

Analysis on the Development of Cotton Industry in Suining in the Republic of China

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Keywords: Republic of China, Suining, Cotton industry improvement, Cotton industry prosperity

Abstract: After the establishment of the Republic of China, thanks to the improvement of land and water transportation and the guidance of the government on the production of cotton industry, the cotton industry of Suining entered into a short period of prosperity after the unification of Sichuan administration. The main reasons include the improvement of cotton industry, the extension of cotton industry and the support to the development of cotton industry under the guidance of the government, which have jointly brought about the prosperity of Suining's cotton industry, promoting the overall development of Suining's cotton industry, and finally played an important historical role in supporting the victory of the War of Resistance Against Japan and driving the economic development of Suining.

1. Introduction

At present, the relevant research on the development of Suining cotton industry in the Republic of China mainly includes the articles of Suining Cotton Mill and the works of "Suining in the Republic of China" written by the Porcelain Museum of Song Dynasty, Sichuan. By consulting the archives, we learned that the author of the article, Xing Jiling, is an employee of Sichuan Farm. Through his own work recollection, the author introduces the beginning and end of the development and the characteristics of Sichuan Farm, which has high authenticity. "Suining in the Republic of China" briefly introduced the development history of Suining's cotton industry. The above-mentioned article can be used for reference to the writing of this paper, but they focus on the establishment of the organization, however content of the application of the original archives is less. This paper mainly cites the contents of the periodicals of the Republic of China, the original archives of Suining Archives and the Institute of Modern History, Academia SINICA, and analyzes the reasons why the important development of Suining cotton industry can make great progress based on the original archives. This paper analyzes the reasons leading to the rapid development and prosperity of Suining's cotton industry in the Republic of China."

2. Overview of Cotton Production and Development

Suining is located in the middle reaches of Fujiang River with abundant rainfall and fertile land. Especially, alluvial plain (commonly known as dam) on both banks of Fujiang River is mostly endowed with high-quality soil suitable for cotton production. “Land near the Fujiang River is mostly sandy soil, which is the area with the most abundant cotton production”^[1]. Nanba, Fengtai Dam, Zhongba and Zhizi Dam in the north of the city are high-quality cotton-producing areas in Suining.^[2] Good natural conditions give the natural conditions for the development of Suining cotton industry. After the founding of the Republic of China, the cotton industry in Suining experienced three stages. The first stage was at the very beginning of the founding of the Republic of China. At this time, the political situation was unstable, the transportation was inconvenient, and the warlords battled for years, resulting in an unrest society and a poor rural economy. In addition, before 1917, the cotton production in Sichuan was poor due to poor planting and poor quality. The cotton yield per mu was too low, and the quality of cotton products was poor. It's still hard to avoid hunger and coldness.^[3] Compared with the development of cotton industry in Hu-Guang area, the cotton industry in Suining was started to developing at this time, but it was still no-scale production. The second stage was after the unification of Sichuan administration in 1935. As early as in the early Republic of China, Sichuan provincial officials began to pay attention to the development of cotton industry in Sichuan. In 1926, Xie Peijun, the director of Sichuan Provincial Department of Industry, proposed that “we should cultivate cotton planting talents, improve planting methods, set up cotton production experimental branch and other measures to assist cotton development”.^[4] Suining was limited by the fact that the warlords were in power in turns at that time. The policy has not been well implemented. After 1934, the cotton industry development of Suining began to recover from the gradual stability of the political situation. In 1935, Sichuan administration was formally unified, and the government began to actively design the cotton industry construction of the whole province. Suining cotton industry development entered an era dominated by government. In the summer of 1935, Chen Rangqing, the vice-director went to Suining to investigate into the production of cotton industry, and proposed to prepare for the establishment of cotton experiment field in Suining. In February, 1936, Lu Zuofu was appointed as the director of the Construction Department, and went to Beijing and Shanghai to discuss with the Cotton Industry Control Committee about the preparation of the cotton plantation of Sichuan Province. After returning to Sichuan, Wei Wenyuan was appointed to prepare for the construction in Suining with the aim of “promoting cotton planting area, increasing cotton yield, replacing it with high-quality cotton seeds and improving cotton quality” After one month, Sichuan Cotton Experiment Farm was established in Suining. Liu Shutuo Set up Cotton Planting Institute in Taihe town, Shehong.

