Consumer Perception, Consumption Preference and Purchase Intention of Geographical Indicated Agricultural Products: a Survey from China

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Abstract: The consumption preference of consumers for agricultural products with geographical indications is the basis of their purchasing behavior, and the consumer's consumption preference will also have a direct impact on the behavior of producers and operators of agricultural products with geographical indications. From the perspective of consumers, based on the data collected from online random questionnaire survey of Chinese consumers, this paper analyzes the current consumers' cognition, consumption preference and consumption intention of agricultural products with geographical indications. The findings of this study are beneficial to the production and sales of agricultural products with geographical indications. Producers should pay attention to strengthen consumers' cognition of agricultural products with geographical indications, enhance consumers' sense of recognition of the quality of agricultural products with geographical indications, and implement targeted marketing strategies according to consumers' preferences. At the same time, the relevant regulatory departments of the government should create a good external environment for the branding and dissemination of agricultural products with geographical indications.

1. Introduction

Consumer preference refers to the degree to which consumers are fond of a certain commodity or commodity combination. Consumers generally rank the available commodities or commodity combination according to their consumption willingness, and this ranking reflects their personal needs, interests and hobbies. The degree of consumers' preference for a certain commodity is positively correlated with the demand for the commodity. Generally speaking, if other conditions remain unchanged, the more consumers prefer a certain commodity, the more consumers demand for the commodity. The consumer's preference determines the consumer's purchasing behavior to a large extent, and then has a direct impact on the behavior of commodity producers and operators. With the full opening of the Chinese market, a large number of foreign agricultural products have entered China, and the competition in the agricultural market is fierce, so it is imperative for agricultural products to take the development path of branding. Therefore, it is of great significance

to study consumers' cognition, consumption preference and purchase intention of Geographical Indicated Agricultural Products for carrying out the brand management of Geographical Indicated Agricultural Products.

2. Data Collection

With the help of the Questionnaire Star platform, this study collected data by randomly issuing questionnaires to Chinese consumers, and 344 valid questionnaires were collected. From the perspective of gender distribution, there are 143 male consumers (41.57% of the sample size) and 201 female consumers (58.43% of the sample size). The age distribution of the samples is mainly young and middle-aged, among which 319 consumers aged 20-50 are surveyed (accounting for 92.73% of the total sample), and 16 consumers aged under 20 are surveyed (accounting for 4.65% of the total sample). There are 9 surveyed consumers over 50 years old (2.62% of the total sample). The educational level of the consumers in the sample is as follows: 3 of them are junior high school students (0.87% of the total sample), 13 of them are technical secondary school students and senior high school students (3.78% of the sample), and 264 of them are college students (including college students) (76.74% of the sample). 64 persons (18.6% of the sample size) studied for master degree or above. From the perspective of occupational distribution of consumers, there are 52 employees in public institutions (15.12% of the sample size), 148 employees in companies (43.02% of the sample size), and 7 employees in civil servants (2.03% of the sample size). There are 8 people in the private industrial and commercial sector (2.33% of the sample size), 12 people in the freelance sector (3.49% of the sample size), and 24 people in other professions (6.98% of the sample size). From the perspective of the income of the surveyed consumers, there are 12 people (3.49% of the total sample) with the Per capita monthly income of 2,000 yuan or less, and 70 people (20.53% of the sample) with the per capita monthly income of 2000-5000 yuan. 87 people (25.29% of the sample) had a family per capita monthly income of 5,000-8000 yuan, and 75 people (21.8% of the sample) had a family per capita monthly income of 8,000-12,000 yuan. 44 people (12.79% of the sample size) had a family per capita monthly income of 12,000-15,000 yuan, and 56 people (16.28% of the sample size) had a family per capita monthly income of 15,000 yuan or above.

3. Results and Discussion

3.1 Consumers' Cognition of Agricultural Products with Geographical Indications

This questionnaire survey explained the meaning of geographical indications of agricultural products. According to the survey results, 79.07% of consumers thought that their understanding of geographical indications was consistent with the annotations in the questionnaire, but 20.93% of consumers still thought that their understanding of geographical indications was quite different from the annotations. The survey results also found that 87.21% of consumers expressed their willingness to purchase agricultural products with geographical indications when buying agricultural products of different brands, and 10.76% of consumers indicated that geographical indications had a great influence on their choice among different agricultural products. Only 12.79% of consumers believed that geographical indications had no effect on their choice of different agricultural products.

