

# The Current Situation and Countermeasures of the Industry Development of Agricultural Products with Regional Characteristics and Advantages

Jing Zhang<sup>1</sup>, Yifu Zhao<sup>2</sup>, Lingxiao Lu<sup>3</sup>, Fujiang Liu<sup>2</sup> and Fantao Kong<sup>1\*</sup>

<sup>1</sup>Agricultural Information Institute, Chinese Academy of Agricultural Sciences/Key Laboratory of Agricultural Big Data, Ministry of Agriculture and Rural Affairs, Beijing, 100081, China

<sup>2</sup>Institute of Agricultural Economics and Development, Chinese Academy of Agricultural Sciences, Beijing, 100081, China

<sup>3</sup>Department of market and informatization, Ministry of Agriculture and Rural Affairs of the People's Republic of China, Beijing, 100125, China

\*Corresponding author's e-mail: kongfantao@caas.cn

**Abstract.** The brand building of agricultural products is the fundamental way to improve the competitiveness of agricultural products in the market, and the premise to ensure the effective docking of agricultural products production and marketing. Through on-the-spot investigation, under the premise that agricultural products in Enshi Tujia and Miao Autonomous Prefecture utilize the advantages of green ecology and mountain agricultural products, and create more than 3,400 regional characteristic agricultural products brands, this paper focuses on solving the problems and difficulties of "high quality" with "low price", leading enterprises not strong, brand influence weak, and infrastructure not strong as well as modern market system has not yet been established. Then some reasonable opinions and suggestions on such works as the docking of production and marketing of agricultural products and industrial development of the Prefecture were put forward.

## 1. Introduction

In June this year, the survey group went to Laifeng and Xianfeng Counties, Enshi, Hubei Province, which are concentrated in poverty-stricken areas, to conduct a survey on the production docking and industrial development of superior agricultural products with regional characteristics. The survey group visited Agricultural Trade Market, North Laifeng County, Jinqi Vine Tea Biotechnology Co., Ltd., China Vine Tea Industry Network- China Netbank Laifeng Entity Enterprise E-commerce Operation Service Center, Agricultural Bureau of Laifeng County, E-commerce Public Service Center Xianfeng County, Agricultural Bureau of Xianfeng County, China-Selenium Ecological Wholesale Market Enshi, Agricultural Products Wholesale Market of both County and Prefecture levels of Agricultural Sciences Academy and so on. The survey group exchanged views extensively with comrades from bodies of agriculture, commerce, ecology and others of counties, Prefecture and Province.



## 2. Development status of dominant agricultural products

Enshi Tujia and Miao Autonomous Prefecture (hereinafter referred to as Enshi) is located in the southwest of Hubei Province. It belongs to the Wuling Mountainous Area, which is centralized and connected extreme poverty-stricken area [1], and has jurisdiction over 2 cities Enshi and Lichuan, and 6 counties Jianshi, Badong, Xuan'en, Lai Feng, Xianfeng and Hefeng. The vast majority of Enshi Prefecture is mountainous, commonly known as "8 Mountains, Half-water & one and half field" [2]. The difference in elevation is large, with an average elevation of 1,000 meters. The microclimate characteristics are obvious, and the vertical differences are prominent. It belongs to the humid climate of subtropical monsoon. Less severe cold in winter; no intense heat in summer; rainfall is abundant, and 4 seasons are distinct.

In 2017, the area of characteristic industrial bases in the Prefecture was more than 5 million mu, of which area of tea, tobacco leaves and medicinal materials ranked the first in the Province. The area of tea was 1.549 million mu, an increase of 8.7% compared with the same period last year [3]; the area of tobacco leaves was 316,900 mu; the area of medicinal materials was 1.37 million mu; the area of vegetables was 1.973 million mu, which was basically the same as previous year, among them, the area of high mountain vegetables was 950,000 mu, up 3.3% year on year, ranking the first in the Province; the area of konjac was 195,000 mu, down 10.6% year on year, which was still one of the 4 major konjac producing areas in China; the area of fruits was 810,000 mu, up 22.7% year on year. Animal husbandry output value was 20 billion Yuan, an increase of 38.9% over the same period.

