Study on Export Differential Pricing Strategy of Green Organic Food in Heilongjiang Province

Zhao Li\textsuperscript{a}, Song Guoyu, and Yin Long\textsuperscript{b}

School of Management, Harbin University of Commerce, Harbin, China

\textsuperscript{a}Zhaoli0515@163.com, \textsuperscript{b}yin_long@126.com

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Abstract: Price strategy is an important part of exporting green organic food and entering the international market successfully. The implementation of differential pricing strategy is an inevitable choice to expand the export of green organic food and enhance the ability of industrial export to earn foreign exchange. This paper analyzes the necessity and conditions of differential pricing strategy for export of green organic food in Heilongjiang Province from the point of demand side management, and analyzes the advantages and principles of differential pricing strategy for export of green organic food, and then proposes that establish the price adjustment information system and adopt the differential pricing strategy according to the market demand of different countries and regions, and take measures that combined with product depth development to provide operational countermeasures and suggestions for government departments and green organic food exporters enterprises.

1. Literature Review

In recent years, domestic and foreign research on the export of green food industry has made great progress, mainly reflected as follows:

1.1. Foreign related research

First, the study of organic food trade. Representative views: Sigrid Stagl (2002) argues that attention should be paid to the needs of the organic food market and its potential and constraints on sustainable development\cite{1}. Yussefi (2003) points out that it need to transform organic market opportunities into business opportunities and adjust product structure according to demand. Jim Lee (2011) believes that export policy and demand-oriented can promote structural optimization and adjustment, and government can optimize the structure of export commodities through formulating policies of development of policies to encourage export products\cite{2}.

Second, research on the growth of export trade. Representative views: Thirlwall (1979) argues that demand is more inclined to supply than supply which led to export growth. Krugman (1981,1990) emphasizes the imperfect competition of markets, and economies of scale and product differentiation are the determining factors of exports. He believes that the increase in total trade is mainly due to more differentiated products\cite{3}. The expansion of trade in a country is precisely derived from tradable products increased variety.

1.2. Domestic research

Domestic research is mainly reflected in three levels:

First, focus on organic food trade and industrial development issues. It emphasizes the research on the development of organic food industry from the angle of policy adjustment and innovation macro management. Song Dejun (2012) from the dynamic point of view of the competitiveness of the green food industry evaluation. Wang Dezhang (2012) proposed that different factors such as
resource enjoyment, market demand and policies have different impacts on the industrial competitive advantage in different stages of the green food industry depending on the industrial policy.

Second, study on the development of organic food export and the development of international field. Jin Ming (2006) put forward the international development strategy of green agricultural products[4]. Zhao Jun (2009) argues that in the long run, the growth of a country's foreign trade structure must be supported by the development of its domestic industries[5].

Third, focus on the study of the impact of export trade, roughly from the perspective of demand or supply. Yu Lu and Fan Xiurong (2008) analyzed the influencing factors of China's export of livestock products and concluded that the expansion of demand in the world market is the main factor to promote export growth based on the constant market share model.

1.3. Comment

Despite these domestic and foreign views, which either focus on the organic food market or focus on the impact of policy and structural adjustment on exports and industry development or on developing the international market, they mostly focus on the overall export growth in a country, with little paying attention to the development of an industry and its demand. However, it has not paid enough attention and in-depth study on how to adapt the export of green organic food to the needs of the international market, and has failed to solve the new bottleneck of export development.

Therefore, this article breaks the traditional idea of supply side analysis, links the development of export of green organic food with the market demand and price strategy, and analyzes the necessity and feasibility of implementing the difference price strategy on the export of green organic food in Heilongjiang province. Furthermore, it points out that it is necessary to carry out international market research and analysis actively, implement differential pricing strategies according to different needs of different countries and regions, and provide feasible measures for government departments and green organic food exporters.

2. The present situation of green organic food export in Heilongjiang Province

In recent years, green organic foods of Heilongjiang Province make full use of both domestic and foreign markets, maintaining a relatively fast development trend. At present, the total output value of green organic food in Heilongjiang Province accounts for 1/6 of the country, the certified area of green food accounts for 1/4 of the national total, and the standardized production base of green food raw materials accounts for 1/2 of the country, which has become the largest production in China base. The speed, scale and quality of green food in Heilongjiang Province have always been at the forefront of the country, leading, demonstrating and driving the development of the national green food industry.

In recent years, the total amount of green food in Heilongjiang Province continues to expand, while maintaining a relatively fast growth rate of exports. In 2013, Heilongjiang Province's overseas green food sales outlets have exceeded 100, with sales exceeding 2 million tons. Russia, Japan, South Korea, Singapore, the EU, Canada and the United States have become major export markets for organic food in Heilongjiang Province. The total volume of green organic food exports in Heilongjiang Province increased year by year. From 2000 to 2013, the export of green food products in Heilongjiang Province increased from 102,000 tons to 316,000 tons (Figure1).