Table 1: Cotton Field Area and lint yield of Suining County from 1935 to 1936

Year	Cotton field area (mu)	Lint yield (dan)
1935	139692	71866
1936	261634	73812

According to the Table1, with the establishment of the cotton field, the cotton industry improvement and promotion was initially implemented. The planting area in Suining's cotton field increased and the cotton output was slowly increased, showing an initial achievement. This stage was no longer the scattered mode in the early years of the Republic of China but turned to the planned development under the guidance of the government instead. In the third stage, the outbreak of the War of Resistance against Japan in 1937 drowned the cotton-producing areas in the Yellow River basin of China and the cotton-producing areas in the middle and lower reaches of the Yangtze River were in danger.^[5] Sichuan has become the rear cotton production area under the key

operation of the government, and Suining County has also become an important part of Sichuan cotton industry who shouldered the responsibilities to improve and boost the production.

Table 2: Cotton Field Area and lint yield of Suining County from 1937 to 1944^[6]

Year	Cotton field area (mu)	Lint yield (dan)	Remarks
1937	378335	60374	The largest area in the whole river
1938	412347	90620	Same as above
1939	429645	104818	Same as above
1940	529670	121626	Same as above
1941	264839	82883	Same as above
1942	164190	60826	Same as above
1943	205237	45163	Same as above
1944	199180	36490	Same as above

According to the Table2, from 1937 to 1940, Suining's cotton industry developed rapidly with a continuously increased cotton planting area and lint yield the scale ranked first in the cities in Sichuan. One of the reasons was that after the outbreak of the War of Resistance against Japan, the number of inward migration population increased rapidly, and the demand for clothing, quilts, military uniforms and gauze increased sharply. In order to solve the large demand for cotton industry, the government increased the fund supporting for cotton production, stimulating the cotton industry to expand planting. Second, as the effective achievements of cotton industry improvement and the cotton industry promotion shown, especially from 1938 to 1940, Suining cotton industry ushered in the peak period of development, and the popularization of cotton industry was effective. In 1941, due to spring drought in the Fujiang River Basin, which was not suitable for cotton crops, and the wartime food price skyrocketed, leading to a weak cotton prices and sharply decreasing cotton fields. In the summer of the same year, the Yunnan-Burma highway was interrupted and the external assistance was cut off. The scale of Suining cotton industry was significantly reduced compared with the first four years after 1937. Taking 1941 as an example, the area of Sichuan cotton field was reduced by 170,000 mu compared with that of the previous year, and the output of Suining cotton field was reduced by more than 30,000 mu compared with that of the previous year, which was still at the first place in Sichuan. Therefore, it can be seen that the production reduction of cotton industry was the difficulty encountered in the whole province. The dilemma lasted to 1943 until it got better gradually.

To sum up, after the all-round War of Resistance against Japan broke out, Suining cotton industry developed rapidly. Especially after the National Government moved to Chongqing, a large number of people and funds poured in and yarn factories resumed work objectively, which accelerated the development scale of Suining cotton industry. More importantly, the cotton industry improvement and promotion vigorously promoted by the government had achieved remarkable results. In the first four years after the war, the development of cotton industry reached its peak. Although natural disasters and war disasters reduced cotton production, the cotton quality of Suining was improved and the high-quality cotton planting was popularized on a large scale, which led to the prosperity of cotton production and processing in Suining. In general, the eight years of War of Resistance against Japan were the short-term peak of Suining cotton industry development.

3. Reasons for Prosperity of Cotton Production

There are many reasons for the development of Suining cotton industry to occupy a higher position in Sichuan. First, it is the superior natural conditions that lay the foundation. Suining is rich in agricultural products, especially famous for its cotton production. "The cotton production of this

county is abundant, and the textile industry is developed immediately. For instance, the cotton yarn and various cotton fabrics are the major exporting goods of the county. ^[7] Suining has a good cotton production basis, maintaining a certain scale in Sichuan. The second is the formation of a commercial hub city. Land and water transportation is convenient in Suining. "Before the War of Resistance against Japan, the import and export of goods in the north of Sichuan were reckoned as the distribution center. After the outbreak of the War of Resistance against Japan, Sichuan-Shaanxi and Sichuan-Hubei highways were built successively. Every day, the number of vehicles increased, merchants gathered, and all businesses were flourishing. ^[8] The soil cloth cotton yarn produced IN Suining is popular throughout the province. The third is the comprehensive support of the government. The government support mainly includes the measures of promoting cotton industry improvement, promotion, cooperation and establishing supporting institutions and providing financial support."

3.1. Improvement and promotion of the cotton industry

Suining cotton is a traditional medium cotton area (i. e. soil cotton) with low yield. Fiber is short and thick, can only spin roving, unsuitable for spinning, at this time the foreign yarn squeezed the market, the west of Hubei cotton production boom, replacing Suining cotton gradually, therefore, "Suining's cotton industry has been hit by it, resulting the undervalued products and the cotton growers is in suffer." ^[9] In order to improve the cotton industry in Suining, Sichuan Provincial Government decided to set up a cotton field in Sichuan Province for cotton seed experiment, improvement and promotion, and actively promote American cotton planting.

