

Calculation of land social security value in the process of urban non-agricultural construction land transfer--Based on field investigation in rural areas of Guangzhou

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Abstract. The social security value of land includes four major items, namely, unemployment security, minimum living security value, old-age security value and medical security value. The non-agricultural construction land compensation substance produced in the process of social security is the land value of the market price, the farmers and urban residents, land value can be partial social security. To determine the process of land expropriation for non-agricultural construction reasonable compensation, we need to provide scientific standards. Through the calculation, Guangzhou 's current land compensation provide social security value of basic level, but due to the large regional land requisition compensation amount difference, the current land expropriation compensation is actually the coexistence of insufficient and transition compensation.

1 Introduction

The studies on social security problems of landless peasants in non agricultural land circulation have received wide attention. Chen Yi's "land for security" program started the research climax, Chen Yi think we should use economic compensation to establish social insurance for landless peasants; Bao Haijun, Wu Fang think time should be the social security of landless peasants in land expropriation compensation after the relocation and land value-added income as the main source of funds, the establishment of the social security system of landless peasants (Bao Haijun and Wu Cifang, 2001); Zhu Mingfen believes that the old-age insurance funds should be disbursed from the main land compensation, land value-added commission. In the case of conditional permission, we should purchase serious illness medical insurance for the peasants who lost their land in the community, and at the same time, the minimum living security system for the landless peasants who lost their ability to work (Zhu Mingfen, 2003). At present, all regions have adopted different policies and measures to construct the social security system for landless peasants, but the lack of reasonable calculation of the social security value of land

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expropriation is not conducive to the construction of effective social security system. This paper takes Guangzhou city as the research area, and aims at the rural land in the urban planning area, and calculates the minimum living security, the pension insurance and the medical insurance value of the vital interests of the landless peasants.

2 Farmers' social security compensation in the process of non-agricultural land transfer

Guangzhou city in rural land circulation, non-agricultural land since 90s is fast, because farmers are not included in the unified social security system, land requisition land compensation value of social security is the embodiment of the market price, there are two kinds of method: one is unified by the state requisition, then to auction construction land units; two is in strict accordance with the premise of land planning, which will be set for the construction land of the collective land directly into the market, and state-owned land with the same price. Survey data show that the compensation for land expropriation varies greatly in each district of Guangzhou (Table 1).

Table 1. Compensation price of non-farm construction land in Tianhe and Guangzhou of Haizhuqu District.

Land expropriation	compensation price(10000 ¥ / 667m ²)	Land expropriation	compensation price(10000 ¥ / 667m ²)
Huang Village, Tianhe District, Dongpu	40.00	fish pool Tianhe District	35.50
Tianhe District Yinhe Village	60.00	Jianghai street, Haizhuqu District	25.00
Longdong Cave Village, Tianhe District	34.50	Dongfengcun Haizhuqu District,	32.74
Tangxia village, Tianhe District	50.40	Haizhuqu District Stone Village	72.00

Data source: field survey

3 Calculation of the social security value of agricultural land based on the data of rural areas in Guangzhou

3.1 The definition of the social security value of agricultural land

The social security function of land is when farmers do not have the perfect social security system, largely have to rely on the land supply basic subsistence harvest, or to land revenue as subsistence and against social risks mainly means (Chen Xinyong, Lan Deng Jun, 2005). In the absence of the social security system in rural areas, the family guarantee with land as the core bears all the farmers' security items. Specifically, the following aspects of security value:

3.1.1 Unemployment insurance value

For pure farming households, the land has the natural ability of unemployment protection, which has caused a great deal of hidden unemployment in the countryside, but it is of great significance to social stability. The reason why hidden unemployment did not cause social unrest was that the land was absorbed by these people (Song Qingfeng, left Er Zhao, 2005). The number and quality of farmers' land determine whether farmers can obtain basic living security.

