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Consumer Preferences for Rural Periodic Markets and Their Influence on Commodity Access: Insights from Selected Market Centers in Magu District, Tanzania.

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ABSTRACT

Abstract

Rural periodic markets play a vital role in shaping the social fabric, economy, and daily lives of rural communities, and they also act as fundamental building blocks within the complex marketplace exchange system in rural areas. However, despite their importance and the opportunities they present, consumers continue to face several critical challenges in utilizing these markets effectively. This study was conducted at Sola, Mahaha, Kabila, and Magu periodic markets in Magu District to assess consumers' preferences for rural periodic markets, understand the factors influencing their buying behavior, and explore their perceived effects on access to commodities. A simple random sampling technique was used to select 236 consumers. Multiple responses, binary logistic regression, and the likert scale were used for analysis. The findings revealed that manufactured goods were more preferred by consumers in rural periodic markets compared to agricultural and livestock products. This preference was largely influenced by factors such as product availability, affordability, and the convenience of the market's location. Most consumers acknowledged that rural periodic markets played a positive role in improving their access to essential commodities. Nevertheless, despite these benefits, the study identified several challenges faced by consumers, particularly price fluctuations, inadequate market facilities, and an unfavorable market environment, which collectively affected their overall purchasing experience. Thus, enhancing rural periodic markets in Magu District requires a multi-sectoral approach that integrates infrastructure development, market organization, access to financial and information services, and inclusive policy support. By addressing these areas holistically, periodic markets can become vibrant economic hubs that contribute significantly to rural livelihoods, food security, and sustainable local development.

1. Introduction

Market preferences refer to the choices and desires of consumers regarding the goods, services, or commodities they value most when making purchasing decisions (Kotler and Keller, 2016). Market preferences are a reflection of consumers' behaviour, shaped by individual needs, cultural influences, and economic conditions. In rural periodic markets, such preferences may include the availability of diverse commodities, opportunities for bargaining, accessible market days, and the presence of basic facilities like stations and security.

According to Roy and Roy (2024) rural periodic market is an authorized public gathering of buyers and sellers of rural commodities, meeting in the appointed place at a regular interval. These markets play an important aspect in the local economy, providing a platform for farmers, wholesalers, retailers, and direct consumers to interact and exchange goods and services face-to-face (Adai *et al.,* 2023). Commercial activities among rural dwellers are mostly carried out through rural periodic markets. Among the importance of these markets is their major role in bridging the gap of social and economic isolation associated with rural areas as well as integrating peasants into regional and national socioeconomic systems (Muoki, 2019).

Globally, Korea, India, and China have established rural periodic markets. These markets have been used to promote socioeconomic development in most developed countries, including the transformation of traditional agrarian societies into modern industrial societies (Muoki, 2019). In developing countries, rural periodic markets have been associated with agriculture, transportation,

and industrialization (Rao and Raju, 2018). Rural periodic markets fulfil the demands of consumers where permanent markets are not present or a daily marketing system is not feasible (Das, 2015). As a result of these markets being established in different countries, rural people's lives have also improved in terms of income and access to day-to-day basic needs. Rural periodic markets in most developed and developing countries are seen as a point in reducing trading costs and maximizing customer access by rural producers.

In Africa, rural periodic markets are found in many Western countries, including Morocco, Nigeria, Ghana, and Sierra Leone. These markets connect rural residents to the national economy and reduce the gap between rural and urban populations. As reported by Valen (2022), about 52% of the African population live in rural areas and are peasants, and these markets have become part of them and define their culture. Rural periodic markets' adequacy may be a prerequisite for social, economic, and cultural transformation in rural communities (Nikusekela *et al.,* 2015). In these markets, rural residents with limited mobility to outside villages get a chance to interact and buy manufactured products from villages (Karg *et al.,* 2018). Periodic markets form important endpoints for manufactured goods and start points for the flow of primary products, especially from agriculture, to major urban centres (Benassai-Dalmau *et al.,* 2025). The lives of rural people can be improved through these markets in terms of employment, income, and access to buyers from different areas.

In Tanzania, the rural periodic market is the farmer's first contact point with the marketing channels and is considered the nerve centre of the economic, social, and cultural activities of the country's rural life. They form important endpoints for manufactured goods and start points for the flow of primary products, especially from agriculture towards the major consumers (Benassai-Dalmau *et al.,* 2025). As a centre of diffusion, they play a significant role in the habitat, economy, and life of the people and act as basic building blocks of the complex marketplace exchange system of the modern world (Adai *et al.,* 2023). The growth of rural periodic markets always follows the development of agriculture, transportation, and industries. Rural periodic market centres are economically viable and represent the regional pattern of development; they provide trade and commerce services to the region, act as a nodal centre for transportation, and serve as a growth centre by providing various services to the adjacent region (Muoki, 2019).