3.2 The Consumption Preference of Consumers on Different Types of Agricultural Products with Geographical Indications

According to the survey results, consumers had a high willingness to consume agricultural

products and processed agricultural products marked with geographical indications, such as rice, cereals, fruits and vegetables, edible oil, tea and so on. Among them, the willingness to consume edible oil brand reached 50.58%, tea brand reached 69.77%, rice grain brand reached 71.51%, while meat, poultry, eggs, The consumption intention of geographical indications for agricultural products such as aquatic products was relatively low , in which the consumption intention of meat and poultry was 27.62%, aquatic products 38.66% and eggs the lowest was 24.13%. Obviously, consumers had different consumption preferences for different types of agricultural products with geographical indications. Generally speaking, consumers had a higher consumption intention for agricultural products with geographical indications after primary processing. It is worth noting that with the increase of income level, people's quality of life have been greatly improved, and consumers are paying more and more attention to the brand consumption of fruits and vegetables. The survey results showed that the willingness to consume fruits and vegetables by geographical indication brand is 58.14%.

3.3 Consumers' Preferences on Purchasing Channels of Agricultural Products with Geographical Indications

The survey data showed that consumers also showed an obvious preference in purchasing channels for agricultural products with geographical indications. The probability of consumers choosing traditional farmers' markets in the survey was 53.2 percent. In recent years, China's supermarket industry as consumers and improve the level of consumption in our country got fast development, improving the quality of the life to choose to buy geographical indications of agricultural products in the supermarket consumer is as high as 84.88%, occupies the absolute high proportion, the supermarket has become consumers buy geographical indications of agricultural products is the most important place of purchase. At the same time, produce stores have overtaken traditional farmers' markets to become second only to supermarkets as the place where consumers buy geographically indicated produce. In addition, the probability that consumers are willing to buy agricultural products with geographical indications is 40.7%, which also accounts for a significant proportion. However, only 13.95 percent were willing to buy GDI from street vendors.

3.4 The Preference of Consumers for the Consumption Attention of Agricultural Products with Geographical Indications

The consumers surveyed in this questionnaire focus on the agricultural products with geographical indications, including freshness, price, quality and safety certification. If the agricultural products with geographical indications are divided into fresh agricultural products and initially processed agricultural products, according to the survey results, there was no significant difference in consumers' attention to the two types of agricultural products with geographical indications when purchasing them . Both fresh agricultural products of geographical indication and primary processing agricultural products of geographical indication, when consumer is buying for visibility is very high, the determination of the freshness of all the attention of more than 80%, the second was the attention to safety certification, The figures were 75% and 73.84%, respectively, and now consumers about food safety awareness and demands are very high. Consumers for geographical indications of agricultural products brand and price after the freshness and safety certification, it is worth noting that, in contrast, consumers when buying these two kinds of agricultural products of geographical indication for brand awareness only 59.01% and 56.69%, again need to increase geographical indication of agricultural products brand awareness in the eyes of consumers, Need to improve consumer recognition of the brand image.

3.5 Whether Consumers Are Inclined to Buy Agricultural Products with Geographical Indications

According to the survey data (Table 1), 69.19% of the surveyed consumers choose to worry about counterfeiting, indicating that the most important reason why consumers are not inclined to buy agricultural products with geographical indications is that there are too many counterfeit and shoddy landmark agricultural products on the market. The second is the price. 21.8% of consumers think that they are unwilling to buy landmark agricultural products because the price is relatively high compared with ordinary agricultural products. As for the reason that consumers tend to buy agricultural products with geographical indications, the most important reason is that the agricultural products with geographical indications are green, healthy and safe. Among the surveyed consumers, only 12.5% of consumers said that they choose agricultural products with

Table1 Frequency analysis results						
Questions	Items	Frequency	Percentage(%)	Cumulative percentage(%)		
What is the reason why	safe	117	34.01	34.01		
you prefer to buy	Green health	177	51.45	85.46		
agricultural products	The pursuit of high quality	43	12.5	97.96		
with geographical	life					
indications?	other	7	2.03	100.00		
Why do you prefer not	Price is high	75	21.8	21.8		
to buy agricultural	Worried about counterfeiting	238	69.19	90.98		
products with	other	31	9.01	100.00		
geographical						
indications?						
Total	344	100.0	100.0			

geographical indications in order to pursue high-quality life.

