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# Analysis of the System of Direct Subsidy for Grain Production in China

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Abstract This paper introduces the status quo of the system structure of direct subsidy for grain production in China, and analyses the function and essence of direct subsidy for grain production in China as follows: the function of direct subsidy for grain production in China is to protect and promote the development of food industry, ensure food supply and national food security, protect grain growers' interests, and maintain the dominant position of national food trade; the essence of direct subsidy for grain production is the compensation for grain producers' reasonable interests, the compensation for positive externality of grain production, and social costs of adjusting equilibrium between food supply and demand. We discuss the problems existing in the system of direct subsidy for grain production in China and put forward corresponding countermeasures as follows: first, adhere to improving synergetic system of direct subsidy for grain production; second, adjust the direct subsidy method of grain production; third, establish long-term mechanism of subsidy for grain production; fourth, promote the information-based service level of the system of direct subsidy for grain production.

Key words Direct subsidy for grain production, Grain production safety, Agricultural fiscal policy

With the population growth and socio-economic development, China's food security problems, low income of the grain growers and grave situation of grain production, prompt us to attach great importance to constructing and improving agricultural macro-control policy system of benefiting farmers and making farmers become prosperous. And the improvement in policy of direct subsidy for grain production is an important aspect. Stable food production needs the support of sound policy of direct subsidy for grain production and other agricultural macro-control policies. On the whole, China's food security reguires us to attach great importance to grain production, and only by stable grain production can China's food security be ensured. This will require us to apply the fiscal policy of direct subsidy for grain production, increase grain growers' income, encourage and support the grain growers to actively continue to engage in food production, in order to stabilize and promote continuous food supply.

### 1 The status quo of the system structure of direct subsidy for grain production in China

**1.1** The content of direct subsidy for grain production
The direct subsidy for grain production mainly refers to directional cash or in-kind financial support provided directly by the financial department to grain producers. In terms of the way of subsidizing, the direct subsidy for grain production, in general,

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is cash or in-kind financial support directly provided to grain pro-

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ducers by means of transfer payments. It is different from the indirect way: the grain producers benefit indirectly, for example, indirectly subsidizing grain producers by offering subsidies for the field of grain circulation, or achieving the purpose of indirectly supporting grain producers by subsidizing the export field.

In terms of the content of subsidy for grain production, it mainly includes five aspects as follows: the first is the subsidies of infrastructure construction and maintenance for grain producers engaged in grain production, such as subsidies for irrigation and water conservancy construction, and subsidies for fallowing; the second is the subsidies for grain producers' purchase of means of grain production and production tools, such as seed subsidies and subsidies for agricultural machinery; the third is the subsidies in food production technology, information, management, and financial services for grain producers, such as subsidies for agricultural technology promotion and subsidies for agricultural insurance; the fourth is the protective subsidies for the income of grain growers engaged in food production, such as the direct grain subsidies; the fifth is the subsidies for the losses arising from sudden disasters in food production, such as drought subsidy and flood subsidy [1-4].

1.2 Types of direct subsidy for grain production By generalizing the phenomenon of subsidy for grain production in China, the direct subsidy for grain production can be divided into four categories in accordance with different purposes of the subsidy: the first is the supporting subsidies; the second is the service-based subsidies; the third is the profitability subsidies; the fourth is the emergency subsidies. The supporting subsidies are mainly cash or in-kind financial support provided for grain producers from the perspective of the object of labor in food production, in order to promote the basic conditions for grain production activity. The subsidies are generally for the

construction of basic conditions of grain production, such as subsidies for irrigation and water conservancy construction. The service-based subsidies are cash or in-kind financial support provided for grain production activities in means of grain production and production tools, technology, information, management, credit and other areas of financial services, in order to promote the level of services in whole process of grain production, such as seed subsidies and subsidies for agricultural technology promotion. The profitability subsidies are cash or inkind financial support provided directly for grain producers according to certain standards, in order to increase grain producers' income, and mobilize grain producers' enthusiasm in grain production activities. This is one important type in direct subsidy for grain production at present, such as direct grain subsidy in China. The emergency subsidies are cash or in-kind financial support provided for grain producers by taking a certain way, in order to help food producers to confront natural risks, make up for or reduce the losses of food producers, such as drought subsidies and flood subsidies [5-8].

### 2 The function of direct subsidy for grain production in China

- 2.1 Protect and promote the development of food indus**try** Food production is the basis of the socio-economic development, and only by increasing grain production constantly can meet the growing needs of people for food. The subsidy for grain production is regarded as an important financial and economic means and measure, the basic purpose of which is to promote the growth of food production, protect and promote the development of food industry. Through the subsidy for grain production, it can increase inputs to construction of grain production conditions, improve the technical level of means of grain production and production tools, perfect grain production services, and promote grain production supply, so as to achieve the growth of food production, protect and promote the development of food industry. Protecting and promoting the development of food industry is a basic objective of subsidy for grain production.
- **2.2 Ensure food supply and national food security** Balance between supply and demand of grain is the basis of steady social and economic development, and only by ensuring the stability of grain production can we achieve the balance between supply and demand of food, and ensure food supply and national food security. Through giving play to positive financial and economic functions of incentives and limitations, the subsidy for grain production can guide the food producers to develop grain production steadily by virtue of this economic lever. Ensuring food supply and national food security is also one important goal of the subsidy for grain production in China.
- **2.3 Protect grain growers' interests** Protecting the grain growers' interests is also an important goal that should be taken into account in the process of designing and making the policy and institution of the subsidy for grain production in China. Due to fundamentality of food industry (Food industry is the foundation of the national economy.) and weakness of food industry

