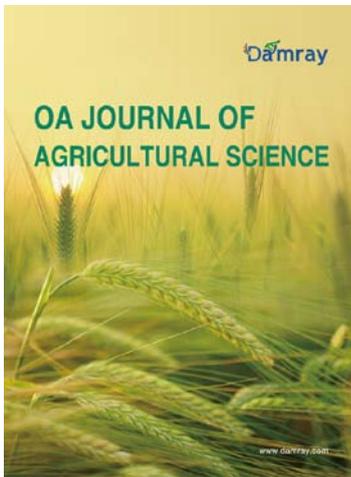


# Present situation and countermeasures of agricultural mechanization development in China



**Dan Zhang**

Linyi University, Linyi, Shandong, China.

## Abstract

Agriculture is the foundation of our country, and it is also an important part of our economy. Therefore, our country has always maintained a high degree of emphasis and support for agricultural development, aiming to achieve the strategic goal of transforming our country from an agricultural country to an agricultural power. At this stage, with the development of a large amount of science and technology and its application in the field of agricultural production, my country's agriculture is developing in the direction of modernization, mechanization and digitalization, which means that my country's agriculture will usher in a huge leap forward. Based on this, this article first analyzes the importance of the development of agricultural mechanization, and then expounds the current situation of the development of agricultural mechanization in my country, and finally summarizes a series of countermeasures that will help promote the development of agricultural mechanization, hoping to make my country an early agricultural power Dreams help.

## Keywords

Agricultural production, Mechanization development, Status quo, Countermeasures

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## Introduction

Agricultural mechanization mainly refers to the use of a variety of machinery to replace manual labor in agricultural production activities, which means the improvement of productivity and the acceleration of production efficiency, is an important direction and trend of China's modern agriculture and future agricultural development. In terms of the current our country agricultural production while some regions has been mechanization production, but there are still some limitations and one-sidedness, especially in the mechanical type, performance and practical application, the existence of obvious lag behind the western developed countries, so in order to as soon as possible from incomplete and imperfect agricultural mechanization status quo, China's agricultural departments and relevant units should study and formulate effective strategies and increase efforts from the promotion of mechanization, publicity, technological innovation, personnel training, policy popularization and other aspects, and then create favorable conditions for China's agriculture to

achieve comprehensive and healthy mechanization production as soon as possible.

## **1. The importance of developing agricultural mechanization**

First of all, the most important significance and function of mechanization of agricultural production is to effectively improve the efficiency of agricultural production, and make field work that originally required a lot of labor and time costs simple and fast. Secondly, agricultural mechanization has promoted the development of our country's economy to a certain extent, which is not only limited to increasing crop income and production, but also that a large number of agricultural machinery inputs have created more employment opportunities, and also promoted the development of my country's manufacturing industry. All in all, the early and comprehensive realization of mechanization in the field of agricultural production has played a very important role in our country's economic development, social development and agricultural development.

## **2. The status quo of the development of agricultural mechanization in China**

### **2.1 Unbalanced development of mechanization in regions**

At present, there is a serious regional imbalance in the development of agricultural mechanization in China, that is, the degree of agricultural mechanization in some areas is high, while the degree of mechanization in some areas is low. This situation is mainly caused by the following reasons: First, it is affected by the regional economic strength. Eastern China and coastal areas are economically developed, and agricultural machinery equipment is rich in variety and large in quantity. On the contrary, the mechanization degree in western and central China is much worse than that in eastern China due to the relatively backward economy [1-6]. Second, it is affected by the natural conditions of the region. As we all know, agricultural planting areas are mainly plains, while plains occupy less area in China, which to a certain extent limits the development of large-scale agricultural mechanization production in China, and leads to regional differences in the development of mechanization in China. For example, the degree of mechanization is higher in northeast China and North China, while the degree of mechanization is lower in southwest China, which has a lot to do with the local geographical terrain.

### **2.2 Service and guarantee systems for agricultural machinery need to be improved**

The development of agricultural mechanization is not simply to put agricultural machinery into production activities, but needs to be equipped with a perfect support service system and management system, in order to truly achieve the goal of agricultural mechanization development, but in terms of the development of China's agricultural mechanization, there are problems of mechanical services and support system [2]. First of all, China lacks systematic promotion mechanism in mechanization promotion, which leads to a lot of advanced mechanization equipment and technology is difficult to be implemented at the grass-roots level. Secondly, agricultural mechanization support policies are not perfect. Although the state has formulated a series of encouragement and promotion policies, it is difficult to directly realize them to farmers in the actual implementation and implementation process, which leads to farmers' inadequate understanding of mechanization development and low trust. Finally, the guarantee system of mechanization development is not sound enough. In many cases, farmers will get benefits when buying agricultural machinery, but they cannot get corresponding guarantee in actual use or mechanical maintenance, which will hit the enthusiasm and enthusiasm of farmers in using mechanical production [2-7].

