

Study on the Development of Fuling Mustard Industry Guided by the Rural Vitalization Strategy

Yu Liao

Yangtze Normal University, Chongqing, China
Southwest Minzu University, Chengdu, China

Tingting Qian

Southwest University
Chongqing, China

Abstract—Since their advent in 1898, Fuling mustard have been gradually launched to the market and exported to all corners of the world. Chinese Fuling Mustard, European sour cucumbers and German sweet and sour cabbages are well-known both at home and abroad as “world’s top three pickled vegetables”. The Fuling District considers the prosperity of the pickle industry as focus and breakthrough of rural vitalization. Anyhow, the competitive resources and practical development of the pickle industry are constrained by poor conditions and small scale of Chinese cabbage head production, low added value of products, diversified but less known brands and difficulty in the treatment of production sewage. Thus, Fuling should remain committed to building a pickle industry cluster and deepening the integration of multiple regulations by actively relying on leading producers of pickles and linking primary, secondary and tertiary industry chains. Only by demonstrating the diverse features of different areas can the district practically facilitate its rural vitalization.

Keywords—Fuling mustard, Characteristic Industry, Rural Vitalization

I. INTRODUCTION

Fuling is the birthplace of the century-old pickle industry. Fuling District has a unique natural environment suitable for large-scale plantation of Chinese cabbage heads. It is the largest modern intensive, industrialized production base in China. Fuling mustard are not only a symbol of Fuling, Chongqing but also a famous pickle brand in China and even in the world, making Fuling District famous as “hometown of pickles”. As the brand becomes popular, the researches regarding Fuling mustard from increasing perspectives, such as law, food science and engineering, applied economics and theoretical economics, rural economy management, have been conducted. Nevertheless, few people have related to Fuling’s pickle culture industry and local rural vitalization. For Fuling, rural vitalization represents an important strategic opportunity and challenge. Thus, the district should start from its reality, take advantage of the current situation, develop strengths and avoid weakness, adapt its measures to local conditions, adjust industry structure and make a reasonable arrangement. While developing agricultural production, it should pay continuous attention to the protection and improvement of rural natural resources and ecological environment so as to facilitate its rural

vitalization.

II. CULTURAL AND HISTORICAL BACKGROUND OF FULING MUSTARD

Since their advent in 1898, Fuling mustard have become a specialty diet in China and even in the world over nearly 120 years of development, with rich cultural and historical connotations involved. A good understanding of the history of Fuling mustard can better help us understand the current status and problems for the development of the pickle industry.

A. Advent of Fuling Mustard and Their Social and Ecological Culture

The advent of Fuling mustard has been recorded in the *Chronicle of Fuling City*, *Fuling mustard (History)*, *Dictionary of Fuling*, *Local Knowledge of Fuling*, *Historical Figures of Fuling* and other literatures. Pickles originate from the family of Qiu Shouan, Qiujiawan, Fuling City in 1898 [1]. Qiu started a pickle store with the business name of Rongshengchang in Yichang in the early years. At that time, He employed Deng Bing, a native of Zizhong, Sichuan, as key member of the store, who was responsible for purchasing, processing and transporting dry pickled vegetables. As a wooden box was required to squeeze the saline water in processing, Qiu named the newly developed dry pickled vegetable “pickle”. The pickles are known as “Fuling mustard” as they were born in Fuling. The advent and development of Fuling mustard is accompanied by a special social and cultural ecology. According to the *Century-old Fuling mustard*, the advent of Fuling mustard in Fuling can be mainly explained by the following reasons: first, the popular thought of “saving the nation by engaging in industry” in China during the modern times. Second, unique geographical, climate and processing environment. Third, unique humanistic environment of Fuling. Fourth, continuation of the tradition of Fuling’s pickle industry [2]. In a word, Fuling mustard are the products of mutual exchanges and reference of Chinese and western cultures, traditional and modern cultures, local cultures of Zizhong and Fuling, as well as farming and commercial cultures. And they are mainly based on the traditional Chinese culture, especially local culture of Fuling, such as scientific and technological spirit characterized by the thought on man and heaven in Ba Culture.

Fund Program: Social Science Planning Program of Chongqing 2016, Study on the Social Relief Mechanism of School Safety Accidents (Youth Program) (Program No.: 2016QNSH26); Bidding Topic of the Research Center for Economy of Upper Reaches of the Yangtze River (201604).

