *et al.*, 2023; Odhiambo 2021). The balance between cost and efficiency in the delivery of goods can only be achieved by strategic transportation management where faster modes are usually associated with better economic outcomes (Mohapatra *et al.*, 2023; Korir *et al.*, 2023). Efficient warehousing logistics, which includes storage and distribution of products helps to optimize space utilization, labor saving as well as equipment usage thus cutting down on costs incurred through operations while at the same time improving supply chain performance, especially in remote areas where storage capacity greatly influences economic productivity (Fagerberg *et al.*, 2020; Fagerberg *et al.*, 2023). These warehouses serve as major points along the supply chain therefore their efficiency or effectiveness reflects that of all other activities involved in logistic operation hence being key drivers for economic development (Buzu *et al.*, 2020; Mengesha *et al.*, 2021). It is good practice for inventory

managers to ensure availability since this is important in meeting demand requirements which contribute towards satisfying customers' needs thereby maximizing revenue generation potentiality through sales volume attainment. Managing stocks, particularly perishable ones comes with high expenses thus there arises a need to cut down lead times coupled with centralizing locations where these goods are stored to improve financial position (Christian *et al.*, 2024; Muhammad *et al.*, 2024; Muhammad *et al.*, 2023). Distribution logistics ensures that products reach consumers from producers at the right time cheaply thereby opening up new markets increasing income levels and fostering consumer loyalty, especially among people residing in rural areas such as Ejura Municipality (Williams, 2019). Local development can be fostered through integration of supply chain management with distribution logistics which also enhances economic performance within a given locality (Althaqafi *et al.*, 2021). Significant improvement in sustainability can often be realized during efficient management of transport systems whose main goal should always revolve around achieving profitability while minimizing both social and environmental impacts on the community thus acting as a catalyst for sustainable development (Duong 2022; Nematollahi & Tajbakhsh 2020). Wang (2021) stated that economic performance indicates how well a firm uses its resources to generate income or profit hence it acts as a mediator between the efficiency and cost-effectiveness of logistics operations. Transportation being one major component within the logistic chain plays a significant role in realization such as reducing expenses incurred during deliveries, and shortening waiting periods experienced by customers whenever they place orders thereby improving overall sustainability within organizations (Saidi *et al.*, 2020; Xu, He, & Ji, 2022; McDougall *et al.*, 2022). Among other things, economic performance also acts moderator relationship between logistics management and sustainable business performance higher levels of economic performance strengthen the positive impact created by logistics management on the environment through sustainability (Liu *et al.*, 2020; Liu *et al.*, 2023). This is because with increased financial capability firms can invest more in green technologies aimed at enhancing ecological balance for example waste reduction facilities like recycling centers which are strategically located near warehousing areas (McDougall *et al.*, 2022; Miklautsch & Woschank, 2022). Additionally, strong economic conditions allow businesses to optimize their transport networks resulting in faster delivery times decreased transportation costs lowered carbon dioxide emissions released into the atmosphere (Xu *et al.*, 2022; Saidi *et al.*, 2020). Duong (2018) proposed that apart from mediating it should also act moderator so that tangible results are achieved through the utilization of various resources involved in the logistics system i.e. labor and, time among others Kim (2019) noted that this idea becomes more relevant when dealing with rural areas where there is need for sustainable development. Pokhrel *et al.* (2016)

remarked upon this concept stating its importance towards achieving growth and sustainability within the logistics sector particularly in such places like Ejura Municipality Ghana. When economic performance is integrated as both mediator and moderator it provides a deep understanding of how different aspects come together to bring out sustainable performance, especially in rural economies where logistics plays key role in the realization of this goal (Kim *et al.*, 2018). Therefore, the current study findings support earlier works done by scholars who emphasized on direct as well indirect impacts of logistics management on sustainable firm performance with more focus being directed towards areas located far away from urban centers including Ejura Municipality (Ferguson *et al.*, 2000).

