

Research on Agricultural Insurance and Its Operation Mode in Hunan Province

Hong Yan, Zhuomin Li, Yunxiang Li

College of Science, Hunan City University, Yiyang, 413049, China

Abstract: To promote the long-term healthy development of agriculture, we explore a business mode that can raise the level of security and ensure the profit demand of insurance companies. This paper explores the demand of agricultural insurance from the characteristics of natural environment, production conditions and grain types in various areas, and then carries out the risk analysis from the three aspects of natural inability, the moral hazard of the insured and the factors of market security. Finally, it puts forward some ideas on the operation mode of agricultural insurance in several aspects of the cooperation mode of the government and enterprises, the mining of agricultural subsidiary value, the innovative sales mode and the risk transfer.

Keywords: Agricultural insurance; Operation mode; Risk analysis; Risk transfer

1. Introduction

In 2007, Hunan has become the first batch of pilot provinces of agricultural insurance in China. But by the end of 2015, the agricultural insurance level of our province was 16.91%, the growth rate was 9.37% compared to the same period, all below the national average level.

China has a vast territory, and there are great differences in natural conditions, humanities, social and economic environment. Therefore, for agricultural insurance, we need to suit measures to local conditions, and divide insurance categories and payment systems according to different situations, to seek a healthy operation insurance mode. Agricultural insurance can help farmers to diversify risks and reduce losses. Food demand is increasing, but agriculture is still a big risk industry. Once natural disasters happen, the rural economy will face a major blow.

There are many kinds of natural disasters in Hunan Province, which are difficult to prevent. Among them, flood and drought disaster are the most important, seeking the operation mode of agricultural insurance in accordance with the situation of Hunan province. It is of great significance to improve the agricultural risk resistance and promote the modernization of agricultural production. It is also an important way to safeguard the social stability to ensure the people's life and improve the happiness of the farmers.

2. Situation and Main Problems of Agricultural Insurance in Hunan

Since 2007, the pilot work of agricultural insurance in Hunan has been emphasized[1]. In 2009, the relevant documents were issued for the first time to restrict the unreasonable expenses of premiums. In the same year,

market oriented agricultural insurance was carried out, and the financial sector offered a certain proportion of financial subsidies to Underwriters and insured[2].

Since 2017, the catastrophe insurance system has been established, the pilot work of catastrophe insurance has been carried out, and the coverage of the agricultural insurance varieties with large natural risks such as the classics, livestock and poultry and aquatic products has been expanded. In the pilot area, the provincial fiscal subsidy premium is 32.5%, the central government subsidy premium is 47.5%, and the county level financial premium subsidy is abolished[3]. With the help of insurance mechanism, we should give full play to the function of insurance, develop precision agriculture, and push forward the structural reform of supply side of agriculture.

In the past ten years, the insurance rate of agricultural insurance in Hunan has not been significantly improved because of the insufficient publicity of agricultural insurance, low amount of guarantee and the long and complicated period of compensation procedures. For a new type of insurance product, most farmers are not very well received, and the degree of trust with the insurance company is very low. Besides, the public welfare of agricultural insurance is too strong. The proportion of government financial subsidies in the amount of claims is too high, which once reached over seventy percent. Finally, although the insurance of agricultural insurance in our province is increasing, the most important catastrophe insurance is still very immature, so the agricultural insurance has not played the expected role for the farmers in many areas[4].

3. The Demand of Agricultural Insurance from the Characteristics of Hunan

3.1. The disaster situation and its influence in Hunan Province

Our province has abundant water resources, abundant rainfall, and unique topography, resulting in frequent floods and floods in many areas. In 2014, the direct economic loss caused by floods reached 19 billion 935 million 270 thousand yuan, and the total loss was 20 billion 645 million 750 thousand yuan. The flood loss accounts for 96.56% of the total, which indicates that the catastrophe insurance in our province needs to be popularized in a large area, especially for flood insurance[5].