In the Mwanza region, these markets are held once per week and play a role as a nerve centre for socioeconomic, socio-cultural, and socio-political harmony. These markets exist year to year at different locations. Currently, the region has different rural periodic markets characterized by single products as well as multiple products, many of which are located in the Magu, Sengerema, Kwimba, Ukerewe, Nyamagana, Ilemela and Misungwi districts. Regarding Magu district, there are many markets that exist once a week. The district's periodic markets are located at Kabila, Magu, Sola, Mahaha, and Ilungu. These market centers play diverse socioeconomic functions towards the integration of peasant economies into the regional level. Rural periodic markets allow the district population to interact with other people while trading agricultural commodities and buying goods and services for household consumption. Despite the opportunities of trading and buying commodities in rural periodic markets, consumers from different parties of the Magu district face challenges such as limited toilet facilities, transport facilities, price variation, fake products, and thieves when it comes to exchanging commodities.

The existing studies (for example, Ismail *et al.,* 2015; Iderawumi, 2015; Velayudhan, 2016; Babune, 2022; Satyam *et al.*, 2022; Addai *et al.*, 2023) paid much attention to the contributions of rural periodic markets in rural development. This study sheds light on the potential embedded in rural periodic markets for rural sellers and buyers by addressing the consumer preferences for rural periodic markets and their perceived effect on access to commodities in four selected periodic markets centres of the Magu district.

This study evaluates consumer preferences for rural periodic markets and their perceived impact on access to commodities. Although these markets are integral to rural commodity exchange, persistent challenges continue to hinder effective trade. Thus, the study aimed to (i) characterize the types of commodities traded in rural periodic markets; (ii) identify key factors shaping consumer preferences; (iii) assess the perceived influence of these preferences on commodity access; and (iv) examine the challenges rural consumers face in accessing commodities within these markets.

Figure 1 shows the conceptual framework for modeling consumer preferences in rural periodic markets and their perceived influence on access to commodities. The study hypothesizes that consumer preferences are shaped by several independent variables, including the nature of commodities traded, perceived effects, and key factors such as availability, accessibility, and affordability.