3.6 The Main Source for Consumers to Obtain the Brand Information of Agricultural Products with Geographical Indications

As for the channels through which consumers obtain the brand information of agricultural products with geographical indications, the survey results showed that commercial advertisements rank the first, with 177 respondents choosing this option, accounting for 51.45% of the respondents, followed by relatives and friends, with 76 respondents choosing this option, accounting for 22.09% of the respondents. There are 38 respondents who choose to obtain information through sales promotion personnel, accounting for 11.05% of the respondents, ranking the third. Only 31 people choose newspapers and magazines, which is relatively small, accounting for 9.01% of the surveyed consumers.

3.7 Effects of Advertising and Packaging on Consumer Preferences for Geographically Indicated Agricultural Products

According to the survey data (Table 2), advertising and packaging had an impact on consumers' preferences for purchasing geographically indicated agricultural products. Among the surveyed consumers, 332 people (96.51%) said that advertising would have an impact on their purchase of agricultural products with geographical indications, while only 12 people (3.49%) thought that it would have no impact. Among the surveyed consumers, 303 people (90.99%) believed that packaging would have an impact on their purchase of agricultural products with geographical indications, while only 31 people (9.01%) believed that it had no impact. According to the proportion data of the survey, advertising has a greater influence on consumers' purchase of

agricultural products with geographical indications than packaging, because only 3.49% of consumers participating in the survey believe that advertising has no influence on their purchase of agricultural products with geographical indications. However, 9.01% of the surveyed consumers believe that packaging has no influence on their purchase of agricultural products with geographical indications. Among respondents, 30.52% of consumers believe that advertising has a great influence on their purchase of agricultural products with geographical indications, and 27.62% of consumers believe that packaging has a great influence on their purchase of agricultural products with geographical indications, and 27.62% of consumers believe that packaging has a great influence on their purchase of agricultural products with geographical indications.

Table2 Frequency analysis results						
Questions	Items	Frequency 🛛	Percentage(%)□	Cumulative		
		1 5		percentage(%)□		
Does advertising have any	Great	105	30.52	30.52		
influence on your purchase	General	227	65.99	96.51		
of agricultural products with	Have no	12	3.49	100.00		
geographical indications?	effect on					
Does packaging affect your	Great	95	27.62	27.62		
purchase of agricultural	General	218	63.38	90.99		
products with geographical	Have no	31	9.00	100.00		
indications?	effect on					
Total		344	100.0	100.0		

3.8 Consumers' Willingness to Consume Geographically Indicated Agricultural Products

According to the survey data, 260 respondents (accounting for 75.58%) said that with the increase of their income level, they would choose more agricultural products with geographical indications. 69 respondents (20.03%) believed that with the increase of income, they would not necessarily choose more agricultural products with geographical indications; With the increase of income, only 32 people, accounting for 9.3% of the total sample, chose not to buy more agricultural products with geographical indications.

According to the survey data, 292 respondents (accounting for 84.88% of the total sample) said that it is acceptable that the price of agricultural products with geographical indications is less than 50% higher than the price of ordinary agricultural products. 50 consumers surveyed chose 50-80%, accounting for 14.53%, and 2 respondents chose more than 80%. Accounted for only 0.58%.

4. Conclusion

Improve consumers' brand awareness of agricultural products with geographical indications and realize the communication of agricultural products with geographical indications. With the rapid development of China's agricultural economy and the increasing degree of marketization of agricultural products, agricultural products in the mass consumer goods market are becoming more and more homogenized. Geographical indications have become an important entry point for China to solve the problems of "agriculture, rural areas and farmers" (i.e., rural areas, agriculture and farmers). Consumers' cognition of agricultural products with geographical indications has a direct impact on their consumption preference and purchasing behavior. However, according to the survey, 20.93% of consumers still have no clear understanding of the concept of agricultural products with geographical indications have an

impact on their choice of agricultural products with different brands. Therefore, operators of agricultural products with geographical indications should intensify their publicity efforts to let more consumers know about geographical indications, so as to realize the branding dissemination and management of agricultural products with geographical indications.