3.2. Production conditions and its influence

Whether power resources, modern farming facilities or traffic conditions are all important factors of agricultural development in a region. The development level of each region is different. An agricultural insurance mode can not adapt to all regions. In developed areas, all aspects of resources are more abundant and grain production is higher, such as the Changsha Zhuzhou Xiangtan area. In this area, the prevention and control of natural disasters in this area is small, and the scientific knowledge of farmers is widely used. In this area, the insurance mode should pay more attention to "cost performance" -- large area insurance, high reimbursement, etc. In less developed economic areas, there are generally backward production conditions, high planting risk and insufficient farmers' insurance awareness. In the face of such a region, enterprises should pay more attention to the functional propaganda of agricultural insurance, and at the same time, the government should also increase support. Improve production conditions and mobilize the enthusiasm of farmers to participate in insurance.

3.3. Hunan province grain type and its influence

Hunan province has diversified agriculture models, abundant food crops and distinctive aquaculture industry (Ningxiang pig and so on). Hunan province has also been increasing agricultural insurance coverage and coverage. The richness of food category determines that the level of agricultural insurance must be hierarchical, and the operation mode should be more targeted.

The highest yield of rice in our province is rice. The planting level of Hunan is at the forefront of the whole country. The geographical location of our province is also very suitable for rice production. The demand for insurance of rice should be mainly on natural disasters such as pests, disasters and drought. The non-mainstream crops such as wheat, sorghum, barley and other non-mainstream crops need to consider the factors such as temperature, precipitation, planting technology and geology. In the formulation of insurance, the compensation project should be more carefully inspected the market demand. For crops with high value and unstable factors,

we should take account of market factors such as "Insured price" when making agricultural insurance.

4. The Risk Analysis of Agricultural Insurance

4.1. Natural irresistible factors

According to the annual statistical data of Hunan, the most extensive area of flood damage is the largest loss. As of July 3, 2017, the flood hit the area of 5 million 622 thousand and 500 hectares of crops and the direct economic loss amounted to 6 billion 14 million yuan. Besides, there have been major droughts in Hunan. Once such a large-scale natural disaster occurs, the insurance company will face huge reparations, even if there are government subsidies, it will cause huge losses. Besides natural disasters, the prices of many farm products are affected by seasonal factors. For example, in summer, the price is extremely unstable because the eggs are not easy to preserve. It is very easy to cause the loss of farmers, and further increase the risk of compensation for agricultural insurance.

4.2. The moral hazard and market safety factors of the insured

First, because there is not a perfect survey - Identification - compensation process at this stage, the basic talent is scarce and agriculture is a difficult and difficult industry[5]. Agricultural insurance also needs to bear the moral hazard from the insured. Second, many agricultural and sideline products cannot be directly preserved for a long time. The probability of accidents in transportation is the transportation risk of agricultural insurance. There are also some uncontrollable accidents that may happen during the processing of agricultural products, which is also a potential safety risk. Finally, the market price changes of many agricultural and sideline products are closely followed by the international futures market, in which the soybean is more typical, the change of international oil price will impact the price of domestic soybean at any time. Once the price falls below the underwriting line, the insurance company is likely to make a deficit claim.

5. A Tentative Plan for the Operation of Agricultural Insurance in Hunan

5.1. Insurance legislation and increasing insurance

Agricultural insurance is still in its growth stage in China. Lack of reasonable market supervision system leads to no standard in the whole industry structure and is difficult to develop. To maintain long-term sustainable development of agricultural insurance, the government must adjust measures to local conditions and introduce laws and regulations that are suitable for provincial conditions[6].

Hunan has rich agriculture diversity and its development has its own characteristics. The insurance companies should introduce different agricultural insurance schemes with different emphasis on the production risk, market risk, safety risk and natural risk of different crops, and increase the risk of agricultural insurance.

5.2. Government and enterprise cooperation

The economic situation is good. The scale of the first industry is strong, and the government has strong financial strength, such as Changsha, Yueyang and Dongting Lake. It is possible to develop the mode of agricultural insurance quasi commercialization (refer to Changde's mode) and the mode of government cooperation and supervision. This mode is conducive to healthy competition in the market, so as to promote the development of agricultural insurance and its operation and operation, and farmers' selectivity. However, the government should give policy support from the angle of farmers, such as raising the premium, but the government should give a certain proportion of the subsidies to the insured farmers; distinguish the huge natural disasters from other compensation reasons, when the catastrophe occurs, in addition to the indemnity of the insurance companies, the government will pay additional compensation to the insured farmers, and give the incentive policy support to the farmers with large insured share. Etc..

