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RESEARCH ARTICLE

From Farm to Fork: Evaluating the Socio-Economic and Environmental Impact of Consumer Meat Preferences in Support of Local Agriculture

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ABSTRACT

Consumer food choices, particularly regarding meat consumption, significantly influence both environmental sustainability and rural economic development. This study examines how consumer preferences for locally sourced versus industrially produced meat impact local agricultural systems, ecological outcomes, and socio-economic conditions. A total of 292 questionnaires were distributed through an online platform. Using a descriptive analysis and Binary Logistic Regression Model, the research explores the drivers of meat purchasing decisions. Results indicate that Malaysian consumers frequently prioritise factors such as price, availability, and brand recognition, even while expressing preference for locally sourced and halal meat. However, barriers such as price sensitivity, consumer awareness, and distribution access limit broader adoption. The study concludes with policy and market recommendations to promote sustainable meat consumption that benefits both local communities and the environment such as addressing price sensitivity, improving consumer awareness, enhancing halal certification, and improving network system and availability of local meat.

1. INTRODUCTION

The agricultural sector remains an essential part of Malaysia's economic development and National Agrofood Policy 2.0 (DAN 2.0). Local meat production has been acknowledged as a critical component in reducing reliance on imports, improving rural lives, and supporting environmentally sustainable practices. According to the 2024 Agriculture Census Interim Report (Ministry of Agriculture and Food Security, 2021) the cow and buffalo meat self-sufficiency level (SSL) was 15.9% in 2023, far below the 35.5% expected under the National Agrofood Policy 2.0 (DAN 2.0) and the 50% goal for this year. Malaysia remains heavily dependent on imported meat to meet domestic demand due to the small scale of local cattle farming and the shortage of indigenous breeding stock, personal communication: Loh Teck Chwen.

In the context of policy interventions and strategic objectives aimed at improving local production, the levels of self-sufficiency for these commodities remain disappointingly low, with trends showing stagnation or even a decline in recent years. The reliance on imports diminishes the robustness of Malaysia's agricultural sector, making it vulnerable to fluctuations in international markets, currency values, and geopolitical uncertainties. This view is at odds with national food security objectives, which prioritise reducing dependence on imported food and enhancing domestic production capabilities (Ali, 2023).

According to Ali (2023), the beef import market in Malaysia is highly concentrated and lacks diversification. This situation not only exposes the country to difficulties in the global supply chain but also negatively impacts initiatives aimed at fostering a robust, self-sufficient local livestock sector. Nowadays, consumer choices play an essential role in determining global or national food systems. A rising consumer interest in halal certification, freshness, food safety and locality could support local agriculture. However, consumer preferences do not always match what they buy. Economic pressure, such as a lack of choices or availability of local products, and a lack of trust often leads consumers to switch their choices (Carfora & Catellani, 2023).

It is widely acknowledged that Malaysian consumers prefer local and halal-certified meat, and that this preference is influenced by price sensitivity, access to local meat and awareness. This is supported by a study from Jamaluddin and

Suhaimi (2022), which found that consumers in Johor Bahru prefer imported meat with halal certification and high perceived quality. This indicates that local meat reflects consumer values such as religious compliance and trust, which should be considered when assessing actual purchasing behaviour.

Although local meat aligns with consumer perceived value, there is a gap between preference and weaknesses in the campaign in encouraging local meat buyers. Long-distance transportation, energy-intensive refrigeration and packaging operations contribute to the product's total carbon footprint. Lecegui et al. (2023) highlight that these emissions make imported meat a contributor to environmental harm. A study from Shaari et al. (2021) shows that consumers are willing to pay more for local meat related to sustainability activities like wildfire avoidance and transport emissions. The imported meat's supply chain impacts (long-distance transport, refrigeration) are the environmental concern, while local production can be more sustainable if optimized.

