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# Reform Paths of Rural Land Property Rights System in the Context of Agricultural Modernization

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**Abstract** The reform of rural land property rights system can promote large-scale and intensive agricultural production, improve the quality of laborers, improve agricultural production efficiency, increase farmers' income, and effectively promote the development of agricultural modernization. In the context of the reform of the "separation of three powers", the rural land property rights system still has problems in terms of ownership, use rights, disposal rights, and income rights, which affect the healthy development of agricultural modernization. In this situation, it is necessary to further clarify the subject of rural land ownership, thoroughly improve the right to use rural land, vigorously improve the right to dispose of rural land, effectively protect the right to benefit from rural land, and deeply promote the reform of the rural land property rights system in order to effectively promote the development of agricultural modernization.

**Key words** Reform of rural land property rights system, Agricultural modernization, Moderate scale operation

## 1 Introduction

Agricultural modernization is the process of using state-of-the-art science and technology, advanced management methods, and advanced material technology to equip agriculture, optimize agricultural structure and promote agricultural specialization, and finally realize the process of improving the total factor productivity of agriculture<sup>[1]</sup>. According to the definition in China's revised *Land Contracting Law* in 2018, rural land refers to "farmland, forest land, grassland, and other land legally used for agriculture that are collectively owned by farmers or owned by the state and used collectively by farmers in accordance with the law"<sup>[2]</sup>. Rural land property rights are the sum of rights related to land ownership, use, disposal, and income. The reform of the rural land property rights system is to continuously improve the rural land property rights according to the inherent requirements of the development of agricultural modernization, so as to make better use of property rights and achieve the goal of improving production efficiency. General Secretary Xi Jinping emphasized that in deepening the reform of the rural land system, more consideration should be taken to promoting China's agricultural modernization<sup>[3]</sup>. Under the "separation of three powers", deepening the reform of the rural land property rights system and developing various forms of moderate scale operation will effectively promote the

development of agricultural modernization.

## 2 Effects of rural land property rights system reform on agricultural modernization

### 2.1 Promoting large-scale and intensive agricultural production, improving the quality of laborers, and increasing production efficiency

General Secretary Xi Jinping clearly pointed out that land circulation and various forms of large-scale operations are the only way to develop modern agriculture and the basic direction of rural reform<sup>[4]</sup>. After the circulation of fragmented contracted land, it is conducive to unified planning and large-scale operation. (i) It is conducive to the use of advanced technology and equipment. Since there are no barriers such as land boundaries in production, modern mechanical farming can be used to plant seeds, fertilize, weed, water, repel insect, and harvest to improve production efficiency. (ii) It is conducive to promoting the improvement of the operation mode. It is necessary to operate through professional large households, cooperatives and other business entities, and develop operation modes such as "company + farmer" and "cooperative + farmer" to improve management efficiency and production levels. (iii) It is conducive to promoting the improvement of agricultural human capital. In modern large-scale agricultural production, the promotion of farmers' technical training is transformed into agricultural workers to improve production efficiency. (iv) It is conducive to obtaining more financing to promote production development. Large-scale modern agricultural production can obtain more preferential funds under national policies, invest more technology and equipment, and develop modern agriculture. (v) It is conducive to the improvement of the agricultural production system and the integrated development of the primary, secondary and tertiary industries. On the basis of large-scale agricultural production, threshing, drying, processing, warehousing, transportation, and sales can be integrated to promote the combination of agriculture and animal husbandry, agri-

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culture and tourism, agriculture and commerce, and agriculture and agricultural product processing, so as to realize the integration of planting, breeding, tourism, agriculture, industry and trade, and the integrated development of primary, secondary and tertiary industries. (vi) It is conducive to improving the ability to resist risks. Through large-scale, complex and integrated production, agricultural cooperatives or enterprises can improve production efficiency, reduce production costs, and assume more market, capital, production and other risks.

