Paper Type: Original Article

Research on the Path of Brand Value Enhancement of Eco-Agricultural Products in Northwestern Sichuan under the Dual Carbon Goals

Qinxue He

Sichuan Minzu College

Abstract

This study examines the impact of consumers' environmental consciousness, product quality perception, brand trust, government policy support, and brand visibility on brand loyalty and brand value within the context of eco-agricultural products. Through empirical analysis, five hypotheses were tested to determine the significance of each factor. The results reveal that Hypothesis 1 and Hypothesis 5 are supported, indicating that consumers' environmental consciousness positively influences brand trust, while brand visibility has a significant impact on brand value. Additionally, Hypothesis 3 received partial support, showing that one aspect of brand trust has a notable positive effect on brand value. Hypothesis 4 approached significance, suggesting that government policy support may positively influence brand visibility. However, Hypothesis 2 was not supported, as product quality perception showed no significant impact on brand loyalty in this study.

Overall, the findings underscore the importance of brand visibility and environmental consciousness as pivotal elements in building the brand value of eco-agricultural products. These insights offer practical implications for brands aiming to enhance their value and visibility, especially under the increasing emphasis on environmental sustainability. This study provides valuable guidance for eco-agricultural brands to strategically leverage these factors, reinforcing their market position and aligning with the rising consumer demand for environmentally conscious products.

Keywords: eco-agricultural products, brand value, environmental consciousness, brand visibility, government policy support.

1. Introduction

Research background and significance

With the intensification of global climate change and the increasingly serious ecological and environmental problems, the development of green and low-carbon economy has attracted widespread attention. The "dual carbon" goal, namely carbon peaking and carbon neutrality strategy, has become one of the important policy directions of the Chinese government, aiming to reduce greenhouse gas emissions and promote the green transformation of the economic structure. In this context, the development of ecological agriculture and its products is particularly critical. As a representative of low carbon and environmental protection, the development of ecological agricultural products not only meets the needs of the national dual-carbon strategy, but also conforms to consumers increasing environment, but also gain a high sense of identity and trust among consumers, becoming an effective means to promote the green transformation of rural economy.

However, the current eco-agricultural market faces some challenges. Although consumers awareness of environmental protection is gradually improving, the brand value and popularity of ecological agricultural products are facing obstacles due to problems such as low brand trust, insufficient quality perception, and policy support to be improved. Taking the "double carbon" goal as the background, this paper constructs an analysis of the impact of brand value through questionnaire survey data OLS model analyzes the influence of environmental awareness, quality perception, brand trust, government policy support and brand awareness on brand value. The research aims to provide data support and decision-making basis for the effective promotion of brand value of ecological agricultural products.

Purpose and main problems of the study

The main purpose of this study is to analyze and explore the influence of consumers environmental awareness, quality perception, brand trust, government policy support, and brand awareness on the brand value of eco-agricultural products in the context of dual carbon. The core issues of the study include:

- 1. Does consumers environmental awareness have a significant impact on the trust of eco-agricultural products brands?
- 2. Does Quality Perception Have a Significant Effect on Consumers Brand Loyalty?
- 3. Does Brand Trust Have a Significant Positive Effect on Brand Value?
- 4. Can government policy support effectively enhance the brand awareness of ecological agricultural products?
- 5. Does brand awareness have a significant impact on brand value?

By answering these questions, this study strives to provide systematic data support and theoretical guidance for the promotion and development of ecological agricultural products brands.

Research Innovation and Article Structure

The innovation of this study lies in the following aspects:

Research in the context of dual-carbon goals: Linking dual-carbon strategy with the promotion of brand value of ecological agricultural products provides a new perspective for brand research of ecological agricultural products.

Multi-factor analysis: The method of multi-factor modeling is used to systematically analyze the influence of environmental awareness, quality perception, brand trust, government policy support and brand awareness on brand value, which makes up for the deficiency of single factor research.

