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Consumer Behavior of Thai Fruit in China

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Abstract

The aim of this study is to investigate the demand dynamics of Thai fruit in China, focusing on Chinese consumer demand behavior of Thai fruit. The investigator conducts a market survey in Guangxi, China, total of 501 valid questionnaires were collected. The findings showed that the price elasticity of demand for Thai fruit is 1.2, this indicates that the quantity demanded of Thai fruit is highly sensitive with respect to price changes, and it also found that Thai fruit is a normal good with an income elasticity of 0.99, suggesting that the demand for Thai fruits is a common good rather than luxury goods. Demand function regression model analyses of the survey data identified several key factors affecting the demand for Thai fruits, including price, personal income, consumer preference, fruit quality, fruit brand, advertising and fruit safety, these independent variables are significate impact on the demand for Thai fruit and they are supported the hypothesis. The survey provides valuable insights and recommendations into consumer demand behavior and potential growth opportunities for Thai fruit in the Chinese market.

Keywords: *Thai Fruit, Chinese Market, Elasticity of Demand, Consumer Behavior.*

Introduction

Thailand is in the center of Southeast Asia, bordering Malaysia to the south, Laos and Cambodia to the east, and Myanmar to the west. It is also a prominent member of the Association of Southeast Asian Nations (ASEAN). The strategic location of Thailand has long been recognized by the international business community, providing easy access to a market of over 660 million people in the wider ASEAN region. Thailand has a nominal gross domestic product (GDP) of 17.3 trillion baht (495.2 billion US dollars) in 2022. It's the second largest economy in Southeast Asia. (NESDC, 2022). Agriculture is an important sector in Thailand's economy, with a total area of approximately 51.31 million hectares, of which over 21.06 million hectares are used for agricultural production, accounting for approximately 41% (World Bank, 2021). Agriculture contributes 8.12% to the total GDP, and fruit is one of the significant contributors to the agriculture industry which plays a crucial role in the country's economy (Tangtrongjita,2023). Thailand and China have a long and positive historical relationship. Since the establishment of diplomatic relations between Thailand and China in July 1975, trade between the two countries has grown rapidly. China has been Thailand's largest trading partner for ten consecutive years, with the total trade volume between Thailand and China reaching 3,678.99 billion baht which equivalent to US$105.40 billion in 2022. This represents an increase of 62% from 64.96 billion in 2013 (Aiyara,2024). With rapid economic growth, China's GDP reached RMB 126.06 trillion (US$17.5 trillion) in 2023 (UNDP, 2024). Higher income has led to increased demand for fresh fruit consumption. China has become the world's largest consumer market for fruit, the value of fresh fruit imports in China has increased from 1.2 billion in 2009 to 6.9 billion in 2018. In 2019, more than 200 fruits from 24 countries were permitted for import (MZ Marketing Communications, 2020). According to data from the China Chamber of Commerce for Import and Export of Foodstuffs, China set new records for fruit imports in 2022. The import and export volume of fruit reached 10.59 million tons worth $19.20 billion. China imported 7.33 million tons or $14.60 billion worth of fruit in 2022, increases of 4% and 8% respectively. However, with a population of over 1.4 billion, the fruit production in China is only about 289 million tons in 2021, This falls far short of meeting the demand from the people. Thailand was China's largest fruit importing country in 2022, followed by Chile, Vietnam, the Philippines, and New Zealand (Zang, 2023). In 2022, Thailand's fruit exports were valued at over 5.74 billion US dollars, with its main trading partners being China, Japan, the United States, and the European Union. Thai Ministry Trade Policy and Strategy Office stated that China is the largest export market for

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Thai fruits, accounting for over 83% of Thai fresh fruit exports in 2022. The demand for imported fruits in China has been increasing in recent years, with Thailand being the largest fruit supplier to the Chinese market. However, it also faces challenges. Economic globalization has faced obstacles due to trade protection measures, technological and financial wars, and conflicts such as the one between Russia and Ukraine in 2022. These negative factors indirectly increase production and trade costs, interrupt normal international trade, slow down economic growth, and weaken global demand, including for fruit, Therefore, it is very important to study the consumer demand behavior for Thai fruits in China, especially investigate the relevant influencing factors. This can provide important suggestions and advice for fruit growers, market operators, and policymakers. Previous studies on Thai fruit exports to China have mainly concentrated on the characteristics or competitiveness of a single variety of fruit, as well as the factors that impact their export. However, a significant gap remains in the research on consumer behavior regarding the export of fruits from Thailand in the Chinese market, particularly in analyzing Chinese consumers' behavior and demand for Thai fruits.

