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Analysis of the Price of Development Right of Agricultural Land in China

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Abstract According to the viewpoints of predecessors, we define the signification of development right of agricultural land and connotation of the price of development right of agricultural land as follows: the development right of agricultural land is to change the former use nature of agricultural land, so as to become the right of construction use land; the price of development right of agricultural land refers to the price that is difference between the price of construction use land, and summation of the price of former agricultural land, the expense of developing agricultural land, the expense of management, and profit, after the agricultural land is transformed into non-agricultural construction use land. By using the principle of economics of land, this paper expounds the generation mechanism of the price of development right of agricultural land, namely the diversity of agricultural land use and the change of demand and supply of development right of agricultural land. The influencing factors of the development right of agricultural land are analyzed, and there are mainly the price of agricultural land, the price of construction use land, the contradiction of demand and supply of urban land, land use, and agricultural land.

Key words Urbanization, Development right of agricultural land, The price of development right of agricultural land, China

With the quickening of urbanization process, the contradiction between human and land aggravates, while the decrease of area of farmland, directly leads to the rise of the price of agricultural land. Moreover, the drive of external interests precipitates the generation of such phenomenon. In the process of generation of this phenomenon, the natural resources, ecological environment, national food security, and farmers' interests are all scathed to some extent. In order to preclude the generation of such phenomenon, or slow down the generation of such phenomenon, many scholars put forward the concept of price of development right of agricultural land, while the research on price of development right of agricultural land still in its infancy in China. By expounding the concept, generation mechanism, and influencing factors of price of development right of agricultural land, we analyze price of development right of agricultural land, so as to provide reference for the research on price of development right of agricultural land.

1 The concept of price of development right of agricultural land

1.1 Signification of development right of agricultural land

The development right of agricultural land, as an important branch of the development right of land, originates from the development right of land, so we should understand the connotation of development right of agricultural land on the basis of understanding the development right of land. At present, the connotation of the development right of land is universally acknowledged as follows: the right to change the former use nature of land, or the right to strengthen the former intensity of land.

The development right of land, initially, originates from the

singlehanded selling and domination after the separation of the mining rights and land ownership. The most basic concept of the development right of land is the right to develop and tap the land, and the right of property that can be separated from land ownership and used individually^[1]. The report of *Research on Land System of All Countries* in 1992, introduced the concept of the development right of land, and the viewpoint of this report is that the development right of land is to change the former use nature of land, into the rights with different use natures, for instance, change the agricultural land into commercial land, or elevate the former intensity of land use; all other property rights or ownership of land are based on value of the normal use that has been determined for the time being; as for the power of decision to change the land use type afterwards, it is the right of development.

Most of the scholars in China have described the development right of land to a certain extent. Zhao Shangpu thinks that the big cities in China, like Shanghai and Beijing, should refer to the transfer system of the development right of land in the United States^[2]. Zhong Hanming holds that with the quickened pace of urbanization, we need more land to be changed into more urban construction use land; in addition to the drive of interests, it makes people strengthen the land use degree and damage, therefore, we should promote the development right of land in terms of this aspect^[3]. The studies of Ye Yanmei and the like, show that further improving the structure of land property rights is inseparable from the development right of land^[4]; Shen Shouyu thinks that the development right of agricultural land is the basis of the development right of land, so the establishment of the development right of agricultural land, not only can be conducive to protecting farmland, protecting natural resources and protecting ecological environment, but also can be conducive to protecting various potential rights of farmers and

rapid development of the national economy^[5].

On the basis of the development right of land, the academic world has further carried out the researches on the development right of agricultural land. The domestic scholars have not yet conducted more accurate definition on the connotation of the development right of agricultural land, but the more unified concept is as follows: the right to change the former use nature of land into construction use land, or the right to strengthen the former intensity of land. It includes two aspects as follows: in the first place, by the way of expropriating land, the state uses administrative power to change the agricultural use land into construction use land; in the second place, according to law, the agricultural use land is transformed into construction use land.