Conceptual Framework

This research examines the interplay of logistics management actions and economic development at Ejura Municipality within a conceptual framework that considers economic performance as both a mediator and moderator. In essence, this framework seeks to explain in which ways do logistics activities directly affect local growth with economic performance playing the role of an intermediary variable as well as moderating one hence leading to different economic outcomes for any

given municipality. According to them, it is clear from their argument that they suggest while on the one hand logistics management promotes economic development through efficiency gains; cost reduction; and service delivery enhancement among others at the same time also propose that these activities can only be fostered or hindered by how well or poor a locality does in terms of its economy (mediates) Logistics significantly drives up economic growths within developed areas than less endowed regions. Various studies have indicated that there is great need for improvement when it comes down to managing supply chains especially where such moves are geared towards realizing better performances (Juhala *et al.*, 2021; Cass *et al.*, 2023; Korir *et al.*, 2023). It therefore explains among other things why this model shows various relationships between logistical undertakings and regional development particularly in rural settings like Ejura Municipality while presenting economic performance as acting both mediator and moderator. This method enables a comprehensive examination of how improved logistic management brings about better financial results and the current states of economies impacting on transportation efficiencies which provide important points that should guide decisions aimed towards using logistics as catalysts for sustainable rural growths (Lasrado *et al.*, 2023; Kumar *et al.*, 2020).

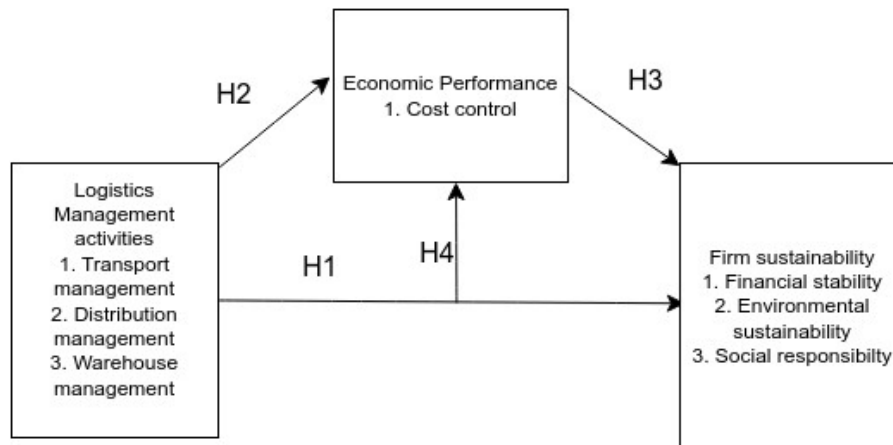


Figure 2: Conceptual Framework
 Source: Researchers own construct, 2024

MATERIALS AND METHODS

Quantitative research uses numerical data for statistical analysis (Ali *et al.*, 2020). This research uses a quantitative method to measure the influence of logistics management activities on local economic development. The researchers developed specific questions and gathered quantitative information from respondents, which enabled them to conduct robust statistical tests and objective inquiry (Mulisa *et al.*, 2022). These participants were knowledgeable in logistics management and local economic development because they were drawn from warehousing personnel, distribution staff, fleet managers, inventory controllers, and commercial farmers among others within Ejura Municipality; assembly members; senior officers from the District Assembly; and merchants

among others. Purposive sampling was used to select individuals with specialized knowledge while convenience sampling was utilized when choosing readily available or willing respondents. With a 95% confidence level, Vu *et al.*'s formula gave a sample size of one hundred thirty-eight people representing sixty-six percent of the total population at risk (Vu *et al.*, 2021). SPSS software which is recognized worldwide as one of the best statistical packages for social science research was employed during the analysis stage. Pearson's correlations were used to find out how strong or weak a relationship exists between logistic activities and economic outcomes while descriptive statistics such as tables, means scores, or standard deviations were applied in summarizing logistics activities together with demographic variables like education levels

attained by different employees; job positions held by these workers; work experience duration so far gained by each employee within their respective departments as well departmental affiliations concerned about this study. Additionally, regression analysis was done to establish whether there is any relationship between them, Does Logistic Management Activities have an effect on Local Economic Performance? Moreover, does it Mediate or Moderate such a Relationship?