Policy Gaps and Research Needs

Policy goals and consumer preferences do not always align. This makes it challenging to promote sustainable local meat consumption. Policies often focus on improving local production and reducing negative externalities, while overlooking key drivers of consumer behaviour, such as taste, pricing, branding, and perceived value. According to Milford and Muiruri (2024), environmentally and health-conscious consumers may continue eating red meat if they perceive that local meat aligns better with national interests, such as livestock-based economies. This indicates that policy assumptions about sustainability awareness does not consistently lead to behavioural change unless consumer narratives, cultural beliefs, and economic incentives are considered. Grebitus and Peschel (2022) demonstrated that consumer segments such as flexitarians prioritise value and quality over sustainability messaging alone, indicating that uniform policy interventions are unlikely to be effective. Policy efforts that do not account for consumer preferences are likely to struggle to increase demand for local, sustainable meat, thereby weakening agricultural development and food security plans.

Malaysia's agricultural policies increasingly emphasise self-sufficiency and sustainability, yet the country continues to rely heavily on imported meat to meet domestic demand. Over 70% of the beef supply in Malaysia is imported, with local production meeting only a fraction of national consumption needs (Nawi et al., 2023). Despite public sentiment in favour of halal-certified, fresh, and locally produced meat, as reflected in survey data where over 80% of respondents indicated willingness to pay more for such products, this preference has not yet translated into consistent consumer behaviour.

The gap between consumer intention and market action may be influenced by socio-economic factors such as income, education, and price sensitivity and environmental awareness like food miles and carbon footprint. There are limited empirical studies combines socioeconomics, behavioral and environmental factor simultaneously. Most of existing research focuses on socioeconomic and price related factors in shaping meat demand in Malaysia (Ahmed, 2006; Rusli & Kamu, 2018; Tey et al., 2010). This paper lack of exploration of environmental awareness and behavioral intention. Furthermore, inconsistent support for local meat threatens the viability of domestic livestock industries, undermining national goals for food security and rural economic development (Ali, 2023).

Study Objectives and Contributions

Thus, this study aims to investigate consumers socio-demographic, and how the environmental impact the consumer meat preferences when purchasing local meat, in supporting local agriculture. This research will support evidence-based policy formulation by providing actionable data to promote local food consumption. Identifying consumer decision-making elements would help policymakers reduce meat imports and enhance the domestic agricultural economy. Consumer preference such as price sensitivity, income level, distance to buy meat, and halal awareness have been identified in this study, which benefits local meat producers and farmers. Understanding these preferences helps manufacturers change production methods, improve supply chain transparency, and establish promotional strategies that match target customers, boosting their competitiveness in a global food economy. The study also examines how environmental understanding, such as locality of meat affects meat purchases, advancing sustainability campaigns. These results can educate Malaysian consumer and sustainability programs to encourage ecologically responsible purchase. The study provides a deep insight of Malaysian, particularly among UiTM staff's consumer behaviour, price sensitivity, and personal views affect food choices, improving scholarly debate. This improves the literature and makes regional or similar emerging economy comparisons easier. This study links consumer insight to sustainable economic growth to match market behaviour with national sustainability and food security goals.

1.1 The Theory of Planned Behaviour (TPB)

Regarding meat purchases, the Theory of Planned Behaviour can anticipate and shape individuals' decisions by

offering a solid and evidence-supported framework. Marcus et al., (2022), explain that in Germany factors such as subjective norms, attitudes and concerns about health and animal welfare significantly influenced the probability of meat alternative consumption among individuals. In contrast, Çoker and Van Der Linden (2020) report that 57% of the variance in intentions and 31% of the variance in actual behaviour is explained by the Theory of Planned Behaviour (TPB). This study focuses on attitudes towards reduced meat consumption in the UK over four weeks, identifying subjective norms as significant factors influencing the decision to reduce meat intake.

In the study of Malaysian consumers' intentions to purchase meat alternatives, Zaman et al. (2022) indicate that the TPB model identifies subjective norms, attitudes, environmental considerations and health concerns as key determinants. Perceived behavioural control and financial difficulties had minimal impact on intent. The Theory of Planned Behaviour model accounted for 49% of the variance in the purchasing intentions of individuals. A study was conducted by Wong and Aini (2017), to examine the factors that influence the demand for organic meat in the Klang Valley, utilising the Theory of Planned Behaviour. The research determined that the intention to purchase organic meat was influenced by price, meat characteristics, personal norms, and behavioural control, which together accounted for 66.4 per cent of the variance. Consequently, the TPB is an excellent instrument for investigating the decision-making processes of consumers and for assessing the extent to which a country's socio-economic and environmental factors influence consumer preferences. These international findings highlight the TPB's relevance across cultural contexts, making it a robust framework for examining Malaysian consumer meat preferences.