B. Forming of Fuling's Pickle Industry

The innovation of pickle industry and pickle producers constitutes an important drive for the forming of the pickle industry. According to the *Chronicle of Fuling City*, in 1935, the planting area of stem mustard in Sichuan was nearly 60,000mu; the yield was 27,000t; and the finished pickles were nearly 9,000t, covering Baxian, Fengdu, Changshou and Jiangbei of Fuling County then. The planting area, yield and product of Fuling accounted for nearly half of the counterpart of Sichuan Province. And the Fuling County Vegetable Industry Association was formally established then, with 212 member units. It offered around 20,000 job opportunities and earned sales revenues of RMB 924,000 yuan (on the basis of the annual average price of silver dollars of Fuling then). With costs and taxes deducted, the net profit was RMB 294,000 yuan, which showed handsome social and economic benefits. Also, the association sent representatives to reside at Hankou, Shanghai and other ports to contact producers. At that time, the pickle market witnessed a rapid expansion. Especially, the "Earth" brand Fuling mustard of Shanghai "Xinhe" Firm were sold both at home and abroad, which were well reviewed by quite many customers. With the forming of Fuling's pickle industry, Fuling mustard gradually expanded towards the regions along the Yangtze River, Poyang Lake and Dongting Lake, with Fuling as the center. In 1935, the pickle industry covered the former Sichuan, Hubei, Zhejiang and other regions. The planting area of pickles exceeded 100,000mu and there were more than 220 processing enterprises, contributing to a major industry in the regions along the Yangtze River.

III. CURRENT DEVELOPMENT AND PROBLEMS OF PICKLE INDUSTRY IN FULING DISTRICT

The unique location of Fuling District has contributed to its rich agricultural production conditions, diversified farmland resources, convenient irrigation resources, plenty of labor resources, advanced agricultural machinery and favorable agricultural production conditions, thus making the agricultural development of the district unique. Characteristic agriculture is a key segment of agriculture in Fuling District, with unique advantages. Anyhow, there remain the following problems with the development layout of Fuling's pickle industry.

A. Poor Production Conditions and Low Scale of Chinese Cabbage Heads

With hilly and mountainous areas in most parts, Fuling suffers from low farming conditions, low scale and mechanized conditions and low production efficiency. Also, the district spends high on seeds, pesticides and chemical fertilizers. As a result, a farmer household can only earn RMB 40 yuan per day by planting Chinese cabbage heads [3]. In the event of any natural disaster, Chinese cabbage heads would witness a huge drop in both yield and quality and the income of the farmers would be even lower.

B. Low Scientific Research Level and Added Value of Pickles

Pickles can not only be enjoyed as salted vegetable but also be helpful for health. However, the research and development of Fuling mustard are relatively backward. Low technology

content and added value have become prominent issues facing the development of the pickle industry. Limited input, poor facilities and lack of talents causes the weak research forces of the brand in breeding, cultivation and process. The research strength of some large-scale leading enterprises remains to be improved.

C. Most Pickle Brands are Less Known and Backward in Marketing Means

Fuling mustard are poor in cultural connotations due to their low added value, extremely limited advertising funds and insufficient cultural connotations. Basically, they do not reflect and improve the cultural value of products. In terms of marketing means, Fuling mustard mainly focus on the traditional 4P marketing mode and distribution channel mode but pays no enough attention to the importance of modern marketing modes such as Internet+, WeChat marketing and relationship marketing, etc.

IV. OPTIMIZED LAYOUT OF FULING'S PICKLE INDUSTRY

The characteristics and unique resources of the mountainous as well as the layout specified in the industry plan of Fuling District determine the fact that the district must take its own path. It is neither practical nor possible to copy others. Thus, Fuling must pay attention to the following aspects in order to develop the characteristic pickle culture industry and pursue rural vitalization.

A. Integrating Chinese Cabbage Head Production Resources, Optimizing Industry Chain and Improving Production Efficiency

Fuling should make efforts to develop a Chinese cabbage vegetable industry belt along the Yangtze River and in Pingshan and Houshan and develop a raw pickle material production base, striving to explore the industrialized business mode for Chinese cabbage heads. It should build and improve the agricultural skills service systems at the township and village levels, provide technical guidance in terms of improved seeds, pesticides and fertilization, etc., and improve the Chinese cabbage head production efficiency by precisely applying fertilizer to different farmlands. It should also improve the technological innovation of pickles, promote the selection of new Chinese cabbage head varieties, mechanized harvest of Chinese cabbage heads and research & development of freshness preservation technology, and accelerate the innovation and development of pickle production technologies such as mechanization, automation and intelligence, etc.