**2.2 Increasing farmers' agricultural income and promoting green development** Under the "separation of three powers" of rural land, rural land can move from "separation" to "integration", and farmers transfer their land management rights to collective economic organizations through subcontracting and shareholding. Collective economic organizations such as cooperatives and enterprises reorganize and plan the fragmented land, carry out large-scale operations, develop a collective economy, and distribute more benefits to farmers. It is also possible to transfer the rural land to enterprises established by the local group or foreign economic developers for large-scale operation, and farmers can obtain corresponding benefits according to their own share of management rights. Farmers produce in cooperatives and enterprises, improve their human capital level through technical training, and obtain higher labor income. Under the large-scale production of rural land, the labor required for direct agricultural production will be reduced. Part of the surplus labor force will be transferred to rural non-agricultural industries, such as processing, transportation, and commerce, and can also be transferred to cities and towns to engage in other non-agricultural industries, so that farmers can obtain more non-agricultural income. In particular, capable farmers can obtain more rural land through rural land circulation and other methods, become professional large households, develop family farms or enterprises, and obtain more income through large-scale land farming. Modern agricultural production under scale management scientifically utilizes land resources, rationally uses pesticides and chemical fertilizers, develops low-carbon, circular, and efficient agriculture, produces green and organic agricultural products, and promotes green development.

### 3 Problems in the rural land property rights system under the background of agricultural modernization

**3.1 Vague rural collective ownership subjects influences the advancement of agricultural modernization** The subject of rural land property in China is a collective, but the subject of actual property rights is vague. First, the legal personality of the "collective" is vague. In the legal provisions, "collective" cannot actually be regarded as a legal person in the strict sense, and the law has no way to protect it. Second, the collective subject of ownership is not clear. The law stipulates that the collective is a village committee or a collective economic organization, so it is actually unclear which one should represent the collective ownership subject. In some villages there is no collective economic organization, so land property right is exercised by the village committee; in

some villages, there is both a village committee and a collective economic organization, and it is not clear which one should be exercised. In fact, the village committee is a grassroots mass autonomous organization in China, not a collective economic organization that exercises ownership. Third, there are multiple levels of ownership subjects and blurred boundaries. At present, the village committee is an autonomous organization transformed from an administrative organization in the past. It is a mass organization proposed by the township government and approved by the county government. Village cadres are self-government representatives elected by the masses, but they are also agents of the local government in rural administration. Village cadres have stronger control over rural land ownership, and local governments have stronger control over rural collective ownership. Therefore, the subjects of rural land ownership are actually shared by townships, villages, and groups, accordingly leading to blurring of the subject. The ambiguity of the subject of ownership will inevitably damage the collective ownership of farmers in the control of use rights and disposal rights, and restrict property rights from playing a better role in promoting agricultural modernization.

**3.2 The problem of land use rights influences farmers' promotion of large-scale operation of rural land** (i) The illegal adjustment of rural land contracting rights. In reality, villagers come in and out, increase or decrease, and natural disasters damage the contracted land, *etc.*, and the adjustment of land contract rights also exists objectively. The *Civil Code* stipulates that "the adjustment of contracted land between individual land contractual management rights holders" should be decided by the members of the collective in accordance with legal procedures. However, the representative village cadres of the ownership subject collective often do not make collective decisions, or are collectively decided by a few representatives, and make excessive or improper adjustments to some farmers' land contracted land, which affects farmers' stable expectations of promoting large-scale operations. (ii) Rural land is contracted by fragments. Some rural lands are extremely poor and uneven. In order to show fairness in land contracting, the land is classified to farmers by fragments. The rural land has many borders, and there is no agricultural machinery to use the farming roads, so it is impossible to operate on a large scale, which affects the development of modern agriculture. (iii). The freedom of rural land planting is limited. In many places, the model of "one industry for one township, one product for one village, and one specialty for one villager group" has been promoted without investigation and research and careful planning. Due to strong promotion, farmers have suffered losses and affected farmers' autonomy and right to participate in the development of modern industries. (iv) Non-agricultural use exists in rural land. The *Rural Land Contracting Law* stipulates that the contracted land shall not be used for non-agricultural construction without approval in accordance with law. In reality, some contractors illegally carry out non-agricultural construction of rural land and develop non-agricultural industries to obtain high returns, resulting in the alienation of valuable rural land resources and restricting the de-

velopment of modern agriculture. (v) Some rural land is abandoned. Due to the fragmentation of rural land, the production efficiency of small-scale operations is not high, and the income is insufficient. Small plot farming makes farmers have insufficient means of production, resulting in a large amount of surplus labor in rural areas. After many rural surplus laborers moved to cities and towns, the land was abandoned, resulting in waste of resources. After a large number of young and middle-aged people in rural areas migrate to urban areas, the old, weak and young have to farm, which leads to a decrease in rural land production efficiency and affects the effective use of resources.