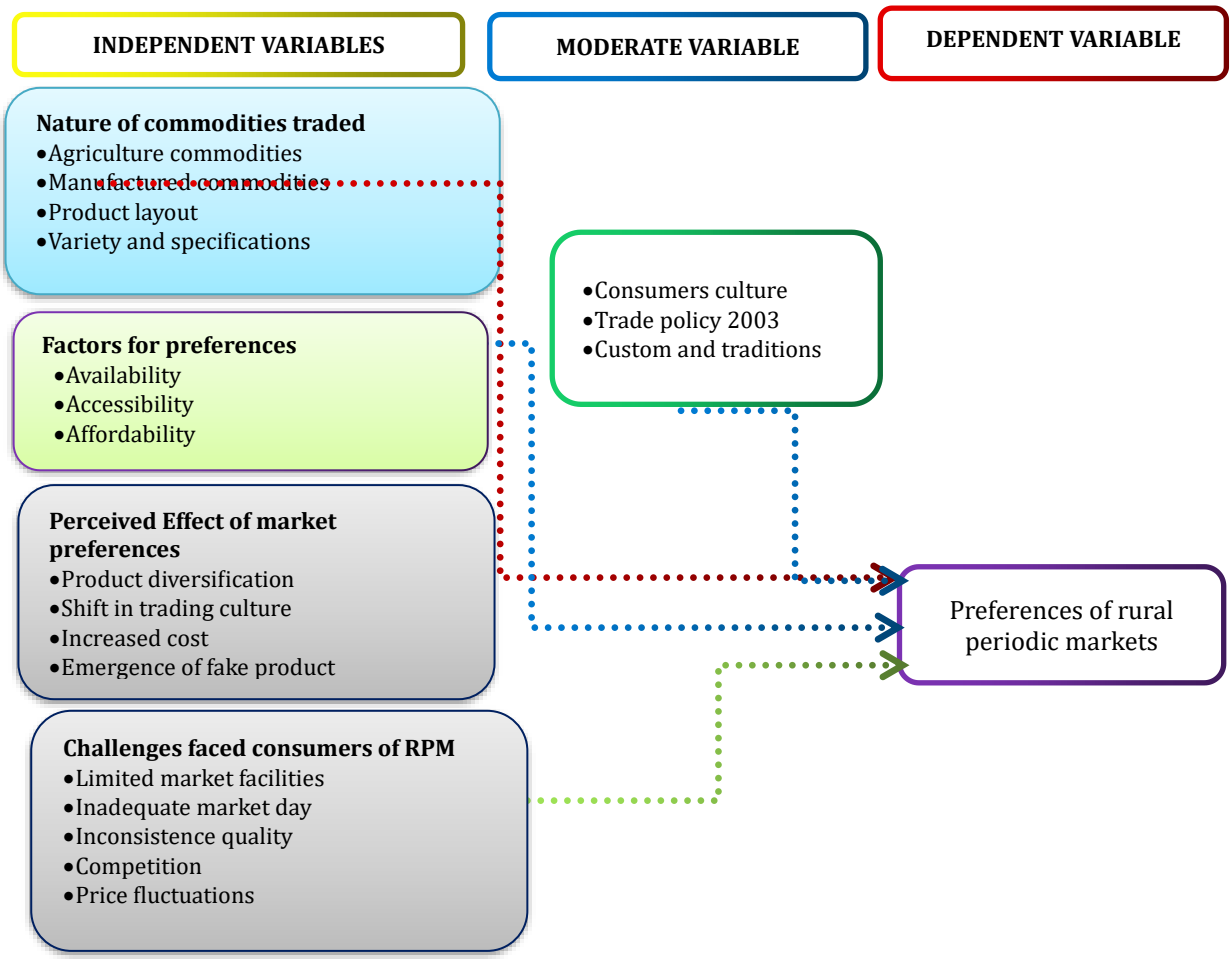

Figure 1: A conceptual framework for consumer preferences for rural periodic markets

2. Study Area, Data and Methods

2.1 Location of the Study Area

The study was conducted in four rural periodic market centres within Magu district: Sola, Magu, Mahaha, and Kabila. Magu district is located at latitude 2°61'79" South and longitude 33°48'32" East. The district comprises 27 wards, 125 villages, and 778 sub-villages, with a total population of 421,119 people (204,166 males and 216,953 females) and 80,681 households. The majority of residents belong to the Sukuma tribe. These specific periodic markets were selected due to the availability of fresh agricultural commodities alongside a variety of manufactured goods within the same market centres. Additionally, these markets attract buyers who rely on rural periodic markets to access commodities typically found in permanent shops and markets.

