



**UNIVERSITI PUTRA MALAYSIA**  
AGRICULTURE • INNOVATION • LIFE

**CONSUMERS' PERCEPTIONS TOWARDS PURCHASING ORGANIC  
FOOD IN KLANG VALLEY, MALAYSIA**

DR. MUHAMMAD MU'AZ BIN MAHMUD

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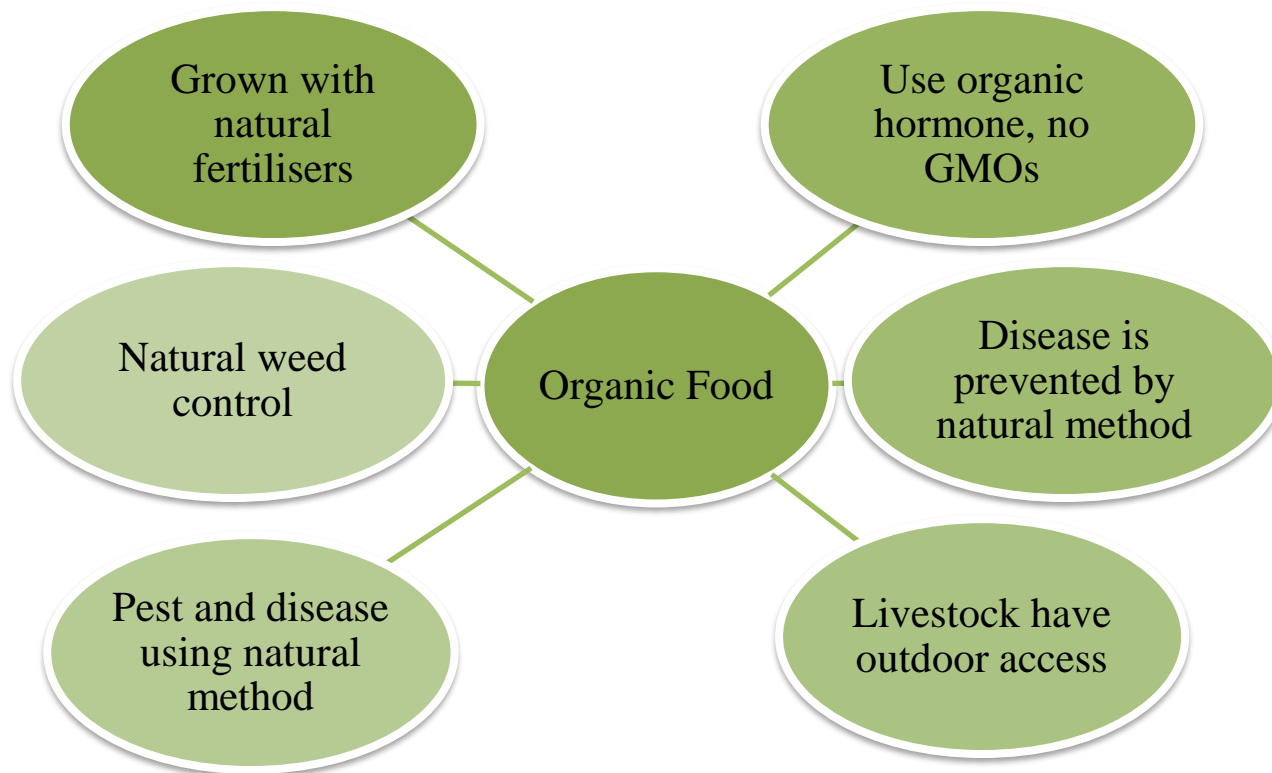
# INTRODUCTION

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# Background of The Study

## Organic Produce

## Organic Livestock



*Source: Robinson et al. 2023*

# Background of The Study

- The organic food industry in Malaysia is currently experiencing major development due to a **growing consumer perception of wellness and environmental sustainability.**
- Consumers are **making an effort to purchase organic food** due to their perception that it is a **healthier and more sustainable choice** compared to conventionally produced food.
- Consumer are even more **confident to purchase organic foods** due to **government programs and certifications.**

*Source: 6Wresearch. (2023, November 30)*

# Issues

- The local organic food production are **insufficient as they cannot meet the increasing consumers' demand** in Malaysia (Mohamed Harris et al., 2018).
- The Malaysian local organic food production needed to be sustainable since approximately **60% of the organic food** in the country is being **imported** (Dardak et al., 2019).
- Malaysia **relies heavily on imported organic products**, mainly from Europe and North America (Somasundram et al., 2016).
- Minister of Agriculture and Food Security, Datuk Seri Mohamad Sabu said are now taking an **aggressive approach in promoting organic farming** practices to local farmers.

# Issues

- Farmers had **financial difficulties to venture into organic food production** (Tiraieyari et al. 2017).
- Malaysia **experiences a high demand for organic food** from Singapore. However, the ability to fulfil this **demand cannot be met by a limited supply** (Aziz et al., 2020).
- Rock et al. (2017) mentioned that there is **no solid evidence and clear conclusion to differentiate conventional farming from organic production** with regards to environmental contaminants and food hazard.