The model used in this analysis can be expressed mathematically as follows:

$$EP = \beta_0 + \beta_1 TM + \beta_2 DM + \beta_3 WM + \beta_4 IM + \beta_5 CR + \epsilon$$

where EP stands for Economic Performance.

TM is an abbreviation for Transportation Management.

DM stands for Distribution Management.

WM refers to Warehouse Management.

IM denotes Inventory Management.

CR represents Customer Response.

ϵ is the error term

β_0 can be defined as an intercept that shows the estimated value of economic performance when all logistics management activities are at zero level.

β_1 - β_5 are coefficients corresponding to each logistic management dimension

The regression model was used to test the relationship between logistic management activities (independent variables) and economic performance (mediating & moderating variables) as well as sustainability (dependent variable). These coefficients (β_1 - β_5) show how much

contribution does each activity have towards EP but also their combined effect on a firm's sustainable development. The study observed strict ethical considerations in research work such as getting informed consent from respondents, safeguarding the confidentiality of obtained information, and respecting (Denzin & Lincoln's participant autonomy and privacy principles Creswell & Creswell 2017). This implies that the ethics committee had reviewed this project thus granting it approval based on ethical standards necessary for establishing trustworthiness in scientific investigations (Newman *et al.*, 2021; Zhaksylyk *et al.*, 2023). To make sure that the data collected were reliable validity and reliability of research instruments were assessed. Validity entails whether tool actually measures what it purports to measure Aithal *et al.* (2020). In this case, reliability was checked by utilizing Cronbach's alpha coefficient which should be equal to or greater than 0.7 Awang *et al.*(2021); Elias *et al.*(2020); Van de Winckel *et al.* (2022). This table indicating construct reliability confirms the dependability/stability of measurement tools thereby enhancing credibility or trustworthiness Guest *et al.* (2020). However, the design itself allows us to understand better how different components of Logistic systems impact on overall firm sustainability especially within rural growth areas where there might be limited accessibilities concerning transportation among others.

RESULTS AND DISCUSION

Table 1: Reliability test

	Variable	Cronbach's Alpha	No. Items
1	Transportation Management TM	.880	5
2	Inventory Management (IM)	.877	5
3	Warehouse Management (WM)	.867	5
4	Customer Response (CR)	.851	6
5	Distribution Management (DM)	.843	5
6	Rural economic growth (REG)	.843	5
7	Overall	.873	31

Source: Respondents' opinion analyzed using SPSS version 23

The study found that variability can be seen across the variables, which was later confirmed by a preliminary survey on the questionnaire. The credibility, quality and reliability of a research work can be increased through measures aimed at improving its validity (Creswell & Creswell, 2017) following strict methods and validation approaches meant to minimize biases and errors (Moore *et al.*, 2021). According to the 2010 Population and Housing Census (Wongnaa *et al.*, 2021), there is an almost equal distribution of sex in Ejura-Sekyedumase Municipality (50.2% male, 49.8% female) but with slight male dominance (sex ratio: 100.8). The population was predominantly young (41.1% youth, 4.4% aged) with rural areas accounting for half of all residents (49.7%). The age dependency ratio stood at 83.6 indicating high

dependence on the working age group but with gender disparities (88.0 males; females:79.37). Understanding community dynamics and development planning requires this demographic understanding among others too. In total the municipality has a population of about 83941 people living in households numbering approximately 16402 giving an average household size of five point one person per dwelling unit. Among children's homes, those headed by single parents accounted for more than twice as many as those headed by couples while nuclear families represented slightly over a quarter of them all. More than sixty percent (60%) of adults aged eleven years or more have attained literacy skills within Ejura-Sekyedumase Municipality; however, boys were found to be more literate than girls with achievement levels reaching

