

Market Segmentation and Performance of Ginger Retail Traders in Kampala, Uganda

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Introduction/Need for the Study

Ginger is an underground stem that belongs to the Zingiberaceae family and is an herbaceous perennial crop that is dug up when the leaves withers (Nair, 2019). Ginger is widely known as a spice, important for its medicinal purposes (Mao et al., 2019) offering protection against cardiovascular diseases (Akinyemi et al., 2015), respiratory diseases (Townsend et al., 2013), and raw material in the baking, soft drinks and perfume industries (Makarau et al., 2013). Ginger production in Uganda has risen with support from the government (NAADS, 2020). Despite the production and use, little research has been done about marketing ginger at the retail level in terms of segmentation and market performance. This research sought to establish the underlying market segments and market performance of retail ginger traders in Kampala, Uganda to capture the benefits that come from all the market segments. This study is aligned with the seventh priority of the U.S. agriculture education research agenda that addresses complex issues including marketing (Andenoro et al., 2016), and the AAAE research value that emphasizes developing and implementing initiatives at global scale to improve livelihoods (AAAE, 2023).

Theoretical/Conceptual Framework

Market segmentation is the process of dividing a broad market of potential customers into subgroups called segments based on shared priorities and characteristics (McDonald, 2012; Wind & Bell 2007). The target markets for certain products are different in terms of demographics, attitudes, needs, and social affiliations; it is therefore necessary to determine the needs and values of the target customers within each segment. Effective marketing and business strategy require an understanding of the needs of various segments to develop marketing strategies that effectively reach the target segments to maximize the expected profits by following and implementing segmentation strategies (McDonald, 2012; Wind & Bell 2007). The process of segmentation begins with the identification of existing and potential customer bases, understanding the underlying heterogeneity, and the evolving needs of the target segment. Next phase involves understanding the response to segmentation; and lastly, market positioning to provide a foundation for the rest of the marketing processes and strategies (Wind & Bell 2007).

Methods

This study was a cross-sectional survey conducted in summer 2018 in Kampala Capital City, Uganda where most urban markets are located and provide a larger domestic market for ginger. Kampala is divided into five boroughs including Kampala Central, Kawempe, Makindye, Nakawa, and Rubaga. One major market was purposively selected from each borough and 15 ginger retailers from each market were randomly selected during interviews giving a total of 75 retailers. Data was collected on the socioeconomic characteristics of retailers, procurement, and costs involved to determine the market segmentation of their customers, profitability, and factors affecting their business. Data were analyzed descriptively on characteristics, gross margin function, and regression for factors affecting their business. Gross margin (GM) was calculated by obtaining the difference between total revenue (TR) and the total variable cost (TVC) [$GM=TR-TVC$]. A regression model was used to determine the factors influencing the profits (dependent variable) obtained against different retail factors (independent). To account for the other factors that affect the profitability but are not included in the model, the error term was included [$GM=\alpha+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\beta_6X_6+\beta_7X_7+\mu$]; where GM = Gross margin, α =Intercept, X_1 =Total costs, X_2 =Age, X_3 =Education, X_4 =Years in trader organization, X_5 =Unit price at purchase, X_6 =Unit price at sale, X_7 =Quantity sold, and μ =Random error. The model was

run at a 0.05 level of significance and the adjusted coefficient of determination R^2 was 0.998 implying the model explains 99.8% of the independent variables.

Results

Ginger retail traders in Kampala had a mean age of 40.15 years and were dominated by women (66.7%, $n=50$). Retailers had an average of 11.03 years of formal education, and 41.3% ($n=31$) belonged to a trade organization and had spent an average of 4.32 years in the organization. The majority obtained their ginger from wholesales (48.0%, $n=36$) and other sources included farmers (24.0%), fellow retailers (18.7%), and middlemen (9.3%). The majority of ginger customers were final consumers (68.0%, $n=51$), others include retailers (22.7%), producers (5.3%), and wholesalers (4.0%). All ginger retailers (100%) sold fresh ginger. The majority of retailers (84.0%, $n=63$) segmented their customers. Of the retailers who segmented, the majority (71.4%, $n=45$) based on the amount of ginger bought. Other segmentation factors included frequency of purchase (25.4%) and customer appearance (3.2%). The average GM was 928,640 UGX per month with a maximum of 1,880,000 UGX [1U.S. Dollar: 3,400 Uganda Shs], 2018.

In the model, the factors that affected the performance of ginger retail, statistically included TC, unit price of ginger at purchase, quantity sold, and unit price of ginger at sale. A unit decrease in the TC led to a 0.279 increase in GM, implying that as the TC decreased, the GM increased. A unit decrease in the unit price of purchasing ginger led to a 0.511 increase in GM because the purchase price reduced the TVC of the trader, increasing the profits earned. A unit increase in the quantity of ginger sold led to a 0.812 increase in GM because sales increased the total revenue, and traders also enjoyed economies of scale. Also, a unit increase in the unit price at sale led to a 0.544 increase in GM of traders, because it increased the amount the traders obtained from sales.

Conclusions

Ginger retail trade is a profitable venture to be invested in especially women (Yiridomoh et al., 2021) which speaks to empowering women traders to sustain their livelihoods. The factors that significantly affected the traders' performance were total costs, the unit price at purchase, the quantity sold, and the unit price at sale. The forms of market segmentation were mainly the amount of ginger bought by the customer and the frequency of purchase by the customer reflecting a need to increase the stocking rates. We see a limited participation of youth in the ginger trade that could require exploring their needs to participate and diversify in ginger trade.

Implications/Recommendations/Impact

Most retail traders were not aware of the advantages of forming and joining trader associations. These associations provide cohesive power for traders of a common goal (Lawton al., 2018), increasing their bargaining power in obtaining loans to increase their stocks and revenue. In the meantime, there is a need to avail loans to ginger retail traders at a reduced interest rate to expand their businesses and livelihood strategies. Nevertheless, for all traders engaged in fresh ginger sales, we see a research potential to assess the impact of value addition on the profitability of ginger traders. Value addition is believed to increase the shelf life of produce and profit (Nair, 2019; Sharma et al., 2023) and can also improve on premium if incorporated with traceable information (Kironde et al., 2024). Retail traders should be helped in the processing of ginger to increase its shelf life and reduce postharvest losses. Efforts should be made to construct improved market infrastructure for the retail traders to provide a proper storage facility to reduce post-harvest losses during storage and maintain the proper quality of ginger. Also, to study the determinants of youth participation in ginger marketing to expand their livelihood strategies.

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