Innovative Design of Agricultural Cross-border E-commerce Management Platform Construction between Hainan and Taiwan

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Abstract. The essay is based on the subject research between Hainan and Taiwan league, by analyzing the comparison of agricultural development between Hainan and other Chinese areas, finds that Hainan agricultural develops slowly. Meanwhile, by using the experience and technology of Taiwan agricultural development for reference, taking full advantage of modern internet technology, we try to find the complementary opportunity of agricultural technology, experience in agricultural development between Hainan and Taiwan. Therefore, by combining the existing resources of Hainan and Taiwan, following the thoughts of the “Internet+ Agriculture”, the essay tries to work out an innovative designation of agricultural cross-border e-commerce management platform, integrate the resource advantages of Hainan and Taiwan, specify the functions of newly designed management platform.

1. Introduction

Hainan has been an island depending on agricultural development, and has been serious about the industrial development in view of protecting the ecological environment. Meanwhile, the natural condition of Hainan is good for agricultural development because of the location which is between tropical and subtropical areas. In spite of this, the agricultural development in 2007~2016 in Hainan is slower than any other areas in China. As picture 1 shows, during the decades from 2007, except for the four cities of Beijing, Shanghai, Tianjin and Chongqing, Hainan agriculture lied in the forth from the end no matter how it reformed and developed.

The comparison of the total output value of agriculture, forestry, grazing and fishing between Hainan and other Chinese provinces in 2007~2016 (Unit: million yuan)

Figure 1. The comparison of agriculture between Hainan and other Chinese provinces in 2007~2016
2. The analysis of Hainan and Taiwan agricultural economy increasing speed

2.1. The change of Hainan agricultural economy increasing speed

![Figure 2](image)

**Figure 2.** The change of Hainan agricultural economy increasing speed between 1995 and 2015

During the two decades from 1995 to 2015, there were two inflections—A and B in the change of Hainan agricultural economy increasing speed. The change of agricultural tax policy and the thoughts of protecting and developing Hainan caused the appearance of inflection A. The national strategy of building Hainan into international tourism island caused the appearance of inflection B in 2009. Being influenced by international market and internet economy, Hainan agriculture continued decline in 2013, which caused the appearance of inflection C in the picture.

2.2. The comparison of Hainan and Taiwan agricultural economy increasing speed during 1995 and 2015

![Figure 3](image)

**Figure 3.** The comparison of Hainan and Taiwan agricultural economy increasing speed during 1995 and 2015

During the two decades from 1995 to 2015, there were two inflections—A and B in the change of Taiwan agricultural increasing speed. The appearance of inflection A was caused by the agricultural liberalization enhanced by Taiwan from 1992 to 2005. After joining the WTO, Taiwan agriculture was picked up by the market. However, the market volatility brought by the global economic crisis in 2010, caused the appearance of inflection B.

3. The analysis of causes----the problem of agricultural economic eco-system

3.1. The analysis of Hainan agricultural economic eco-system problem
According to picture 4, the dilemma of Hainan agricultural development at present lies in low added value of factor input, unscientific overall development of eco-system, poor effect of cooperation and sustainability. In order to deal with the dilemma, Hainan agricultural development should be pulled by the market, stimulated by all elements, including logistical basic condition, policy guidance, production technology, product design, ability of analyzing decision, capital capacity, human resources level, organizing ability as well as market capability.

3.2. The interaction analysis of Hainan and Taiwan agriculture

The interaction of Hainan and Taiwan agricultural development mainly promoted by using agricultural cross-border e-commerce management platform to make the four aspects of capital flow, business flow, information flow and logistics interact and to implement comprehensive communication of agricultural economy development.

4. Hainan and Taiwan agricultural cross-border e-commerce management platform for innovative design

4.1. Hainan and Taiwan agricultural cross-border e-commerce management platform
Figure 6. Hainan and Taiwan agricultural cross-border e-commerce management platform design
4.2. A Description of Agricultural Cross-border E-commerce Management Platform between Hainan and Taiwan

4.2.1. Agricultural Products Trading Platform between Hainan and Taiwan. Agricultural products trading platform between Hainan and Taiwan mainly includes products and services transactions, trading products mainly including fruits and vegetables, food and water (SEA) products, poultry, livestock, herbs, flowers and other services, including trade leisure travel service and hotel service (including breakfast).

4.2.2. Agricultural Communication(Tai League, Cultural and Creative Center) Platform between Hainan and Taiwan. On the agricultural communication platform between Hainan and Taiwan, there is online exchange and offline communication. The content of online communication includes cultural display (agricultural culture, ethnic culture, regional culture, etc.), agricultural technology exchange, production experience and academic exchange. The outline communication includes Qiongtai Culture Expo, cooperation in agricultural technology laboratory, agricultural production cooperation projects, seminars.

4.2.3. Agricultural Service Platform between Hainan and Taiwan. On agricultural service platform between Hainan and Taiwan, service projects include two associations led to market channel design service industry cooperation; industry data analysis service provided by the cooperation of two associations and universities and other research institutions; loans, investment and financing services provided by the financial organization formed by crowd-funding cooperation of Tencent Inc and Taiwan farmers; management consulting services provided by the cooperation of the two agricultural research management institutions; logistics management services provided by binding one (such as SF) logistics company for offline physical transaction.

