

# The Development History and Prospect of Agricultural Machinery in China

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**Abstract:** China's agricultural machinery from the founding of the country can be said to be from scratch. After a short period of 6 years, China's agricultural machinery city has developed into a huge industrial chain with a more complete industrial system, which brings great benefits to China's agricultural production, this paper will analyze the development history of China's agricultural machinery, and put forward some of their own views on the future of agricultural machinery.

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## 1. Introduction

The development of China's agricultural machinery should start from the beginning of the founding of the country. At the beginning of the founding of the country, China is in a special historical period, the domestic machinery ownership is very low, whether it is industrial machinery or agricultural machinery are in the "quantity is small, poor quality" of the embarrassing situation. According to relevant information, in 1949, China's agricultural machinery and equipment, the total power of only 8.01 million kilowatts, of which only 117 agricultural tractor holdings, and large-scale agricultural machinery, such as combine harvesters, heavy agricultural trucks and other holdings for zero. At this time, China's agricultural machinery field can be said to be very backward.

According to our research, we believe that the development of China's agricultural machinery can be divided into four major stages, which represent three major transitions.

## 2. Popularization Stage of Agricultural Machinery (1949-1957)

We call this stage of popularization with reference to the current situation of agricultural machinery in China at the beginning of the founding of new China, and this period can also be called the budding stage of agricultural mechanization in China. The results of this stage are remarkable, between 1950 and 1952, China added more than 59 million pieces of old agricultural implements; as of 1957, the amount of new animal-powered agricultural implements in the country had reached more than 5.1 million pieces; by

the end of this stage, more than 730 state-run mechanized farms were established in the whole country, and the amount of agricultural implements in the country had reached more than 18,000 pieces, among which, the amount of combine harvester reached 1,400 pieces, and the amount of agricultural load-bearing machines reached 1,000 pieces. At the end of 1957, there were more than 350 tractor stations in China, and the area of mechanized cultivation reached 1.75 million hectares in that year; by 1957, China had established the basic framework of agricultural machinery industry system, with a total of 1.75 million hectares. By 1957, China had established the basic framework of the agricultural machinery industrial system, with a total of 276 agricultural machinery manufacturing enterprises in the country, which could produce 15 kinds of agricultural implements, including combine harvesters.

## 3. Mechanization Stage of Agricultural Machinery (1958-1965)

In 1955, Comrade Mao Zedong wrote in "On the Problems of Agricultural Cooperativization": "Only when China completes the socialist reforms thoroughly in the social and economic system, and also in the technical aspect, when machines are used in all sectors and places where they can be used, can the social and economic outlook be completely changed." Four years later, Comrade Mao Zedong summarized his remarks on agricultural mechanization as follows: "The fundamental way out for agriculture lies in mechanization."

In this stage of agricultural machinery mechanization, the Chinese government formed a set of guidelines and policies to guide the development of agricultural

mechanization.

1. The reform movement of agricultural implements was carried out on a large scale, starting from the end of 1957 until 1961, there were hundreds of millions of people participated in the reform movement of agricultural implements, and more than 200 million pieces of agricultural implements were created and reformed nationwide, and the maintenance and manufacturing industry of agricultural machinery of our country took the opportunity to flourish, and more than 80,000 manufacturing and repairing factories of agricultural implements were established in the whole country at that time.

2. Agricultural machinery industry reform, in the last stage of development, China's initial establishment of the agricultural machinery industry system, in this stage of development, the state added more than 2 billion investment, planned new construction, the expansion of a number of agricultural machinery manufacturing enterprises, which are represented by: the first tractor factory, tianjin tractor factory, jiangxi tractor factory, anshan red flag tractor manufacturing plant. By 1960, the national agricultural machinery manufacturing enterprises reached more than 2,600.

3. Improvement of agricultural machinery repair network, with the rapid increase in China's agricultural machinery holdings, the government at the same time to support a number of agricultural machinery repair and distribution plant, but also the development of a number of small repair and distribution station, the formation of a more complete agricultural machinery repair and distribution network.

#### **4. The Stage of Comprehensive Mechanization of Agricultural Machinery (1966-1993)**

The main feature of this stage is that the state continues to vigorously promote the mechanization of agriculture at the same time, experienced a very important turning point in agriculture - the farmers' collective economy into a contracting system, which greatly encourages the farmers' enthusiasm for production, and at the same time, the state in the agricultural machinery above the relaxation of the policy prompted the era of the full mechanization of agricultural machinery This greatly encouraged the farmers to be active in production.

By 1993, the power of agricultural machinery in China had reached 315.58 million kilowatts, which was 3944 times more than that at the beginning of the country. It can be said that this marks the fact that our country has come to a relatively high point on the road of mechanization of agricultural machinery.

The most epoch-making aspect in the possession of agricultural machinery is that the national government has

allowed farmers to purchase, own and operate agricultural machinery on their own. This has greatly facilitated the process of mechanization of agricultural machinery in China.

#### **5. Stage of Modernization of Agricultural Machinery (1995-)**

This stage has lasted until today, the distinctive feature of this stage is market-oriented, agricultural economic development as the core, in the country to realize the trend of independent modernization of agricultural machinery.

In this stage, agricultural machinery manufacturing enterprises and repair enterprises to participate in the market competition, no longer have the deliberate support of the state, this period gave birth to a drag and other large-scale agricultural machinery enterprise group, and the quality of the product and the technical content of the substantial increase. In this stage, agricultural machinery enterprises began to pay attention to market competition, and this competition gradually from a single price competition to quality, after-sales service, brand, price and other aspects of the comprehensive competition, which greatly enable farmers to get the actual benefits, and promote the development of modernization of agricultural machinery.

#### **6. Outlook for the Development of Agricultural Machinery**

Based on the development trend of China's agricultural machinery, we believe that China's agricultural machinery should come out of a modernization of agricultural machinery development road with Chinese characteristics, specifically embodied in two aspects.

For individuals, we believe that the development of China's agricultural machinery should be developed towards industrial clustering, the road of commodity services. For our farmers, modern agricultural machinery belongs to the higher technical content and expensive products, due to the lack of relevant professional knowledge, in many cases, the majority of farmers hold modern agricultural machinery does not get good maintenance, which greatly increased the use of modern agricultural machinery farmers friends Ham Ben. If the relevant enterprises can do product sales, after-sales consulting one-stop service, then it is bound to win a larger market share, and can lead to the development of related service industries.

The line for the macro aspects, we believe that China should be small multi-functional agricultural machinery as the core development goals, because China's arable land terrain, hold the situation and the United States and other agricultural exporting countries are very different from large-scale agricultural machinery does not have much prospect for development.

## 7. Conclusion

We hope that China's agricultural machinery can be human nature, service-oriented industrial chain development, which is not only the respect for the consumer groups, but also a way to help agricultural machinery industry mammoth development. Many foreign manufacturers have begun to realize this service-oriented industrial program. I hope that China's related enterprises can learn from.

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At the request of the author, it will not be disclosed.

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