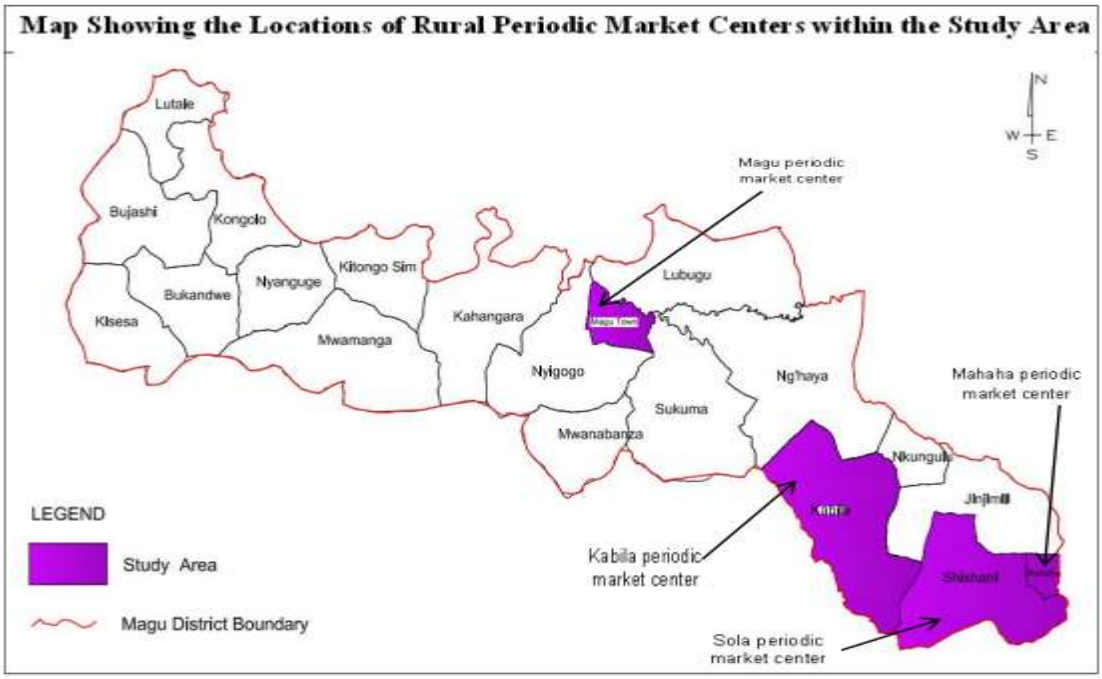

Figure 2: Map of Magu district and villages where market centres are located

2.2 Data

The study employed a cross-section design to assess consumer preference for rural periodic markets in Magu. This design was selected as it enabled the collection of quantitative and qualitative data from a large population at a single point. Consumers aged 15 years and above, who were purchasing various goods through rural periodic markets, were randomly selected to participate in the study. Both primary and secondary data of quantitative and qualitative nature were collected. Primary data were collected from market leaders, district trade officer, sellers and buyers of commodities in rural periodic markets using the interview and observation methods. Secondary data were collected from reports obtained from district trade officer, market leaders, and electronic sources including articles using documentary review.

Using simple random sampling, 245 consumers were initially selected for interview. However, due to incomplete information from 9 respondents, they were excluded, resulting in a final sample of 236 consumers for analysis. Additionally, a pilot study was conducted with 24 consumers from the Magu periodic market centre to pre-test the questionnaire and ensure the validity of the primary data collection tool.

2.3 Analytical Methods

The analysis employed both descriptive and inferential statistics to come up with relevant conclusions. Descriptive statistics like the number of responses, percent of cases and weighted mean score were used in the study to determine the nature of commodities traded in rural periodic markets, explore the perceived effect of market preferences and analyze challenges faced by consumers in rural periodic markets. Multiple regression was used to analyze data on the factors for preferences in rural periodic markets. The multiple regression model was suitable because the dependent variable, market preference, was much affected by the number of factors driven by the market system and market participants. Descriptions of independent variables used together with their measurement scale are provided in Table 1.

The multiple regression model was expressed as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_n X_n + \varepsilon \ldots\ldots (1)$$

Where Y= Market preferences, X_1= manufactured commodities, X_2 = agriculture commodities, X_3 = product layout, X_4 = freshness and quality, X_5 = variety and specification, X_6 = number of supplier, X_7 = trading space, X_8 = distance to market center, X_9 = market location, X_{10} = market facilities, X_{11} = commodity delivery, X_{12} =transport facilities, X_{13} = market frequencies, X_{14} = bargaining opportunities, X_{15} = consumers income, X_{16} = local commodities, X_{17} = price of commodities, X_{18} = manufactured commodities, X_{19} = transportation cost, X_{20} = inflation, X_{21} = quantity of commodities, β_s = (β_0, β_1, β_2, β_3, β_4, β_5..... β_n) = regression coefficient of variables

Econometric model

Table 2: Summary of variable included in the Multiple regression mode

Variables	Code	Measurement	Expected Significance
Dependent			
Market preference	Y	0=Rarely, 1=Occasionally, 2= Frequently	
Independent variables			
Availability of commodities			
Manufactured commodities	MANC	Dummy (1 =Yes, 0=otherwise)	+
Agriculture commodities	AGRC	Dummy (1 =Yes, 0=otherwise)	+
Product arrangement	PRL	Dummy (1 =Yes, 0=otherwise)	+
Freshness and quality	FRQ	Dummy (1 =Yes, 0=otherwise)	+
Variety of commodities	VS	Dummy (1=Yes; 0=No)	+/-
Number of suppliers	NS	Dummy (1 =Yes, 0=otherwise)	+
Accessibility of commodities			
Trading space	TS	Dummy (1 =Yes, 0=otherwise)	+
Distance to market center	DMC	Kilometers (Km)	+
Market location	ML	Dummy (1 =Yes, 0=otherwise)	+/-
Market facilities	MF	Dummy (1 =Yes, 0=otherwise)	+
Transport facilities	TF	Dummy (1 =Yes, 0=otherwise)	+/-
Market frequencies	MF	Number of market day per month	+
Affordability of commodities			
Bargaining opportunities	BOP	Dummy (1 =Yes, 0=otherwise)	+
Consumers income	CI	TZS	+
Local commodities	LC	Dummy (1 =Yes, 0=otherwise)	+
Price of commodities	PC	TZS	-
Manufactured commodities	MANC	Dummy (1 =Yes, 0=otherwise)	+
Transportation cost	TRC	TZS	+
Inflation	INFL	Dummy (1 =Yes, 0=otherwise)	+
Quantity of commodities	QC	Dummy (1 =Yes, 0=otherwise)	+

The results obtained from the analysis were interpreted, and the gaps observed were addressed by using information from key informant interviews (KIIs). Open-ended questions and information from KIIs were analyzed using qualitative content analysis. The content analysis was used to create qualitative conclusions, interpretations and conclusions.