In 2017, there were 3,457 trademarks concerning agriculture, newly added 706 trademarks, 298 trademarks concerning selenium, 1,255 tea trademarks and 245 medicinal trademarks. There were 4 well-known trademarks in China, namely "Enshi Yulu and Pictures", "Wujiataigong Tribute Tea and Pictures", "Three Gorges Brand and Pictures" liquor and "Changyou Brand and Pictures" canned fruits and vegetables; There are 24 geographical indications in the whole Prefecture, including 133 famous trademarks in Hubei Province, 59 famous brand products in Hubei Province, 136 certification enterprises with "pollution-free agricultural products, green food, organic agricultural products, geographical indications of agricultural products" (confirmed by the Ministry of Agriculture), 274 products; And its organic agricultural products base has been certified as the only one in the whole province by the country; the certified area of green food raw material base has been ranked the first in the whole province; the total number of green and certified organic food products is the first in the Province. The Prefecture also possesses such livestock products as "Enshi Selenium Tea", "Enshi Yulu", "Enshi Selenium Potatoes", and "Sile", and public brands as "Dashanding" high mountain vegetables, "Qingjiangyuan" tobacco leaves; moreover, Laifeng County and Xianfeng County, etc. are actively creating public goods brands as "Laifeng Vine Tea" and "Tangya Brand" with county characteristics. In 2017, Enshi selenium tea sales volume hit 5.177 billion Yuan, Enshi Yulu 510 million Yuan.

## 3. Existing difficulties and problems

### 3.1 "Good quality" meets "low price"

Enshi is located in Wuling Mountainous Area, where natural conditions are very superior, industrial pollution is basically absent, and it has unique advantages in the development of green agriculture. However, it is difficult to form scale effect in time and space due to vertical distribution of elevation, scattered fields, various kinds of agricultural products, long sowing time and prominent characteristics of "small and scattered" crops, resulting in insufficient competitiveness of agricultural products. Because of traffic and information congestion, some agricultural products do not even enter the market at all, still at the state of "self-supply and self-sufficiency", which has not formed an income-increasing effect. According to the Survey, the agricultural development of Laifeng County is positioned at "two teas and one fruit" (vine tea, oil tea and small fruits). At present, vine tea covers an area of more than 70,000 mu. As a landmark product, "Laifeng Vine Tea", the overseas market has not yet opened up and its popularity is insufficient. Previously, leading enterprises positioned at high-end

consumption and market practice was frustrated, which led to last year's failure with price drops by 50%, some farmers even abandoned their harvest and their enthusiasm was frustrated. This year, they began introducing new enterprises, transforming into graded products and deep-processed products, only then did they get better. Oil Tea has just begun to be popularized, and only after 3-5 years, large-scale products will be harvested. What's more, the "small fruits" is a scattered development with over 10 categories, which cannot form scales. Farmers still use the traditional "street economy" as the main marketing channel. In addition, under the heavy task of poverty alleviation, a large number of Party members and cadres in Laifeng County are stationed in villages to help the poor in the form of "pioneering team". Generally speaking, they pay more attention to "what and how to grow" but give less consideration to "where to sell and how to sell" agricultural products in the future, especially in some poverty-stricken areas, they have greatly expanded planting of economic forest and fruit varieties. In the future, all these plants will enter the full fruiting period at the same time resulting in hidden trouble of unsalable and difficulties.

### *3.2 Leading enterprises are not strong*

Industry scale restricts the development of leading enterprises, which is not conducive to attracting investment. The main manifestation is lack of powerful well-known enterprises. Firstly, from the overall development level of agricultural industrialization, there is still a big gap between the output value of agricultural products processing in the whole Prefecture and other areas of the whole province and even the surrounding areas, and the industrial chain and value chain of characteristic industries are not fully realized. Secondly, viewing from the scale of processing enterprises, except for the tobacco industry, only one enterprise with output value over 500 million Yuan last year in the Prefecture, namely the Sile Group, has 32 enterprises with sales value over 100 million Yuan, accounting for only 15.5% of the leading enterprises in the Prefecture's agricultural industrialization, and 10.6% of the enterprises above the scale. Thirdly, viewing from the perspective of enterprise management, over 60% of the agricultural products processing enterprises in the Prefecture still adopt backward production and management methods such as "family-style" and "workshop-style". They have not established a perfect modern enterprise management system and operation mechanism, and their management ideas are lagging behind. In the meantime, most enterprises lack scientific research talents and their product innovation ability is insufficient.