### 3.3 The issue of disposal rights restricts the development of agricultural modernization

(i) The autonomy of rural land circulation is disturbed. The *Rural Land Circulation Law* stipulates that the contractor has the right to independently decide whether the land management right is to be circulated within the contract period, as well as the object, method, and time limit of the circulation. The transferees of the circulation of land management rights shall be organizations and individuals with agricultural management capabilities or qualifications<sup>[5]</sup>. Some local governments set unalterable quota for the rural land circulation, and even transferred rural land to operators in a unified way such as subcontracting. In the circulation development, farmers' participation is insufficient, demonstration planning is insufficient, and operators' ability is insufficient, which affects the development of modern agriculture. (ii) After circulation, the use of rural land is changed. The *Rural Land Circulation Law* stipulates that changing the agricultural use of land is prohibited, and it is forbidden to occupy permanent basic farmland to develop forestry and fruit industry and dig ponds to raise fish. In reality, some lands are seriously degraded after land circulation. The "non-grain conversion" of rural land in Henan Province reached 40%, and the proportion of "non-grain conversion" in large households was even higher, while the "non-grain conversion" in Shandong, Anhui, and Hebei was as high as 61.1%, which affected the national grain security<sup>[6]</sup>. There are also some rural lands that have undergone "non-agriculturalization" after circulation, especially many rural lands in the suburbs have carried out more non-agricultural constructions such as "farmhouses" and processing plants. Such circulation influenced the resource allocation of modern agricultural development. (iii) The rural land market is not perfect. The *Rural Land Circulation Law* proposes encouraging local areas to establish land management rights circulation markets or rural property rights trading markets, to provide transaction-related consulting, evaluation, visa, and financing services. At present, China's rural land market is not perfect, and rural land-related service agencies are not well-equipped, which affects the smooth circulation of rural land. (iv) The rural land mortgage financing is not enough. The relevant provisions of the *Civil Code* allow rural land mortgages. The *Rural Land Contracting Law* also clearly states that after the land circulation, the transferee can also use the management right to mortgage the loan with the consent of the contractor. However, the rural land mortgage loan mechanism is not perfect, which restricts

the financing for farmers or developers to promote agricultural modernization.

### 3.4 The issue of income right restricts the development of agricultural modernization

According to the *Rural Land Contracting Law*, the contractor enjoys the "income right" from the contracted land according to law, and if the contracted land is expropriated, requisitioned, or occupied according to law, it has the right to obtain corresponding compensation according to law. In reality, farmers' corresponding income rights are damaged.

(i) The problem of insufficient or damaged income after land circulation. Farmers or developers and operators from other places circulate land, and sometimes the circulation fee is too high, resulting in high operating costs and insufficient returns. However, when the rural land is transferred out, especially when the whole village or the whole area is promoted, the circulation price is often low. Circulation must be filed through the collective contract issuing party, and village cadre representatives often intervene to affect the circulation price, or there is a lack of circulation market mechanism, and there are problems such as unreasonable prices. The *Rural Land Circulation Law* stipulates that the income from the circulation of land management rights belong to the contractor, and no organization or individual may withhold or withhold them without authorization. In practice, there is an information asymmetry problem between farmers and village cadres. Rent-seeking by village cadres in the circulation will lead to problems such as low fees or income withholding, which will affect farmers' enthusiasm for land circulation.