3.1.2 Minimum living security value

For the pure agricultural population, without sufficient accumulation of wealth, not enough non-agricultural employment opportunities and non-agricultural income, land is the most basic factor of agricultural production, but also can provide the most basic living security for farmers, land basic output capability determines the boundaries of poor farmers. Farmers own land

3.1.3 The value of old-age security

At present, Guangdong rural everywhere, explore the establishment of a new pension system, but because most of the grass-roots public finance and farmers unable to pay the pension funds required, so rural endowment insurance failed to play its due role. In this case, the pension is mainly dominated by the family pension, land is provided to farmers old-age security function (10000 chaolin, 2003). Learned from the investigation, the farmers home for the elderly also get a piece of land, they raised their own children or by farming, provides the basic living security.

3.1.4 Medical insurance value

As the new cooperative medical system in rural areas has not yet fully expanded in Guangdong, the rural medical insurance is mainly undertaken by the land. Medical expenditure occupies a considerable proportion of the annual land income of farmers. The land physical protection can save the land cash expenditure of farmers, so that more land cash income is used for medical expenditure.

3.2 The calculation of the social security value of agricultural land

3.2.1 Minimum living security value (EV).

It is realistic and feasible to calculate the minimum living security value by considering the long-term survival guarantee function of the land to the landless peasants. Here in the calculation of the minimum living guarantee value, according to the average age of farmers, calculate the number of years away from retirement, land acquisition compensation one-time minimum living expenses, such as farmers reach retirement age to receive pension insurance. That is to say, the minimum subsistence support fee is calculated from the period from land lost to unemployment to retirement:

$$EV = C \times Tm \times M + C \times Tf \times F$$

(EV: a one-time compensation for farmers minimum living expenses; C: total annual minimum living expenses; Tm: the average age of male citizens before retirement years; Tf: the average age of female citizens before retirement years; M: male population accounted for the proportion of the total population; F: female population accounts for the total number of cases than.)

According to the Guangzhou Municipal Civil Affairs Bureau, in 2007, the minimum living security line for urban residents was 330 ¥ per person per month. Using the 2006 census data, calculated according to the average age and the proportion of each age, the average age of the town of Guangzhou city are male is 34 years old, female average age is 35 years old, male population proportion of the total population is 0.505, the female population proportion of the total population was 0.495. In a 60 year old male, female 50 years old to retire to Chengdu city standard, the calculation of the requisitioned land per capita minimum living guarantee value, non agricultural construction of Guangzhou city

land expropriation should be compensation to farmers per capita minimum living guarantee fee is about 81 thousand and 500 ¥.

$$\begin{aligned} EV &= C \times Tm \times M + C \times Tf \times F \\ &= 0.40 \times 26 \times 0.505 + 0.40 \times 15 \times 0.495 \\ &= 81500 \text{ ¥.} \end{aligned}$$

3.2.2 Calculation of the value of endowment insurance (LV).

The basic old-age insurance is a social system that the laborers are provided with material help to protect their basic life in their later years. In accordance with the provisions of China's old-age insurance policy, to participate in old-age insurance personnel pay more than 15 years of age, in order to receive a monthly pension. For agricultural land endowment insurance value can be used to inverse method estimates, i.e., in accordance with the social security department of the basic old-age insurance for urban workers calculation method, estimated to pay the basic old-age insurance, basic pension with reference to enjoy table (Table 2) find corresponding amount.

Table 2. Pension insurance and enjoy the old gold comparative table.

Fee/month	Payment period and accumulative total payment		Legal age for enjoying retirement treatment		monthly pension benefits	
	15 years	20 years	male	female	15 years	20 years
120	21600	28800	60	50	360	480
160	28800	34800	60	50	480	640

According to the minimum basic pension of 405 retirees from urban enterprises in Guangzhou in 2006, the calculation of the endowment insurance value of the expropriated land was calculated. To reach the minimum basic pension of 405 ¥, the monthly fee must be paid at around 150 ¥. In accordance with the payment of 15 years, measured by the current expropriation of land in Anqiu per capita pension security price of about 28 thousand and 100 ¥.