# Issues

- Mustapha, Zubairu and Adamu (2018) reported that the demand for organic products is **increasing due to the rising awareness on the health benefits and nutritional values** attached to these produce.
- Malaysia is currently at the **development phase** where the consumer is still **low in the awareness of environmentally sustainable** when purchasing organic products (Ogiemwonyi et al., 2020).
- Consumers **struggle to differentiate genuine organic foods from those falsely labeled** which then **leads to a decline in consumers perception** when purchasing organic food (Malaysian Organic Resource Centre, 2023).

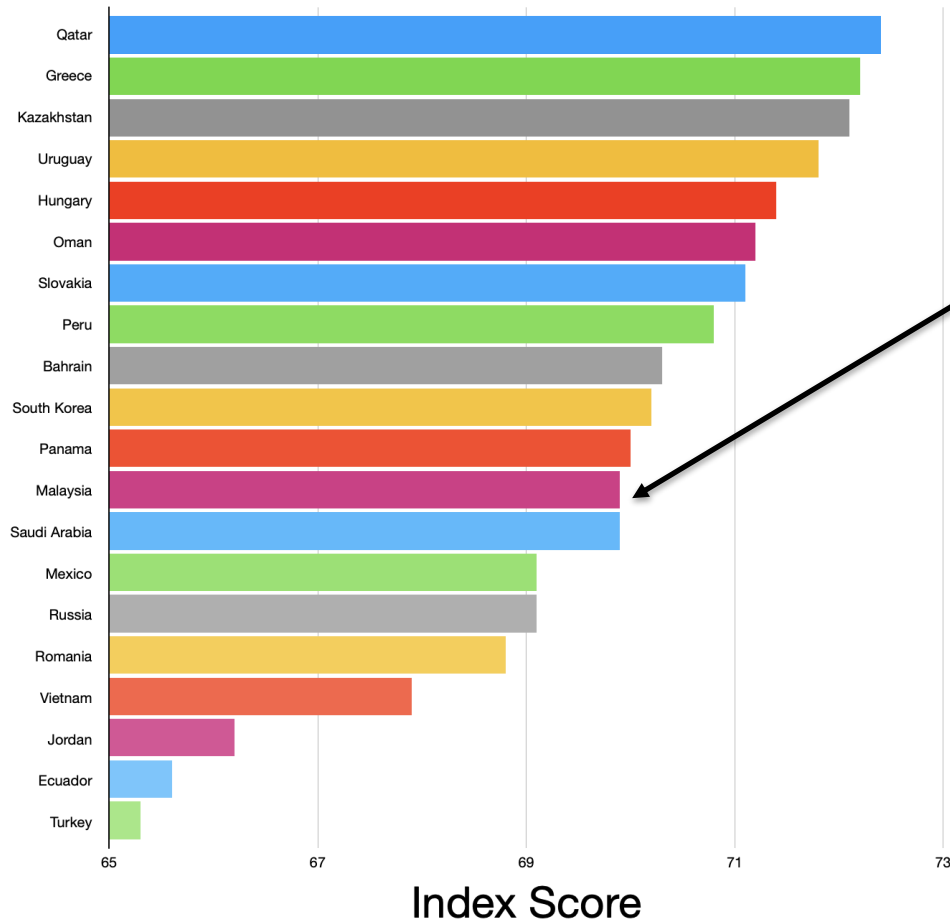
# Issues

- Siwar et al. (2019) stated that the **declining sense of family interaction** does **not have any influence** on customer perception towards purchasing organic food.
- The **absence of peer support that encourages purchasing organic food** may **discourage individual** from developing it as a regular routine (Kashif et al., 2020).
- Malaysians usually eat regular food, switching to organic food requires **experiencing something unfamiliar** that might be **challenging to adapt** into existing eating habits (Mohd Yusoff et al., 2020).