1.2 The Sustainable Livelihoods Framework (SLF)

Besides TPB, the Sustainable Livelihoods Framework (SLF) can serve as a valuable approach for analysing consumer meat preferences. In the context of livelihood strategies and their outcomes, SLF can be utilised based on five fundamental assets: human, natural, physical, social, and financial capital. Primary determinants encompassed age, gender, and perceived food safety based on studies by Atuahene et al., (2014) and Paustian et al., (2016). This study conducted in Ghana and Germany identified notable consumer preferences for locally produced poultry and regional meat, driven by perceptions of enhanced taste, health advantages, and ethical production methods. Additionally, research conducted by Imran (2015) identified income and gender as the most significant demographic factors affecting preferences for sensory attributes, including tenderness and flavour, which are indirectly linked to livelihood issues and access to quality food.

SLF is also used in the aspect of traceability and sustainability awareness. In Malaysia, consumers appreciate traceability systems in meat products but possess limited awareness of their significance in food safety and sustainability. Elements such as Halal certification, transparency, and food quality substantially influence preferences (Nawi, 2019). However, interventions such as support for fattening techniques and women-led processing groups have been proposed to improve sustainability in Tunisia. Given strong consumer demand for goat meat, farmers' practices are not aligned with market needs and have limited profitability (Day et al., 2025)

1.3 Consumer meat preferences

Numerous factors, including consumer background, religious beliefs, culture, taste, cost, localism, and perceived quality shape meat preferences. Many studies have found that taste is one of the predominant factors in consumer preferences for meat Ghani@Ismail et al. (2024), Isahak et al. (2024), and Muzayyanah et al. (2022), followed closely by quality attributes such as, juiciness, freshness and tenderness (Muzayyanah et al., 2022 and Hoffman & Chawthron, 2012). While the study by Font-i Furnols & Guerrero (2014) categorises consumer choices and actions towards meat preferences into three distinct factors: psychological (individual-related), organoleptic (product-related), and marketing (socio-environmental) factors.

In certain countries, price significantly influences consumer preference. This factor is linked to the grade of the meat and the consumer's income level (Lawal, 2023; Lee et al., 2012). Catlett (2011) and Paustian et al., (2016) discovered that consumers with higher incomes are more likely to favour organic, regional, or ethically sourced meat, while those with lower incomes prioritise the availability and cost of meat.

1.4 Socio-economic impact of local meat

Research also correlates consumer preferences and perceptions regarding the consumption of organic meat and plant-based alternatives. Prior research indicated a substantial correlation between consumer preferences and factors such as halal authenticity, quality, freshness, country of origin of meat, and contemporary concerns regarding organic or plant-based meat (Jamaluddin & Mohd Suhaimi, 2022; Malone & Lusk 2017; and Tey et al., 2010). Paustian et al. (2016) who conducted local meat studies in Germany, find a positive effect of local meat on employment and rural

economies, while emotional and ethical motivations play a major role. A study by Lawal et al. (2023) also supports that local livestock production raises rural household incomes and improves food security.

In Malaysian cases, a study conducted in Johor revealed that consumers prioritised Halal certification (81.25%), freshness, and taste, whereas the origin or local economic advantages were not distinctly prioritised unless associated with quality or religious assurance (Isahak et al., 2024). Jamil (2015) found that many consumers prefer local beef for the quality, few cite rural employment or supply chain resilience as a reason, unless specifically stated. There is untapped potential for marketing campaigns that frame local meat as helping rural livelihoods and national food security. Accordingly, research in rural areas should be enhanced, given that product accessibility and residents' income levels in those regions have the potential to influence consumers' product preferences.

1.5 Environmental footprint of meat

Economic activities, whether industrial, agricultural, or fisheries, have a significant impact on the environment and people. Shaari et al. (2021) found that over 83% of Malaysian airline passengers were aware of environmental issues, and 75.7% understood carbon offset mechanisms. However, this general environmental consciousness does not yet significantly influence food choices, particularly regarding meat consumption.