The realization degree of the development right of agricultural land is reflected by the price of the development right of agricultural land. The price of the development right of agricultural land also can be conducive to inhibiting the rapid decrease of agricultural land, protecting natural resources, protecting ecological environment, protecting farmers' rights, and arousing their enthusiasm, therefore, the research on the price of the development right of agricultural land has certain practical significance.

1.2 The connotation of price of development right of agricultural land The price problem of the development right of agricultural land is an important branch of problems of the land price, while various types of rights constitute the system of land price. One market has several either interrelated or different land prices, which constitute a price series^[6]. All rights have the corresponding prices. As the price content which corresponds to various rights will be different along with the different needs of management and transaction forms, it thus constitutes the "price cluster" of land price, which can be seen in Fig. 1^[1].

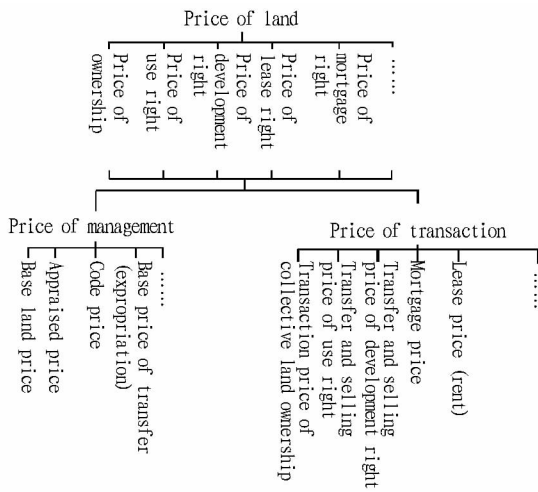


Fig. 1 China's "land price cluster"

The price of the development right of agricultural land is the price that we use the price of construction use land to subtract the summation of the price of former agricultural land, the expense of developing agricultural land, management expense and profit, after the agricultural land is transformed into non-agricultural construction use land.

2 The generation mechanism of price of development right of agricultural land

2.1 Diversity of land use With the social development, economic growth, and accelerated process of urbanization, the demand for commercial land, industrial land and residential land is increasing, but the natural supply capacity of land is limited, so the diversity of agricultural land use becomes the prerequisite and basis of this part of the land economy. The change of use has become the main source of this part of land economy. In this process, the price of the development right of state-owned land tends to be higher than the price of collective land ownership, thus it generates the price of the development right of agricultural land, while the price difference in this process is the root cause of generation of the price of the development right of agricultural land^[7]. In terms of the benefit of land, after the agricultural land is transformed into industrial land, commercial land and residential land, if we want to balance the price before and after, it is bound to generate the price of the development right of agricultural land.

Fig. 2 shows the process of formation of price of the development right of agricultural land (with the change of time, it generates the value of the development right of agricultural land).

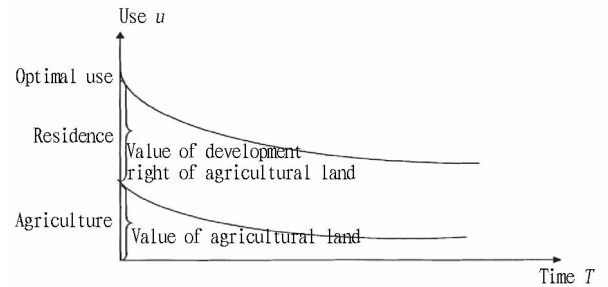


Fig. 2 The formation of price of development right of agricultural land arising from the diversity of land use

2.2 Supply and demand of development right of agricultural land According to the law of supply and demand of goods and the theory of formation of land price, the land markets should also follow the general laws of supply and demand of goods as follows: if the land prices rise, the supply will increase, and the demand will decrease; if the land prices fall, the supply will decrease, and the demand will increase. The development right of agricultural land will form the equilibrium price after the market of the development right of agricultural land is established.