Enhance consumers' sense of identity to agricultural products with geographical indications, which is helpful for the spread of agricultural products with geographical indications. According to the survey results, the main reason that consumers are willing to choose agricultural products with geographical indications is that they are green, healthy and safe, which indicates that consumers have higher expectations for the quality of agricultural products with geographical indications. The certification and mark of agricultural products with geographical indications will further enhance consumers' recognition of agricultural products with landmarks. Therefore, the operators of agricultural products should ensure the quality of products on the basis of active application for relevant certification, improve consumer recognition at the same time, improve the market competitiveness of products.

Targeted implementation of marketing strategy is conducive to the dissemination of geographical indication agricultural products brands. The survey results of this paper show that, with the increase of consumers' income level, 75.58% of the surveyed consumers will increase their purchase intention to the agricultural products with geographical indications. Therefore, this further proves that with the development of China's social economy, it is a correct choice to take the brand road in the management of agricultural products. According to the survey results show that the consumer to the consumer preferences of different types of agricultural products of geographical indication exist certain differences, agricultural products of geographical indications for popular types of cooking oil, tea, rice grains and fruits and vegetables, so such agricultural production operator shall perfect product information according to their own conditions, actively create product features, Thus applying for registration of geographical certification trademark, further take the road of branding. Generally speaking, the processed agricultural products with geographical indications are more popular with consumers than the primary fresh agricultural products. Therefore, the producers and operators of agricultural products with geographical indications that have applied for registration should further extend the industrial chain, so that the processed agricultural products with geographical indications can better take the development path of branding.

The relevant regulatory departments of the government should create a good external environment for the branding of agricultural products with geographical indications. According to the survey results, the main reason why consumers are not inclined to choose agricultural products with geographical indications is the fear of shoddy and fake products. Due to the existence of counterfeit and shoddy products in the market, many consumers have lost trust in branded agricultural products and are reluctant to buy them. Therefore, the relevant government departments on the one hand should through a variety of channels, product quality certification of high-quality agricultural products, and strengthen the publicity of certification and anti-counterfeiting measures, so that more consumers trust the quality of brand agricultural products market, introduce effective measures to protect the geographical indication agricultural products brands, and strengthen the publicity of fake and should-quality agricultural products. Establish the image of agricultural products with geographical indications, and enhance consumers' recognition of agricultural products with geographical indications.

References

^[1] Liu Jinhua, Liu Jie, Ji Xiaoguang. (2016). Research on brand construction of geographical indication agricultural products based on origin effect [J]. Agricultural Economy and Management, (2): 74-79.

- [2] Pang Fanglan. (2010). Research on the brand strategy of agricultural products with geographical indication [J]. World Agriculture, (3): 33-36.
- [3] Sun Yanan, Hu Hao. (2015).Research on the development of agricultural products with geographical indications [J]. Economic Review, (7) : 81-84.
- [4] Alam, K., (2015). Farmers' adaptation to water scarcity in drought-prone environments: a case study of Rajshahi District, Bangladesh. Agric. Water Manag. 148,196e206.
- [5] Ampuero, O., Vila, N., (2006). Consumer perceptions of product packaging. J. Consum.Market. 23 (2), 100e112.
- [6] Aschemann-Witzel, J., Zielke, S., (2017). Can't Buy Me Green? A review of consumer perceptions of and behavior toward the price of organic food. J. Consum. Aff. 51(1), 211e251.
- [7] Awuni, J.A., Du, J., (2016). Sustainable Consumption in Chinese Cities: green purchasing intentions of young adults based on the theory of consumption values. Sustain. Dev. 24 (2), 124e135.
- [8] Botelho, A., Dinis, I., Lourenco-Gomes, L., Moreira, J., Costa Pinto, L., Simoes, O., (2017). The effect of sequential information on consumers' willingness to pay for credence food attributes. Appetite 118, 17e25.
- [9] Buil, I., Martínez, E., Chernatony, L.D., (2013). The influence of brand equity on consumer responses. J. Consum. Market. 30 (1), 62e74.
- [10] Constantinides, E., Lorenzo-Romero, C., Gomez, M.A., (2010). Effects of web experience on consumer choice: a multicultural approach. Internet Res. 20 (2),188e209.
- [11] De-Magistris, T., Gracia, A., (2016). Consumers' willingness-to-pay for sustainable food products: the case of organically and locally grown almonds in Spain.J. Clean. Prod. 118, 97e104.
- [12] Ma.C., Wang.T.W.,Li.J.K,(2012), Review on the pollution-free, green and organic vegetables [J]. Agricultural Science & Technology, 13(5): 1145-1147.