Research on the environmental footprint within the agricultural sector, particularly in meat production, remains a viable area for exploration. The environmental footprint of meat significantly impacts land and water use, greenhouse gas emissions and extensive deforestation. Meat production, especially beef, typically exhibits a greater environmental impact than plant-based foods. There is limited evidence that Malaysians consider the environmental impact of meat (GHG emissions, land/water use) when making food decisions. Koh and Talib (2025) founds there are a limited comprehension of CO2 emissions management from the organisational perspective, particularly within the food industry in Malaysia. While Tan and Cheng (2024) discovered that a limited proportion of Malaysian participants recognised the environmental and health risks associated with a meat-based diet, indicating a low acceptance of environmentally sustainable foods. These contrasts with studies in Western contexts, where such factors are increasingly influencing behaviour (Ivanova et al., 2016 and Dineva et al., 2024). Environmental considerations, such as carbon footprint and water consumption, are infrequently factored into purchasing decisions (Jamil, 2015 and Ishak et al., 2024).

Given that environmental impact currently lacks prominence as a decision-making factor, policymakers and producers may implement tools such as eco-labels or carbon footprint disclosures to enhance consumer awareness and influence preferences towards more sustainable meat options (Klemes et al., 2017).

In Malaysia, a multi-ethnic nation, meat preferences are notably varied, primarily shaped by religious and cultural factors. Prior research has exclusively concentrated on contemporary preference determinants influencing the demand for meat-based products in the marketplace. Research integrating behavioural studies, economics, and environmental science is underexplored in this country. Nonetheless, international studies of this nature can offer comprehensive coverage and marketing analysis to enhance meat demand. This study is timely, as its findings are expected to clarify the extent to which socio-economic, behavioural, and environmental impact factors influence consumer preferences while fostering the development of the local agricultural industry.

2. METHODOLOGY

2.1 Data collection

Researchers can quantify variables and draw relationships between them using a descriptive quantitative research design. Primary data was collected via an online platform from a set of questionnaires to examine the socio-economic environmental impact of consumer meat preferences in support of local agriculture. Data collection occurred in June 2024 and targeted staff at Universiti Teknologi MARA (UiTM) across Malaysia as a sample. This study utilised a sample size of 400, as determined by the sample table provided by Krejcie and Morgan (1970). Due to time constraints, 350 respondents participated in the survey; however, after filtering and data cleaning, only 292 responses were deemed suitable for analysis. 58 survey was omitted after filtered because the survey sent was incomplete and some important information could not be provided. The Universiti Teknologi MARA (UiTM) Research Ethics Committee granted ethics approval, identified by approval code REC/05/2024(ST/MR/98). Consent was secured from each participant prior to the commencement of the questionnaire.

2.2. Data Analysis

This study uses several analyses, namely descriptive analysis and Binary Logistic Regression. We used descriptive analysis to determine the socio-demographic characteristics of consumers and applied the binary logistic regression model to predict the log odds of an outcome. The model allows

researchers to interpret the effect of each independent variable on the likelihood of preferring local meat. The general form of the equation is as follows:

$$\log(p / (1 - p)) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \ldots + \beta_k X_k$$

Where:
- p = probability of preferring local beef
- β_0 = intercept (constant)
- β_1 to β_k = coefficients for predictor variables X_1 to X_k

The variables used in this study are:
Dependent Variable:
- Y = 1 if respondent prefers local beef, Y = 0 otherwise

Independent Variables:
- X_1 = Halal awareness
- X_2 = Environmental concern proxy by locality of meat
- X_3 = Income level
- X_4 = Price sensitivity
- X_5 = Distance to buy meat

The independent variables halal awareness, environmental concern, income level, price sensitivity, and distance to buy meat was chose based on previous studies identifying them as significant determinants of consumer meat preferences, particularly in the Malaysian context.