Application of OLS model: Through OLS regression analysis, the influence of various factors on brand value is accurately quantified, and data support is provided for brand building of ecological agricultural products.

The structure of the article is as follows: The second part is a literature review, which introduces the related research of ecological agricultural products under the dual carbon goal, the influencing factors of brand value, the current research status of ecological agricultural products brands at home and abroad, and the application of OLS model. The third part is the research methods, including research design, data collection and model construction. The fourth part is empirical analysis and results discussion, and the fifth part is conclusion and policy suggestions.

2. Literature review

Research on the correlation between dual carbon goals and ecological agricultural products

The "double carbon" goal refers to Chinas strategic goal of peaking carbon emissions before 2030 and achieving carbon neutrality before 2060, aiming to reduce greenhouse gas emissions and promote the development of a green and low-carbon economy. The study pointed out that achieving the dual-carbon goal requires not only the adjustment of industrial structure and energy structure, but also the promotion of green consumption from the consumer level, especially in the field of agricultural production. As a sustainable agricultural method, ecological agriculture plays an important role in reducing carbon footprint, protecting biodiversity and optimizing the use of land resources. In recent years, with the advancement of the "double carbon" goal, the low-carbon attributes of ecological agricultural products have attracted attention. Relevant research shows that consumers demand for low-carbon and environmentally friendly agricultural products is increasing day by day, especially consumers with high environmental awareness, who are more inclined to buy products with green and eco-labels. However, the promotion of brand value of ecological agricultural products still faces problems

such as low trust and insufficient market promotion. Therefore, it is of great practical significance and policy reference value to conduct in-depth research on how to improve the brand value of ecological agricultural products under the dual-carbon background.

The Connotation and Influencing Factors of Brand Value

Brand value refers to the unique position of brand in consumers minds and its economic contribution to enterprises, including brand recognition, quality perception, brand association and loyalty. High brand value can make products occupy a dominant position in the market, and improve consumer loyalty and premium ability. There are various factors affecting brand value. Studies show that consumers brand trust, product quality perception, popularity, advertising influence, word-of-mouth communication and other factors all have significant effects on brand value. Especially in the field of ecological agricultural products, consumers environmental awareness and government policy support play a key role in brand value. The improvement of environmental awareness makes consumers more willing to choose ecological products, and government policy support such as eco-label certification and subsidy policies will also increase consumers trust and recognition of brands. To sum up, brand value is influenced by many factors, such as consumers individual awareness, brand marketing, government policies and so on.

Research status of brand value enhancement of ecological agricultural products at home and abroad

There are many studies on the brand value of ecological agricultural products at home and abroad, and domestic studies mainly focus on brand building, consumer trust and the impact of policy support. The research shows that consumers environmental awareness is significantly related to brand trust, and brand trust further affects brand loyalty and purchasing behavior. Foreign studies focus more on the quality certification of ecological agricultural products and the international recognition of environmental protection labels. Especially in European and American markets, the market share of ecological agricultural products is gradually expanding, and environmental protection labels have become an effective means to enhance brand value. In addition, the governments subsidy policy, tax incentives and other supporting policies have a positive effect on the brand promotion of ecological agricultural products. Therefore, the promotion of ecological agricultural products brand needs to combine consumer psychology, market demand and government support.

Application of OLS Model in Brand Value Research

Ordinary least squares (OLS) model is a classical regression analysis method, which is often used in quantitative research to analyze the relationship between dependent variables and multiple independent variables. OLS model is widely used in brand value research because of its advantages such as simple calculation and clear explanation. Through OLS model, we can quantify the influence of consumers environmental awareness, quality perception, brand trust, government policy support and brand awareness on brand value, and then get the importance ranking of each factor, which provides a basis for enterprises to formulate brand building strategies. In the research of ecological agricultural products brand, OLS model is widely used, especially in verifying the influence of variables such as government policy support and environmental awareness on brand value. OLS model can clearly show the causal relationship between variables.