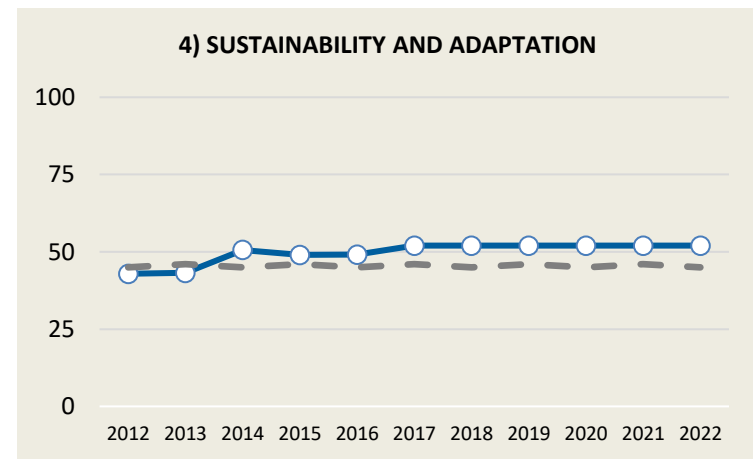
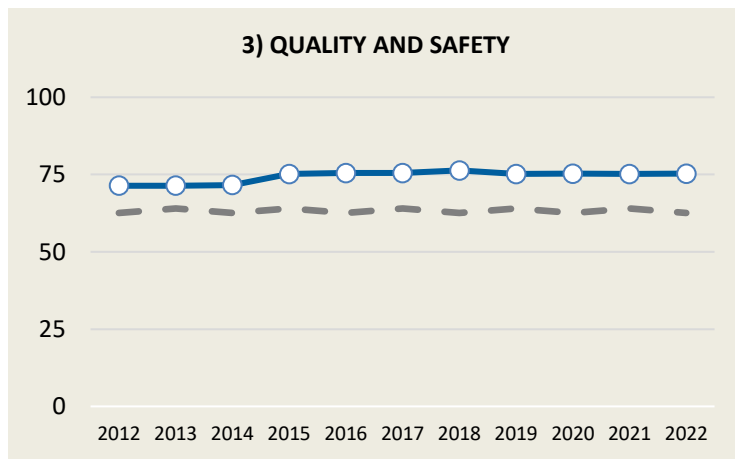
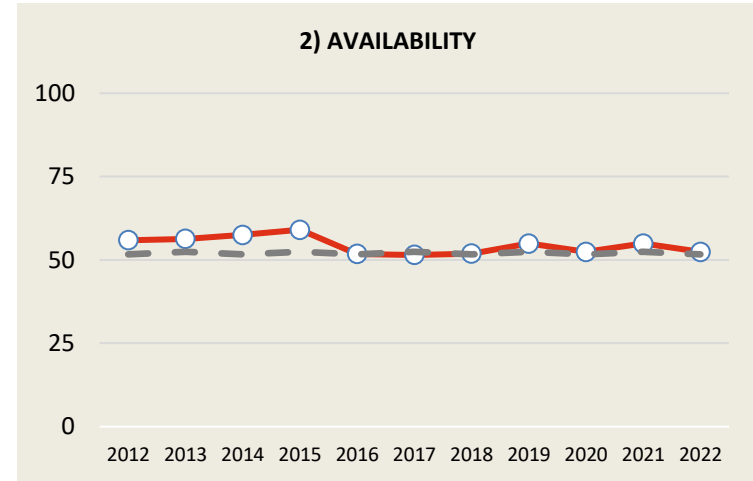
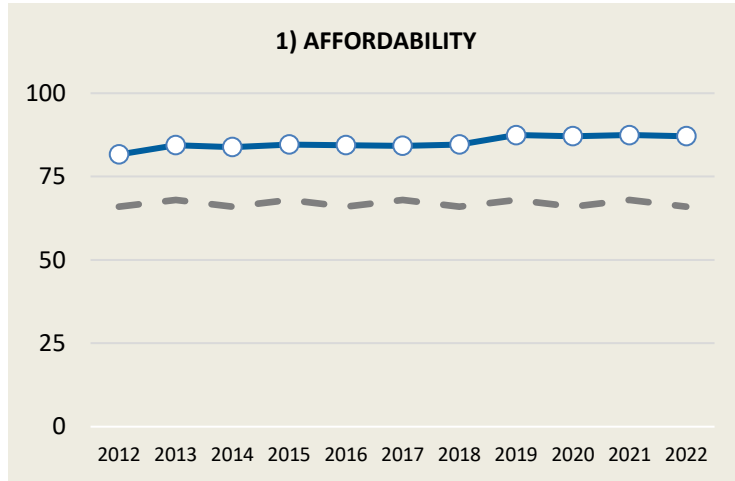
# Malaysia Ranking For Global Food Security Index 2022

TOP 30 - 50 for Global Food Security Index 2022



Malaysia ranks 41 out of 113 countries

# Malaysia Food Security



Source: Economist Impact GSFI (2022)

# Issues

## Affordability

- Organic food tends to be **more expensive**, which **limits its affordability for lower-income Malaysians** (Malaysian Organic Resource Centre, 2023).
- Wong and Aini (2017) found that the **high price of organic food discouraged consumers' intention to purchase** organic food.

## Availability

- The **demand for organic food is increasing**, while the availability of organic foods in the local area is **insufficient to meet the demand** (Aziz et al., 2020).
- The author also mentioned that the **range of organic food available** in the area is also **limited**.

# Problem Statement

- The organic food industry's inability to meet local and worldwide demand results from an **inadequate number of organic producers** in Malaysia.
- Malaysia **depends on imported organic food** from other countries to meet the consumers' demand.
- The **distribution channels for organic food are limited** compared to conventional groceries.
- However, consumers will purchase lesser than usual due to its **unavailability in the market** which then results in the inconsistency of them consuming organic food.

# Problem Statement

- The **premium price of organic food** is commonly known as the **main barrier for consumers** to purchase organic food.
- Malaysia **awareness is currently low** to sustain the environment and understand the benefits for human health.
- Consumers **unable to identify genuine organic food** which will result **inconsistency when purchasing organic food**.
- Consumer might **not purchase organic food as often** when they **aren't encouraged by their friends and family**.