3. RESULT AND DISCUSSION

3.1 Socio-Demographic Characteristics

The descriptive analysis of the sample (n = 292) as shown in Table 1 reveals key demographic trends that are important for studying people's meat preferences and support for local agriculture. Most of the people who answered (72.26%) were women, which means that the results may show women's points of view. This gender imbalance suggests that the findings may be more reflective of female perspectives, particularly as women often exhibit greater concern for health and sustainability in food choices (Mustapa et al., 2025). The high percentage of married respondents (82.88%) indicates that household consumption patterns and family-oriented purchasing decisions may influence meat preferences and support for local food systems. The sample is mostly Malay (95.21%), which suggests that cultural and religious factors like halal eating may have a big impact on meat preferences. The age range is mostly working adults between the ages of 25 and 54 (89.38%). This group has both economic power and household responsibilities, making them very important for measuring support for local meat systems. More than half of the people who answered (56.85%) fall within the RM4,850–RM10,959 range, which suggests that they are middle-class and normally price-sensitive yet are becoming more interested in ethical and sustainable food options (Lecegui et al., 2023). Based on table 1, 46.15% have a Master's degree, 16.92% have a PHD and lot of them have postgraduate degrees. The sample demonstrates a high level of education and a probable increased interest in environmental and socio-economic issues related to food. An employment data shows, 61.64% of the sample work as academic staff at UiTM. This supports the hypothesis that they are likely to hear stories about sustainability and learn how to make smart choices when they shop. Overall, this demographic profile gives us a lot of information we can use to study how people's awareness of social, economic, and environmental issues affects their meat preferences and support for local farming systems.

Table 1: Socio-demographic characteristics

Sample (n=292)		
Demographic		**Number of samples**
Gender	Female	211 (72.26%)
	Male	81 (27.74%)
	Single	45 (15.41%)
	Married	242 (82.88%)
	Divorce	5 (1.72%)
Race	Malay	278 (95.21%)
	Chinese	1 (0.34%)
	Indian	2 (0.68%)
	Other	11 (3.77%)
Age	15 – 24 years	3 (1.03%)
	25 – 54 years	261 (89.38%)
	55 – 64 years	28 (9.59%)
Income	Below RM4,849	111 (38.0%)
	RM4,850 – RM10,959	166 (56.85%)
	RM10,960 and above	15 (5.15%)
Education Level	Secondary School	33 (10.77%)
	Diploma	13 (4.62%)
	Degree	63 (21.54%)
	Master	135 (46.15%)
	PhD	49 (16.92%)
Employment Status	UiTM Academic staff	180 (61.64%)
	UiTM Non-Academic staff	112 (38.36%)

The data shown in Table 2, indicates that the majority of respondents are located in Selangor (86 respondents) and Johor (65 respondents), representing approximately 52% of the total sample combined. The findings likely reflect urban or semi-urban consumer behaviours, given that both states are economically developed, densely populated, and possess improved access to markets and modern food systems. States such as Kelantan (24), Melaka (16), Negeri Sembilan (17), Pahang (16), and Terengganu (16) exhibit moderate contributions, whereas Perlis (3), Pulau Pinang (9), Sabah (7), and Sarawak (8) account for a smaller proportion of the sample.

Table 2: Socio-demographic number of respondence based on state

State	Number of respondents
Johor	65
Kedah	12
Kelantan	24
Melaka	16
Negeri Sembilan	17
Pahang	16
Perak	13
Perlis	3
Pulau Pinang	9
Sabah	7
Sarawak	8
Selangor	86
Terengganu	16

3.2 Consumer's preferences for purchasing local beef

Based on Figure 1, the main factors affecting consumer preferences for purchasing local beef. The predominant factor is "Variety in meals," selected by 191 respondents, significantly surpassing other preferences such as "Favourite food of family members" (37), "Ease of preparation" (34), "Cost of meat" (17), and "Quickness of preparation" (13). The prevalent preference for variety suggests that consumers appreciate local beef for its culinary versatility, indicating that its appeal extends beyond price and convenience to encompass meal planning diversity, a factor frequently neglected in pricing-focused models. Mustapa et al. (2025) found that European consumers identified taste, cooking flexibility, and recipe adaptability as primary factors influencing their choice of meat and substitutes, which corresponds with the dataset's emphasis on meal variety (Mustapa et al., 2025). The relatively low emphasis on "Cost of meat" (17 responses) challenges the prevailing assumption that price is the primary determinant of consumer meat choices. Angón et al. (2021) found that Spanish consumers demonstrated a willingness to pay premiums for meat linked to local origin and quality certifications, suggesting that factors such as perceived quality or utility may take precedence over cost considerations. This data in Figure 1 indicates that meal variety significantly influences consumer decisions to purchase local beef, while factors such as cost, and convenience are comparatively less important. This indicates that marketing strategies for local beef may be more effective by highlighting culinary flexibility, recipe diversity, and family appeal, rather than focusing solely on price or preparation speed.