3. Results and Discussion

3.1 Descriptive analysis of respondents' demographic characteristics

Table 2 summarizes the demographic and behavioral characteristics of consumers in rural periodic markets within the Magu district, based on 245 responses, with 9 questionnaires excluded due to incompleteness. The results show that 48.6% of respondents were male and 51.4% female, indicating slightly higher female participation. The majority, 53.8% were below 25 years of age, suggesting that younger consumers are more active in these markets. Regarding marital status, 44.5% were single, 40.7% were married, with the remainder being widowed, separated, or divorced. In terms of education, most consumers had primary education 22.9%, secondary education 23.3%, while fewer had advanced qualifications such as diplomas and degrees. The data also indicate that 64.8% of consumers travelled more than one kilometre to reach market centres. Additionally, 57.2 of consumers have less than five years of experience in using these markets. Most consumers 91.1% attended the market fewer than three times per week. The majority, 64.8% originated from within market area. Periodic markets in the study area operate once a week, with Magu on Monday, Kabila on Wednesday, Mahaha on Friday and Sola on Saturdays.

Table 3: Descriptive analysis of respondents' demographic characteristics

Sex of respondent	Frequency	Percent
Male	114	48.6
Female	122	51.4
Age of respondents		
Below 25	127	53.8
Above 25	109	46.2
Marital status		
Single	105	44.5
Marriage	96	40.7
Separate	11	4.7
Devoiced	6	2.5
Widower	18	7.6
Eeducation level of respondent		
Not attended to school	40	16.9
Primary education	54	22.9
Secondary education	55	23.3
Certificate	47	19.9
Ordinary diploma	21	8.9
Bachelor degree	14	5.9
Master degree and above	5	2.1
Distance to market center		
Below 1Km	83	35.2
Above 1Km	153	64.8
Experiences in exchange commodities in RPM		
Below 5 years	135	57.2
Above 5 years	101	42.8
Frequency of attendance to market center		
Below 3times	215	91.1
Above 3 times	21	8.8
Consumers Originality		
Inside the market center	153	64.8
Outside the Market center	83	35.1

Note: Results are based on descriptive analysis. Source: Survey, (2024)

3.2 Nature of Commodities Traded in Rural Periodic Markets

3.2.1 Agriculture commodities traded in rural periodic markets

Table 3 highlights that vegetable commodities including tomato, onion, carrot, Chinese vegetables and fruits are most frequently traded items in rural periodic markets, comprising 75.5% of cases. These markets attract consumers because of the fresh and diverse range of vegetables available. Sweet potatoes also rank highly at 43.8%, drawing buyers from both within and beyond Magu district due to their variety and ample supply compared to other markets. In contrast, sorghum is less commonly traded, making up only 12% of consumers, appealing mainly to those with specific household uses. Maize accounts for 24.9% of traded commodities, with consumers preferring rural periodic markets because of the larger quantities offered. These findings indicated that rural periodic markets serve as a vital centre for trading key agricultural products, especially vegetables and grains. Their roles in providing diverse, abundant produce encourage consumers to frequently visit these markets over other alternatives.

3.2.2 Manufactured commodities traded in rural periodic markets´

Table 3 reveals that clothes are the most traded manufactured commodities in rural periodic markets, accounting for 73.2% of cases. In Magu district, consumers are particularly drawn to these markets due to the wide variety of clothing that meets their diverse needs. Addai et al. (2023) similarly highlight that periodic markets act as vital distribution points for manufactured goods like clothing, linking rural and urban areas. Shoes are also popular, comprising 39.4% of traded items, with buyers favoring rural markets for their affordability and accessibility, a pattern supported by Ikechukwu and Innocent (2019) in Emohua local area. Electronics such as radios and lights represent 15.2% of traded commodities, and many consumers prefer to purchase these items in rural markets due to their convenience and proximity. Muoki (2019) confirms this trend, noting that rural populations often depend on periodic markets for electronics such as mobile phones and solar panels. Overall, rural periodic markets function as essential hubs for the trade of manufactured goods, offering accessible, affordable, and varied products to a wide range of consumers.