Fig1. The growth changes green organic food exports in Heilongjiang

The regional characteristics of green organic food in Heilongjiang Province are distinct and have
prominent comparative advantages, but the resource advantages have not yet been fully transformed into economic advantages. Therefore, the export pricing of green organic food has become one of the important decision variables that affect the development of green organic food exports. Heilongjiang green organic food to enter the international market, the basic problem that can not be avoided is how to participate in the international market competition, how to conduct international market demand research and according to different countries and regions, the market price difference strategy to further tap and promote consumption Capacity and export efficiency to promote green organic food exports in Heilongjiang Province both "incremental" and "efficiency" to promote the export competitiveness of green organic foods and further development of the industry.

3. Analysis on the difference pricing of green organic food export in Heilongjiang Province.

3.1. Analysis of growth performance of green organic food exports in Heilongjiang Province

As a large province of green organic food production, the green organic food industry in Heilongjiang Province has shown a relatively strong development trend after more than 20 years of development. In 2015, the physical production of green organic food in Heilongjiang Province reached 38 million tons, and the area under monitoring reached 72.09 million mu, accounting for 1/5 of the national total. From 2000 to 2012, the export of green organic food in Heilongjiang Province increased from 0.66 billion U.S. dollars to 330 million U.S. dollars, while the export volume showed obvious fluctuations. However, with the rapid expansion of industrial scale, the export growth performance of green organic food industry in Heilongjiang Province is not obvious. Thus, Heilongjiang Province is a large province of green organic food production and a small export province. Especially in recent years, the export of green organic food is relatively small and shows obvious fluctuations, which make a huge contrast with the production status of our country and our province, and obviously deviate from other industry growth indicators.

Further through the regression analysis of export and export of green organic food in Heilongjiang Province (green organic food exports as independent variables, exports as dependent variables) and related analysis, The regression equation \( E = 1.78 + 0.010X \), due to the smaller \( R^2 \), the fitting effect of the equation is poor, the regression equation is not significant, the regression coefficient was not significant (Table1,Table2). This shows that with the growth of green organic food exports in Heilongjiang Province, the export volume did not increase. The reason is: first, the export unit price is low, in the international trade did not get the corresponding share of foreign exchange earnings; Second, the homogenization of competition among exporting enterprises, green organic food exports into the international market in the process, competing prices, resulting in lower export earnings. Therefore, how to further expand exports, enhance export influence and enhance profitability has become a issue that green food production and export enterprises need to focus on.

<table>
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<th>Coefficient</th>
<th>Standard error</th>
<th>t</th>
<th>Sig.</th>
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<td>0.504034</td>
<td>3.5407</td>
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<td>X</td>
<td>0.010097</td>
<td>0.030477</td>
<td>0.331291</td>
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Table 2 ANOVA results

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<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
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</thead>
<tbody>
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<td>Residual</td>
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The export of green organic food in Heilongjiang Province can better reflect and enhance the
product value of green organic food and increase the export income and profitability of green organic food by formulating a reasonable pricing strategy. Due to the differences in market demand between different countries and regions for the export of green organic food, differential pricing strategies can be implemented according to the specific situations of different countries and markets so as to enhance the industrial competitiveness and export foreign exchange earning capacity of green organic food in Heilongjiang.

3.2. Differential pricing and the conditions for its implementation

Although the role of non-price factors in the marketplace has become more and more prominent, prices are still regarded as one of the most important means of competition. Under perfectly competitive market conditions, the enterprise is only the recipient of the price and has no effect on the market price. However, under imperfectly competitive market conditions, there may be multiple products that are produced and the markets they face. Enterprises can influence or determine prices and obtain the maximum profits through price strategies, and exert their influence and control over the market.

Green organic food export pricing need to consider the cost, demand, competition and government policies and other factors. Green organic food production and distribution costs are the most basic factor, green organic food pricing at the lowest cost, but need to consider the resources and environment, technology compensation and other factors. Market demand and competition are the important bases for formulating the price of green organic food. The demand is affected by the change of price and income. The demand price elasticity and the income elasticity of demand are one of the important indexes to be considered by the green organic food enterprises. The price elasticity of demand for green organic food is small, raising the price can increase the profit. The price elasticity of demand for products is great, and the price increases and the profit is reduced. Market competition is the price competition and non-price competition between similar products or alternative products. Market competition is the price competition and non-price competition between similar products or alternative products. The impact of market competition on price depends on the competitor's price level of the same product and the market competition, which is related to the degree of product differentiation. Therefore, it is necessary to understand the market structure of green organic food, the market supply and demand, the price of competitors and the competition. The possible reaction of the opponent.

Differential pricing, also known as price discrimination, refers to the same product, in the face of different customers or different markets for different prices. Differential pricing is also a means by which firms respond differently to markets with different degrees of competition. The fundamental purpose of adopting differential pricing is to capture consumer surplus. Differential pricing is a demand-oriented pricing strategy.