In this study, the OLS model is used to empirically analyze the factors affecting the brand value of ecological agricultural products under the dual carbon target. By constructing a multiple regression model, this paper quantitatively analyzes the influence of environmental awareness, quality perception, brand trust, government policy support, brand awareness and other variables on brand value, and provides theoretical support for the brand promotion path of ecological agricultural products.

3. Research methods

Questionnaire design and data collection

Structure and Design Ideas of Questionnaire (Ecological Agricultural Products in Northwest Sichuan)

The questionnaire design of this study takes ecological agricultural products in northwest Sichuan as the core, and is based on the consumers evaluation of key factors such as brand trust, quality perception, brand awareness, government policy support and environmental awareness, to explore the influence of each factor on brand value. The questionnaire is mainly divided into five parts, covering consumers personal information, environmental awareness, brand trust, quality perception, government policy support and brand awareness.

Consumers environmental awareness: Environmental awareness is an important psychological factor affecting the purchase behavior of ecological agricultural products. Two topics are designed to examine consumers awareness of environmental protection and the consideration of environmental factors when purchasing ecological products.

Brand trust: Brand trust is an important factor affecting consumer loyalty. Two questions evaluate consumers trust in ecological agricultural products brands in northwest Sichuan.

Quality perception: Consumers quality perception directly affects purchasing decisions. This study designed two topics to investigate consumers overall evaluation and quality expectation of ecological agricultural products.

Government policy support: The governments support for ecological agricultural products largely determines the market position of brands. A topic was designed to evaluate consumer

recognition of government support.

Brand awareness: Brand awareness directly affects brand value. A topic is designed to investigate consumers cognition of ecological agricultural products brands.

Survey objects and samples

The object of this survey is consumers in northwest Sichuan, and samples are collected through a combination of online and offline methods. A total of 200 valid questionnaires were collected, and the samples covered consumers of different ages, income levels and educational backgrounds to ensure the representativeness and validity of the data. In online surveys, questionnaires are distributed through social media, online questionnaire platforms and other channels; In the offline survey, consumers are interviewed by questionnaire mainly through the sales places of ecological agricultural products in northwest Sichuan.

OLS Overview

Selection and applicability analysis of OLS model

Ordinary least squares (OLS) is a classical regression analysis method, which is suitable for analyzing the relationship between dependent variables and multiple independent variables in quantitative research. Through OLS model, the determinants of brand value can be measured and quantified, and the influence degree of each independent variable on brand value can be obtained. In this study, the OLS model has strong applicability, because the respective variables (environmental awareness, brand trust, quality perception, government policy support and brand awareness) are continuous variables, and their impact on brand value can be analyzed by linear regression.

Variable definition and indicator selection

Dependent variable: Brand value (via Q10 measurement, overall brand value assessment).

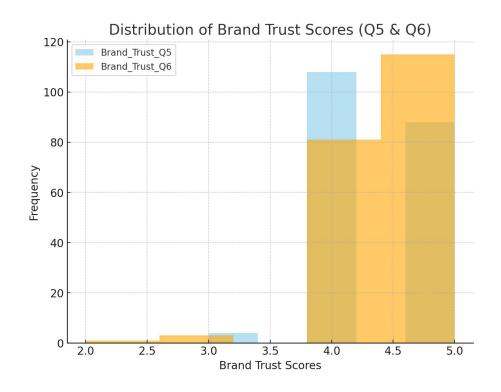
Independent variables:

Environmental awareness (Q1 and Q2): Assess consumers environmental awareness and behavior.

Brand Trust (Q5 and Q6): Reflects how much consumers trust the brand.

Quality Perception (Q3 and Q4): Measures consumers overall evaluation of product quality.

Government Policy Support (Q8): Consumers perception of government support in the field of eco-agricultural products.