The objective of the research is to investigate consumer behavior and demand for Thai in the Chinese market, with a specific focus on the Guangxi region. The primary aims of this study are: To understand the consumer preferences for Thai fruit in China. This includes examining the impact of socioeconomic factors such as gender, age, marital status, income, educational level, income and on fruit consumption patterns. To study the price and income elasticity of demand for Thai fruit in China. This aim focuses on understanding how changes in price and income affect the quantity of Thai fruit demanded by consumers. To identify the specific attributes of Thai fruit that drive consumer demand. This involves assessing the importance of factors such as Thai fruit price, other fruit price, preference, quality, price, brand, advertisement, packaging, safety and origin of the country in influencing consumer choices. To provide actionable insights for fruit growers, market operators, and policymakers. The study aims to offer recommendations on how to enhance market share and consumer satisfaction, based on the findings. By achieving these objectives, the study seeks to fill the gap in existing research on consumer behavior regarding the export of Thai fruits to the Chinese market.

Literature Review

The motivation for production arises from the need to satisfy human needs. When people be able to afford what they need, it leads to a demand for goods. Maslow's hierarchy of needs theory identifies five levels of needs, starting from the basic physiological needs, safety needs, belongingness and love needs, esteem needs, and finally, the highest level of self-actualization (Maslow, 1943). Demand represents the potential for sales of a product, and business operators always strive to analyze consumer demand when making business decisions. Alfred Marshall (1920) was a prominent economist who developed the consumer demand function theory, which proposes that the quantity demanded of a particular good is a function of its price, the consumer's income, and the prices of other goods. According to Parkin (2012), demand refers to the willingness and ability of buyers to purchase a good, provided they can afford it and have a plan to buy it. The quantity demanded of a good is the amount that buyers are willing and able to purchase. The law of demand states that when the price of a good increases, the quantity demanded of the good decreases, and when the price decreases, the quantity demanded increases. Apart from price, other factors that determine the amount of a good that consumers want to buy include income, the prices of substitutes and complements, tastes, expectations, and the number of buyers (Mankiw, 2012). The study by Pindyck & Rubinfeld (2013) on consumer purchasing decisions can aid in our understanding of how changes in income and prices affect the demand for goods and services, as well as why the demand for certain products is more sensitive to changes in prices and income than others. In econometrics, the demand function is typically a mathematical representation used to illustrate the demand theory. The demand function expresses the relationship between the quantity of a commodity demanded and various factors that affect the demand. The quantity demanded is the dependent variable, while the various factors that affect the quantity demanded are independent variables. Since the price is the most important determinant of the demand for a product, the simple demand function is usually represented by $Qd=f(P)$, and in the linear demand function form, it is represented as $Qd = a - bP$ (Nicholson & Snyder, 2016).

