Study on the Obstacle Factors and Countermeasures on Land Circulation System Innovation in Tianjin

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Abstract: Land circulation system innovation is a one of the most significant assignment to develop the metropolis modern agriculture and accelerate land scale operation in Tianjin. However, the rate of land circulation system was only 22.8% in 2013. This was the reasons of land fragmentation, low willingness to land investment, low land output-input earnings, no industrial support and financing channels. On the basis of these problems, the paper brought out the innovation objective and important task of land circulation system innovation. In the end, the thesis came up with some corresponding suggestions land circulation innovation by different levels and phases, overall plans for jurisdiction land, fostering new agriculture management entity and establishing and perfecting the matching service system.

Keywords: land circulation; land stock cooperative system, right of land management contracted, Tianjin

1 Major measures and effectiveness of land circulation system innovation during the “Twelve-Five Planning” in Tianjin

1.1 Major measures of land circulation system innovation during the “Twelve-Five planning”

Land circulation system innovation is a one of the most significant assignment to develop the metropolis modern agriculture, make agricultural land centralize into the new management entities and accelerate the industrialization of agriculture in order to realize increasing agriculture production and increase farmer income during the “Twelve-Five Planning” in Tianjin.

Firstly, some fund with supportive policies was put into effect to new management entities that transferred a large number of concentrated land. There are 24 rural land stock cooperative systems enterprises, 23 family farms as experimental units that rural land contracted were normally and massively transferred[1]. The experimental units meeting construction standards would gain preferential treatments on fund, land and supporting project.

Secondly, perfect the service system of land circulation. Set up the three levels service platform in county, village and town, furthermore offer support on fund and land.

Thirdly, the government and related departments helped joint the land supply with demand. Each farmer difficultly jointed with large farmer, agricultural leading enterprises and farmer’s specialized cooperatives. However, new management entities were unable to negotiate with the numerous farmers. At the same time, the government and related departments played the role of intermediaries to connect management entities with farmers. This greatly reduced transaction cost.

In the end, the local government provided the all aspects of supporting service. For example, the local government provided the financing assurance service for rural land stock cooperative systems enterprises and large farmer. At the same time, some agricultural projects inclined to new management entities, such as water conservancy construction, high yield field, the overall development of agriculture, land consolidation, the application of new varieties, new technology.

1.2 Effectiveness of land circulation system innovation

(1)Land transferred traditional agriculture to efficient intensive facility agriculture. With the support of promoting facility agriculture under RMB 240 hundred million, local government already constructed 450 thousand acre high standard facility agriculture, 22 modern agricultural parks, one hundred modern livestock farming park and 55 modern aquaculture park.

(2)Circulation of land management right contracted appeared the trend of large-scale. Now some large land circulation projects were already in not only administrative village, but also several villages, even whole town. The rate of land circulation was low, but it was gradually increasing to the circulation of whole village. This would come a major trend of land circulation in future.

(3)Land transferred decentralized farmers to new management entities. The development model of “three
districts” linkage accelerated land circulation, realized the circulation from decentralized farmer to new management entity and promoted agriculture industrialization. Now the system innovation project already developed more than 5500 farmer’s specialized cooperatives, 451 leading enterprises of agricultural industrialization and 2000 large farmers. They powerfully promoted urban modern agriculture producing and circulation by perfect agricultural organization and the socialized service system.

(4) Land stock cooperative institution continually developed and expanded. With the development of urbanization and industrialization in Tianjin, the demonstration small town construction with changing homestead for housing made the farmers live in the buildings, the youth work to vicinal factory. The agriculture appeared feminization and ageing. Aiming at these problems, land transferred to farmers’ cooperatives under the guidance of the government, this made the farmers get stable income and dividends. The farmers enjoyed four aspects of income-salary, dividend, rent and old age security. Now, the pilots have already reach 24.

2 Main problems on land circulation in Tianjin

2.1 Low of the rate of land circulation and serious land fragmentation
The circulation area of Contracted cultivated land was 3.4 million acres in the whole nation, and the rate of the land circulation was 26% at the end of 2013[2]. The rate of the land circulation has attained more than 50%[3-4], such as Jiangsu province and Zhejiang province. While the rate of the land circulation was only 22.8%[5] in Tianjin, which was lower than average level of the whole nation, no matching with the social and economic development level. Furthermore, the development inequality among the different regions mainly focused between suburban areas and outer suburb. The outer suburbs depend on the land, because of secondary and tertiary industries at a relatively slow speed. These caused the low willingness on land circulation as the result of land fragmentation and further restricted large-scale and industrialization management.