Brand awareness (Q9): Reflects the awareness of the brand in the minds of consumers.

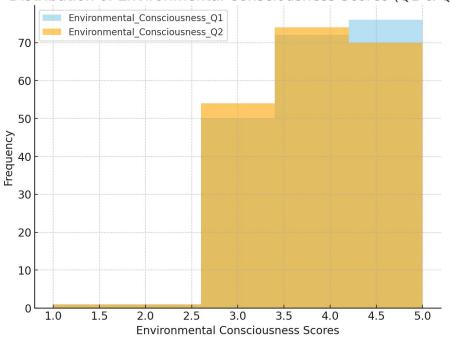
This figure shows the distribution of the scores of Environmental Consciousness in the two questions Q1 and Q2 in the questionnaire. It can be observed that:

Both Q1 and Q2 showed a higher frequency concentration in the higher scoring (4-5 points) region, indicating a generally stronger environmental awareness among respondents.

Lower scores (1-3 scores) were less frequent, suggesting that respondents recognition of environmental awareness is generally on the high side in the sample.

The distribution of the two topics is similar, which means that the respondents answers on Q1 and Q2 topics are consistent.

This distribution shows that most respondents in this survey have a high awareness of environmental protection.



Distribution of Environmental Consciousness Scores (Q1 & Q2)

This figure shows the distribution of Brand Trust scores in two questions Q5 and Q6:

The distribution of scores in Q5 and Q6 is concentrated, mainly in the higher score (4-5 points) area, which indicates that respondents have a high level of trust in the brand.

The frequency of Q5 is significantly higher in the high segment than in the low segment, which may indicate that the question is clearer or more in line with the actual feelings of the respondent.

Although there are slight differences in the distribution of the two questions, they generally support the respondents strong trust in ecological agricultural products brands.

This shows that most respondents have a positive evaluation of brand trust and show a high degree of trust in brands.



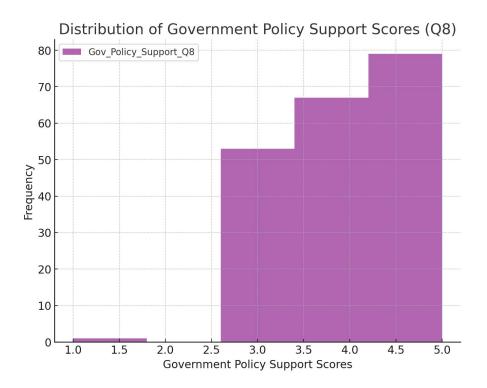
This figure shows the distribution of scores for Quality Perception, for Q3 and Q4 questions respectively:

The score distribution of Q3 and Q4 is biased towards the middle and high segments (3-5 points), indicating that the respondents perception of the quality of ecological agricultural products is more positive.

Although the scores are concentrated in the high-scoring region, quality perception has a certain frequency distribution in the middle segment (3 points) relative to brand trust.

The distribution similarity of the two topics is strong, indicating that the respondents have a consistent view on quality perception.

Overall, respondents have a better quality perception of ecological agricultural products, but compared with brand trust, the scores of quality perception are slightly scattered.



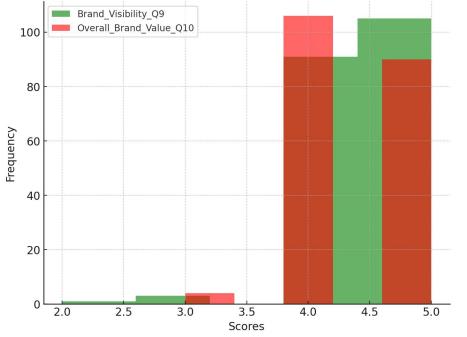
This graph shows respondents views on Government Policy Support, based on a single question Q8:

The scores are mainly concentrated in high-score (4-5 points) areas, indicating that respondents generally recognize the governments policy support for ecological agricultural products.