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Several studies have explored factors influencing consumer behavior towards fruit consumption in both China and international market. Chen et al. (2012) conducted a market survey on the primary factors that influence consumer behavior among residents of Guangdong province when consuming tropical fruit. The data was analyzed using an ordered multi-variable discrete choice model, which included variables such as income, economic development level, education level, and family size in relation to the consumption of tropical fruit. The research concluded that there is significant potential for growth in the consumption of bananas, oranges, pineapple, durian, and other fruits, as well as coconut juice, orange juice, and other fruit juices in Guangdong. However, the market potential for litchi, longan, and canned fruit is relatively small. The authors argued that due to the rapid development of China's national economy, the consumption of tropical fruit is expected to increase significantly in the foreseeable future. Sun & Huo (2013) conducted a market survey of 400 imported apple consumers in four major cities in China, namely Beijing, Shanghai, Guangzhou, and Xi'an. They used a structural equation model to analyze the main factors that affect consumers' consumption behavior of imported apples. The empirical analysis results indicate that price is the biggest negative factor affecting consumers' consumption evaluation and consumption behavior of imported apples. On the other hand, the good attributes of imported apples, the popularity of fruit-related enterprises, the advertising effect, and consumers' awareness of the quality and safety of imported apples have a positive impact on consumers' consumption evaluation and consumption behavior of imported apples. Harahap et al. (2019) conducted the research on the effect of prices, income and tastes on consumer demand for orange fruits in Pantai Buaya, Indonesia and found that the price has a partial influence on the demand for orange fruits, factors such as income and taste do not significantly affect consumer demand for orange fruits. The combined effect of income, price, and taste on consumer demand for orange fruits is 8.7%, with the remaining demand being influenced by other variables. Yu & Li (2019) conducted research regarding consumer demand for walnut products and the factors that influence it in Kunming City based on the survey of 1115 consumers and analyzed by a logistic regression model. The research revealed that gender and sales recommendations have a significant negative impact on consumer behavior when it comes to purchasing walnut products. On the other hand, the level of education of consumers and internal factors such as packaging, price, quality, brand, and discount promotions have a significant positive influence on their behavior. The researchers recommended promoting marketing, strategy, technology, and innovation to improve market share. Huang & Jiang (2020) conducted a multiple linear regression analysis to investigate the factors influencing fruit consumption in China. They found that the level of urbanization, regional differences, fruit output, and fruit export volume all had a significant impact on fruit consumption in China. Furthermore, they pointed out that with the development of the economy and society in China, fruit consumption is expected to continue to increase in the coming years. To support this trend, they recommended the establishment of an industrial belt for high-quality fruit, acceleration of logistics construction, and expansion of fruit import and export trade. Vivithkevoonvong (2021) discovered that socioeconomic factors, such as gender, age, occupation, education, and income, are related to the decision-making process of purchasing Thai fruits. Customers prioritized product awareness, particularly in terms of quality and taste. The COVID-19 pandemic has heightened concerns about the quality and safety of products, and the impact of taste experience on purchasing decisions is significant. These studies collectively emphasize the importance of price, quality, and socioeconomic factors in shaping consumer demand for fruits.

Methodology

The research design for investigating the consumer behavior of Thai fruit in China is a survey research approach. This design is chosen because it allows for the collection of quantitative data from a large and diverse sample of Chinese consumers, providing insights into their preferences, behaviors, and attitudes towards Thai fruit. The survey involves collecting data through structured questionnaires to gather information both demographic information and specific factors influencing the demand for Thai fruit. Drawing from literature which relates to consumer demand behavior theory, previous research regarding to fruit industry and fruit consumption patterns to form a demand function model to investigate consumer demand behavior for Thai fruit in China. The demand function model for Thai fruit in the Chinese market is represented by the multi-linear regression equation in this study.

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$$Qd=\alpha+\beta1X1+\beta2X2+\beta3X3+\beta X4+\beta5X5+\beta6P+\beta7X7+\beta8X8+\beta9X9+\beta10X10+\varepsilon.$$

Where:

Qd denotes consumer demand for Thai Fruit.

X1 denotes price of Thai fruit (Px).

X2 denotes consumer income (IN).

X3 denotes price related fruits (Prg).

X4 denotes consumer preference (Pref).

X5 denotes the quality of the fruit (Qu).

X6 denotes brand of fruit (Br).

X7 denotes packaging of the fruit (Pkg).

X8 denotes advertising of the fruit (Adv).

X9 denotes safety of the fruit (Sa).

X10 denotes the origin of Fruit (Or).

