

## Problems and Suggestions on Maintenance Management of Agricultural Machinery

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**Abstract:** With the development of social economy and science and technology, agriculture has gradually developed from traditional manual agriculture to mechanical agriculture, and the level of agricultural machinery has been continuously improved, but in the further development, agricultural machinery has also faced many new challenges and problems. Agricultural machinery refers to all kinds of machinery used in the process of crop planting and animal husbandry production, as well as in the process of initial processing and treatment of agricultural and livestock products. The input and use of agricultural machinery has improved the efficiency of agricultural production and work efficiency, laid a solid foundation for the development of rural economy, and ensured the quantity and quality of agricultural products. Based on this, it is very important for the maintenance and management of agricultural machinery, and the proper maintenance and management of agricultural machinery will also improve the level of agricultural machinery, promote the development of agricultural machinery, and thus promote the development of rural economy. This paper analyzes and studies the problems existing in the maintenance and management of agricultural machinery, and puts forward some suggestions and measures.

### 1. Introduction

China's large number of agricultural machinery maintenance network, wide distribution, agricultural machinery repair points have more than 200,000. The service network of agricultural machinery maintenance is an important part of the socialized service system of agricultural machinery and the guarantee of efficient operation of agricultural machinery. The quality problem of agricultural machinery maintenance is not only related to the technical condition of agricultural machinery and the saving of resources, but also to the vital interests of the maintenance parties, and also to the personal safety. Therefore, it is very important to strengthen the management of agricultural machinery maintenance. The further development of agricultural machinery maintenance industry can also absorb certain surplus labor force in rural areas, increase farmers' income and ensure the normal and orderly operation of agricultural production. So the development and application of agricultural machinery have been paid attention and attention by the government and society. In this era of rapid development, any industry needs to have advanced management concept and information system. Nowadays, in the course of agricultural development, China has gradually made agricultural machinery have more and more advanced management system, but with the continuous development and progress of the industry, maintenance and management system has also appeared some problems. In the process of social development and progress, there are some problems always inevitable, we have to go to in-depth analysis of the causes and sources of these problems, put forward solutions to these problems, so that agricultural machinery better development.



Figure 1 Agricultural machinery

## 2. Problems in the Maintenance and Management of Agricultural Machinery

### 2.1. Inadequate Management System

Compared with other western developed countries, the management level of agricultural mechanization in China is relatively backward, and many regional agricultural mechanization management institutions have not yet completed the system and intelligent management. The agricultural mechanization management organization has not formulated and perfected the related management system according to the actual situation and the work ability consideration, carries on the better supervision and the inspection to the agricultural machinery maintenance management, the management aspect is relatively single, is not very comprehensive. In addition, the service system of agricultural machinery in China is not perfect enough to effectively meet the needs of the development of modern mechanization, and it is difficult to carry out timely and effective after-sale maintenance services in some economically backward areas, which leads to the difficulty of agricultural mechanization in some areas, and the failure of agricultural development in some areas. The rural economy is underground and has a very great impact on human life.



Figure 2 Agricultural mechanization process

### 2.2. Low Level of Management

Most agricultural machinery management departments do not have full-time personnel responsible for agricultural machinery maintenance, busy time is difficult to take into account the maintenance work, resulting in the quality of agricultural machinery maintenance can not be guaranteed, agricultural machinery maintenance management can not be guaranteed. When the administrative department in charge of agricultural machinery carries on the administrative punishment to the maintenance quality unqualified of the agricultural machinery maintenance point, it can not find the punishment basis, which gives the specific administrative behavior of the administrative department in charge of agricultural machinery a difficult problem. Under the background of deepening the reform of the market economy system, the traditional agricultural

production management mode has been unable to meet the needs of modern agricultural development. In the management of agricultural mechanized production in various regions, it is necessary to carry out innovative reform work on the mechanical management mode in time to ensure the construction of a mechanized management system that meets the requirements of agricultural development in the new period. However, due to the short development time of mechanization management in China, the lack of professional management ability and practical experience of managers, the backward working concept of agricultural mechanization managers, the emphasis on immediate benefits, the neglect of the long-term and stable development of agricultural mechanization, and the lack of innovative consciousness in management work, the level of management has been unable to improve, and the quality of maintenance management of agricultural machinery is still on the low side [1].

### **2.3. Inadequate Regulation**

There are many and wide distribution of rural machinery maintenance network, the supervision of law enforcement department is very difficult to put in place, and most of the maintenance personnel are unlicensed to take up posts, but also lack the necessary management means. In addition, the law enforcement department is restricted by funds and establishment, which leads to difficulties in the management of agricultural machinery maintenance, so the supervision of relevant departments is very weak, which has a bad impact on the development of agricultural machinery maintenance management.