33.5% among females compared to 66.6% amongst their male counterparts who also recorded higher rates for proficiency in English language including reading writing speaking understanding listening etcetera together alongside other Ghanaian languages spoken countrywide. Literacy among adults aged fifteen years or more indicated that about one-third had never attended any formal education system at all, another 25 were still attending classes currently, while the remaining quarter had already gone through some schooling before dropping out again without completing it fully. The economically active population within this area was estimated at (74.6%) where (97.4%) were employed and (2.6%) remained jobless despite being part of the working age bracket. Skilled farming activities accounted for most jobs created by self-employed individuals followed by service provision

which included sales crafts such as tailoring barbering salons etcetera; management professional technical roles formed a very small proportion while the majority fell under unskilled casual labourers category especially those engaged in private informal sector businesses without any employees under them Agriculture dominated household economic activity with crop production being practiced by more than 9 out every 10 farm households surveyed here. The fourth chapter provides empirical data analysis from fieldwork done during research which involved collection, processing and interpretation of various aspects relating to participants’ demographic information together with the effects logistics management has on the rural economy within the Ejura Municipal Assembly area. Table 2 below sample size, response rates, and gender distribution.

Table 2: Demographic characteristics of respondents

Demographic Variable	Category	Frequency	Percent
Genderr	Male	58	58
	Female	42	42
Married Status	Single	41	41
	Married	59	59
Age in Years	20 to 30	23	23
	31 to 40	38	38
	41 to 50	24	24
	Above 50	13	13
Highest Education	Diploma or below	31	31
	Degree	35	35
	Post Graduate	25	25
	Professional	9	9
Working Experience	Below 5 years	25	25
	5-10yers	29	29
	11-15 years	16	16
	Above 15years	20	20
	Others	10	10

Source: Fieldwork, 2024

The statistics show that 35 individuals have a bachelor’s degree, 31% have diplomas or lower-level qualifications and 9% have professional body certifications. Moreover, postgraduate qualifications were held by 25 persons. This wide range of educational backgrounds enabled the respondents to give meaningful answers to the questionnaire.

Descriptive Analysis

According to Mesfin (2016), five points were determined equally spaced on a Likert scale ranging from “strongly disagree” to “strongly agree.” The interval values are such that the mean value for strong disagreement is given as between 1 and 1.8 while somewhat disagreement falls within the range of 1.81 and 2.6; 3.41 up until 4.2 suggests somewhat agreement whereas strong agreement lies around Mean Value:4.21-5.00 [as cited in

Girma,2018]. To get this measurement element in each question there should be a difference of at least eight tenths from one point to another through dividing with a maximum score which is five Standard deviations were used during data analysis whereby small depicts closeness between data points’ distances from average while large implies wide spreadness where deviation measures how well mean represents data (Schober *et al.*,2021). In terms of education levels; Bachelors constituted 35% followed by diploma holders at 31% then certificates accounted for 9 % while masters comprised 25%, thus enhancing richness brought about by different types of educational qualifications among those who responded to the survey for equalizing intervals on a Likert scale with five points ranging from “strongly disagree” to “strongly agree,” Mesfin (2016) used heuristic method so that strong disagreement corresponds mean value between 1 and

1.8; somewhat disagreement takes place when mean falls within the range of 1.8 one six two thousand six hundred; neutrality sets the threshold at two thousand six hundred one three four zero; somewhat agreement lies between three thousand four hundred one and four two zero while strong agreement falls within the range of four thousand two hundred one five thousand [as cited in Girma, 2018]. One measure of dispersion is the standard deviation, which indicates how closely grouped data are around an average value. When there is a small standard deviation, this means that most points fall near some mean score; conversely if there is large standard deviation then it implies that many scores are far away from average point. The education levels of the respondents were as

follows: 35% held bachelor's degrees, 31% had diplomas or lower qualifications, 9% possessed professional body certifications and 25% had postgraduate qualifications thus making their answers more diverse since they came from different educational backgrounds. Mesfin (2016), as cited by Girma (2018), employed a five-point Likert scale with equal intervals from strongly disagree to strongly agree, where mean values reflected agreement levels, setting a 0.8 limit for questionnaire items. The analysis involved standard deviations to evaluate the mean representation of data; smaller deviations indicated data points clustered near the mean, while larger deviations indicated more dispersed data points (Schober *et al.*, 2021).