Data collected was used quantitative method through SPSS program to analyze and evaluate the research hypotheses. Hypotheses 1: The price of commodities has a significant impact on the demand for Thai fruit. Hypotheses 2: Personal income has a significant impact on the demand for Thai fruit. Hypotheses 3: The price of related goods has a significant impact on the demand for Thai fruit. Hypotheses 4: Consumer preferences have a significant impact on the demand for Thai fruit. Hypotheses 5: Product quality has a significant impact on the demand for Thai fruit. Hypotheses 6: The brand of a product has a significant impact on the demand for Thai fruit. Hypotheses 7: The packaging of a product has a significant impact on demand for Thai fruit. Hypotheses 8: The advertising of a product has a significant impact on demand for Thai fruit. Hypotheses 9: The safety of a product has a significant impact on the demand for Thai fruit. Hypotheses 10: The origin of a product has a significant impact on demand for Thai fruit. At the meantime, the investigator uses collect data to measure elasticity of the demand for Thai fruit in China market. Elasticity of demand is an economic concept that measures the responsiveness of the quantity demanded of a good to a change in a market condition. The price elasticity of demand is a measure of how much the quantity demanded of a good respond to change in the price of that good. The income elasticity of demand is a measure of how much the quantity demanded of a good respond to a change in the income of consumers.

Market Survey Questionnaire: the researcher designed a structured questionnaire to collect data from many respondents. The questionnaire is the closed-ended questions designed to gather specific, quantifiable information about consumer behavior. The sample is drawn from various regions, income levels, and demographic groups to provide a comprehensive view of consumer behavior. Sample size: it was calculated using Yamane's formula (1967). $n = \frac{N}{1+N*e^2}$. the size of sample can be calculated $50126804/(1+50126804*0.05^2) = 399.9 \approx 400$. Considering the characteristic of Guangxi's particularly large population base, this survey calculates the sample size based on Yamane's formula and adjusts it to approximately 0.01‰ of the total population, resulting in a total target size of about 501.

Data Collection: The study employs random sampling to select a representative sample of the target population, ensuring that the findings can be generalized to the broader population.

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Data Analysis: the quantitative methodology will be employed to analyze the collected data. Using statistical methods to identify patterns and trends in consumer behavior. Descriptive Statistics: To summarize demographic data and responses related to the independent variables. Correlation Analysis: Pearson correlation will be used to identify relationships between the independent variables and the dependent variable. Regression Analysis: Multiple linear regression models will be employed to assess the relative influence of independent variables on the dependent variable. Software Tools: Statistical software SPSS will be used to process and analyze the data efficiently. By employing a structured questionnaire, random sampling, and advanced statistical analysis, the study aims to deliver actionable insights for Thai fruit growers, marketers, and policymakers to enhance market penetration and consumer satisfaction.

Result

Demographic Information

A total of 501 valid questionnaires were collected in this survey. Males accounted for 42.32%, and females accounted for 57.68%. In terms of age distribution, the 31-40 age group had the largest proportion, at 47.31%, followed by the 26-30 age group, which accounted for 26.15%. Married individuals accounted for 77.45%, while single individuals accounted for 22.55%. In terms of educational status, those with a bachelor's degree accounted for 73.65%, and those with a master's degree or higher accounted for 8.18%. In terms of occupation, company employees accounted for 72.46%, students accounted for 6.99%, and the rest were civil servants, professionals, workers, etc. Regarding personal monthly income, 33.13% of the respondents had a monthly income between 5001-8000 yuan, and 29.54% had an income between 8001-12000 yuan.

Table 1-1. Demographic Descriptive Analysis

Name	Option	Frequ	Percent (%)	Cumulative (%)
1.Gender	Male	212	42.32	42.32
	Female	289	57.68	100
2.Age	18–25-year-old	69	13.77	13.77
	26–30-year-old	131	26.15	39.92
	31–40-year-old	237	47.31	87.23
	41–50-year-old	48	9.58	96.81
	51–60-year-old	16	3.19	100
3.Marital status	Single	113	22.55	22.56
	Married	388	77.45	100
4.Educational level	Junior high school and below	2	0.4	0.4
	High school graduate	19	3.79	4.19
	Associate degree	70	13.97	18.16
	Bachelor’s degree	369	73.65	91.82
	Master’s degree and above	41	8.18	100
5.Occupation	Company staff	363	72.46	72.46
	Civil servant	19	3.79	76.25
	Professional person (e.g. Teacher)	25	4.99	81.24
	Worker	33	6.59	87.82
	Business owner	11	2.2	90.02
	Student	35	6.99	97.01
	other	15	2.99	100
6.Monthly income	Under 3000 RMB	40	7.98	7.98
	3000-5000 RMB	75	14.97	22.95

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	5001-8000 RMB	166	33.13	56.09
	8001-12000 RMB	148	29.54	85.63
	>12000 RMB	72	14.37	100
Total		501	100	100

Overall, Table 1-1 demographic data shows that the respondents are mostly highly educated, married individuals with a moderately high income.