2.2 Phenomenon of small farmer by-business and low willingness to land investment
It was 16% of whole income to family operational income from primary industries, and non-agricultural income has been major income to a farmer during the “Twelve-Five” in Tianjin. Agricultural income has been subsidiary income in spare time, so it was a widespread phenomenon of agriculture Agricultural sideline, farmers concurrent business. Therefore, farmers mostly planted field crops, because field crops need less time[6]. Therefore, the farmers in Tianjin are less in investing in land, which caused extensive produce and management. These reasons caused the low yield of farmland. In return, agriculture in lower comparative advantage further deteriorated extensive land management and farmers' concurrent business. This formed a vicious circle.

2.3 The high rate of traditional agriculture and the low land output-input earnings
The cultivation of crops were mostly traditional crops-corn and wheat in Tianjin, which these areas seeded was 43.3% of farmland, however net income was about 1000 yuan a unit of area. By contrast, earning of facility agriculture a unit of area attained 20,000 yuan, which was 20 times of traditional agriculture[7]. So facing expensive land and labor force, Tianjin was most suitable for modern urban agriculture, not for traditional agriculture.

2.4 Able man leading villages development in minority villages and no industrial support and financing channels
Throughout the investigation on the villages and towns of economy develops well, there was a common character- excellent rural grassroots cadres organized farmers to transfer land. They led the farmers to adjust the structure of agricultural production and operate in a large-scale to develop the modern facility agriculture and characteristic agriculture, such as Liu Jun-zhuang as a branch secretary in Xiaoyan town Ninghe county and Liu Chun-hai as a president of Shuang jie group Corporation in Beichen county. Nevertheless, excellent talents was scarce, which decided the mode of ability person leading only happened in minority villages. Majority villages only depended on farmer themselves and local government. But it has been the most obstacles factors that farmer themselves were unable to develop, the guidance ability of government lack and villages and towns shortage of pillar industry.

2.5 New management entity without financing channels and the development of facility agriculture meeting with capital bottleneck
Now facility agriculture of large farmers and family farms were mainly simple plastic shed, and the energy-saving sunlight greenhouses were invested and constructed by the government. Simple plastic shed and the energy-saving sunlight greenhouses were separately 60.8% and 39% of overall facility agriculture[8]. Because the cost of a standard plastic shed was about 70,000-80,000 yuan and steel pipes shed about 150,000-200,000 yuan. It was impossible for the farmers who cannot obtain loan. We found out a data by field research that about 70%-80% new management entity wanted to loan, but cannot obtain. So capital was the one of most important handicap factors[9].

3 Goals and key tasks of the agricultural land circulation system during “Thirteen-Five” Planning in Tianjin

3.1 Reform goal
Agriculture in Tianjin is transforming from
small-scale by-business to standardized scale management. At the same time, agriculture in Tianjin explores various forms of moderate large-scale management; develops the rural land stock cooperative organization; improves the use efficiency and productivity of agricultural land; speeds up the efficient use of agricultural land resources and promotes agricultural efficiency and farmers income.

3.2 Reform content

3.2.1 Establishing and perfecting the rural land stock cooperative organization

At present, the rural land stock cooperative organization is divided into two kinds: many elements shares and agriculture land shares. Community stock cooperative organization fits the areas of more collective assets, more strong organization and management capacity. The cooperative organization with agriculture land shares fits the vast rural areas. No matter what kind of the land stock cooperative organization should follow:

(1) Clear proper right structure and setting up reasonable share right. Perfect the scientity of land assets evaluation; clearly define the property rights relation on cooperative organization, including in the scope of responsibilities, the subject of Cooperatives, the relationship between farmers, local government and cooperative organization; shares setting and and shares trade system[10-13].

(2) Improving the internal governance system of cooperatives organization. Formulate the regulations in accordance with modern enterprise system on cooperatives organization; set up and improve the structure of cooperative organization; define the rights, obligations and responsibilities of various departments; establish the practical and feasible supervision system and effective organization and management system.