(ii) The problem of damage to the income right in rural land expropriation. During the expropriation of rural land, farmers may only get compensation for the corresponding income of contracted management rights. Nevertheless, as one of the subjects of ownership, the compensation for the corresponding income of ownership after land expropriation is often not reflected. This may not give collective ownership compensation during the expropriation, or the collective remains after the ownership expropriation, or is withheld and privatized. The lack of rural land development rights, the expropriation of rural land and the development of non-public construction have led to the exclusion of farmers from the distribution of value-added benefits after non-co-development of rural land. Farmers losing their land and other means of production will lead to insufficient development funds, affecting non-agricultural transfers and affecting the development of agricultural modernization.

(iii) Disputes over compensation for modern agricultural facilities after the rural land circulation. The *Rural Land Circulation Law* stipulates that the transferee shall be compensated for the investment in soil improvement and the construction of auxiliary and supporting facilities for agricultural production in accordance with the law. However, in reality, there are many disputes over compensation standards and compensation methods, which have affected developers' enthusiasm for promoting the development of modern agriculture.

(iv) The problem of damage to the income rights of rural laborers who settle in cities and towns. The *Rural Land Contracting*

*Law* stipulates that after farmers settle down in cities and towns, it is required to guarantee the farmers' income right from the contracted land. Farmers who quit the contracted land should be compensated. However, in reality, there is a problem that compensation for land use rights cannot be obtained or obtained insufficiently in land acquisition after settlement in cities and towns, and the income from ownership compensation cannot be manifested. Many rural areas lack funds and land is also scarce. Farmers settled in cities and towns want to withdraw from contractual management rights, but compensation cannot be provided or insufficient compensation. However, after the land circulation, the income right is often not guaranteed. These restrict the rational allocation of rural land resources and affect the development of modernization.

## 4 Reform paths of rural land property rights system in the context of agricultural modernization

### 4.1 Further clarifying the subject of rural land ownership to effectively guarantee the advancement of agricultural modernization

China's *Villager Committee Organization Law* stipulates that under the village committee, several villager groups are established according to the living conditions of the villagers and the ownership of collective land. Therefore, the collective ownership subject of rural land should be clearly defined to the villager group as the subject of legal personality. The villager group has relatively few members and low organizational and management costs. It is a traditional community of interests. According to the spirit of the *Law on Rural Professional Cooperatives* revised in 2018, a villager group land cooperative was established, and through registration, it became a collective economic organization of farmers with legal personality and strong legal protection. The small groups of land cooperatives in a village can jointly develop into cooperative associations, negotiate on common land issues, guarantee farmers' land collection rights, and effectively promote the development of agricultural modernization. It is necessary to define the responsibilities of village committees and village cadres, and promote the separation of village committees and village branches from the rural land economy, so as to effectively prevent rent-seeking behaviors of village committees and ensure the development of agricultural modernization.

### 4.2 Deepening and improving rural land use rights, and promoting agricultural modernization

(i) It is necessary to strictly enforce the stability of rural land contractual management rights. It is necessary to strictly implement the national policy of keeping the contract period of cultivated land, grassland, and forest land unchanged, strictly confirm rights and issue certificates, and ensure that farmers promote rural land scale operations and obtain stable and expected returns. (ii) It is necessary to promote the overall contracting and use in rural areas. It is recommended that the village collectives that subcontract the land in small pieces and subcontracts to rural households, if conditions permit, promote land consolidation through negotiation, reduce the extreme difference in land, and renew the unified contracting according to the new standard, make each household obtain blocks and large-