### *3.3 brand influence is weak*

The public brand has developed from nothing in Enshi region, but industrial value is not fully realized, and the lack of well-known trademarks in China, many high-quality agricultural products sold to well-known nonlocal enterprises at low prices, as raw materials. Firstly, the number of well-known brands is low. At present, Enshi has created 4 well-known trademarks in China, but compared with other cities in the Province, the number is too small. For example, 25 well-known brands have been created in Jingzhou, and 61 have been created in Yichang. Secondly, the influence of public brand in the Prefecture is weak. Enshi regional public goods brand such as "Enshi Selenium Tea" and "Enshi Selenium Potato" brand building is still in its infancy. Among them, "Enshi Selenium Tea" is going through the registration trademark formalities, and "Enshi Selenium Potato" was awarded "the most popular regional public products in 2015" the year before. In recent years, Enshi City has participated in the evaluation of China Tea Regional Public Brand Value Rank. Brand value has been rising, ranking is also rising, but there is still a big gap from the well-known tea brands in China. Thirdly, support policies are not in place. In 2014, the Prefecture government formulated and promulgated a reward policy for well-known trademarks in China. It would award the enterprise with 300,000 Yuan for every creation of well-known brand. The reward standard is low and there is no comprehensive policy support from other aspects.

### *3.4 Infrastructure is not perfect*

The mountainous agricultural plots are scattered and the scale of planting is small. Accordingly, large-scale mechanized operations are difficult to achieve. In addition, the inconvenience of transportation, the blocked news and the serious loss of young people in rural areas make it difficult to improve the level of agricultural informatization [4]. Although Enshi Prefecture has relatively strong agricultural science and technology support with Enshi Prefecture Academy of Agricultural Sciences as the main force, its industrial infrastructure is still at a low level due to the limitations of natural conditions. In addition to the production side, especially with the imperfection of the various links of field sowing, transfer out of village, and cold chain logistics for agricultural products with "small and scattered" characteristics of mountainous areas, has become an obstacle to the effective docking of production and marketing [5]. The Survey found that Jingui and other seedlings with characteristic industry of Banqiao Village, Zhongbao Town, Xianfeng County which was the targeted poverty lifting point, its price was about 30 Yuan per plant, which should have market advantages, but the cost of packaging logistics to be transported out is as high as 30 Yuan, so it is difficult to sell them.

### *3.5 Modern market system has not yet been established*

The main manifestation is that the market system is not well developed. Firstly, docking with the non-local market is not smooth. Enshi is located in the Wuling Mountainous Area, where the traffic is not smooth for a long time, resulting in poor market channel resources for local enterprises, less docking with large markets and enterprises in developed areas, and in a weak position. The market value created by many high-quality superior products cannot be shared by local farmers and market players. For example, Enshi "Marco" potatoes are purchased at an average price of about 1 Yuan per half-kg locally, while in the markets of Beijing and Inner Mongolia, the price is as high as 9 Yuan per half-kg. Secondly, the size of wholesale market of agricultural products is small. There are 58 wholesale markets for agricultural products in the Prefecture, but only 2 of which are designated wholesale markets of the Ministry of Agriculture (China Selenium Wholesale Market in Enshi City and Xiaoguan Piglet Wholesale Market in Xianfeng County). The construction of regional and professional wholesale markets and field markets are lagging behind. Taking Leifeng County as an example, there are only 2 farm product markets in the county town. According to field research, there are only simple stalls in the North City Market built in 1994. There are no supporting facilities and services such as grading, processing, cold storage, trading system, etc. The market area is small. A large number of businessmen have to set up stalls along the streets, and the county-level markets fail to play a role of distribution. Thirdly, e-commerce development for agricultural products is slow. In recent years, the e-commerce of agricultural products has just started, and the scale of "upstream" is small. There lacks of e-commerce industrial park of large-scale and complete supporting facilities in the whole region. At present, there are some local e-commerce (WeChat-commerce) platforms, such as "Selenium Markets", "Tujia Purchases", "Selenium Valley Products", "Lichuan Medicinal Material Network", "Tujia East Selenium", "Selenium Products Mall", "Hungry Food Man", "Tujia Global Purchases", etc., which have limited popularity and driving capacity. "China Vine Tea Industry Network" of China Net Library in Laifeng County has operated for more than one year, which has driven the export value of local vine tea less than 1%. Fourthly, imperfect market information system; According to the survey, the construction of grass-roots agricultural market information system is still lagging behind. The Agricultural Bureau of Enshi Prefecture did not set up Market Information Section until 2017. Until now, Agricultural Bureau of Laifeng County has not set up a special market information cell and full-time personnel. Grass-roots agricultural sections lack talents who understand market information knowledge, market information work lacks overall planning, mainly to complete the fair tasks arranged by superiors.