Results of Thai Fruit Purchase Status and Preference

Based on the collected data, the purchase status of Thai fruits by Chinese respondents was analyzed and the results are shown in Table 2-1. In general, Thai fruits enjoy a high level of popularity in the Chinese market.

Table 2-1. Fruit Purchased Descriptive Analysis

Name	Option	Frequ	Percent (%)	Cumulative (%)
7.Which Southeast Asian country is your favorite fruit?	Thailand	444	88.62	88.62
	Vietnam	38	7.58	96.21
	Philippine	9	1.8	98
	Other	10	2	100
8.Are you willing to purchase Thai fruits?	Very unlikely	23	4.59	4.59
	Unlikely	11	2.2	6.79
	Neutral	125	24.95	31.74
	Likely	339	67.66	99.4
	Very likely	3	0.6	100
9.If you don't want to buy Thai fruit , why?(n=26)	The price is too expensive	19	55.88	55.88
	It is inconvenient to buy	12	35.29	91.18
	I am not familiar	2	5.88	97.06
	I don't like Thai fruit.	1	2.94	100
11.How many kilograms of Thai fruit do you buy each time?	Less than 1 kg	25	4.99	4.99
	1-3 kg	259	51.7	56.69
	3-5 kg	173	34.53	91.22
	More than 5 kg	44	8.78	100
12.How much do you spend each time you buy Thai fruit?	＜50 RMB	14	2.79	2.79
	50-100 RMB	161	32.14	34.93
	101-150 RMB	182	36.33	71.26
	＞ 150 RMB	144	28.74	100
13.How often do you buy Thai fruit?	＜ 1 a month	82	16.37	16.37
	1 time per month	165	32.93	49.3
	2 times per month	175	34.93	84.23
	3 times and more	79	15.77	100

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14.In which season do you most often buy Thai fruit?	Spring	48	9.58	9.58
	Summer	377	75.25	84.83
	Autumn	56	11.18	96.01
	Winter	20	3.99	100
15.What percentage of the fruit you buy is Thai fruit?	＜10%	94	18.76	18.76
	10%-30%	273	54.49	73.25
	30%-50%	117	23.35	96.61
	＞ 50%	17	3.39	100
16.Where do you usually buy Thai fruit?	Supermarket	156	31.14	31.14
	Fruit store	243	48.5	79.64
	Fresh market	44	8.78	88.42
	Street vendor	8	1.6	90.02
	Online	50	9.98	100
17.Where do you get the information about Thai fruit?	Internet Ads	262	52.3	52.3
	TV Ads	35	6.99	59.28
	Brochure	98	19.56	78.84
	Friends or relatives	100	19.96	98.8
	Others	6	1.2	100
Total		501	100	100

In the analysis of current fruit purchasing trends, 88.62% of the respondents indicated that they most prefer Thai fruits, and 67.66% stated that they are likely to purchase Thai fruits, with only a small number expressing that they are unlikely to buy. Among the 34 respondents who were unwilling to purchase, 55.88% believed that Thai fruits are too expensive. Additionally, 51.7% of consumers buy 1-3 kilograms of Thai fruits per purchase, with spending concentrated between 101-150 yuan (36.33%). In terms of purchasing frequency, 34.93% of consumers buy twice a month, mainly in the summer season (75.25%). Regarding the purchasing channels, 48.5% of consumers choose to buy at fruit specialty stores, and the primary source of information is online advertisements (52.3%).

Thai Fruits Preference

The preferences for purchasing Thai fruits among respondents in China were analyzed based on the collected data, the results are as follows.