Table 4: Nature of Commodities Traded in Rural Periodic Markets

Variables	Number of responses	Percent of Cases (%)
Agriculture commodities		
Rice	31	13.3
Maize	58	24.9
Sorghums	28	12.0
Vegetable (tomato, onion, fruits)	176	75.5
Cassava	30	12.9
Sweet Potatoes	102	43.8
Livestock	61	26.2
Manufactured commodities		
Shoes	79	34.2
Clothes	169	73.2
Kitchen utensils	91	39.4
Agriculture Inputs (animal feeds and fertilizers)	62	26.8
Electronics	35	15.2
Medicine	42	18.2

Note: Results are based on multiple responses analysis: Source: Survey, (2024)

3.3 Factors for Preferences in Rural Periodic Markets among Consumers

3.3.1 Commodity availability

Results from Table 4 reveal that the availability of manufactured commodities in rural periodic markets significantly influenced consumers' preferences (P<0.05), with about 87% of consumers favouring these markets due to the variety of products offered. Muoki (2019) similarly found that goods like clothes, mobile phones, and solar panels strongly shaped rural residents' reliance on periodic markets. Additionally, the availability of a variety of commodities was significantly related to consumer preferences (p<0.05), supporting findings by Johnson and Brown (2019) and Bekele *et al.* (2017), who noted that a broader range of tailored products attracts more consumers, especially in rural areas. Conversely, product arrangement showed no significant effect on preferences (p > 0.05), aligning with studies by Gupta and Reddy, (2019) and Ojo and Adebayo, (2019), which found a minimal impact of product arrangement in rural markets. Similarly, the diversity of suppliers did not significantly influence consumer choice (p>0.05), consistent with research from Munyoki and Mugambi (2017) and Adeola and Olaniyi (2017), suggesting consumers prioritize other factors when selecting markets.

Table 5: Influence of commodities availability in the preferences of in rural periodic markets

Variables		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Manufactured commodities	2.741	0.741	13.343	1	0.000	0.64
	Agriculture commodities	-0.728	0.430	2.860	1	0.091	0.483
	Product arrangement	-0.078	0.326	0.058	1	0.810	0.925
	Freshness and quality	0.494	0.341	2.094	1	0.148	1.638
	Variety of commodities	1.357	0.435	9.647	1	0.000	0.58
	Supplier of commodities	-0.314	0.308	1.041	1	0.308	0.730
	Constant	-0.414	0.164	48.116	1	0.000	0.320

Note: Results are based on binary logistic analysis. Source: Survey, (2024)

3.3.2 Market Accessibility

Market accessibility encompasses not only the physical proximity of markets to consumers but also the ease with which goods and services can be reached and acquired. The study found that marketplaces significantly influenced consumer preferences in Magu District (p = 0.000), with many consumers attracted by the convenient location of these markets (Rajagopal, 2010; Rao and Raju, 2018). This convenient location enhances commodity accessibility by reducing travel time and transportation costs, especially in areas where infrastructure is poor and mobility is limited.

Although the statistical analysis revealed that the distance from consumers' residences to market centers did not significantly affect buying decisions (p = 0.825), the presence of supporting infrastructure such as roads and transport facilities (p < 0.05) was found to be a critical factor in facilitating access. This suggests that while distance alone may not deter participation, the availability of reliable and affordable transportation options substantially improves consumers' ability to access markets. Moreover, accessibility is also linked to the internal structure of markets. Organized product arrangements (p = 0.811) contribute to ease of movement and convenience, thereby influencing

consumers' willingness to attend and make purchases.

Lastly, transport facilities significantly influenced consumer preferences ($p < 0.05$), underscoring the importance of accessible transportation in attracting consumers to rural periodic markets. Reliable transport options reduce travel burdens and improve overall accessibility to commodities, thereby enhancing market participation and consumer satisfaction.

Table 6: Influence of commodities accessibility on the preferences for rural periodic markets

Variables	B	Std. Error	Beta	t-value	Sig
(Constant)	1.932	0.138		13.984	0.000
Trading space	0.770	0.443	0.334	1.739	0.083
Distance to market center	-0.032	0.144	-0.014	-0.221	0.825
Market place	0.585	0.146	0.252	4.006	0.000
Market facilities	0.282	0.412	0.123	0.686	0.049
Commodity delivery	-0.328	0.141	-0.149	-2.319	0.021
Transport facilities	0.080	0.194	0.035	0.413	0.480
Market frequencies	0.340	0.150	0.146	2.273	0.024

Note: Result based on multiple regression analysis: Source: Survey, (2024)

3.3.3. Commodity affordability

Commodity affordability emerged as a significant factor influencing consumer preferences in rural periodic markets. The study revealed that the opportunity to bargain significantly affected consumer behaviour (p = 0.008), as the ability to negotiate prices allowed buyers to obtain goods at lower costs, thereby encouraging greater market attendance. Consumer income levels also played a crucial role (p < 0.05); lower-income consumers, in particular, preferred local periodic markets due to cost constraints and the availability of affordable purchasing options.