# Research Questions

- How can food security influence consumers' perceptions towards purchasing organic food in Malaysia?
- How can green advocacy influence consumers' perceptions towards purchasing organic food in Malaysia?
- How can social norms influence consumers' perceptions towards purchasing organic food in Malaysia?
- How can food production influence consumers' perceptions towards purchasing organic food in Malaysia?

# Objective

## **General objective**

This study aims to identify consumers' perceptions towards purchasing organic food in Klang Valley.

**To achieve this aim, the following specific objectives have been determined:**

1. To identify the influence of food security on consumers' perceptions towards purchasing organic food.
2. To determine the influence of green advocacy on consumers' perceptions towards purchasing organic food.
3. To identify the influence of social norms on consumers' perceptions towards purchasing organic food in Klang Valley.
4. To identify the influence of food production on consumers' perceptions towards purchasing organic food.

# Significance of The Study

## **Consumer**

- Understand the consumers' awareness and understanding of organic food in Malaysia.
- Understand the consumers' motivations for choosing organic food to promote a sustainable future.

## **Marketer and Producer**

- Understand the consumers' perceptions towards purchasing organic food that can help shape the marketing strategies and product development efforts.



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# LITERATURE REVIEW

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# Food Security

- Malaysia has shown an increase of consumer who **reduced their consumption intake** due to their constraint income (Mahmood et al., 2022).
- The European Union encourages organic production to **sustain and improve food quality** to create a more sustainable agriculture (Bei et al., 2021).
- Consumer can hardly have the **accessibility and affordability** to purchase organic food at their local markets (Kowalska et al., 2021).
- The availability of organic food in the Malaysia market are **hardly accessible** which contributes to inconsistency consumer to purchase organic food (Cheah et al., 2022).

# Green Advocacy

- Organic food has instantly been increasing for consumer consumption due to their **concern towards their health and environment** (Mukul et al., 2013).
- Consumers will influence others' perceptions towards **improving the environmental awareness** through communication and discussing to understand their view and knowledge (Crucke et al., 2021).
- The government should create a green certificate so consumers will be **able to identify and trust the credibility** of organic products in the markets (Cheah et al., 2022).
- Malaysia is currently at the **development phase** where the consumers are still **low in the awareness** of environmentally sustainable when purchasing organic products (Ogiemwonyi et al., 2020).

# Social Norms

- Social norms are able to **influence, shape and motivate** other consumers' perceptions and beliefs in purchasing behaviour (Kim et al., 2019).
- Social norms can **directly and indirectly** influence consumers' perceptions towards their purchasing behaviour (Kim et al., 2019).
- Through social norms, it can **enhance and develop consumers' understanding** towards sustainable agriculture by consuming organic food (Ogorevc et al., 2020).
- Social norms have the **influence for consumers' motivation** to get them engage to the environmental behaviour (Testa et al., 2018).

# Food Production

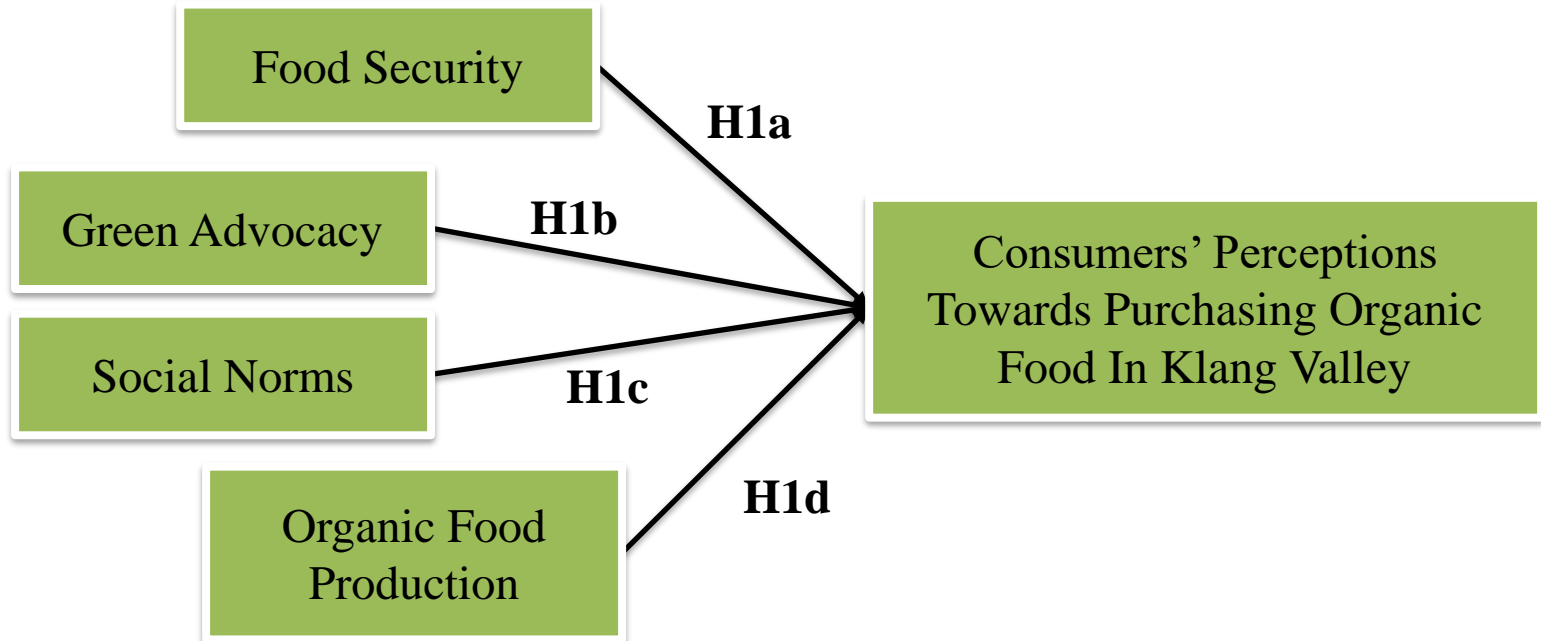
- Organic food production can be perceived as **safer than conventional farming** merely because of **fewer expected agrochemical residues and a lower level of nitrate** in the produce (Doni et al. 2019).
- In Malaysia, the local **organic food industry is still small** because it depends on imported organic food, which is more than 60% (Dardak et al., 2019).
- The demand for organic food is growing but the producers are **unable to supply** local organic products (Somasundrum et al., 2016)
- **Lack of awareness** among producers, retailers and consumers of the wider extent of organic production in the local markets (Saleki et al, 2012).