Table 2-2. Thai Fruit Preference Descriptives Analysis

Option		Response		Penetration rate（*n*=501）
		n	Rate	
Durian		415	30.92%	82.83%
Longan		204	15.20%	40.72%
Mangosteen		294	21.91%	58.68%
Coconut		193	14.38%	38.52%
Pineapple		232	17.29%	46.31%
Others		4	0.30%	0.80%

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The table 2-2 shows that Thai durian is the most popular fruit, with a penetration rate of 82.83%, followed by mangosteen, with a penetration rate of 58.68%. Pineapple and longan have penetration rates of 46.31% and 40.72%, respectively. Coconuts are also indicated as a purchase preference by 38.52% of the respondents. The desire to purchase other fruits is relatively low, with a penetration rate of only 0.80%. Overall, durian and mangosteen are the most favored Thai fruits among Chinese consumers.

Elasticity of Demand for Thai Fruit

Elasticity of demand is an economic concept that measures the responsiveness of the quantity demanded of a good to a change in its price. It is a measure of how buyers and sellers respond to changes in market conditions. Following is the study result of price and income elasticity of the Thai fruit in Chin.

Price Elasticity of Demand for Thai Fruit

From the question assuming the price of Thai fruit decreases by 10%, how much more Thai fruit would you want to buy? The collect the data from the survey as below.

Table 3-1. Price Decreases and Changes in Thai fruit Purchases

Item	Option	Frequency	Percent	Valid Percent	Cumulative Percent
PED1	5%	83	16.6	17.2	17.2
PED2	10%	184	36.7	38.1	55.3
PED3	15%	135	26.9	28.0	83.2
PED4	20%	78	15.6	16.1	99.4
	Other	3	0.6	0.6	100.0
	Total	483	96.4	100.0	
Missing	System	18	3.6		
Total		501	100.0		

Based on the survey collected data to calculate the price elasticity of demand (PED) for Thai fruit as below:

$$PED = \frac{percentage\ change\ in\ quantity\ demanded}{Percentage\ change\ in\ price}$$

PED1= 5%÷(-10%)=-0.5, PED2=10%÷(-10%)=-1,

PED3= 15%÷(-5%)=-1.5, PED4=20%÷(-10%)=-2.

Weighted PED=-0.5*0.172-1*0.381-1.5*0.28-2*0.161=-1.2

The absolute value of the price elasticity of demand for Thai fruit in China is 1.2, it's greater than 1, it indicates that the demand for Thai fruit in China is elastic. That means that the quantity demanded changes by a larger percentage than the price change. For every 1% decrease in the price of Thai fruit, the quantity demanded increase by 1.2%. Conversely, 1% increases in price would result in a 1.2 % decrease in quantity demanded of Thai fruit in China.

Income Elasticity for Thai fruit

From the question assuming your income increase by 10%, how much more Thai fruit would you want to buy? The data collected from the survey is table 3-2.

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Table 3-2. Income Increases and Changes in Thai Fruit Purchases

Item	Option	Frequency	Percent	Valid Percent	Cumulative Percent
IED1	5%	164	32.7	35.0	35.0
IED2	10%	173	34.5	36.9	71.9
IED3	15%	96	19.2	20.5	92.3
IED4	20%	33	6.6	7.0	99.4
	Other	3	0.6	0.6	100.0
	Total	469	93.6	100.0	
Missing	System	32	6.4		
Total		501	100.0		

Based on the survey collected data to calculate the income elasticity of demand (IED) for Thai fruit as below:

$$IED = \frac{percentage\ change\ in\ quantity\ demanded}{Percentage\ change\ in\ income}$$

IED1= 5%÷10%=0.5, IED2=10%÷10%=1,IED3= 15%÷5%=1.5, IED4=20%÷10%=2

Weighted IED=0.5*0.35+1*0.369+1.5*0.205+2*0.07=0.99

The income elasticity of Chinese demand for Thai fruits is 0.99, Since the income elasticity demand value is positive and less than 1, Thai fruit is considered a normal good but not a luxury good. The demand for Thai fruit is somewhat sensitive to change in income but not highly elastic, consumers will buy more as their income rises, but the proportionate increase in demand will be slightly less than the proportionate increase in income. every 1% of increase in Chinese consumes' income, the demand for Thai fruit increases by 0.99%.

Results of the Thai Fruit Demand Regression Model

In the regression analysis, factors that were significant in the univariate analysis and had significant correlations were used as independent variables, with the willingness to purchase Thai fruits as the dependent variable. The results are as follows.