On the other hand, commodity prices strongly affected consumer preferences (p = 0.000) in rural periodic markets, emphasizing that cost remains a central consideration for rural consumers. The competitive environment within periodic markets also significantly influenced purchasing decisions (p < 0.05), as increased competition among traders often leads to better pricing, discounts, and greater variety. These competitive dynamics enhance market attractiveness, drawing in more consumers who seek both value and choice. Conversely, transportation costs did not show a statistically significant influence on preferences (p = 0.064), suggesting that although rural consumers may face logistical challenges within the context of rural periodic markets, the direct prices of goods and market conditions outweigh travel expenses in shaping consumer decisions.

Price fluctuation of manufactured goods was also a key factor in shaping consumer preferences in rural periodic markets (p = 0.006). Given that these markets often provide periodic access to branded and processed products, variations in price over time impact consumer purchasing strategies, encouraging consumers to time their purchases or switch between sellers to capitalize on lower prices, especially in markets where competition is high. This behaviour underscores the growing importance of manufactured goods in rural consumption patterns. In contrast, local agricultural commodities such as vegetables and fruits did not significantly influence market choice (p = 0.166), likely due to their widespread availability and relatively stable pricing across rural areas. Thus, this dynamic suggests that in rural periodic markets, consumers prioritize affordability and competitive pricing of manufactured goods and the overall market environment over the mere availability of local produce.

Table 7: Influence of commodity affordability on the preference for rural periodic markets

Variables	B	Std. Error	Beta	t	Sig.
(Constant)	27.694	1.636		16.933	.000
Bargaining opportunities	0.772	0.288	0.345	2.685	0.008
Consumers income	28.481	14.462	0.234	1.969	0.005
Price fluctuation of agricultural produce	0.263	0.189	0.112	1.390	0.166
Price per product	131.055	27.983	1.018	4.683	0.000
Price fluctuation of manufactured goods	58.510	20.860	0.474	2.805	0.006
Transportation cost	-1.033	0.556	-0.441	-0.858	0.640
Quantity of commodities	4.548	7.879	0.038	0.577	0.564
Number of suppliers	-12.100	10.458	-0.095	-1.157	0.249
Competition in commodities	3.643	1.933	0.160	1.885	0.056
Promotional display	1.635	2.540	0.076	0.644	0.520

Note: Result based on multiple regression analysis

3.4 Perceived Effect of Market Preferences on Access to Commodities in Rural Areas

The study shows mixed perceptions of how market preferences affect access to commodities in rural periodic markets, with some findings reflecting recent research trends. The low rating for improved market infrastructure (mean score 2.1) aligns Kuboka *et al.* (2024) highlighting ongoing infrastructure challenges limiting rural market efficiency in Sub-Saharan Africa. Moderate support for enhanced bargaining opportunities (mean score 3.5) corresponds with FAO (2023) findings emphasizing bargaining as vital for price flexibility and consumer empowerment in rural settings. Strong positive views on increased product variety (mean score 4.1) and new commodity entry (mean score 4.7) resonate with McKinley and Thompson (2024), and CGIAR (2024) studies that link market diversification and innovation to improve rural livelihoods. The neutral perception of availability of preferred commodities (mean score 3.1) aligns with Reardon and Vos's (2023) findings on inconsistent supply chains affecting rural access. Finally, the low score on price differentiation (mean score 2.8) matches OECD (2023) insights showing price variability often restricts equitable access, indicating competitive pricing remains a challenge in rural periodic markets.

Table 8: Perceived Effect of Market Preferences on the Access to commodities in Rural Periodic Markets

Statement	Strongly disagree (0)	Disagree (1)	Neutral (2)	Agree(3)	Strongly Agree(4)	Weighted mean score
Improved market infrastructure	117(49.6)	55(23.3)	40(16.6)	19(8.1)	5(2.1)	2.1
Enhanced Bargaining opportunities	70(29.7)	49(20.8)	64(21.1)	36(15.2)	17(7.2)	3.5
Increased product varieties	62(26.2)	25(10.5)	77(32.6)	52(22.0)	20(8.5)	4.1
Encouragement of new commodity entry	105(44.5)	60(25.4)	38(16.1)	15(6.3)	18(7.6)	4.7
Improved availability of preferred commodities	76(32.2)	63(26.6)	47(19.9)	39(16.5)	11(4.6)	3.1
Price differentiation	95(40.2)	61(25.8)	36(15.2)	29(12.2)	15(6.3)	2.8

Note: Result based on larked scale analysis
Source: Survey, (2024)