(3) Clear distribution system of the land stock cooperative organization. Determine the ratio, form and of collective distribution; confirm the rate of revenue sharing, form and calculation method in different elements participating in the distribution.

3.2.2 Setting up the withdrew system of the contracted management of rural land

(1) Establishing exiting the mechanism on the land contracted management. Firstly, formulate a scientific and rational compensation standard. The standard should be determined by compensation standard for land expropriation, agriculture management revenue and land circulation income [14]. And then, make sure the origin of compensation capital of exiting land. Establish compensation fund of exiting land. If collective economic organization can undertake the expense, it funds. Otherwise the expense funds by local government, town government and the beneficiaries. At last, Establish diversified compensation means and the normative compensation procedures.

(2) Structuring a linkage mechanism of social security mechanism, household registration system and the exiting and compensation mechanism on the land contracted management right. Farmers may freely choose to keep the rural household registration or into urban residents, after they exit the contracted management of land. Set up the different register standards from a peasant to a townsman in tree degrees of city-town, county and city. At the same time, farmers exiting the right of the land contracted management enjoy townsman equal employment, including in housing, health care, pension, education and other social security system.

(3) Establishing and perfecting the exiting mechanism of land circulation and the reserves. Fully play intermediation of the land circulation service platform of the county, township and village levels, in order to circulate land in a timely manner to credit unions, family farms, large planter and agricultural enterprises. Establish the rural land reserve and purchasing institution[15-20]. The rural collective economic organizations receives the exiting land, and then implements land comprehensive improvement into the land circulation market after scale operation conditions.

3.2.3 Regulating the income distribution system of the land circulation

The price of land circulation reflects not only the current market price of agricultural land, but also price of land development right. Specific practice is: (1) determining the the growth rate of land rent in the form of contract. The initial rent is regulated and adjusted in every two to three years; (2) regulate a guaranteed land rent, and residual income is distributed among land cooperative organizations, farmers and village collective organization in accordance with land management benefit. Let farmers share the scale economy and industry value-added benefits.

4 Suggestions on land circulation system innovation in Tianjin

Under the background of Beijing-Tianjin-Hebei metropolitan region joint development, agriculture in Tianjin is a critical period of transforming from traditional agriculture to urban modern agriculture. The transformation depends on whether land circulation system innovates. It is the only way of increasing the land utilization efficiency, promoting the development level of modern agriculture.

4.1 Exploring the mode of land management contracted circulation and land circulation system innovation by different level and phase

Firstly, explore the various modes of land management contracted circulation. The government actively guides the farmers to transfer the right land management contracted in the way of subcontract, rent, transfer and interchange, and greatly develops land stock cooperative organization. The land circulation in a whole town, several towns and whole village should be encouraged supporting new cooperative economic organizations in the developed economy regions, exploring the new land circulation forms such as land
trust, land bank and rural cooperative union and gradually building up exiting mechanism in the right of land management contracted; Secondly, innovate the operation means of agricultural land. The right of land management contracted should transform from a single family management mode to diversity land management modes such as family management, collectivity management, cooperation management and enterprise management. Encourage a farmer combined together other farmer to manage their land. Vigorously develop the large-scale grain-production households with agriculture machineries and agriculture machinery cooperative. They carry out the hosting service in whole production processes or main ones to achieve unified consolidation, unified cultivation and large-scale, mechanization, specialized production. Thirdly, put into effect on the management system of land public bidding. The government should carry out the management system of land public bidding to determine the optimal operator of transferring the land according to land public bidding program, when transferring the land exists several competitors.

It is a great difference of the development level of social economy, locations, the property rights reform of village level among different counties and different towns that we should fully take into account spatial effects to carry out multiple levels in land circulation innovation systems. The land circulation innovation systems may divide into four levels.

The first level is that the farmers rent their land to the large-scale grain-production households, family farms, farmer specialized cooperative and agricultural company in order to realize the mechanization and specialized production. The mode should be developed in Ji county, Ninghe county and Baodi district. They are relative backwaters and lack the choice of no agricultural employment. They should emphasize on adjusting the structure of agricultural production, innovating agricultural insurance products, popularizing the policy-guided agricultural insurance, especially developing the green, upscale and characteristic vegetables and fruits production to increase the added value of agricultural products.