In this way, it is beneficial not only to guarantee the market value of "agricultural insurance", that is, the profitability of the product, but also has a positive impact on raising the enthusiasm of the farmers. The agricultural insurance market is huge, as long as it can successfully solve the "hard injury" of commercial profit, the major insurance companies will do their best to improve their own products to compete for market share. Once the market competition is fierce, the "cost performance" of agricultural insurance will become the most important competition point, and the three party of the insurance company, the farmer and the government will win together.

In areas where the economy is undeveloped and the primary industry is not large, the operation mode of the agricultural insurance should be based on the government and the joint insurance company undertakes the insurance. This model is more public welfare, needs the government to carry on the financial support energetically, and must provide help from the production link, reduce the farmer's production risk in order to reduce the purpose of compensation. In areas where disasters are frequent, the government can take compulsory insurance measures appropriately.

From the point of agricultural insurance itself, reducing the rate of compensation is always the common pursuit of insurance companies, governments and policyholders. First, the government and the insurance institutions can

cooperate to popularize science planting technology and provide advanced equipment leasing to help farmers improve their income and reduce the risk of compensation. Second, the insurance claims should be subdivided to avoid "small disaster and big loss", so as to increase the adverse selection and moral hazard of the insured's derogation.

5.3. Strengthening the support of "catastrophe risk"

The main disaster in Hunan is flood. Agriculture is generally most affected by it. Most of the insurance companies have thin capital and less insurance capacity, so there are very few companies that are willing to underwrite insurance. Therefore, increasing the support of catastrophe insurance and promoting the construction of catastrophe insurance system are of great significance for maintaining the stability of rural economy and protecting the life of farmers. At the same time, it plays a decisive role in the sustained, long-term, stable and healthy development of the whole agricultural insurance industry[7].

5.4. Help excavate agricultural subsidiary value

A single traditional agricultural production model is too risky for insurance, but if it can combine tourism with agriculture and take into account the additional output value of tourism, the risk of insurance can be greatly reduced. For example, the "rape flower base" in Hengyang County of Hunan province is a successful example. Once the additional tourism value of agriculture is excavated, even if the latter suffers from natural disasters, the farmers' ability to resist risk is greatly enhanced by the income of the tourism industry. Most of the tourism resources in our province are very good and have the conditions to develop this mode[8].

5.5. Innovation sales mode for risk transfer

In traditional agricultural marketing mode, consumers always share the risk of agriculture in the form of "market price", but the beneficiaries are farmers who are not affected. If consumers are allowed to participate in agricultural insurance, the other three parties, including government, farmers and insurance companies, will benefit. How to achieve this assumption may start with the innovation of sales mode.

Under the rapid development of Internet, many people are accustomed to online shopping, and life pursuit and attitude have changed dramatically. Many families with economic conditions are more choosy about the choice of food and are more willing to pay for high quality agricultural products such as 'green 'and' pollution-free ', so the market can be extended to the traditional model of agricultural products. We can refer to the O2O mode of fruit sale now, and the pre sale model of the real estate industry to form a new model of agricultural sales: let the consumers participate in the consumption from the begin-

ning of the production cycle of agricultural products, prepay the deposit, periodically push the production situation, and play "safe" and "safety". Consumers can choose whether to insure agricultural insurance independently. Once natural disasters occur, the insured consumers can take back the deposit and small compensation, and the uninsured will lose the deposit (in the case of inability to resist natural disasters).

Thus, whether or not the claim is made, the risk of farmers and insurance companies is dispersed. Because this risk is borne by many consumers, the risk of products is affordable for consumers. The shortcoming of this mode is that it is only suitable for high quality agricultural products, or the agricultural products with the advantage of producing areas (example: Ningxiang flower pig). But in the case of huge natural disasters, it can relieve the financial pressure of the government. Some of the released subsidies can be put into the reinsurance of low-end agricultural products, which is of great significance to the whole agricultural insurance industry.

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