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# METHODOLOGY

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# Conceptual Framework



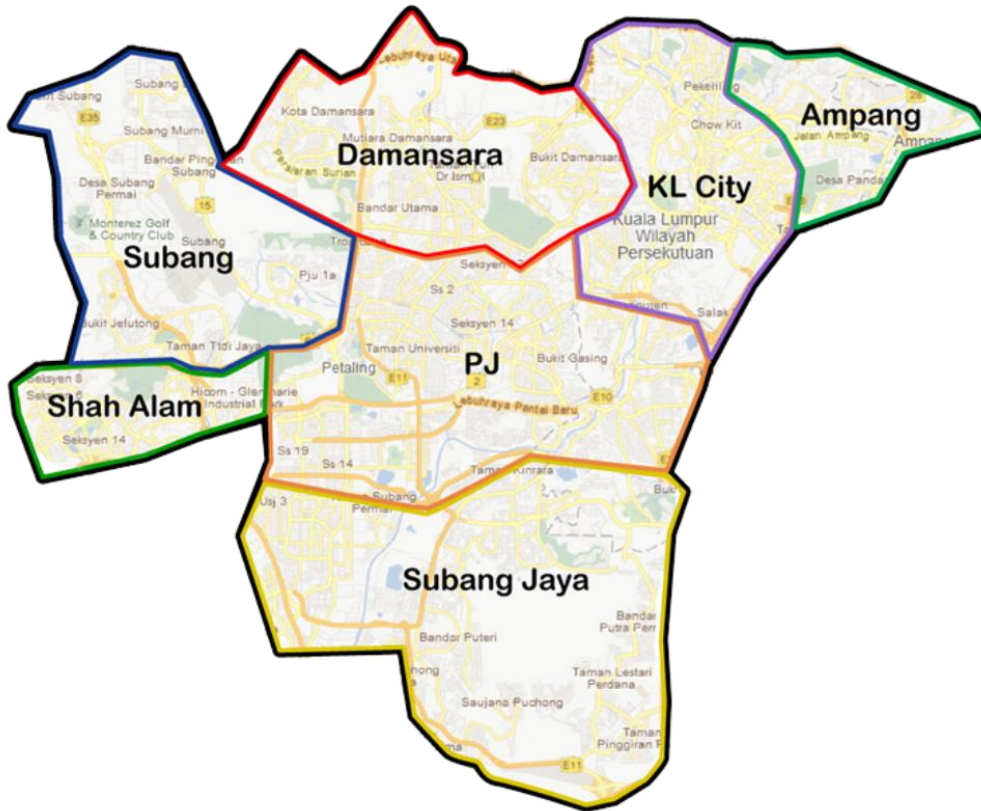
**H1a:**Food security is positively influenced consumers perceptions towards purchasing organic food.

**H1b:**Green advocacy is positively influenced consumers perceptions towards purchasing organic food.

**H1c:**Social norms is positively influenced consumers perceptions towards purchasing organic food.

**H1d:**Organic food production is positively influenced consumers perceptions towards purchasing organic food.

# Sampling



**Sampling Data:**  
Primary

**Sampling Area:**  
Klang Valley

**Sampling Method:**  
Convenience Sampling

**Total Respondent:**  
N = 201

According to a survey conducted by Wong & Aini (2017) stated that **Klang Valley is the most purchased organic food types by Malaysian consumers** (organic fruits, vegetables & meats).