3.3 Regression analysis: Binary Logistic Regression

The coefficient of intercept in Table 3, (β = 2.091) signifies that, when all independent variables are held constant at zero, the log-odds of preferring local meat are 2.091. The standard error (S.E. = 0.187) indicates the accuracy of the coefficient estimate. A minimal standard error signifies that the estimate is dependable and uniform. The Wald statistic (124.54) and its corresponding p-value (Sig. = 0.000) indicate that the intercept is statistically significant ($p < 0.001$).

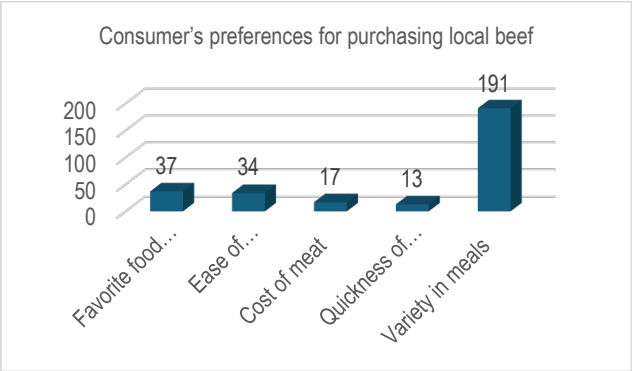

Figure 1: Consumer's preferences for purchasing local beef

The result shown in Table 3 indicates that, even in the absence of supplementary variables, the model accounts for a significant portion of the variability in consumer preference. The odds ratio (Exp(B) = 8.094) indicates that the likelihood of choosing beef is 8.1 times greater than that of preferring local meat. This suggests that there is a pronounced baseline aversion to local beef, which may be influenced by factors such as cost, trustworthiness, or accessibility. This discovery is consistent with the current literature. Harun et al. (2022) emphasised that price and availability significantly affected the meat preferences of Malaysian consumers. Ali et al. (2023) discovered that confidence in imported meat, particularly about safety and halal certification, may surpass preference for local products. In conclusion, while the model presently comprises solely the intercept, the notable outcome indicates a basic consumer prejudice against local meat. To promote local agriculture, it is essential to overcome customer apprehensions around affordability, availability, and certification of local meat products.

Table 3: Summary of Logistic Regression Analysis for Factors Influencing Preference for Local Meat

Variable	β	S.E.	Wald	df	Sig.	Exp(B)
Constant	2.091	0.187	124.54	1	0.000	8.094

The logistic regression model demonstrates a limited ability to explain variations in consumer preference between imported and local meat. Based on Table 4, although the Hosmer-Lemeshow test indicates an acceptable fit (p = 0.458), the Nagelkerke R^2 value of 0.090 highlights the model's limited explanatory power, suggesting that key predictive variables influencing meat preference are missing. However, the model explains only 9% of the variance in

consumer meat preferences (Nagelkerke R^2 = 0.090), it can still be considered adequate for several reasons. First, in logistic regression studies involving human behavior and consumer preferences, relatively low pseudo-R^2 values are common and do not necessarily indicate a poor model (Menard, 2002). This is because consumer decision-making is influenced by multiple unobserved psychological, cultural, and contextual factors that are difficult to capture fully in quantitative models (McFadden, 1974). Therefore, even modest explanatory power may yield valuable insights into significant predictors. The non-significant Hosmer–Lemeshow test (χ^2 = 7.749, p = 0.458) indicates that the predicted probabilities generated by the model are not significantly different from the observed outcomes. This suggests that the model does not suffer from systematic lack of fit, thereby providing statistical justification for its adequacy despite low variance explained (Hosmer, Lemeshow & Sturdivant, 2013).

Table 4: Model Fit Statistics for Consumer Meat Preferences

-2 Log Likelihood	188.258
Cox & Snell R^2	0.045
Nagelkerke R^2	0.090
Hosmer-Lemeshow χ^2 (df=8)	7.749
Hosmer-Lemeshow Sig.	0.458

In terms of classification accuracy in Table 5, the model's high overall classification accuracy (89.3%) is largely due to its perfect prediction of the majority class (imported meat preference), while its sensitivity towards predicting local meat preference is poor (3.1%). This reflects a class imbalance issue, limiting the model's effectiveness in distinguishing between preference groups This imbalance suggests that the model may be overfitting the majority class, likely due to a significant imbalance in the dataset where more respondents preferred imported meat. This issue highlights the need for a more balanced dataset or the inclusion of stronger predictive variables to improve model sensitivity.