### **2.3 There is a huge gap in agricultural mechanization professionals**

The machinery used in agricultural production often needs professional personnel to operate, and the maintenance of agricultural machinery also needs professional maintenance personnel, but there is a huge gap in operation and maintenance personnel in our country. For example, when wheat and corn are harvested, it is common to see the movement of harvesters, which means not only a shortage of equipment but also a shortage of people to operate it. In addition, when using agricultural machinery to engage in production activities, there are often mechanical failures that cannot be eliminated and maintained, which not only seriously affect the efficiency of agricultural production, but also easily reduce farmers' recognition and support for the development of mechanization. Therefore, in order to realize the mechanization of agricultural production, it is necessary to strengthen the training of professional talents, especially the operators, maintenance personnel and technicians of agricultural machinery, so as to ensure the safety in the use of agricultural machinery, and ensure the efficiency and stability of agricultural machinery [8-9].

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### 3. Countermeasures for the development of agricultural mechanization in China

#### 3.1 Economically developed regions drive backward regions to achieve common development

Aimed at the status quo of the imbalance in development of agricultural mechanization, drive the underdeveloped regions should push forward the economic developed areas to achieve the goal of common development, promoting economic relatively developed area in the aspect of mechanical equipment, professional and technical, professional, more backward area to help and support, thus effectively to narrow the gap in our country mechanization development in the region, This will create favorable conditions for the comprehensive realization of mechanized production in China's agriculture. For example, in economically developed and highly mechanized areas, the replacement of agricultural machinery can be put into economically backward areas, so as to drive the mechanization development of backward areas step by step.

#### 3.2 Strengthening the promotion and publicity of agricultural mechanization

Promotion and publicity is the main way to accelerate the development of agricultural mechanization in China, so the local governments should actively formulate promotion policies and increase the intensity of publicity, so as to provide strong support for the development of agricultural mechanization in China. First of all, for the new research and development of technology and mechanical equipment to complete the test, the rapid promotion and implementation of rural grassroots, to ensure that farmers can understand and apply technology and mechanical equipment in the first time. Secondly, formulate reasonable promotion policies to enhance the enthusiasm of farmers to use machinery in agricultural production activities. For example, during the busy farming period, the local government can assign professional technical personnel to visit the grassroots in order to provide maintenance services for farmers, and then ensure that the agricultural machinery can be in a relatively efficient production state. Finally, modern information technology can be used to publicize the advantages and characteristics of mechanized production, and agricultural machinery publicity meetings can also be held at grassroots level to introduce the uses and operation methods of agricultural machinery to farmers in detail, so as to achieve the purpose of rapid promotion and publicity of mechanized production [10-16].

#### 3.3 Pay attention to the training of mechanization professionals

The cultivation of professional personnel in mechanization is the key to promote the development of agricultural mechanization in China. Only by keeping up with the needs of mechanization development, can we ensure that China's agriculture can fully realize mechanization and modern production. First of all, we should pay attention to the introduction and training of talents, especially in secondary and higher vocational education. We should not only pay attention to the teaching of theoretical knowledge, but also focus on improving students' practical ability. In addition, colleges and universities can also encourage mechanization professionals to go to rural grass-roots training, on the one hand, it can promote the development of agricultural mechanization, and on the other hand, it is conducive to testing the technical level of talents. Secondly, in addition to the introduction and training of technical personnel, we should also pay attention to the training of promotion and publicity personnel, especially to improve the comprehensive quality and professional knowledge of promotion personnel, so as to ensure that the promotion work can contribute to the development of agricultural mechanization. Third, the local government can also set up a special operation and driving training platform to encourage farmers to actively learn the relevant knowledge and operation techniques of agricultural machinery, and then provide a large number of operators for agricultural mechanized production [17-18].

### 4. Conclusion

Realizing agricultural mechanization production can not only improve the efficiency of production, but also promote the growth of agricultural economy, as well as boost the development of other fields in our country, so vigorously promote and publicize agricultural mechanization has very important significance. The above mentioned strategies and methods are proposed mainly from the aspects of training, guarantee and service system construction of mechanization professionals, hoping to be helpful for the development of agricultural mechanization in China.

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