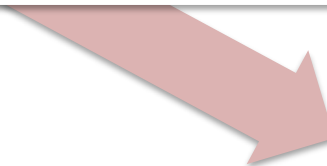


Factor  
Analysis

Cronbach's Alpha  
Reliability Test

Multiple Linear  
Regression

Data  
Analysis



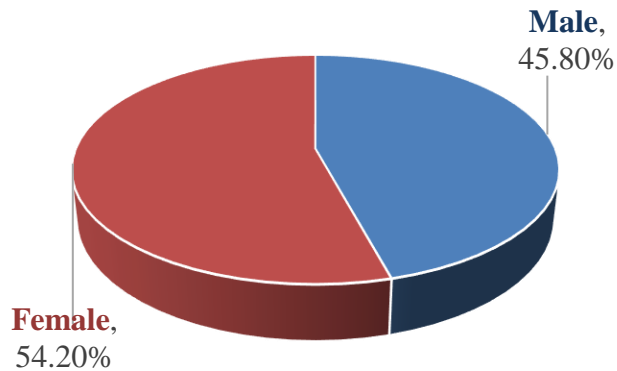
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# RESULTS & DISCUSSION

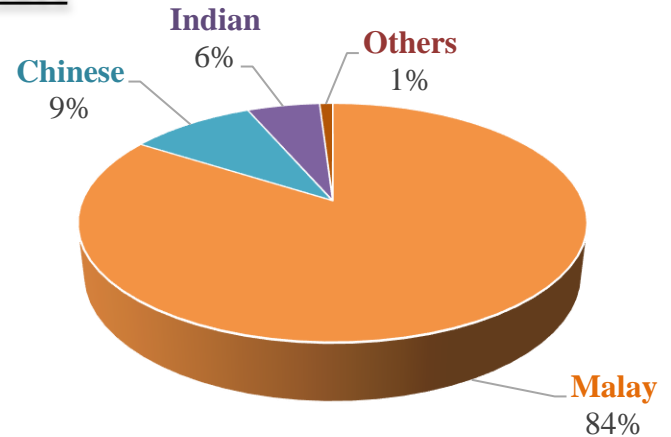
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# Descriptive Analysis (Demographic)