Table 4-1. Regression Result of Thai Fruit Demand

	Non-standardized Coefficients		Standardized Coefficients	*t*	*p*	Collinearity Diagnosis	
	B	Standard Error	*Beta*			VIF	Tolerance
constant	-0.409	0.095		-4.289	0.000**	-	-
1 Price of Thai fruit (Px)	-0.036	0.014	-0.04	-2.476	0.014*	1.277	0.783
2 My income (IN)	0.142	0.014	0.184	9.867	0.000**	1.519	0.658
3 Price of related fruit (Prg)	0.139	0.014	0.171	10.013	0.000**	1.278	0.783
4 My preference (Pref)	0.173	0.017	0.212	10.420	0.000**	1.814	0.551
5 Quality of fruit (Qu)	0.204	0.018	0.264	11.429	0.000**	2.335	0.428
6 Brand of fruit (Br)	0.159	0.013	0.223	11.759	0.000**	1.572	0.636
7 Packaging of fruit (Pkg)	-0.016	0.014	-0.02	-1.186	0.236	1.480	0.676

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8 Advertising (Adv)	0.028	0.01	0.041	2.263	0.024*	1.471	0.680
9 Safety of fruit (Sa)	0.192	0.018	0.24	10.732	0.000**	2.199	0.455
10 Origin of fruit (Or)	-0.01	0.015	-0.01	-0.657	0.511	1.623	0.616
R^2	0.888						
Adjusted R^2	0.886						
F	F=389.246, p=0.000						
D-W value	1.934						

According to the previous linear regression analysis results, the demand equation for Thai fruits in Chinese market is established as follows:

Thai fruit demand regression model is: Qd=-0.409-0.036*Px + 0.142*IN + 0.139*Prg + 0.173*Pref+ 0.204*Qu + 0.159*Br-0.016Pkg + 0.028*Adv + 0.192*Sa -0.01*Or.

Among the independent variables, the price of Thai fruits (B = -0.036, p = 0.014) is significantly negatively correlated with the willingness to purchase, with higher prices leading to lower willingness to buy. Conversely, consumer income (B = 0.142, p < 0.001), the price of other fruits (B = 0.139, p < 0.001), personal preferences (B = 0.173, p < 0.001), fruit quality (B = 0.204, p < 0.001), fruit brand (B = 0.159, p < 0.001), advertising influence (B = 0.028, p = 0.031), and fruit safety (B = 0.192, p < 0.001) all show significant positive correlations with the willingness to purchase, indicating that these factors have a positive impact on driving consumers to buy Thai fruits.

Discussion

The demographic profile of the respondents shows that the majority are well-educated, married individuals with a relatively high income, suggesting a market that is mature and has disposable income to spend on products like Thai fruits. The current purchasing status of Thai fruits reveals a strong preference for Thai fruits, especially durian and mangosteen, indicating a favorable market presence for these items. The preference is also reflected in the high willingness to purchase among respondents, with a significant portion likely to buy Thai fruits. Elasticity of demand analysis shows that price elasticity indicates that Thai fruit demand is elastic, with significant sensitivity to price changes. Thai fruits are considered normal goods with income elasticity of 0.99, suggesting that demand is sensitive to income changes but not highly elastic. This highlights the need for Thai fruit producers to be aware of competitive pricing and to potentially enhance the value proposition of their products. The regression analysis on factors influencing demand for Thai fruits revealed strong explanatory power, with an R-squared value of 0.888 and an adjusted R-squared of 0.886, accounting for 88% of the variability. The F-test (F=389.246, p=0.000) confirmed the model's overall significance. Collinearity diagnostics showed no severe multicollinearity (all VIF values <10, tolerance >0.1), ensuring accurate relationships between variables. The Durbin-Watson statistic of 1.934 indicated no significant autocorrelation in residuals, validating the model's reliability. The coefficients of the independent variables provide specific insights into the factors that influence the demand for Thai fruits. The negative coefficient for the price of Thai fruits (B = -0.036, p = 0.014) indicates that as the price of Thai fruits increases, the willingness to purchase decreases, which is consistent with economic theory. On the other hand, positive coefficients for personal income (B = 0.142, p < 0.001), the price of other fruits (B = 0.139, p < 0.001), personal preferences (B = 0.173, p < 0.001), fruit quality (B = 0.204, p < 0.001), fruit brand (B = 0.159, p < 0.001), advertising (B = 0.028, p = 0.031), and fruit safety (B = 0.192, p < 0.001) suggest that these factors positively influence the willingness to purchase Thai fruits. Overall, the price of Thai fruits has a significant negative correlation with the willingness to purchase, suggesting that higher prices lead to a decreased willingness to buy. Consumer income has a significant positive correlation with the willingness to purchase, indicating that as income increases, so does the willingness to buy Thai fruits. The price of other fruits positively influences the willingness to purchase Thai fruits, implying that Thai fruits are seen as a substitute when other fruits are more expensive. Personal preferences play a significant role in the willingness to purchase Thai fruits, with a positive correlation. The quality of the fruit is a significant positive