scale rural land, so as to facilitate modern agricultural cultivation. (iii) It is necessary to protect the right of farmers to cultivate freely. Farmers should strictly follow the principle of "agricultural use of rural land" and develop production according to their own needs and market requirements. In promoting the development of large-scale modern agriculture such as "one product for one village", it is necessary to fully investigate and study, solicit farmers' wishes, and proceed in an orderly manner on the basis of successful pilot projects, and effectively protect farmers' autonomy and participation rights. (iv) It is necessary to ensure that the contractors carry out "agricultural use of rural land". The No. 1 Central Document in 2022 emphasized "severely investigating and punishing illegal occupation of cultivated land for non-agricultural construction". In the self-management of the contractor's land, the scope of rural land agricultural use should be strictly limited to ensure that the cultivated land is mainly used for food production and develop moderate scale operations. (v) It is necessary to strictly prevent contractors from abandoning land. At present, the *Rural Land Contracting Law* does not clearly propose preventive measures against the land abandonment of by contractors. However, if the land has been abandoned for two years during the transfer to others, it is stipulated that the contractor has the right to terminate the circulation contract, and if the contractor does not terminate the contract, the contract issuing party has the right to terminate the circulation contract. It is recommended to improve the law to clearly stipulate that if the land contractor abandons the land for two consecutive years, the contracting party can take back the contracted management right, which can prevent abandonment, promote the contractor to actively promote agricultural development, or circulate land to promote the modernization of rural land management. (vi) It is necessary to steadily promote the merger of villages and land. In the transformation of urban-rural dual structure, problems such as "aging of farmers, hollowing of rural areas, and extensive agriculture" are serious. According to statistics in the early years, among the 640 000 administrative villages and more than 3 million natural villages in the country, more than 50% of the villages have experienced serious "hollowing"<sup>[7]</sup>. Several groups should be merged into one group, or even several villages into one village. Under the condition that villagers' original land contract rights remain relatively unchanged, several groups and rural lands of several villages should be merged and reorganized. It is recommended to make land concentrate to large households or enterprises, industries concentrate to parks, and villagers concentrate to central villages or towns. The returned idle homesteads are reclaimed as rural land, and unified planning with other rural land, so that farmers can have more rural land to develop modern agriculture. (vii) It is recommended to actively expand the use of newly cultivated land under the balance of occupation and supplementation. The *Land Administration Law* revised in 2019 stipulates that the state implements a compensation system for the occupation of farmland. If non-agricultural construction is approved to occupy farmland, it shall follow the principle of "how much is occupied and how much is reclaimed"<sup>[8]</sup>. Therefore, ru-

ral areas can actively obtain information on the demand for requisitioned and supplemented farmland, and reclaim wasteland, barren slopes, and even some woodland as farmland without affecting ecological degradation. Through improvement, these lands will become farmland with a comparable grade of occupied farmland. Under the transaction of balance between occupation and supplementation, the area of farmland is increased and agricultural scale operation is promoted. (viii) It is recommended to invest intensively in the development of rural land and strictly implement the priority of farmland utilization. It is necessary to intensify efforts to transform low- and medium-yield fields, and actively develop high-standard farmland; develop facilities such as greenhouse planting and three-dimensional ecological breeding according to local conditions, promote production integration, intelligent equipment, promote the use of compound intelligent agricultural machinery, and promote the development of modern agriculture. In terms of farmland utilization, all high-standard farmland should be used for grain production, and permanent capital farmland should focus on the development of grain production. General farmland is mainly used for the production of grain, cotton, oil, sugar, vegetables and other agricultural products, as well as forage and fodder. It is necessary to gradually withdraw the forestry and fruit industry from farmland and transfer it to the "four wastelands" for development; it is strictly forbidden to occupy farmland for non-agricultural construction, so as to ensure national grain security and high-quality development of modern agriculture.

#### **4.3 Improving rural land disposal rights and promoting agricultural moderate scale operation**

(i) Ensuring the autonomy of farmers in circulation and promoting moderate scale operation in various forms. In the development of economies of scale such as characteristic industries in a village or village group, it is necessary to promote land circulation to the land cooperatives of the villager group for operation. Cooperative associations can be used to develop economies of scale through land planning, consolidation, and joint cultivation and farming. It is necessary to scientifically demonstrate the plan and fully solicit the wishes of farmers. Farmers can also freely circulate land to developers who enter the village or group for operation. In addition, it is recommended to encourage farmers to obtain circulation land, develop themselves into modern business entities such as large agricultural professional households, family farms, and joint-stock companies of different scales, and vigorously promote modern business models such as "company + cooperative + base + farmer" to develop modern agricultural production. (ii) Guaranteeing the agricultural use of the rural land after circulation and prevent abandonment. Contractors and contract issuers should monitor the use of rural land after circulation to prevent changes in use and abandonment. If the change of use or abandonment causes damage to agricultural land resources and wastes valuable land resources, the circulation contract shall be terminated in accordance with contractual provisions. If there is damage to the land, the operator should be allowed to restore the fertility of the land, or make economic compensation. (iii) Promoting the construction of land property rights