In the light of demand, the acceleration of the process of urbanization will make the demand of people for the development right of agricultural land increasingly grow, while there are two aspects of demand regarding the transformation of agricultural land into non-agricultural land as follows: the first is the demand for the national infrastructure use land; the second is the demand for commercial land and residential land. After we conduct definite definition on the price of the development right of agricultural land, the development right of agricultural land will be like the law of supply and demand of general commodities: if the demand increase, the price of the development right

of agricultural land will rise; while if there is a rise of price of the development right of agricultural land, the demand will be bound to decrease.

In the light of supply, the main source of economic supply of urban construction use land is agricultural land. Under the circumstance that we cannot precisely assess the value of agricultural land, driven by the benefit of non-agricultural conversion of agricultural use farmland, considerable farmland is transformed into non-agricultural use land. After the price of the development right of agricultural land forms and we have clear definition on the price of the development right of agricultural land, the value of agricultural land can be truly reflected, while the owners of the development right of agricultural land will also deliberately consider the sales problem of the development right of agricultural land^[8]. Under the influence of factors of supply and demand, the equilibrium price of the development right of agricultural land will be generated, which can be shown in Fig. 3.

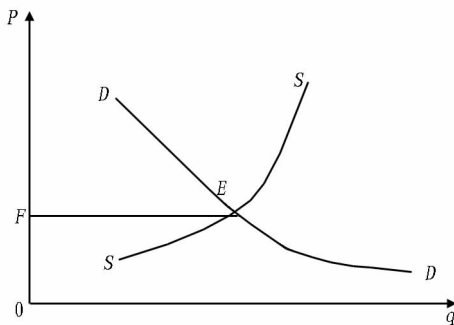


Fig. 3 The balanced price of development right of agricultural land

In Fig. 3, SS is the supply curve of the development right of agricultural land; DD is the demand curve of the development right of agricultural land; E is the equilibrium point of supply and demand of the development right of agricultural land; F in vertical axis which corresponds to E is the equilibrium price of the development right of agricultural land.

3 Influencing factors of price of development right of agricultural land

The continuous intensification of the contradiction of supply and demand of urban land is the impetus of generation of the development right of agricultural land and continuously increased price of the development right of agricultural land. The urban planning and land use planning are the specific measures of formation of price of the development right of agricultural land; the diversity of land use is the premise and basis of formation of price of the development right of agricultural land; the prices difference between construction use land and agricultural use land (excluding cost of land development) is the form of expression of the development right of agricultural land.

The price of the development right of agricultural land is the price that we use the price of non-agricultural construction use land which is transformed from agricultural land, to subtract the summation of price of former agricultural use land, expense of developing agricultural land and expense of management and

the profit. Therefore, the influencing factors of price of the development right of agricultural land are as follows: the price of agricultural use land, the price of construction use land, expense of developing agricultural land and expense of management, the contradiction of supply and demand of urban land, profit, use and other factors of agricultural land.

3.1 Price of agricultural use land The price of agricultural land is one of the important factors impacting price of the development right of agricultural land. The difference of the land prices before and after the change of agricultural land use is just the price of the development right of agricultural land (excluding the expense of development, the expense of management, profit and so on), so, prior to the change of land use, the price of agricultural land, namely the price of agricultural use land, has a direct impact on the price of the development right of agricultural land. In terms of the same land, the price of agricultural use land is relatively low prior to the change of agricultural land use, while the price of construction use land is relatively high after the change of agricultural land use. In addition to the different impacts of location before and after the change of land use, that is to say, no matter from the vertical comparison, or from the horizontal comparison, the price of agricultural land has a certain impact on price of the development right of agricultural land.

3.2 Price of construction use land The price of construction use land is another important factor impacting price of the development right of agricultural land, which has a great impact on the rise or fall of price of the development right of agricultural land. The agricultural land use changes from agricultural use land to construction use land, and the price of construction use land after land use change determines the land price. Under the circumstance that other factors are same, the same parcel of land which is used as industrial land, commercial land, and residential land, will also have great difference in terms of the land price. In terms of the same parcel of land, the price of agricultural use land before the land use change doesn't change, so the price of the development right of agricultural land, to much extent, hinges on the price of land use after the land use change-the price of construction use land. In terms of the different parcel of land, although some factors impact the price of the development right of agricultural land, such as the conditions of land, land fertility, location, and so on, in comparison with the construction use land after the land use change, the impacts of these factors become less important.