According to the Table3, the government carried out the quality test of Suining cotton seed, and concluded that the United States cotton is very well developed, seen from its big peach fruit, compared with the local soil species, and double receipt quantity, and the color is white, the fiber toughness is tough, which is unmatched by the local soil cotton. It was decided to improve cotton seeds in Suining and distribute them to cotton farmers on a house-by-house basis to promote planting and seek increased production in the cotton industry. Suining is a traditional medium cotton region. The yield of native cotton is high while the quality is poor. Because of its high yield, the local cotton growers were very distrustful of the promoted American cotton at first. Because of the long growth period, more diseases and insect pests, late explosion and unstable yield of the promoted Trice351, the promotion process was not smoothly progressed. Only adapted to the local actual situation in Renli, Beigu, Xinqiao, the rural promotion of a slightly lower yield but high quality of Xiaogan cotton was produced. However, since the second year of the promotion, cotton growers gradually have a new understanding and acceptance of American cotton, more requests to distribute improved varieties, voluntary planting in Laijiazhou Zhongba area. The improvement of Liushutuo and Taihe Town in Shehong County was more successful. Compared with the local varieties before the improvement, the promoted Trice "increased the yield by more than 25% and the fiber length was more than one inch." ^[10]

In addition to the improvement of cotton seeds, the government has also actively improved the cultivation methods of cotton seeds. Through improvement and promotion in terms of sowing time, seedling opening, fertilization, ridge cultivation, green boll stripping, and disease and insect prevention and control, the receiving quantity per mu can be increased and the yield of lint per mu can be increased by 10 jin.

To sum up, the improvement of cotton industry led by the government is an important reason for the development and prosperity of Suining cotton industry. Taking 1937 as an example, the Trice which was popularized in a large amount increased by 20% on average compared with the output of Suining native cotton. The improvement and promotion of cotton industry practically promoted the

increase of cotton production and the improvement of cotton products in Suining.

Table 3: Cotton Industry Improvement and Cotton Industry Promotion in Suining Area

Region	Improvement and promotion	Effect of Improvement	Remarks
Suining County	Promotion of Chinese Cotton in Xiaogan Promotion of Deifos No. 531	The yield of Xiaogan cotton is slightly lower, but the quality is high. Deifos No. 531 has the highest yield and good quality, which are both popularized.	At first, Suining cotton farmers were extremely distrustful of American cotton
Liu Shutuo in Shehong	Promotion of "Trice"	Compared with the local small cottonwood, the income per mu increased by about 32 jin, with a total increase of 26%	High average yield
Shehong Taihe Town	Promotion of "Trice"	Compared with the local cotton, the income per mu was increased by about 10 jin, with a total of increase of 14%	High average yield

3.2. Policy and financial support

Suining cotton production area was an existing cotton area in Sichuan before the war. The government also strengthened the policy support for the development of Suining cotton industry, mainly through the way of establishing the training organizations and providing enough funds. In 1934, Suining set up Suining Senior Agricultural Vocational School in Sichuan Province to train agricultural talents. In 1936, on the basis of the establishment of Sichuan Cotton Plantation in Suining, Cotton Industry Guidance Institutes were set up in Liushutuo and Taihe towns, and technicians were dispatched to cover the villages and towns for cotton industry improvement. In 1941, the Bureau of Agriculture of the Ministry of Economic Affairs coordinated the establishment of a training class in Suining girls high school for textile business promotion personnel in Suining handicraft industry. The Ministry of Agriculture and Forestry set up Suining Cooperative Farm in Beigu town of Suining to cooperate in agricultural production and processing. Among them, cotton textile is one of the three major businesses of the cooperative farm. Since 1942, Suining Cooperative Farm and Cotton Field have started to jointly promote Xiaogan Chinese cotton in Beigu Township. "In 1942, it was expanded to 166.7 mu, and in 1943 it continued to promote 168.7 mu." In addition, the government also provided financial support. The government cooperated with Meifeng Bank to establish Suining Cotton Transportation and Marketing Cooperative, and set up cooperatives in Nanba, Beiba and other districts to "regulate rural finance and improve the income of cotton farmers". Taking 1936 as an example, Meifeng Bank provided 35 loan cooperatives with 854 loan farmers. The total amount of borrowings is RMB 8,215.

To sum up, the prosperity of Suining cotton industry is closely attributed to the overall support of the government. Especially, the improvement and promotion of cotton industry have led to the improvement of Suining cotton products' quality, the popularization of improved varieties and the increase of output.