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factor, with higher quality fruits leading to a greater willingness to purchase. The brand of fruit also positively influences the willingness to purchase, suggesting that a strong brand can drive consumer decisions. The packaging of the fruit had a negative but non-significant correlation, indicating it may not be a major driver of purchase decisions. Advertising has a positive, albeit small, impact on the willingness to purchase Thai fruits. The safety of fruit is a significant positive factor, with consumers showing a greater willingness to purchase fruits they perceive as safe. The origin of the fruit had a negative but nonsignificant correlation, suggesting it may not significantly influence the purchasing decision. The regression analysis has effectively identified key factors that drive consumer decisions regarding the purchase of Thai fruits. The significant positive correlations with income, preferences, quality, brand, advertising, and safety, along with the negative correlation with price, provide a comprehensive understanding of the market dynamics.

Conclusion and Recommendation

The comprehensive analysis of consumer demand for Thai fruits in the Chinese market has yielded significant insights into the consumer behavior. The study's findings provide a robust framework for understanding the factors influencing the demand for Thai fruits in the Chinese market, here are strategy and policy recommendations for Thai fruit exporters. Maintain Competitive Pricing. Given the high price elasticity of Thai fruit demand, exporters should closely monitor market price trends and price their products competitively to maintain a strong position in the Chinese market. Enhance Product Quality. Quality is a significant factor influencing consumer purchasing intentions. Thai exporters should ensure the quality of their fruits by improving cultivation techniques and post-harvest handling standards to meet the Chinese consumers' demand for high-quality fruits. Raise the quality standards and packaging of exported fruits according to market demands to meet the high-quality fruit demands of Chinese consumers. Increasing Marketing Efforts. Advertising has a positive, although small, impact on the willingness to purchase Thai fruits. Exporters should utilize multi-channel marketing, including online platforms and offline events, to increase brand and product visibility in the market. Brands positively influence consumer purchasing decisions. Thai fruit exporters should enhance brand awareness through marketing campaigns and brand promotion to establish and elevate the image of Thai fruit brands. Ensure Food Safety. Food safety is a critical concern for consumers. Thai exporters must adhere to strict food safety standards to ensure that the fruits exported to China are safe and unpolluted, thereby boosting consumer confidence. Adapt Market Strategies to Local Preferences. Considering the acceptance and preferences of Chinese consumers for imported fruits, Thai exporters should research the Chinese market, develop products that cater to Chinese consumer tastes and needs, and adapt marketing strategies to suit the Chinese market. By implementing these policy recommendations, Thai fruit exporters can better adapt to the Chinese market, increase market share, and achieve sustainable business growth. In examining the consumer demand behavior of Thai fruit in the Chinese market, despite utmost efforts to ensure thoroughness and rigor, our study inevitably encounters certain limitations. For instance, methodological constraints. The study may employ specific analytical models and methods that have limitations in explaining complex consumer behavioral phenomena. Although these constraints are present, they do not detract from the core insights of the research; however, they do necessitate a cautious interpretation of the results and suggest avenues for improvement in future studies. Future research should consider a broader range of factors that could influence fruit trade, such as technological advancements in agriculture, changes in consumer behavior due to health trends, and the impact of climate change on fruit production.

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