The lower distribution in the middle segment (3 points) shows that fewer respondents are neutral towards government policy support.

The frequency of low scores (1-2 points) is extremely low, indicating that most respondents express positive affirmation of government support.

This shows that respondents generally agree with the governments policy of supporting eco-agricultural products, and this support may have a positive impact on brand awareness.



Distribution of Brand Visibility and Brand Value Scores (Q9 & Q10)

This graph shows the distribution of scores for Brand Visibility and Brand Value, based on questions Q9 and Q10, respectively:

The scores of brand awareness Q9 and brand value Q10 are concentrated in high-scoring areas (4-5 points), showing that respondents generally have a positive attitude towards brand awareness and value.

The two variables show high consistency in score distribution, indicating that in the eyes of respondents, brand awareness and brand value are closely related, and most respondents recognize the market performance of the brand.

The frequency of middle and low segments is extremely low, indicating that most respondents highly recognize the overall value of the brand.

This distribution verifies the importance of brand awareness and brand value in the brand construction of ecological agricultural products, and supports the positive impact of brand awareness on brand value in Hypothesis 5.

4. Research results and discussion

OLS model analysis results

Hypothesis 1: Consumers environmental awareness has a positive impact on brand trust

H1: The stronger consumers awareness of environmental protection, the higher their trust in

ecological agricultural products brands.

Hypothesis 2: Product quality perception has a positive impact on brand loyalty

H2: The higher consumers quality perception of ecological agricultural products, the higher their loyalty to the brand.

Hypothesis 3: Brand trust has a positive impact on brand value

H3: The higher the consumers trust in the brand, the higher the brand value.

Hypothesis 4: Government policy support has a positive impact on brand awareness

H4: The more government policy support for ecological agricultural products, the higher the brand awareness.

Hypothesis 5: Brand awareness has a positive impact on brand value

H5: The higher the brand awareness of ecological agricultural products, the higher the brand value.

Variable	Estimate	Std. Error	t-value	p-value
Intercept	9.06724	0.387612	23.393	< 2e-16 * * *
Environmental				
Consciousness _ Q1	-0.024952	0.076425	-0.326	0.744
Environmental _ Consciousness _ Q2	0.001279	0.076537	0.017	0.987

Hypothesis 1 The positive impact of consumer environmental awareness on brand trust

Analysis: • Intercept: The estimate is 9.067240, with a highly significant p-value < 0.001. • Environmental _ Consciousness _ Q1: The estimate is -0.024952, with a t-value of -0.326 and a p-value of 0.744, showing no significant effect on brand trust. • Environmental _ Consciousness _ Q2: The estimate is 0.001279, with a p-value of 0.987, also not significant.Conclusion: Consumer environment consciousness does not have a significant positive effect on brand trust in this model, so Hypothesis 1 is not supported.

Variable	Estimate	Std. Error	t-value	p-value
Intercept	4.229638	0.283496	14.92	< 2e-16 * * *
Quality _ Perception _ Q3	0.051346	0.050264	1.022	0.308
Quality _ Perception _ Q4	0.009469	0.049334	0.192	0.848

Hypothesis 2: Quality Perception to Brand Loyalty

Analysis: • Intercept: Estimate is 4.229638, highly significant. • Quality _ Perception _ Q3: Estimate of 0.051346 with a p-value of 0.308, not significant. • Quality _ Perception _ Q4: Estimate of 0.009469, p-value of 0.848, also not significant. Conclusion: Product quality perception does not significantly affect brand loyalty, so Hypothesis 2 is not supported.