#### 4. Countermeasures and suggestions

##### *4.1 The government set up bridges to enhance the promotion and publicity of local superior agricultural products*

Firstly, strengthening the top-level design of the whole region overall plan, formulating the brand development strategy, coordinating the relationship between the regional public goods brand "Enshi Selenium Tea" and the public goods brands of the counties, coordinating the planning of the Prefecture and counties, highlighting the key points, forming a joint force and avoiding internal friction. At the same time, actively striving to organize special presentations in all major relevant fairs hosted by the Ministry of Agriculture and Rural Affairs; the effort should be concentrated on major events and build bridges to establish the connection between local superior agricultural products and vast non local markets. Secondly, market players and increase support for market players, including financial environment, etc should be cultivated energetically. Only the larger the main player is, the larger the market is, the more farmers are driven, and the larger the scale of the base is. Through local cultivation and investment attraction, the close relationship between market participants and superior agricultural production can be established. Thirdly, through the government's efforts, concentrating resources from various channels, strengthening information guidance and training of new farmers, farmers can not only learn the technology of planting development, but also understand the changes of market demand, and actively integrate into the modern agricultural system [6].

##### *4.2 Perfecting market system construction*

Enshi's agricultural industry is weak, and lacks the effective support and drive of agricultural informatization. It is always a heart-breaking thing for farmers who have superior quality of products but difficult to sell; and the development of agriculture is relatively slow. Rural people are not sensitive to docking with the market, most remote mountainous areas do not have symmetrical information channels, and people do not fully understand "to plant what the market needs ". Firstly, driven by the development of local cooperatives or leading agricultural enterprises, first of all, to solve the marketing channels, and then to organize farmers to grow on a cooperative scale, which can appropriately improve the protection of farmers' interests, first there should be markets, then develop production. Secondly, the construction of wholesale markets for agricultural products should be strengthened, the construction of supporting infrastructure such as rough processing, grading, cold storage, cold chain logistics should be increased, and marketing, promotion, and loans, etc. for agricultural products should be developed. Thirdly, to reduce costs and save time as the core, optimize the layout of logistics facilities, promote the construction of new delivery logistics distribution centers, and build a comprehensive demonstration project of national rural e-commerce; Planning and laying out 3-level logistics delivery service network, such as logistics park, distribution center and terminal distribution network, strengthening the infrastructure construction of Rural Postal network, village post station and "agriculture, rural and farmer" service station, and promoting the two-way circulation of green agricultural products in poor villages; Facilitating the support project of rural logistics express delivery, promoting the organic docking and matching integration of e-commerce, postal express, modern transportation, logistics distribution and modern industrial system, and realize the objective of "building postal stations in every village, providing delivery service for all villages"; Hangzhou Enshi e-commerce assistance should be fully utilized, to promote the work of poverty alleviation and training for e-commerce providers, and enrich resources of talents. Fourthly, in order to carry out industrial mode innovation, the idea of "Internet +" in line with local conditions should be introduced, to drive traditional agriculture, build information service carriers, and promote the deep integration of information technology with agricultural production, operation and management services. Enshi's characteristic agricultural industry in terms of information, circulation, finance and technical services should be supported, and local governments should participate in creating Enshi's "Selenium Business Card", so as making the famous and high-quality agricultural products "go out", activating the chain of

the upstream and downstream resources, and "good mountains and waters" become "gold and silver hills", so as accelerating the process of agricultural modernization.

#### *4.3 Strengthening the modernization of characteristic production areas*

Although Enshi's agricultural production is facing the restrictions of scattered land use and difficult use of large-scale machinery in mountainous areas, it is necessary to actively introduce advanced production technologies and fine varieties in the context of the leap-forward development of agricultural modernization. In the meantime, it is necessary to develop small-scale machinery and planting technologies suitable for mountainous agriculture according to local conditions, so as to comprehensively upgrade its unique advantages of the production capacity of agricultural products. In the meantime, green production, strengthen water and fertilizer management should be relentlessly made, the application of chemical fertilizers should be comprehensively controlled, the application of organic fertilizers should be increased, the use of toxic pesticides and other prohibited inputs should be prohibited, and green prevention and control as well as ecological cycle model should be vigorously promoted [7]; The implementation of tea garden landscape project will promote the upgrading and transformation of tea/ orchards with good basic conditions, strengthen the integration of three industries, enhance the rate of improved varieties, and promote the transformation of old production area, and medium and low-yielding poor-yielding areas mainly with local improved varieties.