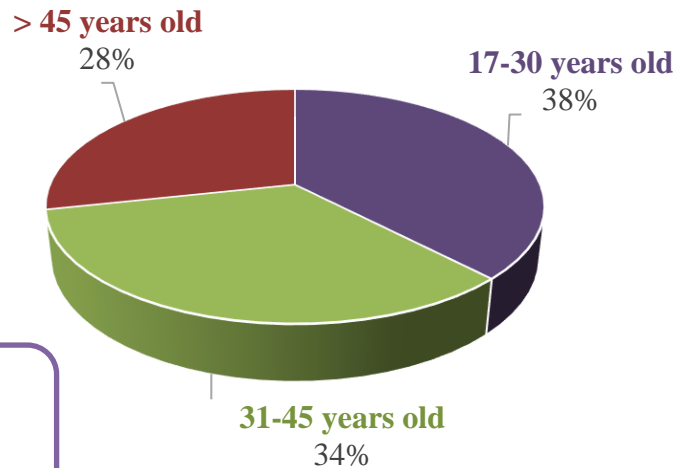
## Gender



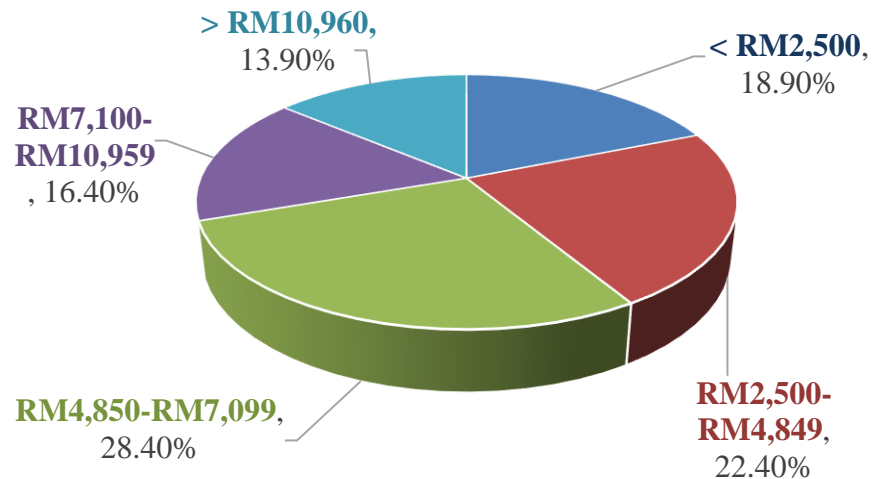
## Race



## Age



## Household income

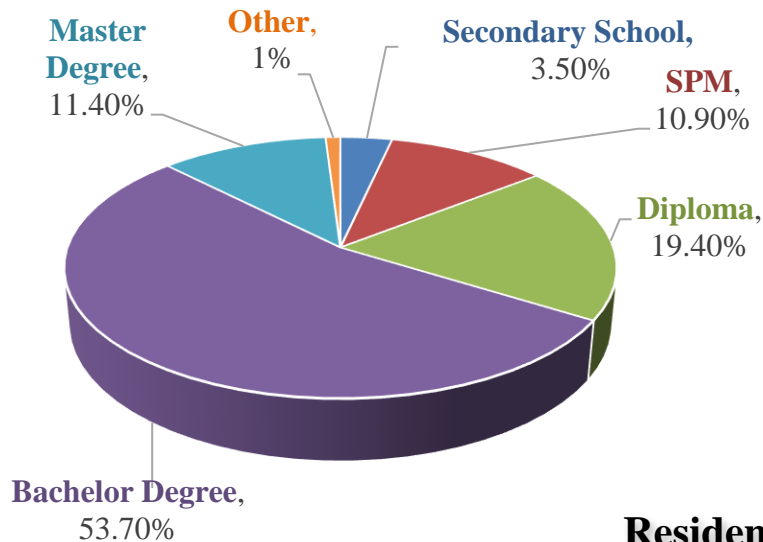


## Notes

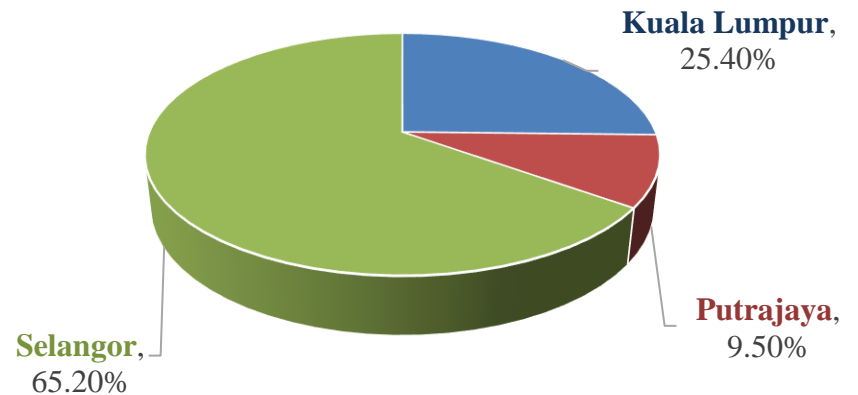
N = 201

# Descriptive Analysis (Demographic)

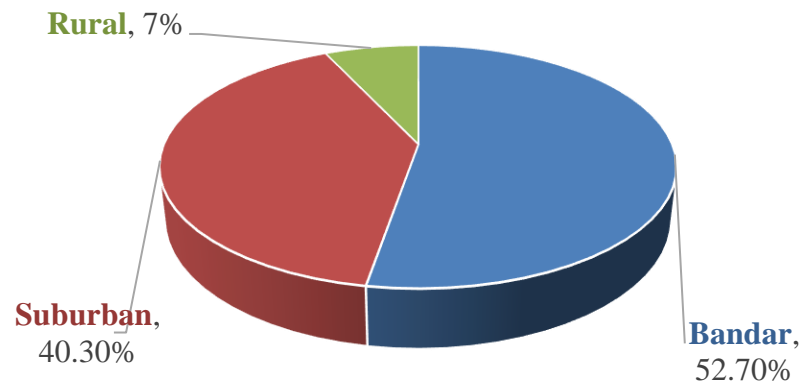
**Highest level of education**



**Klang Valley area**



**Residential area**



**Notes**

N = 201

# Cronbach's Alpha Reliability Test

Table x. Reliability test if independent variables		
Factors	No. of items	Cronbach's Alpha
Food security	4	0.737
Green advocacy	3	0.902
Social norms	5	0.804
Food production	4	0.820

**0.70 or higher are considered acceptable** to run any data analysis (George & Mallery, 2016).

These **variables are reliable** for this study since **the value is greater than 0.70.**

# Factor Analysis

Table x. KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.818
Barlett's Test of Sphericity	Approx. Chi-Square	1406.211
	df	120
	Sig.	0.000

A **value of 0.80 or greater shows a high level of acceptability** for sample adequacy, which suggests that factor analysis is likely to be successful (Kaiser, 1970).