Differential pricing conditions or feasibility of green organic food export:

1) Enterprises have a certain price control, but lack of alternative products. Heilongjiang Province actively explores the international market based on its own advantages. The major export products of green organic food include primary products such as grain and oil, dairy products, soy products, potato products, vegetables, corn and other small amounts of processed products. The countries of export include Korea, Japan and Russian, New Zealand, Malaysia, Thailand and so on more than a dozen countries and regions. The geographical advantages of green organic food in Heilongjiang Province are distinct and have prominent comparative advantages. This irreplaceability makes the control over the export price of green organic food.

2) Products have two or more divided markets. Businesses can divided product market into several different markets based on the consumer price sensitivity. Russia, Japan, South Korea, Singapore, the EU, Canada and the United States have become major export markets for green organic food in Heilongjiang Province. Among them, Russia has become the largest export market of green organic food in Heilongjiang Province due to its geographical advantages. In addition to geopolitics in Japan, South Korea and Heilongjiang Province, green organic food have been exported to these countries have also contribute to similar cultural traditions and eating habits. Due to
differences in income level, regional culture and consumption habits among consumers of green organic food in different countries and regions, green organic foods are evaluated differently, and those with higher ratings are willing to pay higher prices. Green food exporters differentiate their prices through differentiated consumer groups, which can transform some of the consumer surplus into green organic food exporters' interests.

3) Different markets have different price elasticity of demand. Different consumer preferences and manufacturers must be to some extent different preferences of consumers. Because of the economic level in different countries, there is a big difference between consumer perceptions and consumer preferences of organic foods in different countries. There are also great differences in the prices of organic foods in different markets. Since green organic foods are exported to different countries and regions, due to the geographical differences between countries and the restriction of information flow, market segmentation can effectively differentiate pricing strategies.

3.3. The advantages and principles of differential Pricing

The advantages of implementing green organic food exports differential pricing in Heilongjiang Province are mainly reflected on:

1) Differential pricing can not only meet the needs of consumers in different countries and regions, but also transform part of the consumer surplus into profits for exporting enterprises so as to increase the profitability of green organic food exporters.

2) To implement differential pricing can eliminate "unnecessary losses" to achieve Pareto optimal. Through differential pricing, not only the profit level of exporting enterprises has been raised, but also the welfare level of the society as a whole has also risen more than that of a single price.

3) Differential pricing is the profit-driven enterprise innovation. Differentiated pricing is based on the premise of dividing market demand, which can encourage enterprises to actively conduct market research so as to meet diversified market demands and adopt innovative mechanisms and innovative strategies. Therefore, green organic food export enterprises should be able to maximize the profits of enterprises to develop different prices while adopting differential pricing.

4. Strategies and measures for implementing differential pricing of green organic food export in Heilongjiang Province

4.1. Active price research

Price research is mainly through brand influence, competitor prices and consumer psychology research to achieve, and in use of the target market interaction and consumer demand characteristics to determine the export price of green organic food. Brand impact study by investigating whether brands used by green organic food producers or exporters have some influence, green organic food prices can be set slightly higher for influential brands. Studying competitor pricing and consumer psychology pricing, determining the highest point of their pricing and the highest acceptable psychological price, helps companies to determine the best differential pricing for green organic food exports. Specifically:

1) In order to enter and occupy the international market effectively, green organic food exporters need to segment the international market. According to the analysis of the needs of the international market, in order to ensure a certain market share for the production and export of green and organic foods similar to those destined for export to reduce the price or discount strategy; for our province-specific green organic foods, taking into account the characteristics of the target market, based on the higher export prices can be taken.

2) Green organic food exporters should conduct international market research to identify and meet the needs of the international market as the main direction for exporting enterprises. For those markets with small price elasticity of demand, to obtain high prices, they must carry out green organic food products, technologies and distribution services innovative inevitably, while implementing differential pricing strategy which based on different consumers, different product forms, different markets, and different sales time.
4.2. Establish a price adjustment information system to enhance the proactive pricing ability

The implement of differential pricing between green organic food exporters will be affected by such factors as the target of export enterprises, the life cycle of green organic food, flexibility of their products, market structure and competitive conditions, channel structure and consumer perception. Therefore, when calculating export earnings of green organic foods, some factors should be considered such as changes of seasons, market supply and demand, competition conditions and others, in this way pricing adjustment can be flexible and diversified.

4.3. Enhance the quality of green organic food

The implementation of differential pricing strategy is based on the quality and safety of green organic food, otherwise it is difficult to enter the international market or vulnerable to the constraints of the green trade monarchy. Among the green organic foods in Heilongjiang Province, there are not many famous, excellent, special and new products. Heilongjiang Province, as the main export commodities, is also a large variety of bulk food products with high impurity content, resulting in superior quality and relatively low prices of organic food in Heilongjiang Province. Lower the competitiveness of the international market weakened, therefore, the quality of green organic foods in Heilongjiang Province should be substantially increased and the international competitiveness should be enhanced.

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