4.2.4. Agricultural Development Management Platform between Hainan and Taiwan. The large data management platform for agricultural development in the two areas established by Tencent Inc can provide production management, product (service) management, transaction management, information management, logistics management and system management for the agricultural organizations both in Hainan and Taiwan.

4.2.5. Agricultural Cooperation Platform between Hainan and Taiwan. This platform is led by the two governments, absorbing research institutions in these two areas, co-founding muti-angle cooperation projects, including cooperation in the Park, leisure agriculture, land usage, technology innovation, cross-border market channel, etc.

5. Platform Function Design

5.1. Promoting Agricultural Development in both Areas

5.1.1. Promoting Agricultural Economy Development in both Areas. With the help of the majority of users, market, technology and brand accumulated over the past 18 years by Tencent, based on the construction and operation of agricultural cross-border electronic business platform between Hainan and Taiwan, the agricultural markets between these two areas will greatly excavate and expand. The pulling effect of this market can not only provides a market base for the transformation of Hainan's agricultural production, technological improvement and competitiveness, but also provides strong market support for Taiwan's agriculture out of the trough.

5.1.2. Promoting Agricultural Technology Development in both Areas. With the help of the Tencent's market and technology the platform will bring the product competition, technology competition and
brand competition of the agricultural markets in these two areas to a new height. This change of competition will form a forced trend, forcing the two agricultural enterprises or by its investment in technology and improve competitiveness, either through the introduction of technology and cooperation to enhance their competitiveness, so the overall form of the technical level of the industry to improve the situation.

5.1.3. Promoting Complementary Advantages of resources in both Areas. The status of agriculture in Hainan is dominated by traditional agricultural production methods, and the advantages of production factors mainly come from climatic conditions, geographical position, agricultural resources such as labor, land, water conservancy and so on. Taiwan has already entered the stage of post-modern agricultural production very early. The advantages of production factors mainly come from agricultural technology, human capital, agricultural infrastructure with modern communication and agricultural production management. This agricultural cross-border e-commerce platform between Hainan and Taiwan can form good complementary cooperation situation, and seek common development situation in both areas.

5.1.4. Promoting the Improvement of Agricultural Production Management Level in both Areas. Through agricultural cross-border e-commerce platform between Hainan and Taiwan, farmers and merchants on the platform are provided tracking management advice and consultation on the selection, breeding, cultivation, fertilization, spraying, growth, processing, manufacturing, logistics, distribution, sales and so on, provides management communication in different links, greatly promote their agricultural production management level for farms and merchants from both areas.

5.1.5. Promoting the Transformation of Agricultural Economy in Hainan. The introduction of Taiwan's agricultural management mode can integrate and upgrade the existing agricultural associations, strengthen the scale integration of labor, land and other agricultural technology promotion, improve the added value and management value creation, develop technology dominated new agricultural economic situation.

Taiwan agriculture takes the peasant association as the leader, and carries out scientific co-ordination from production management, land planning, product design, circulation management and so on. Hainan is rich in agricultural resources, but the level of development and utilization is relatively backward. Through cross-border electronic business platform, Taiwan and Hainan can have further cooperation in the field of agriculture and agriculture. The introduction of Taiwan's agricultural management mode, integration and promotion of the existing agricultural areas Association, strengthen the scale integration of labor, land and other agricultural technology promotion, improve the added value and management value creation, the development of technology dominated new agricultural economic situation.

5.2. Promoting Cultural Exchanges between the Two Areas

The agricultural cross-border e-commerce management platform between Hainan and Taiwan is specialized in the design of communication service platform. Using online culture exchange platform, both farmers and agricultural businesses can carry out agricultural culture, regional culture, cultural exchanges, promote the convergence of culture and value orientation of convergence, and promote the further development of agricultural trade and cooperation.

5.3. Great Improvement in the Level of Agricultural Human Resources in Hainan

With the help of Taiwan peasant association management mode, the integration of domestic and foreign agricultural technology, training resources, combining with Hainan actual local agricultural development needs, agricultural production, agricultural technology, agricultural management, agricultural enterprises in the cultural field training, will be targeted to carry out to enhance the overall level of agricultural human resources in Hainan.
5.4. Narrowing the Hearts and Minds of both Sides, and Promoting Cross-strait Exchanges and Cooperation

5.4.1. Direct Effects. Through agricultural cross-border e-commerce platform between Hainan and Taiwan, more farmers and agricultural businesses can more timely and deeply understand the actual situation of the real Chinese mainland, and actively carry out the cooperation in access to their own interests, at the same time sense the strong support of the mainland.

5.4.2. Indirect Effects. Agricultural cross-border e-commerce platform between Hainan and Taiwan can bring economic stimulating effect to the agriculture in these two areas, which will deepen the mainland culture and real conditions and well-being of Taiwan to Taiwanese’s heart, and lay the foundation for the reunification of the two sides.

6. Concluding Remarks

The support of the agricultural cross-border e-commerce management platform construction between Hainan and Taiwan is to promote agriculture exchange between these two areas and accelerate agriculture economic development ecosystem in Hainan and eventually achieve mutually beneficial and mutually coordinated of agriculture economic development in the two areas. This paper is based on TaiMeng Hainan research. The innovative design of management platform not only plays a very good role in promoting agricultural development, in promoting political stability, also hope to provide a reference for the development of agricultural development in other areas of our country.

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