The value which results from **Bartlett's sphericity test is 0.00 ( $p < 0.05$ )** which indicates that the variable **fits the basic requirements for factor analysis.**

# Factor Analysis

Table x. Component Matrix <sup>a</sup>				
	1	2	3	4
GA2	0.753			
SN4	0.749			
GA3	0.734			-0.536
GA1	0.701			-0.552
SN1	0.636			
SN5	0.629			
FP3	0.587			
FP4	0.569	-0.567		
SN3	0.569			
FP2	0.530			
SN2	0.525			
FS2		0.673		
FS3		0.612		
FS4		0.597		
FP1				
FS1				

Note: Extraction Method: Principal Component Analysis

a. 4 components extracted

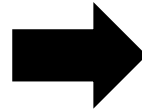


Table x. Rotated Component Matrix <sup>a</sup>				
	1	2	3	4
SN2	0.819			
SN1	0.729			
SN4	0.690			
SN3	0.642			
SN5	0.638			
FP4		0.853		
FP2		0.821		
FP1		0.744		
FP3		0.714		
GA1			0.873	
GA3			0.868	
GA2			0.841	
FS4				0.781
FS3				0.777
FS2				0.753
FS1				0.624

Note: Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalisation.

a. Rotation converged in 5 iterations

# Multiple Linear Regression

Table x. Coefficient of consumers' perceptions towards purchasing organic food

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	10.750	1.447		7.427	0.000
Food security	0.147	0.066	0.157	2.236	<b>0.027</b>
Green advocacy	0.212	0.094	0.179	2.254	<b>0.025</b>
Social norms	0.135	0.062	0.176	2.197	<b>0.029</b>
Food production	-0.059	0.077	-0.056	-0.760	0.448

Note: a. Dependent variable: Organic food (OF)

From all the four variables, **only three variables are significant statistical** with the **value of sig. less than 0.05 (p-value > 5%)**.

The variables that are having significant value are **food security (0.027)**, **green advocacy (0.025)** and **social norms (0.029)**.



# Food Security

- Food security obtains a significant **coefficient (B = 0.147, p = 0.027)**, there is **enough evidence to reject H0 at a 5% significant level**.
- In a simple term, when **perceived of food security increase in for every 1%, there is a 0.147** increase in the chance of consumer purchasing organic food.
- Abdullah et al. (2020) stated that consumers can **easily afford to purchase organic food** for their balanced meals.

# Green Advocacy

- Green advocacy has a **positive coefficient (B = 0.212, p = 0.025)**, there is **enough evidence to reject H0 at a 5% significant level.**
- The result shows that when the consumers' perceptions towards green advocacy **increases by 1%, the consumer's perceptions towards purchasing organic food increases by 0.212.**
- According to Ahmad (2010), consumers believed that **organic food contain health benefits** because organic food is **healthier compared to conventional grown food.**
- Lockie et al. (2013) found that environmental concerns were **a significant motivator for purchasing organic food.**

# Social Norms

- Social norms ( $B = 0.135$ ,  $p = 0.029$ ) has a positive value of **coefficient**, there is enough evidence to reject  $H_0$  at a 5% significant level.
- When consumers' perceptions in **social norm increases by 1%**, the **chance of consumer purchasing organic food increases by 0.135**.
- Lian and Yoong (2019) supported that purchasing organic products can **represent a specific social identity** that are associated with **health awareness, sustainability, as well as extravagant lifestyles**.

# Food Production

- Food production **has a negative coefficient ( $B = -0.059$ ,  $p = 0.448$ )**, there is **not enough evidence to reject  $H_0$  at a 5% significant level**.
- It means that when the consumers' perceptions in food production **increases by 1%, the chance of consumer purchasing organic food will decrease by  $-0.059$** .
- Mohd Isa et al. (2013) stated that the organic food distribution channels in Malaysia are **still developing, making them less readily available compared to conventional options**.

# Summary of Hypothesis

<b>Hypothesis 1</b>	There is a significant relationship between <b>food security</b> and consumers' perceptions towards purchasing organic food.	0.027	Supported
<b>Hypothesis 2</b>	There is a significant relationship between <b>green advocacy</b> and consumers' perceptions towards purchasing organic food.	0.025	Supported
<b>Hypothesis 3</b>	There is a significant relationship between <b>social norms</b> and consumers' perceptions towards purchasing organic food.	0.029	Supported
<b>Hypothesis 4</b>	There is a significant relationship between <b>food production</b> and consumers' perceptions towards purchasing organic food.	0.448	Not Supported

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# RECOMMENDATIONS & CONCLUSION

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# Recommendations

- **To ensure equal access to organic food**, the distribution channels should offer low-income families **income-based vouchers or coupons** to buy organic food at a **lower price to influence their perceptions**.
- **Campaigns that educate consumers** about the benefits of organic food, how it is grown and how it gets certified **can help the consumers to change their perceptions** towards purchasing organic food.
- **Malaysian government should provide programmed support** which encompass land distribution initiatives, financial subsidies for organic farmers and investments in infrastructure development which can **boost production and make organic food more accessible**.

# Conclusion

- Consumers who are **concerned about food security, held a strong environmental value, and are influenced by the people they surround themselves** with are prone to purchase organic food.
- Various research is pointing to the fact that **consumers are becoming more aware of the benefits of purchasing organic food**, which are generally linked to improved health and less chemical exposure.
- Despite the increasing demand for organic food, the supply of **locally sourced organic food continue to struggle to meet the rising demand**.
- Therefore, **government's support and legal measures are important to promote organic farming** and making organic food **more accessible to consumers**.





**TERIMA KASIH/*THANK YOU***

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