Table 3: Descriptive statistics

Variable	N	Mean	Std. Deviation
Transport Management	100	3.502	.764
Inventory Management	100	3.431	.770
Warehouse Management	100	3.405	.727
Customer Response	100	3.433	.628
Distribution Management	100	3.360	.676
Rural Economic Development	100	3.483	.601

Source: Respondents' opinions were analyzed using SPSS

A Transportation Management score of 3.502 (SD=0.76) is shown in Table 3, which means that most people agree on it. According to Table 1, Inventory Management has a mean of 3.43 and a standard deviation of 0.77, suggesting general agreement within the range from 3.41 to 4.2. The mean for Warehouse Management is also 3.40 which indicates an agreement within this same range too. A high standard deviation shows many different opinions among respondents about a measure while lower values imply similar views towards that construct inventory

management had a mean of warehouse management (M = 3:40; SD = 0:72; n.d.).

Kimario *et al.*'s study found that correlations between variables were small if they ranged from .01-.31; moderate when between .30-.70;.71-.90 represented large relationships while anything greater than or equal to one signifies very strong correlation relationship exists between these two items Customer Service Management (M=3:43; SD=0:63); respondents' overall agreement reflected this fact in Table 2.

Table 4: Correlations between Logistics Management Activities and Firm sustainability

Correlations		Transport Management	Inventory Management	Warehouse Management	Customer Service Management	Distribution Management	Firm Sustainability
Transport Management	Pearson Correlation	1					
	Sig. (2- tailed)						
Inventory Management	Pearson Correlation	.8760 **	1				
	Sig. (2- tailed)	.000					
Warehouse Management	Pearson Correlation	.868**	.868**	1			
	Sig. (2- tailed)	.000	.000				
Customer Service Management	Pearson Correlation	.892 **	.858 **	.853**	1		
	Sig. (2- tailed)	.000	.000	.000			
Distribution Management	Pearson Correlation	.790**	.814**	.808**	.838**	1	
	Sig. (2- tailed)	.000	.000	.000	.000		

Rural Economic Development	Pearson Correlation	.898**	.884**	.873**	.828**	.850**	1
	Sig. (2- tailed)	.000	.000	.000	.000	.000	

***. The Correlation is significant (p < 0.01 level (2-tailed), N=100*
 Source: Field Work (2024)

Table 5: Multiple Regression Model Summary

Model	R	R Squared	Adjusted R squared	Std. Error of the Estimate
1	.941 ^a	.886	.881	.20776

According to Liu *et al.* (2023), this model fails to account for 11.9% of the variability in Economic Performance regarding local community development within the Ejura Municipality, which means that there are other factors at play here. It implies that logistics management activities such as transport management, inventory management, warehouse management, customer service management, and distribution management explain 88.1% of the

changes in economic performance within the local community development of Ejura municipality. This finding indicates a large number or high proportion maybe all but few or some; many but not all logistics activities greatly affect people’s lives through their communities by improving their financial abilities thus contributing towards overall growths at Ejura Municipality level involving businesses and individuals alike.

Table 6: The Determinant Factors of Logistics Activities on Rural Economic Development

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.806	.116		6.958	.001
	Transport Management	.386	.071	.489	5.519	.000
	Inventory Management	.185	.066	.243	2.795	.006
	Warehouse Management	.159	.067	.190	2.338	.021
	Customer Service Management	-.233	.083	-.244	-2.766	.007
	Distribution Management	.289	.061	.323	4.823	.000

a. *Dependent Variable: Firm Sustainability*
 Source: SPSS version 21 was employed to analyze the opinions of respondents