### **2.4. Lack of Management Personnel for the Maintenance of Agricultural Machinery**

The high ability and high quality maintenance management talents have great effect on the maintenance management of agricultural machinery, which can ensure the steady development of agricultural machinery maintenance management, put forward new management methods and systems for agricultural machinery maintenance, promote the development of agricultural machinery, and thus develop the rural economy, so it is very important to train such talents. However, at present, some economically backward areas in our country lack professional mechanized management personnel, and the ability of agricultural machinery management personnel is generally relatively low, and many do not have professional related knowledge. In addition, due to the lack of professional training and education of agricultural mechanization management personnel, the concept of management work can not be updated in time, which leads to their knowledge of mechanization management is difficult to keep up with the development requirements of the times, and it is difficult to meet the needs of social development and change, thus affecting the smooth development of agricultural mechanization construction in China.

### **2.5. Working Attitudes**

Agricultural machinery maintenance work needs a serious attitude, attitude is not serious will lead to incomplete maintenance, the emergence of key safety components perfunctory, not only affect the quality of agricultural machinery maintenance, but also prone to agricultural machinery maintenance accidents. Most of the tractors in the countryside are now privately owned, and many of them see only immediate benefits. They can be saved when they are repaired. They do not pay attention to inspection and maintenance at ordinary times.[2].

## **3. Recommendations for Strengthening the Management of Agricultural Machinery Maintenance**

### **3.1. Improved Mechanized Management System**

In order to adapt to the development of agricultural production in the new period, it is necessary to improve the mechanization management system scientifically and improve the contents and methods of mechanization management. Regional governments should strengthen scientific guidance to mechanized management institutions, guide them to improve relevant management systems, and implement measures to reform mechanization, and formulate relevant mechanized

management systems in combination with local actual conditions and work efficiency to ensure the quality of agricultural machinery maintenance management. Build a professional and perfect agricultural mechanization service system, introduce professional after-sales service technical personnel, provide timely agricultural machinery supporting services for the majority of farmers, comprehensively improve the level of mechanization services, avoid the disconnection between machinery production and sales and service system, improve the management level of agricultural machinery maintenance, promote comprehensive mechanization management, and improve the relevant system.



Figure 3 Mechanical maintenance

### **3.2. Enhanced Surveillance and Strict Enforcement**

The management department of agricultural machinery shall, in accordance with the relevant laws and regulations, strengthen supervision and management of the maintenance points of agricultural machinery, perform its duties, examine and verify the maintenance points and repairmen of agricultural machinery, strictly supervise the maintenance quality, and intensify inspection of the operators of agricultural machinery accessories. The agricultural machinery department should strengthen the contact with the Bureau of Quality and Technical Supervision and the Administration for Industry and Commerce to form the normal work of joint law enforcement in order to improve the level and quality of law enforcement and ensure the healthy development of the agricultural machinery maintenance industry [3].

### **3.3. Training of High-Quality Maintenance Managers**

In order to meet the needs of social development for the development of agricultural mechanization management, regional agricultural mechanization management institutions should pay attention to the establishment and training of high-capacity and high-quality professional management personnel. Relevant departments should strengthen the training and education of law enforcement personnel, organize law enforcement personnel to learn professional theoretical knowledge of maintenance management, let law enforcement personnel familiar with the relevant laws and regulations of industry management, and act in strict accordance with law enforcement procedures, so as to serve the concept of serving the market and serve all maintenance enterprises. The local government should formulate and promulgate a series of policies for the training, support and encouragement of agricultural mechanization management personnel, guide mechanized management institutions to attract high-quality and high-capacity maintenance management personnel with more generous salary treatment and promotion opportunities, and fully mobilize the enthusiasm and initiative of managers in their work, so as to effectively improve the efficiency of mechanized management work and improve the management level of talents.

### **3.4. Strengthening and Delivering Quality Services**

Relevant departments must change their concept of work, have the ideological consciousness of serving the people wholeheartedly, work hard for the people, and endure hard work. To provide information to agricultural machinery maintenance personnel, as well as to promote new agricultural machinery maintenance technology, new materials, new technology and new

maintenance equipment, according to the actual solution of problems in maintenance, agricultural machinery maintenance personnel to carry out publicity and education of agricultural machinery laws and regulations, so that they abide by the law, integrity for the people, loyalty for the people. The staff of the agricultural machinery department should strengthen and provide high-quality service for the purpose of completing the work attentively and making their own contribution to the development of human society [4].

#### **4. Conclusions**

The maintenance and management of agricultural machinery not only involves the technical status and resource utilization of agricultural machinery, but also relates to people's personal safety and economic benefits. Therefore, the relevant departments and staff of agricultural machinery maintenance and management should do their own work well, treat this work carefully and serve the people wholeheartedly. Staff should improve their own quality, constantly innovate management means and methods, and then promote the development of the whole agricultural machinery maintenance industry. In the era of high-speed network development, whether it has brought some influence to the maintenance or management of agricultural machinery facilities, the relevant departments should set up relevant service websites, so as to further promote the development of agricultural machinery maintenance management towards the direction of information. We should strengthen the research of agricultural mechanization, constantly explore and innovate, promote the rapid development of agricultural mechanization, promote the further development of rural economy, and thus enhance the social and economic development of our country.

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