3.5 Challenges Faced by Consumers of Rural Periodic Markets

Several challenges were identified by consumers in rural periodic markets, as shown in Table 8. Price fluctuations, characterized by unstable and unpredictable prices, were reported by 83.4% of consumers, impacting product affordability and complicating household budgeting. Inadequate market infrastructure, including insufficient stalls, shelters, sanitation, and storage facilities, affected 79.6% of consumers, creating uncomfortable market environments; these findings echo those of Kithuka (2019) in Kenya. Security and safety concerns were raised by 78.7% of respondents, who attributed increased theft and fraud incidents to the lack of security personnel, consistent with observations by Ochieng and Grote (2025) in Tanzania's rural markets. Limited market days, noted by 69.4% of consumers, restricted timely access to essential commodities, which is in line with findings from Fafchamps and Hill (2008) and Mishra and Padhy (2021). Transportation challenges cited by 64% of respondents, involved high costs and poor infrastructure, reflecting similar issues documented by Ugbomeh and Chukwu (2023) in Nigeria.

On the other hand, gender and social inclusion were noted as key issues, with 41.5% of respondents indicating that women and marginalized groups often faced social or cultural restrictions that limited their participation in market activities, consistent with findings by Badstue *et al*. (2021) who reported similar barriers in rural markets in Tanzania. Limited access to financial services was also reported by 45.3% as many consumers struggled to use convenient payment methods such as mobile money, echoing the challenges documented by Mwaseba *et al*. (2024) in Dodoma, Tanzania. Inconsistent commodity quality particularly around the freshness and authenticity of perishable goods, were also prevalent (9.7% of respondents), which undermined their trust and align with observations by Buchaki and Ochieng (2024) in Kenyan rural markets. Furthermore, 12.9% of consumers highlighted the lack of reliable market information, especially up-to-date details on prices, product quality, and availability, as a major challenge in utilizing these markets, which corresponds with findings by Mgale *et al*. (2021), who emphasized information asymmetry as a key issue in commodity exchanges. Lastly, poor market environments

characterized by unsanitary conditions, inadequate waste disposal, and lack of clean water were reported by 34.7% of respondents, consistent with studies such as that by Tsiwezi and Mutundu (2022), who documented similar infrastructural challenges in rural market settings. Collectively, these challenges hinder the efficiency, inclusiveness, and consumer experience in rural periodic markets.

Table 9: Challenges faced by Consumers of Rural Periodic Markets

Challenges	Number of responses	Percentage (%)
Lack of Reliable Market Information	30	12.9
Limited Availability of Goods	23	9.75
Security and Safety Concerns	185	78.7
Price fluctuations	196	83.4
Inadequate Market Infrastructure	187	79.6
Competition	96	40.9
Limited market day	163	69.4
Transportation issues	151	64.0
Poor Market Environment	83	34.7
Quality Concerns	139	59.1
Limited Financial Services	107	45.3
Gender and Social Inclusion Barriers	98	41.5

Note: Results based on multiple responses
Source: Survey, (2024)

4. Conclusions and Recommendations

The study focused on analyzing the consumers' preferences for rural periodic markets and their perceived effects in access to commodities in Magu District, Tanzania. The study used both descriptive and inferential statistics in data analysis. The research findings indicated that the studied rural periodic market primarily traded agricultural and manufactured products. Most respondents agreed that rural periodic markets have a positive impact on access to commodities. However, the study revealed that most respondents positively perceive that the availability of the product, affordability and location of the market are important in influencing their preference towards rural periodic markets. Moreover, the study observed that price fluctuation, inadequate market infrastructure, poor market environment, lack of reliable market information, security and quality concerns, limited financial services, and gender and social inclusion barriers are the main challenges for the utilization of rural periodic markets.

Based on the study's findings, several recommendations are proposed to enhance the functionality and consumer experience of rural periodic markets in Magu District. Efforts should focus on stabilizing pricing mechanisms through transparent and accessible price information to reduce unpredictability and improve consumer budgeting. Investment in upgrading market infrastructure, including permanent stalls, sanitation, and storage facilities, is essential to create a safer and more comfortable trading environment. Strengthening security by deploying personnel or community-based surveillance can help curb theft and fraud. Additionally, increasing market frequency and improving rural transportation infrastructure will enhance commodity accessibility. Establishing quality control measures alongside consumer education can build trust in product authenticity. Promoting access to financial services such as mobile money and microcredit will facilitate smoother transactions and market participation. Finally, developing reliable market information systems and ensuring inclusive participation of marginalized groups, particularly women, will contribute to a more equitable and efficient rural market system. Together, these interventions can significantly improve access to commodities and the overall sustainability of rural periodic markets.

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