This study examines how logistics operations affect community development within the Ejura Municipality in Ghana with regard to mediating as well as moderating influences of firm performance. According to the results, there is a significant relationship between transport logistics and firm performance where management of transport logistics greatly impacts local economic growth (B=.386, p<0.001) which is consistent with other studies (Kim *et al.*, 2022; Thorne *et al.*, 2024; Pokhrel *et al.*, 2024; Mamad & Chahdi, 2013; Oumami *et al.*, 2024). The findings also reveal that good warehouse management has positive correlation with Ejuras’ economic performance implying that better storage facilities will lead to high levels of income generation among businesses operating at this level while lowering their operational expenses through distribution efficiencies within the region. In addition, it was found that distribution logistics significantly contributes to local economies (coefficient=0.289, p<0.01) which confirms previous research findings (Williams, 2019; Ferguson, 2000). Furthermore, inventory control systems were discovered to have certain impacts on rural development where a positive relationship exists between these two variables indicating that more should be done by organizations to improve customer service delivery especially those

targeting customers from remote areas who need goods urgently thus enhancing their satisfaction levels thereby leading into increased sales volumes accompanied by higher returns for investment. This understanding highlights the importance of considering different aspects related with supply chain management when trying improve living standards among people living in villages. Inventory management was shown to be positively related to rural economic growth but negatively associated with it in terms of its effect on firm performance levels since if not controlled well may result in overstocking or under stocking either way affecting business operations hence customer needs should always come first during decision making processes about stock supplies because failure do this might lead dissatisfaction on part customers thereby resulting low revenues being collected by system. These findings demonstrate that there are various ways through which logistics can be used as a tool for enhancing sustainable development within municipalities like Ejura in Ghana. The study also sought to establish whether or not there were any significant differences between males and females regarding their perceptions towards such issues but no statistically significant gender-based disparities were observed thus suggesting

that everybody regardless of their sex should have equal opportunities when dealing with matters about community growth through supply chain management activities. 100 respondents participated in this research by completing a structured questionnaire designed on five point Likert Scale which was analyzed quantitatively using SPSS version 21 where OLS regression models were run. It was found that transportation logistics management is significantly related to rural economic development which means transport systems play crucial roles in fostering growth especially areas located far from major towns. Additionally distribution as well warehouse logistics were positively associated with local economies within the Ejura Municipality, thereby indicating that they contribute greatly towards these regions' prosperity. These results showcase need for effective transport, inventory, customer response and distribution among others so that more value can be created at grassroots levels. Properly managed warehouses act as catalysts for economic transformation since they reduce operational costs while heightening productive capacities among firms hence attracting investments into different sectors including agriculture, manufacturing; retailing; wholesaling etc. Policymakers could use such findings to guide them during decision-making processes aimed at improving infrastructure facilities like roads; storage facilities; and distribution networks among others to enhance economic performance across rural areas particularly those located near urban centers because improved accessibility enhances connectivity thereby enabling smooth flow goods services promoting sustainable development among people living within such regions

Implications of the Study

In enhancing economic outcomes and sustainability in rural areas, this study provides important directions for policymakers and businesses. The research also brings to light the importance of distribution logistics which ensures that goods reach their destination at the right time and are cost-effective such as transport logistics that contribute positively towards rural growth hence the need for more infrastructure investments to spur economic activities as well as efficient warehouse management through improved storage facilities can significantly cut down costs while increasing efficiency.

Future Study of the Research

However, this study has a limited scope about generalizability due to its concentration on Ejura Municipality only but other than that; there might be an oversight on some complexities associated with different ways of doing things or methods used in carrying out various logistical functions if quantitative data collected from structured questionnaires is relied upon alone. Thus, it could be helpful if future researchers adopted mixed methods approach besides looking into procurement related issues together with technology integration among other logistics operations for wider understanding.

CONCLUSION

The research shows that there is a strong relationship between logistic management and business sustainability in rural areas within Ejura Municipality where these two are mediated by economic performance. Therefore, we can say without any doubt that transportation warehousing/distribution logistics are very important in terms of driving economies forward, especially those located away from big cities like Ejura Municipality which requires strong infrastructural support coupled with streamlined operations if they want to grow economically sustainably over time. These findings have great significance not only for policymakers but also for those leaders who want use supply chain management ensure sustainable development takes place in rural regions.

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