The second level is that agricultural land is clustering contiguously transformed by the long-term contract through land stock cooperative, cooperative system of the rural community and rural cooperative organization specialized.

The third level is that the grass-root government and cooperative organization encourage transforming land of the whole village, several towns and a whole town by land consolidation project and increasing and decreasing connection of urban and rural construction land project. And then, transforming land will be planned again for residential land, industrial land and agricultural land in order that agricultural land transform to modern agricultural garden. The mode applies to the regions of neighboring industrial park, grassroots cadres or capable man with strong organizations drive abilities and the high rate of no agricultural employment. These regions pay attention to establish the modern agricultural industrial cluster with regional characteristic.

The forth level is establishing corporate business union of town level. Business union includes in land bank, land fund company, land circulation trust organization or land stock cooperative as a carrier of land consolidation. The mode is a groping stage. It may practice in Xiqing district, Beichen district and Jinghai county.

4.2 Overall plans for jurisdiction land

The government should plan the rural land and set up the mechanism of land cycle dynamic circulation. Overall village land is planned on basis of farmers’ willingness of land circulation. Overall Plans among the whole town and village are put in effect in some conditional regions. New cooperative economic organizations including in land stock cooperative organization, community stock cooperative organization and farmer specialized cooperative would divide agricultural land into tree regions-concentration operation region, cycle dynamic circulation region and family operation region.

Family transforming land would be planned to concentration operation region by collective rent and land stock system. These land still reserves the farmers’ right of land contracted, but their location is not clear. No transforming land is planned to family operation region. The location of these land is clear. It is planned to cycle dynamic circulation region that the owners with land possibly change the willingness of transforming land after a cycle. The location of these land is not clear. The land in the region meets the need of the conversion of other region because of the change of farmers’ transferring willingness. Agricultural land may implement the large-scale and specialized management in concentration operation region. It is beneficial to increase the agricultural land rent, participate in land circulation for the most family, step by step realize large-scale management and optimize the configurations on land, fund, technology and labour force.

4.3 Fostering new agriculture management entity and accelerating land management in a large-scale

The government should cultivate new agriculture management entities in the main way of family farmer and a large-scale grain-production household to work on specialization and intensification production. Alert no-agricultural behavior of transforming land in the name of agricultural enterprises. Encourage the farmers to join in new cooperative economic organizations supplying technology communication and train with their members. Encourage the agricultural enterprises to supply the procession and circulation service with agricultural production and socialization service. Set up a tight interest alliance among the farmers, agricultural enterprises and new cooperative economic organizations to realize the relationship of complementary advantages,
division-cooperation and mutual benefit and win-win results. New cooperative economic organizations would connect farmers, new agriculture management entities with socialization service organizations. Supporting some conditional regions to stock system of land, fund and technology and develop the multiform forms of land stock cooperative systems. Build the risk management mechanism where a large of land was transferred by a business enterprise.

4.4 Establishing and perfecting the matching service system with land circulation system innovation

Land circulation system innovation is a progressive process from traditional agriculture to modern urban agriculture. It should adapt to not only urbanization and transferring labor force but also industrial division in Beijing-Tianjin-Hebei metropolitan region and peasants’ cognition, grassroots governance order. Only a farmer participates in land system innovation and shares the benefit of scale economy and industry appreciation on the basis of respecting of the farmers’ willingness. Land circulation system innovation may succeed in Tianjin. Large-scale management of agricultural land needs the relevant service on the agricultural science and technology extension system, investment and financing systems, agricultural insurance and agriculture socialization service. Land circulation system innovation can not only depend on the experiments in grope of village and town by oneself, but the government to put into implement some relevant policies and the service system. On the aspect of land circulation, set up the county level, town level and village level service platform of land circulation, the supervisory mechanism of income distribution of land circulation and land share and the government supporting system. On the aspect of mortgage finance of the right of land management contracted, the government offers the supporting policies on subsidized loans, risk compensation fund of financial subsidies and loan reward. At the same time, set up the risk prevention system of financing institution, agricultural insurance company and guarantee company. On the aspect of land price, set up the land appraisal agency, mortgage and loan registration, disposing bad loans and mediation institution. Exploring the disposing mechanism of mortgage assets and perfecting the relevant mortgage and loan service system of the land management contracted.

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