transaction market. A rural land property trading center should be established in a certain area, so that the supply and demand information of land circulation, including the balance of occupation and supplementation, and information on land use linked to increase or decrease, can be issued through the platform. Through the construction of mechanisms such as bidding, auction, and open negotiation on the platform, developers with qualifications, capital, and operating capabilities who can drive farmers to develop modern agriculture can obtain land for circulation, to form a complete market, encourage the establishment of some evaluation, financing, technology, training and other organizations to ensure to obtain relevant services after land circulation. (iv) Financing such as mortgage of operating rights should be actively promoted. At present, the relevant laws stipulate that the land acquired by the operator can be financed by mortgage. To smoothly promote rural land mortgage financing, the financing process mechanism should be gradually improved, and the risk protection mechanism should be improved. If there is a risk of debt repayment, the future income of the land operation right can be used for priority repayment to ensure that the contracting right remains unchanged, thereby promoting mortgage financing and promoting the modern operation of rural land. Also, it is recommended to explore the promotion of security-based financing of rural land. Farmers invest rural land in land joint-stock companies, and the company then issues bonds or stocks, making use of the functions of the securities market to turn rural land into liquid financial assets to finance the development of modern agriculture.

#### **4.4 Effectively protecting the right to benefit from rural land and promoting the development of agricultural modernization**

(i) It is necessary to guarantee the income from the circulation of land operation rights. After land circulation, farmers can get land circulation fees, or get corresponding dividends and dividends by investing in shares, and can also become agricultural workers on large-scale land operation and earn wage income. Farmers can engage in secondary and tertiary industries related to agriculture, or go to cities and towns to engage in non-agricultural industries to obtain income, thus effectively guaranteeing their income. After the land is circulated to the developer for operation, a better profit return for the operator should be guaranteed. Ensuring the grain security is an important task for the development of agricultural modernization. For operators who circulate rural land to develop large-scale modern grain production, the government should increase subsidies to allow operators to obtain income equivalent to the income from operating "vegetable basket" products, thereby stimulating the enthusiasm of grain operators. (ii) It is necessary to guarantee farmers' income from land expropriation. The expropriation of land for public development should be strictly promoted, and if the development is not for public construction, the compensation fee for rural land expropriation should be increased. In land expropriation, apart from compensation for expropriation of land use rights, farmers, as one of the subjects of ownership, should also obtain compensation for collective ownership expropriation. The right to rural land development should be

clearly granted by law. After rural land is expropriated and developed, the land requisition price should include land requisition compensation and the value of rural land development rights. The compensation for land acquisition consists of rural land ownership and the value of the right to use, resettlement fees, fees for crop seedlings, compensation for attachments, *etc.* Farmers receive the value of rural land development rights, the compensation value of use rights, resettlement fees, and the allocated part of the compensation value of rural land ownership. It can also explore the rural land procurement system. Under the strict approval of the state, non-agricultural developers have to purchase rural land if they want to obtain it. After acquisition, the ownership of the land belongs to the state, the right to use is sold to developers through market transactions, and farmers get the value of the right to use in equal transactions. In addition, it is recommended to actively promote the equal access to the market of rural collective operating construction land and state-owned land, with the same rights and prices. In this way, it will effectively increase farmers' land income, have enough development funds to engage in non-agricultural industries, and promote the integrated development of primary, secondary and tertiary industries. (iii) It is necessary to guarantee compensation rights such as modern agricultural facilities. Rural land leaseholders should be compensated for their modern agricultural operating facilities when the contract period expires or are taken back in advance. It should be clearly defined in the land circulation contract, and the compensation method and standard should be clarified. (iv) It is necessary to actively obtain income from carbon sink trading. It can promote rural areas to use some forest land and urban ecological degradation due to expansion and development for carbon sink trading, explore the establishment of a carbon sink product value realization mechanism, make full use of green resources to obtain carbon sink benefits in promoting ecological protection, and increase farmers' funds for developing modern agriculture. (v) It is necessary to develop land ticket transactions to increase farmers' income. By reclaiming construction land such as idle homesteads and abandoned township enterprise land, the indicators generated after strict inspection and acceptance by the land management department form land tickets. Enterprises can purchase and obtain land use indicators for urban construction, promote the replacement of construction land, ensure the balance of construction land replenishment, and increase farmers' income. Farmers obtaining income will promote agricultural modernization investment or move to cities and towns to promote the transfer of surplus labor. (vi) It is necessary to actively explore methods such as land banks to increase farmers' income. It is recommended to establish a land bank with the support of the government, and farmers can deposit their land in the bank. The bank arranges and sublets the rural land to the developer to obtain income, the farmers obtain "interest" by virtue of the contract, and the developer obtains the large-scale rural land to promote the de-