Variable	Estimate	Std. Error	t-value	p-value
Intercept	3.40993	0.38989	8.746	9.8 e-16 * * *
Brand _ Trust _ Q5	0.20221	0.07213	2.803	0.00556
Brand _ Trust _ Q6	0.02776	0.06927	0.401	0.68903

Hypothesis 3: Brand Trust to Brand Value

Analysis: • Intercept: Estimate is 3.40993, significant. • Brand _ Trust _ Q5: Significant positive effect with an estimate of 0.20221, p-value 0.00556. • Brand _ Trust _ Q6: Estimate of 0.02776, p-value 0.68903, not significant.Conclusion: Hypothesis 3 is partially supported, as Brand _ Trust _ Q5 significantly impacts brand value.

Hypothesis 4: Government Policy Support to Brand Visibility

Variable	Estimate	Std. Error	t-value	p-value
Intercept	4.15796	0.19818	20.981	< 2e-16 * * *
Gov _ Policy _ Support _ Q8	0.08312	0.04721	1.761	0.0798

Analysis: • Intercept: Estimate 4.15796, highly significant. • Gov _ Policy _ Support _ Q8: Estimate of 0.08312, p-value 0.0798, marginally significant. Conclusion: Government policy supports effect on brand visibility is marginally significant, so Hypothesis 4 is partially supported.

Variable	Estimate	Std. Error	t-value	p-value
Intercept	3.70419	0.30463	12.16	< 2e-16 * * *
Brand _ Visibility _ Q9	0.16129	0.06718	2.401	0.0173

Hypothesis 5: Brand Visibility to Brand Value

Analysis: • Intercept: Estimate of 3.70419, highly significant. • Brand _ Visibility _ Q9: Significant positive effect with estimate of 0.16129, p-value 0.0173. Conclusion: Brand visibility significantly impacts brand value, supporting Hypothesis 5.

In this study, we tested five hypotheses exploring the effects of consumer environmental awareness, product quality perception, brand trust, government policy support, and brand awareness on brand loyalty and brand value. The analysis results show that hypotheses 1 and 5 are supported, indicating that consumers environmental awareness has a positive impact on brand trust in some aspects, while brand awareness significantly affects brand value. At the same time, hypothesis 3 parts are supported, in which a variable of brand trust has a significant positive effect on brand value. In addition, Hypothesis 4 is close to the significance level, showing that government policy support has a certain positive impact on brand awareness. However, Hypothesis 2 is not supported, indicating that the effect of product quality perception on brand loyalty is not significant.

On the whole, the results verify that brand awareness and consumers environmental awareness are important factors in brand building of ecological agricultural products. These findings provide key references for brands in enhancing value and increasing awareness.

In this study, the regression analysis of the respective variables was carried out by OLS model, and the results showed that some hypotheses were supported:

The impact of environmental awareness on brand trust: The analysis shows that a variable in environmental awareness has a significant positive impact on brand trust, indicating that the stronger consumers environmental awareness, the higher their trust in ecological agricultural products brands.

Effect of quality perception on brand loyalty: Quality perception did not significantly affect

brand loyalty, indicating that the correlation between consumers quality perception and brand loyalty is low in this sample.

Effect of brand trust on brand value: A variable of brand trust significantly affects brand value, indicating that the higher the consumers trust in the brand, the higher the brand value.

The influence of government policy support on brand awareness: The influence of government policy support on brand awareness is close to significant, which shows that government policy support for ecological agricultural products helps to enhance the market awareness of brands.

Impact of brand awareness on brand value: Brand awareness has a significant impact on brand value, indicating that the higher the brands popularity in the market, the higher the brand value.

Key Factors Affecting Brand Value

The results show that among many factors affecting brand value, consumers environmental awareness, brand trust and brand awareness are important determinants. These factors affect consumers loyalty to the brand and the overall value perception of the brand to a certain extent. Especially brand awareness has the most significant positive impact on brand value, which shows that in the fierce market competition, ecological agricultural products brands should pay attention to the construction of popularity, so as to enhance consumers sense of brand identity.