B. Making Full Use of the Agglomeration Effect to Optimize the Layout of Pickle Production

According to the modern economic geography theory, industry agglomeration can be shared in terms of knowledge technology, marketing information, infrastructure and other aspects. Specialized division of labor can contribute to large-scale economic benefits and increase the momentum of innovation by intensifying competition, thus greatly facilitating the development of the industry. By planning the Pickle Industry Park, Fuling District enables the agglomeration of

pickle producers, the sharing of raw material supply, sales channels and technological innovation, and intensive treatment of waste gas, waste water and industry residue. The district should provide key support to pickle producers in terms of capacity increase and upgrading, production technology upgrading, High-end Auxiliary Material Production Center, Pickle Engineering Technology Center, Fuling Pickle Futures Trading Center and other projects.

C. Strengthening the Branding Effect of Characteristic Pickle Industry

The key difference between characteristic agriculture and traditional agriculture is that the earnings from the characteristic agriculture are much higher than those from traditional agriculture. Thus, the branding of characteristic agriculture is a good way of improving the efficiency of agricultural production. Meanwhile, brand building cannot do without the highlight and support from the government. In 2018, the People's Government of Fuling District decided to formulate the Action Plan for Upgrading the Pickle Industry in Fuling District (2018-2020), base itself on the characteristic high-quality Chinese cabbage head resources of Fuling, rely on leading enterprises including Chongqing Fuling Zhacai Group Co., Ltd and adhere to the mode of "government guidance, enterprises as market players, project orientation, market operation" in order to achieve the goal of making the people rich, enterprises prosperous and villages green and beautiful.

D. Deepening System Reform, Promoting Industry Development

First, promote the structural reform of agriculture at the supply side, regard the concept of "re-starting business and seeking new development" as guidance, adjust structure and layout, transform modes, increase effective supply, and open up a new prospect for rural development. Second, implement the principle of the "separation of three powers", release the vitality of rural lands, further lift the constraints of farmlands over farmers according to the ideas of "ownership affirmation, empowerment and invigoration", thus contributing to agricultural modernization. Third, play the leading role of government, cultivate new market players, pursue integrated development of diversified forms of agricultural industries and promote the development of rural industry.

V. CONCLUSION

Fuling mustard enjoy broad market prospects, unique cultural and historical significance. With a long history, they play a big role in facilitating rural vitalization. However, due to

the impact of mountainous regions and special locations, their development is different from that in plains and hilly areas. The lack of construction lands, scattered residence in mountains and valleys, as well as protection of natural ecology make the connotations of Fuling mustard different in terms of Chinese cabbage head planting, rural industry development, as well as rural tourism development, planning and design. The internal objective factors determine the unique characters of Fuling in rural vitalization and also echo the possible considerations and path selection of the district in rural vitalization. And only by integrating Chinese cabbage head production resources, integrating industry chain, improving production efficiency, making full use of agglomeration effect, optimizing pickle production layout and intensifying the branding effect of characteristic pickle industry can the district adapt itself to the reality without deviating from the main line so as to realize the new development of characteristic agriculture and facilitate its rural vitalization.

REFERENCES

- [1] Chronicle Compilation Committee of Fuling City, Sichuan, Chronicle of Fuling City, Sichuan People's Publishing House, 1995. (*In Chinese*).
- [2] Edited by Zeng Chao, Pu Guoshu, Li Wenyuan, Century-old Fuling mustard(for internal use only), 1998, pp.14-17. (*In Chinese*).
- [3] He Shichang, Li Qiande, Tang Peng, Research on Pickle Industry Economy [M]. China Economic Publishing House, 2014. (*In Chinese*).
- [4] Kang Yongzheng, Xue Kening: Relationship between Rural Modernization and New Urbanization from the Perspective of Rural Vitalization Strategy, included in the Journal of Shandong Agricultural University (Social Science Edition), No. (2018)1, Total No.: 76. (*In Chinese*).
- [5] Chen Yun: Study on the Building of the Chengdu Village and Town Planning System from the Perspective of Rural Vitalization Strategy, included in the Journal of Chengdu Institute of Public Administration, No. (2017) 6. (*In Chinese*).
- [6] Du Wei, Huang Min: Reflections on the Rural land System Reform Guided by the Rural Vitalization Strategy, included in the Journal of Sichuan Normal University (Social Science Edition), No. (2018) 1. (*In Chinese*).
- [7] Chen Meiqiu, Liao Cairong, Liu Taoju: Rural Vitalization, Collective Economic Organization and Land Use System Innovation: Based on Practice Analysis of Huangxi Village, Jiangxi, included in the Journal of Nanjing Agricultural University (Social Science Edition), No. (2018) 2. (*In Chinese*).
- [8] Kang Yongzheng, Wang Zeli: Ruralization: Selection of the Path to Rural Vitalization, included in the Gansu Theory Research, No. (2018) 2, Total No.: 246. (*In Chinese*).
- [9] He Shichang: Study of the Fuling Pickle Culture, Xinhua Publishing House, 2017. (*In Chinese*).