Table 5: Classification Accuracy for Consumer Meat Preferences

Preference	Predicted No	Predicted Yes	% Correct
Prefer Local Meat (No)	1	31	3.1%
Prefer Imported Meat (Yes)	0	259	100.0%
Overall Accuracy			89.3%

The results of the regression analysis indicate that the socio-economic and environmental variables incorporated into the model are not highly predictive of consumer meat preference. This is consistent with previously conducted research by Nawi et al. (2023), who observed that Malaysian consumers frequently prioritise factors such as price, availability, and brand recognition, even when they express preferences for locally sourced and halal meat. The gap between preferences stated and actual purchasing behaviour suggests a complex decision-making process. Lack of consumer confidence and limited supply in Malaysia's local beef industry support this observation by highlighting the structural limitations (Ali et al., 2023). These factors often supersede individual values, such as environmental considerations and halal assurance. The research emphasises the significance of these values; however, it indicates that they cannot influence consumer behaviour independently without market and regulatory interventions.

Research in the future should improve the predictive capability of logistic regression models. More detailed variables should be included such as perceptions of local meat quality, consumer trust in halal certification and previous purchasing experiences. Addressing data imbalance is crucial, as the predominance of a single preference group can undermine model accuracy. This research indicates that policy initiatives to promote local meat consumption should extend beyond mere awareness-raising efforts. Policymakers should prioritise competitive pricing and enhancing supply chain reliability and fostering consumer trust via transparent certification and quality assurance mechanisms. A holistic approach is essential for effectively shifting consumer preference towards local agriculture and achieving long-term food security.

4. CONCLUSION

This study shows that Malaysian consumers, particularly among UiTM staff are strongly demand halal-certified, fresh, and locally sourced meat, but price sensitivity and socio-economic factors like income and accessibility make it hard for them to buy it. Even if people are becoming more conscious of environmental issues, things like carbon footprint and sustainability are still not the most important factors when they buy something. The regression results show even more clearly that price and perceived value, not environmental concern or social impact, are the main factors that affect people's choice of beef. To get more people to eat local meat, the government and the market need to make sure that it is affordable, easy to find, and has quality assurances that middle-class, educated consumers can see and understand.

The results indicate multiple policy implications. Addressing price sensitivity necessitates the implementation of policies that promote subsidies or cost-sharing mechanisms to enhance the competitiveness of locally sourced halal meat in comparison to imports. Secondly, improving consumer awareness via targeted educational campaigns, eco-labeling, and sustainability certifications can reconcile the disparity between expressed preferences and actual purchasing behaviour. Enhancing halal certification systems and

increasing transparency in supply chains will foster consumer confidence in local products. improving distribution networks and accessibility is crucial for ensuring the availability of local meat products to consumers in various regions. These measures can align consumer preferences with national food security and sustainability objectives.

The studies only used a limited number of independent variables, mostly focusing on halal awareness, income, location, price sensitivity, and distance for purchase. This narrow focus may have omitted other important aspects that affect how people behave, like trust in food safety, brand loyalty, past consumption experience, or cultural and psychological issues. Furthermore, the model only explained a small part of the difference in customer desire, which means that more detailed factors are needed to make the predictions more accurate. Besides, this study only involving UiTM staff throughout Malaysia, thus, it cannot represent all Malaysians because the number of samples obtained from each state is not sufficient.

To better reflect the national consumer environment, future research should use a sample that is more diverse and representative of people from different areas, economic levels, and ethnic groups. Adding perceptions of product quality, food safety, certification credibility, and behavioural standards to the set of variables may provide us even more information. Using mixed method approaches like qualitative interviews or discrete choice experiments could also add to survey data and reveal hidden motivations that quantitative methods alone can't find. These improvements would help make legislation and marketing efforts more focused on encouraging people in Malaysia to eat beef that is sustainable and comes from local sources.

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