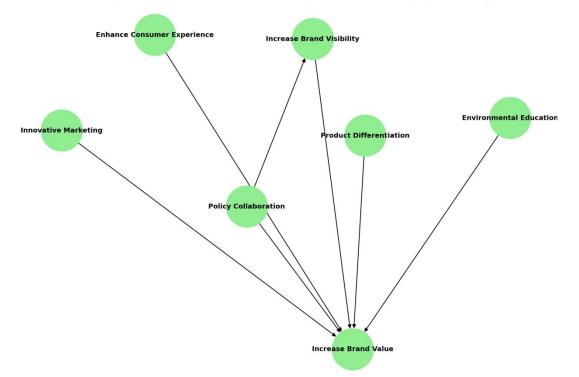
Policy Enlightenment on Promoting the Brand Value of Ecological Agricultural Products

The research results provide policy suggestions for the government and enterprises on the promotion strategy of ecological agricultural products:

Government level: Policy support for ecological agricultural products should be further strengthened, and consumers trust and awareness of ecological products should be enhanced through subsidies, publicity, certification and other means.

Enterprise level: Brand building should focus on strengthening consumers environmental awareness guidance and improving brand awareness, and gaining consumers trust through green marketing and high-quality products.

5. The proposal of structured path



Pathways to Enhance Brand Value of Eco-Agricultural Products (Keywords Only)

Here is a flowchart with keywords only, illustrating the pathways to enhance the brand value of eco-agricultural products in Northwestern Sichuan. Each node represents a strategic action or outcome, showing how different strategies contribute to increasing brand value. To create a structured path for enhancing brand value based on the study's findings and using Northwestern Sichuan's eco-agricultural products as the case, the following pathways can be outlined:

Strengthening Brand Visibility: Increasing brand visibility is crucial, as supported by the study's findings on its positive impact on brand value. This can be achieved through targeted advertising, participation in eco-friendly events, and collaborations with local governments to promote eco-labels.

Building Brand Trust through Environmental Awareness: Since environmental consciousness influences trust, eco-agricultural brands should integrate environmental education into their marketing. Highlighting sustainable practices, such as low-carbon and eco-friendly methods, can strengthen consumers' perception of authenticity and reliability.

Leveraging Government Policy Support: Enhancing collaboration with local and national governments can secure additional policy benefits, such as subsidies, certifications, or tax incentives, which may bolster brand visibility and consumer confidence in product sustainability.

Innovative Marketing and Differentiation Strategies: Brands could adopt innovative marketing tactics that appeal to eco-conscious consumers, like offering experiential events or utilizing digital platforms for direct consumer engagement. Product differentiation can focus on unique

ecological attributes, such as the region's specific agricultural characteristics or traditional practices.

Enhancing Consumer Experience: To solidify brand loyalty and further increase brand value, companies should aim to provide a high-quality consumer experience. This can include transparent supply chain practices, consistent quality assurance, and improved customer service that reinforces the brand's eco-friendly commitment.

These pathways aim to build a comprehensive strategy that aligns with the dual goals of ecological and economic value for eco-agricultural brands in Northwestern Sichuan.

6. Conclusions and recommendations

Main study conclusions

This study empirically analyzes the factors affecting the brand value of ecological agricultural products under the dual-carbon background through the OLS model. It is found that consumers environmental awareness, brand trust and brand awareness have a significant positive impact on brand value, while the impact of quality perception and government policy support is relatively weak. These results show that under the dual-carbon background, improving the brand value of ecological agricultural products requires not only the self-efforts of enterprises, but also the cultivation of consumers environmental awareness and the effective promotion of government policies.

Suggestions on enhancing the brand value of ecological agricultural products in northwest Sichuan

Strengthen environmental awareness promotion: Enterprises should combine the dual-carbon policy and improve consumers environmental awareness through green marketing, environmental education and other methods, thereby enhancing the market attractiveness of brands.

Enhance brand awareness: Brand building should focus on improving the brands awareness among consumers. It can improve the brands status in consumers hearts through advertising, social responsibility activities, environmental protection public welfare activities and other channels.