3.3 Contradiction between supply and demand of urban land As the contradiction between supply and demand of urban construction use land will have impact on the price of agricultural land and the price of construction use land, so the contradiction between supply and demand of urban construction use land will also have impact on the price of the development right of agricultural land. With economic development and acceleration of urbanization process, the city needs more and more construction use land to develop dwellings, green space, public facilities and so on^[9]. In order to protect agricultural land resources, national food security and ecological environment,

we should inhibit the decrease of farmland area, and at least ensure that farmland area cannot be decreased by a large margin. The consequence of this practice are as follows: the contradiction between supply and demand of urban land becomes continuously acute, so that the price of construction use land rises ceaselessly. But the price of agricultural land under this circumstance may remain unchanged or increase slightly, which will be bound to widen the price difference between the two continuously, so the price of agricultural land under this circumstance will impact the price of the development right of agricultural land.

3.4 Land use Use is also the influencing factor of price of the development right of agricultural land. Before and after the formation of the development right of agricultural land, the role of use is different (Fig. 4)^[10]. In Fig. 4, K_1 is commercial land; K_2 is residential land; K_3 is industrial land; K_4 is agricultural use land. The price difference of Point A after the agricultural use land is transformed into commercial land is biggest, while the price difference of Point C after the agricultural use land is transformed into industrial use land is smallest. Therefore, among the influencing factors of the price of agricultural land, the role of use cannot be ignored. In the light of the horizontal side, in the process of the agricultural use land being transformed into commercial use land, the change of economic value of residential land is greater than the change of economic value of industrial land.

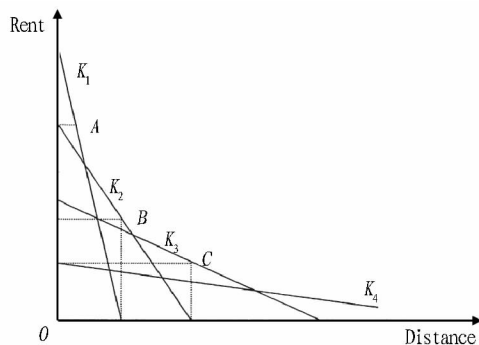


Fig. 4 The land price change of different uses

3.5 Factor of agricultural land The factors of agricultural land are as follows: the soil fertility of agricultural land, the area of agricultural land, topography of agricultural land, the natural conditions, maturity degree of agricultural land, geographical conditions of agricultural land and so on. The geographical conditions of agricultural land directly affect the benefit of agricultural land, and further affect the price of agricultural land. The difference of the geographical conditions of agricultural land is a condition responsible for the formation of differential rent. Especially in the cities, the main form of urban differential rent is the differential rent spawned by geographical conditions.

Fertility is the richness degree of land. This factor is related with the agricultural land. As the natural productivity of land is determined by the fertility of the land, so the fertility of land determines the net benefit of land^[11].

4 Conclusion

The price problem of the development right of agricultural land is an important component of the study of the development right of agricultural land. By the research on connotation of the development right of agricultural land, connotation of price of the development right of agricultural land, formation mechanism of price of the development right of agricultural land, influencing factors of price of the development right of agricultural land and so on, we conduct preliminarily exploration on the price of the development right of agricultural land. With the social progress, economic development, continuous improvement of living standards of people, and propulsion of process of urbanization, the agricultural land is decreasing sharply and rapidly. In order to arrest the further development of this trend, the scholars should pay attention to the research on the development right of agricultural land, especially the research on the price of the development right of agricultural land^[12].

The research on the price of the development right of agricultural land can not only protect agricultural land, natural resources, ecological environment, and food security, but also protect the potential interests of farmers, and arouse the enthusiasm of farmers. The content concerning the research on price of the development right of agricultural land is abundant, so conducting profound analysis and exploration on price of the development right of agricultural land will become an inexorable trend.

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