3.3. Expansion of cotton production and processing industry

All ginning and oil-extruding manual spinning is called cotton production and processing. The expansion of cotton production drives the development of Suining cotton production and processing industry. First, cotton processing business such as springing and embossing is booming. Ginning is widely distributed in the county. There are 56 towns in Beimen outside, 25 in Renli, Yongxing, and

unevenly distributed in Jixiang and Hengshan. Ginning is a process of cotton production and processing, in which the business of embossing in urban area is operated by cotton merchants in full-time, and that in rural areas is mostly carried out by cotton farmers. The income is considerable, which is beneficial to improve the enthusiasm of rural cotton farmers. The second is the expansion of the cotton spinning business. There are about 90,000 hand-operated power machines in the county, producing about 4 liang of yarn every day. The cotton spinning business has almost become the main sideline of the people of the county.

Second, the number of textile and dyeing factories increased. Before the War of Resistance against Japan, Suining had no large factories, but only some small handicraft workshops. Since the end of the War of Resistance against Japan, the supply of foreign cloth was rapidly reduced due to the interruption of sea transportation. The local soil cloth of Suining began to sell well both inside and outside the province. Under such supply and demand conditions, the addition of textile and dyeing factories came into being.

With the obvious improvement effect of cotton industry, the tenacity of cotton fiber is improved, and it is more suitable for spinning. The large-scale modern textile factories begin to flourish. According to the table4, in 1944, the government registered 18 textile factories with a capital of 8.61 million yuan and more than 1,000 employees working here. Among them, Suining Textile Factory of Fujiang Industrial Co., Ltd. is located in Yufeng Street of outside Beimen, with a large scale (more than 300 employees), wide business scope (spinning, weaving, printing and dyeing) and sufficient capital (with a total capital of nearly 4 million yuan). The success of the factory has lighted up the passion of local factories, and some small-scale factories emerged in the county. At the same time, the number of cotton-related printing and dyeing factories also began to increase. The factories registered by the government include Sui Ning Wenhua Printing and Dyeing Factory and Minfu Fabric Factory, and the other 26 small-scale bleaching and dyeing factories. After the outbreak of the War of Resistance against Japan, the advanced printing industry began to be popularized in Suining. On the eve of the outbreak of War of Resistance against Japan, the number of printing factories increased to 13.

To sum up, the prosperity of Suining cotton industry has driven the formation of a cotton-based industry in the whole county. The establishment of modern textile and dyeing factories has led to the increase of cotton production and processing industries such as knitting and baling. At the same time, cotton planting, cotton processing and cotton spinning sales in the whole county became the pillar industry of Suining County in modern times.

Table 4: List of Textile Factories of Suining County in 1944

Name
Suining Textile Dyeing Factory of Fujiang Industrial Co., Ltd. and Manufacturing Factory of Xinhua Textile Co., Ltd.
Suining County Textile Promotion Industrial Cooperatives, Tianfu Weaving Industrial Cooperatives. and Daye Weaving Industrial Cooperatives
Minfu Dyeing and Weaving Factory, Jianhua Weaving Factory, Jinhua Weaving Factory, Yongli Weaving Factory and Benli Weaving Factory

4. Conclusions

This paper discusses the development of Suining's cotton industry in the period of the Republic of China from three aspects, the general situation of the cotton industry in Suining, the reasons for the rapid development of the cotton industry in Suining and the expansion of the cotton industry. This paper mainly analyzes the reasons why Suining cotton industry can prosper quickly, and the

main reason is that it benefits from the unified and centralized guidance of the government. Judged by effect, it can be seen that the development of Suining cotton industry in the Republic of China made great achievements in 10 years, and became the most representative cotton industry development area with the highest output in the province. The improvement of quality of cotton seeds, the increase of yield, the expansion of Suining cotton production scale, jointly promoted the economic development of Suining in a direct way. The cotton produced by Suining County has become an important supply of military uniforms in the rear area. The prosperous development of Suining cotton industry in the past 10 years has ensured the military supply of the rear area in wartime to the most extend and made great contribution to the final victory of the government. However, limited by the unstable political situation after the war, Suining cotton industry rapidly shrank after the victory of the War of Resistance against Japan. In addition, the development of Suining cotton industry in the Republic of China did not change the scheme that the Suining industry is in a backward position. Compared with cities in Sichuan such as Yibin, Leshan and Zigong, the National Government did not rely on the rapid development of Suining cotton industry to build large-scale factories. Suining was still a county with backward industries in Sichuan on the eve of liberation. These are the obvious shortcomings of the development of Suining cotton industry in the Republic of China.

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