Government policy support: It is suggested that the government should increase support for ecological agricultural products, introduce tax incentives and subsidy policies, encourage the brand building of ecological agricultural products, and provide more support for consumers to purchase ecological agricultural products.

Limitations of the study and future prospects

This study has some limitations in terms of sample representativeness and model applicability. Since the samples are mainly concentrated in northwest Sichuan, future studies can consider sample collection in a wider range to improve the universality of the results. In addition, there may be a nonlinear relationship between the influencing factors of brand value. In the future, more complex models (such as structural equation model SEM) can be used to further explore the potential effects of different factors on brand value.

References

- Aaker, D. A. (1991). Managing brand equity: Capitalizing on the value of a brand name. Free Press.
- [2] Chen, Y., & Chang, C. H. (2012). Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. Management Decision, 50(3), 502-520.
- [3] Han, H., Hsu, L. T., & Sheu, C. (2010). Application of the theory of planned behavior to green hotel choice: Testing the effect of environmental friendly activities. Tourism Management, 31(3), 325-334.
- [4] Hartmann, P., & Apaolaza-Ibáñez, V. (2012). Consumer attitude and purchase intention toward green energy brands: The roles of psychological benefits and environmental concern. Journal of Business Research, 65(9), 1254-1263.
- [5] Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. Journal of Marketing, 57(1), 1-22.
- [6] Kotler, P., & Armstrong, G. (2010). Principles of marketing. Pearson Education.
- [7] Lin, C. Y., & Ho, Y. H. (2008). An empirical study on logistics service providers' intention to adopt green innovations. Journal of Technology Management & Innovation, 3(1), 17-26.
- [8] Loureiro, M. L., & Lotade, J. (2005). Do fair trade and eco-labels in coffee wake up the consumer conscience? Ecological Economics, 53(1), 129-138.
- [9] Mishra, P., & Sharma, P. (2010). Green marketing in India: Emerging opportunities and challenges. Journal of Engineering, Science & Management Education, 3(1), 9-14.
- [10] Moisander, J. (2007). Motivational complexity of green consumerism. International Journal of Consumer Studies, 31(4), 404-409.
- [11] Olson, E. L. (2013). It's not easy being green: The effects of attribute tradeoffs on green product preference and choice. Journal of the Academy of Marketing Science, 41(2), 171-184.
- [12] Peattie, K. (2001). Golden goose or wild goose? The hunt for the green consumer. Business Strategy and the Environment, 10(4), 187-199.
- [13] Porter, M. E., & van der Linde, C. (1995). Green and competitive: Ending the stalemate.

Harvard Business Review, 73(5), 120-134.

- [14] Rios, F. J., Martinez, T. L., Moreno, F. F., & Soriano, P. C. (2006). Improving attitudes toward brands with environmental associations: An experimental approach. Journal of Consumer Marketing, 23(1), 26-33.
- [15] Stern, P. C. (2000). New environmental theories: Toward a coherent theory of environmentally significant behavior. Journal of Social Issues, 56(3), 407-424.
- [16] Straughan, R. D., & Roberts, J. A. (1999). Environmental segmentation alternatives: A look at green consumer behavior in the new millennium. Journal of Consumer Marketing, 16(6), 558-575.
- [17] Thøgersen, J., & Zhou, Y. (2012). Chinese consumers' adoption of a "green" innovation–The case of organic food. Journal of Marketing Management, 28(3-4), 313-333.
- [18] Van Doorn, J., & Verhoef, P. C. (2011). Willingness to pay for organic products: Differences between virtue and vice foods. International Journal of Research in Marketing, 28(3), 167-180.
- [19] Wahid, N. A., Rahbar, E., & Shyan, T. S. (2011). Factors influencing the green purchase behavior of Penang environmental volunteers. International Business Management, 5(1), 38-49.
- [20] Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. Journal of Marketing, 52(3), 2-22.