velopment of modern agriculture. (vii) It is necessary to guarantee the land income right of registered urban farmers. It is necessary to guarantee the income rights of the farmers who are transferred to the cities and towns during the contract period, and to ensure that they have the same rights and interests as other villagers. If farmers want to withdraw from the contractual operation rights, the principle of "who benefits should provide compensation" can be adopted, and the beneficiary farmers, collective economic organizations, local governments and the central government shall jointly assume the withdrawal compensation fees. The compensation period shall be based on the remaining years of the contract period, and the compensation shall be based on the average annual turnover income of the contracted land in the previous three years. The farmers who settle in urban areas can also mainly sell the contractual operation rights to the villagers in this group to obtain compensation, and hand over the confirmation certificate to the purchaser or keep it in the collective economic organization of the group. The number of years is based on the remaining years of the contracting cycle, and the purchase is based on the average annual turnover income of the contracted land in the previous three years. Buyers who obtain contractual operation rights can promote agricultural scale operations, and can continue to sell the contractual rights during the contract period to obtain income. After the contract period expires, the contracted land should be returned to the collective.

## References

- [1] HE CY. Exploring the land issues which hinder China's agricultural modernization in the new era[J]. Studies on Mao Zedong and Deng Xiaoping Theories, 2021(3):12-23, 107. (in Chinese).
- [2] Rural Land Contracting Law of the People's Republic of China[EB/OL]. (2020-02-17)[2022-04-16]. [http://www.zfs.moa.gov.cn/flfg/202002/t20200217\\_6337175.htm](http://www.zfs.moa.gov.cn/flfg/202002/t20200217_6337175.htm). (in Chinese).
- [3] Strictly control the quality of the reform plan and supervise the inspection to ensure that the reform and improvement will be improved and the reform will be successful[N]. People's Daily, 2014-09-30. (in Chinese).
- [4] Instructions on doing a good job in the protection of farmland and the circulation of rural land[N]. People's Daily, 2015-05-27. (in Chinese).
- [5] Measures for the Administration of the Circulation of Rural Land Operation Rights[EB/OL]. (2021-01-26)[2022-04-18]. [http://www.gov.cn/zhengce/zhengceku/2021-02/04/content\\_5584785.htm](http://www.gov.cn/zhengce/zhengceku/2021-02/04/content_5584785.htm). (in Chinese).
- [6] SONG CF, YE XS. Analysis on legal issues of "separation of three powers" in rural collective lands[J]. Journal of Guangxi Normal University (Philosophy and Social Sciences Edition), 2015,51(06):73-78. (in Chinese).
- [7] LIU YS. Scientifically promoting the strategy of reclamation and readjustment of rural land in China[J]. China Land Science, 2011, 25(4):3-8. (in Chinese).
- [8] Land Administration Law of the People's Republic of China (2019-09-05)[2022-05-01]. <http://www.npc.gov.cn/npc/c30834/201909/d1e6c1a1ecc345eba23796c6e8473347.shtml>. (in Chinese).