#### *4.4 Establishing quality and safety guarantee system*

Green safety is the lifeline of Enshi's agricultural development. Firstly, the formulation of standardized production standards such as tea, vegetables and fruits should be strengthened to realize that there is regulation to follow; Secondly, the enterprises should be guided to move forward, to set up industrial bases, to have their own core raw material bases, and to effectively promote standardized production by relying on enterprises. Thirdly, strengthening the pollution control in agricultural area, taking comprehensive measures to improve soil quality and enhance soil fertility. Fourthly, strengthening supervision of agricultural inputs [8], and strictly control the high residue and/or high toxic pesticides entering the raw material base; Specifically, it is necessary to strengthen the cooperation between the agricultural departments and the commercial and food and drug supervision departments, promote the construction of traceability system of agricultural product quality and safety, improve the quality standards of agricultural products, establish the linking mechanism between origin outflow and market access, and promote the informatization of the whole process of supervision and control on agricultural product quality and safety. On the basis of certain scale and information technology, leading enterprises acquiring certifications of "pollution-free agricultural products, green food, organic agricultural products, geographical indications of agricultural products", professional cooperatives, family farms and large agricultural households, to carry out traceability application of agricultural product quality and safety, and link up with e-commerce platforms to establish traceability and compensation mechanism.

#### *4.5 Products go out and consumption comes in*

Under the guidance of implementing the strategy of Rural Revitalization in an all-round way, on the one hand, through a variety of channels of production and marketing docking, to achieve agricultural products with superior regional characteristics "go out", in an effort to realize the increase of farmers' income; On the other hand, through the integration of 3 industries and the construction and development of rural tourism, non-local consumption can be "introduced" in a bid to promote the development of local forest and fruit industry and tea garden, and to solve the issue of production and marketing docking of small-scale products locally.

### **5. Conclusion**

Under the guidance of the five development concepts of socialism with Chinese characteristics in Xi Jinping's new era, the key to solving the contradiction between supply and demand of agricultural

products is revitalizing agriculture with green industry, and empowering farmers with good quality. "Clean water and green hills are gold and silver hills". The green ecological advantages of Enshi and the characteristic advantages of agricultural products in mountainous areas have become the new opportunity for farmers to lift poverty and get prosperity, and modernization upgrade of agriculture, as well as revitalization and development in rural areas.

### Acknowledgments

This research was funded by the National Natural Science Foundation of China (71573263).

\*Corresponding author: Fantao Kong (kongfantao@caas.cn).

### References

- [1] Sun Z., Liu H., Xiong W., etc. (2018) Strategic Studies on Intellectual Targeted Poverty Alleviation and Rural Revitalization in Enshi Prefecture Wuling Mountains Area--Based on the Inheritance and Development of Traditional Knowledge and Cultural Heritage, *Journal of Jiangxi Agriculture*, 4:134-140.
- [2] Hao H. (2018) Characteristic Industries Lead the Integration and Development of the Primary, Secondary and Tertiary Industries in Rural Areas--Taking the Selenium Industry in Enshi, Hubei as an Example, *Jianghuai Tribune*, 4:19-24.
- [3] Lei M., Chen Z., Cheng S. (2018) Studies on the Cultivation of Public Brand in Enshi Selenium Tea Area, *Hubei Agricultural Sciences*, 13:140-145.
- [4] Zhao J., Chen Z., Li Q., etc. (2018) Research on the Achievements, Problems and Countermeasures of Agricultural Technology Extension in Enshi Prefecture, *Grassroots Agricultural Technology Extension*, 4:3-5.
- [5] Li Z. (2012) Predicament and Change of Characteristic Agriculture Development in Wuling Mountain Area: Taking Enshi Prefecture as an Example, *Hubei Social Sciences*, 12:70-76.
- [6] Zhang K., Wang X. (2009) Analysis of Brand Building of Agricultural Products in China, *Issues in Agricultural Economy*, 2:22-24.
- [7] Liu W. (2018) Helping Rural Revitalization by Agricultural Branding, *Heilongjiang Daily*, 16:007.
- [8] Kong F., Zhu M., Han S., etc. (2016) Comparative Study of Agricultural Informatization at Home and Abroad [J]. *World Agriculture*, 10:10-18.

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.