(Food industry is in face of natural risks and social market risks.), the state needs to use public means of finance to regulate the food industry and protect the stable development of food industry. Through various kinds of subsidies for grain production, the state can protect food industry, stabilize the level of employment in food industry, promote grain growers' income level and meet farmers' employment needs, so as to achieve the goal of protecting grain growers' interests.

#### 2.4 Maintain the dominant position of national food trade

For the countries where the supply of grain exceeds the demand of grain, an important goal of national subsidy for grain production is to maintain the dominant position of domestic food trade, reduce grain growers' export costs, promote grain growers' export competitiveness, therefore, maintaining the dominant position of domestic food trade becomes an important goal considered by some countries when designing the policy of subsidy for grain production, but this function is not prominent in China's grain export.

### 3 The essence of direct subsidy for grain production in China

The subsidy for grain production is the most important and the most frequently used policy tool in domestic policy system of agricultural support and protection at present, and the transfer payment provided by the government for domestic grain production activities or agricultural food producers through financial means. The direct subsidy for grain production is directional financial support provided by the government in one country for grain production, in order to achieve food security, and other political, economic and social objectives. The direct subsidy for grain production is an important policy tool of the government in regulating grain production and grain growers' interests. The direct subsidy for grain production is implemented by the financial distribution (the secondary distribution).

From the phenomenon of direct subsidy for grain production, we can find the essence of direct subsidy for grain production as follows: the direct subsidy for grain production is the compensation for grain producers' reasonable gains, the compensation for the positive externalities of grain production, and the social costs of adjusting equilibrium between food supply and demand [8].

**3.1** The compensation for grain producers' reasonable interests The direct subsidy for grain production is the compensation for grain producers' reasonable gains, in line with the requirements of the law of value of goods. As for the food issues, since the price critically deviates from the value, there is a great disparity between relative price of food, and relative price of cash crops, livestock and industrial products over a long time. The continuous hike in the prices of means of agricultural production greatly increases the costs of grain production, and this growth rate of the costs of grain production exceeds the rate of advance in food prices. Under the conditions of the socialist market economy, in view of imperfections in market, the state needs to strengthen intervention and macro-control, and only through the use of fiscal and economic means can the

grain producers obtain reasonable gains. Therefore, for the issues of low comparative benefit in growing grain, in addition to price considerations, this requires us to offer direct subsidy for grain production sectors, so that the grain producers obtain the compensation of reasonable gains.

3. 2 The compensation for positive externality of grain The direct subsidy for grain production is the compensation for the positive externalities of grain production. The food industry is based on food production, and the grain production has strong economic positive externality, social positive externality, and eco-friendly positive externality. The government should offer economic subsidies for the providers of positive externality of grain production. The economic positive externality of grain production is mainly to benefit people universally by high quality and low price of grain. The social positive externality of grain production is mainly to have ample food and clothing, reduce social conflicts, and promote social harmony. On the one hand, in comparison with industry, transportation and other non-agricultural industries, the grain production is easier to become the receptor of externalized cost of other industries; on the other hand, the social positive externality of grain production is also reflected in the role of grain production in maintaining social stability. As the savings go, "You will be in a fluster if without food at home, and the state will be in unrest if without food", "There is no stability for want of agriculture, and people cannot subsist without commerce". This fully demonstrates the role of agriculture based on grain production in maintaining social stability. The eco-friendly positive externality of grain production is mainly reflected in free functional supply of ecological environment and landscape of grain production, focusing on farmland protection, soil and water conservation, vegetation increase, and environmental beautification. The function of ecological environment and landscape is also a kind of public product, and the grain production plays an important role in the process of providing this kind of public product. The construction of eco-food industry can contribute to the sustainable and efficient use of agricultural resources, improve the ecological environment, promote the development of pollutionfree agricultural products and green food, and play an active role in promoting the quality safety of agricultural products. This "externality" of grain production determines that considerable investment of grain production depends on governmental inputs, including policy subsidies for the main grain producing areas and grain growers. Under the conditions of market economy, through coercive means, the government implements the compensation policy, which is of great significance to the internalization of positive externalities of food production.

3.3 Social costs of adjusting equilibrium between food supply and demand The grain production is influenced by the year's harvest, climate, the basic conditions of agriculture, technological progress, national policies and other factors, thus the yield grows in fluctuation, while the demand for food grows continuously along with population growth and improvement in people's living standards. Under market economy conditions, the balance between the grain supply and demand is the result

of food price adjustment mechanism, but the food price mechanism will be stuck in a failure sometime. The most typical case is that when food supply is tight, everyone wants to operate food, store up goods to corner the market, leading to skyrocketed prices; when we gather a rich harvest of grain needing open up distribution channels widely, no one wants to operate food and the prices plummet, therefore, the farmers suffer. This requires the state to offer direct subsidies for grain production, so that the subsidies become the social costs of adjusting the balance between supply and demand of grain, thereby making up for the "failure" of the food market mechanism to some extent.