3.2.3 Calculation of the value of basic medical insurance (MV).

The peasants' medical insurance should refer to the medical insurance of the urban residents after the peasants' land is converted into non-agricultural land formula for:

$$MV = AW \times (60\% \times 9.5\% \times 15 + 7\% \times 15)$$

(MV: land health insurance value; AW: the average wage of the city's workers in the previous year.)

In 2007, the average annual wage of workers in Guangzhou was 34 thousand and 300 ¥, and the value of medical insurance for land requisitioned by Guangzhou was about 65 thousand and 400 ¥ by using the formula mentioned above.

$$\begin{aligned} MV &= AW \times (60\% \times 9.5\% \times 15 + 7\% \times 15) \\ &= 3.43 \times (60\% \times 9.5\% \times 15 + 7\% \times 15) \\ &= 65400 \end{aligned}$$

3.3 The total value of agricultural land social value calculation

In the process of non-agricultural construction land transfer, the value of land social security should be the sum of the four basic social security values defined above. Since the peasants have never paid unemployment insurance benefits, the current landless peasants

can be regarded as freelancers. Therefore, it is not practical for the landless peasants, especially the landless and unemployed peasants, to apply for unemployment insurance. The value of land expropriation and social security in the process of non-agricultural land transfer can be defined as:

$$FV = (LV + EV + MV) / AI$$

(FV) social security value per mu of land; LV: minimum living security value; EV: endowment insurance value; MV: basic medical insurance value; A: per capita operating land area

In 2006, the rural residential land management area of Guangzhou was 0.43 mu, and according to the above sub item measurement, the social security value of the land requisitioned by non-agricultural construction in rural areas of Guangzhou was:

$$\begin{aligned} FV &= (LV + EV + MV) / AI \\ &= (8.15 + 2.81 + 6.54) / 0.43 \\ &= 341600 \end{aligned}$$

4 Conclusions and policy recommendations

From the theoretical calculation results and the comparison shows that Guangzhou Tianhe, Haizhu survey of two district data, land compensation and land for farmers to provide the basic social security value is reasonable (the theoretical calculation results for 341 thousand and 600 ¥, the average price of the actual implementation is 351 thousand and 200 ¥). From the implementation of the compensation price of each district vary greatly, some was significantly higher than that of land to provide social security value, some land was significantly lower than the value of social security, the implementation of the market price to determine the presence of serious unfairness within the land compensation system. If we want to eliminate this unfairness, we must use other corresponding measures to supplement it to ensure the interests of landless peasants:

4.1 Establish a land acquisition compensation benchmark pricing system

According to the four social security functions provided by the land to farmers, the specific compensation standards of each region are determined, and the specific compensation amount of land expropriation in each section is adjusted on the basis of the benchmark price. The magnitude of the adjustment may be converted to the value of the rental after referring to the land conversion function of each region. In this way, the compensation for land expropriation can be prevented in the land expropriation compensation, and the transition compensation and compensation coexist in the concrete implementation.

4.2 Improve land expropriation procedures and form a reasonable mechanism for distribution of benefits

First, improve land acquisition procedures. In the process of land acquisition, we should establish and implement the hearing system of expropriation on the ground, and fully listen to the opinions of the collective and farmers of the village, and endow farmers with the right to know, participate, supervise and appeal. The two is the reasonable determination of the compensation standard. Land expropriation compensation is the core of land expropriation problem, and also the difficulty of land expropriation system reform. Land

acquisition compensation can not be simply based on the annual output value of land expropriation as the basis for compensation. In order to determine the property rights of farmers' collective land, they should be determined in accordance with the laws of market economy.

4.3 Strengthening the construction of the government's behavior mechanism

One is to strengthen the institutional capacity of the government, the government must implement the scheme using clear land payments, improve laws and regulations, perfect the management mechanism, the social security system integration and standardization; the two is the construction of government trust mechanism, the government must take the vital interests of farmers as the starting point of action, regulate their own behavior and the policy of ruling. Stable and rational and to improve farmers' psychological expectations on government behavior and recognition level; the three is to strengthen the construction of government supervision system, two aspects from the masses supervision and supervision system, raise the rent for the land of farmers can be effectively utilized.

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