## 4 The problems existing in the system of direct subsidy for grain production in China and corresponding countermeasures

4.1 Existing problems In terms of the practice process of the policy of direct subsidy for grain production in China, the main problems in China's system of direct subsidy for grain production is as follows. First, the organizational management system of the direct subsidy policy is still in an imperfect state, and the establishment of scientific and efficient organizational information management system is the problem that needs to be urgently resolved in the practice of direct subsidy for grain production. Second, the granting of subsidy for grain production lacks evaluation criteria of ecological consideration, easily triggering some hidden ecological and environmental problems arising from one-sided emphasis on food production, such as stimulating the increase in the area of inappropriate arable land, "returning forest to farmland and returning grass to farmland". Third, the intensity level and way of direct subsidy for grain production need to be constantly improved, in order to perfect the the system of direct subsidy for grain production suitable for China's actual situation. Fourth, the law and order of direct subsidy for grain production is not sound, lacking effective and normative legal system.

We put forward the following proposals for improving the system of direct subsidy for grain production in China at present<sup>[8-11]</sup>.

### 4.2 Countermeasures for improving the system of direct subsidy for grain production

4.2.1 Adhere to improving synergetic system of direct subsidy for grain production. China's system of direct subsidy for grain production should include the following four types: the supporting subsidies for grain production, the service-based subsidies for grain production and the emergency subsidies for grain production. We should play the unique subsidizing role of various types of subsidies, pay attention to connection and coordination of the supporting subsidies, the service-based subsidies and the profitability subsidies, and focus on improving service-based agricultural insurance subsidy policy system. In the long run, the current policy of subsidy for grain production in China should be adapted to needs of the rules of the WTO, learn from foreign experience to transform into " green box" policy. Based on

"green box" policy of the WTO, we should establish and improve the general agricultural services concerning grain production in China, such as agricultural scientific research, pest and disease control, training services, promotion and advisory services, inspection services, market promotion services of agricultural products, agricultural infrastructure construction, food security reserve subsidies, food aid subsidies, subsidies for income not linked to production, natural disaster subsidies and relief, agricultural insurance program, subsidies for the retirement or job change of agricultural producers, subsidies for agricultural resources reserve, subsidies for agricultural environmental protection, and aid and subsidies for the backward areas. China should expand the scope of direct subsidy for grain production, and continuously improve the level of subsidizing, expanding direct subsidies to all varieties of grain and expanding direct subsidies to all food producers. Due to differences in regional climate, soil, environment and other conditions, the structure of varieties of grain all over the country is different, so we should fully understand the rationality of such differences. and establish the concept of "Big Grain" to offer subsidies for beans, potatoes and other crops at present. The subsidies should not be confined to rice, wheat and corn. Only by doing this can we fully mobilize the enthusiasm of food producers. promote diversified development of grain production and effectively promote the grain production safety in China.

**4.2.2** Adjust the direct subsidy method of grain production. China should adjust the method of direct subsidies for grain production. We should offer different subsidies for different types of grain production, offer different subsidies for grain producers of different scales, and focus on subsidizing based on food production within the WTO framework that China promises. The direct subsidy should tend to be given for the grain growers providing commodity grain. From the perspective of food security, the better subsidy model is the direct subsidy model linked with the amount of commodity grain for sale. Since the grain subsidy is linked with the amount of commodity grain for sale, the farmers producing more commodity grain can obtain more subsidies, which can guide farmers to adjust planting structure. and produce more high-quality grain. The financing policy of China's direct subsidy for grain production should be adjusted. We should adjust the financing policy after distinguishing direct subsidy financing in areas for transferring grain out, direct subsidy financing in areas for transferring grain in, and direct subsidy financing in food-self-sufficiency areas. Taking public character and positive externality of grain production into consideration, the local government in areas for transferring grain out should not bear the responsibility of subsidizing, but should be compensated in large measure.

**4.2.3** Establish long-term mechanism of subsidy for grain production. China should establish long-term mechanism of subsidy for grain production, incorporate subsidy for grain production into the orbit of the rule of law, improve the organiza-

tional system of subsidy for grain production, establish subsidizing funds for grain production, levy the tax of subsidy for grain production, ensure that the funds are used exclusively for its designated purpose, and improve the state budget system of subsidy for grain production. China should change the current practice of relying on the policy document to grant subsidy for grain production, research and establish systematic and normative legal system of subsidy for grain production, and establish the public finance system ruled by law.

**4.2.4** Promote the information-based service level of the system of direct subsidy for grain production. China should raise the information-based service level of subsidy for grain production, establish specialized information service network platform of subsidy for grain production, timely promulgate the information concerning national subsidy for grain production, provide relevant information inquiry service, carefully gather opinions and suggestions of the majority of food producers, establish and improve decision-making feedback service mechanism of the policy of subsidy for grain production.

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