# A THEORETICAL MODEL OF COMPENSATION STANDARD AND DISTRIBUTION OF LAND VALUE INCREMENT IN LAND REQUISITION<sup>\*</sup>

### Hai Jun BAO

Institute of real estate, Zhejiang University of Finance & Economics, Hangzhou, China

**Abstract:** In China, the present compensation measures in land requisition system still kept the shortcomings of that in the period of planned economy, resulting in the unscientific compensation standard, incomplete compensation contents and unreasonable distribution of land value increment, etc. Through investigation and with reference to the relation between land price and land use in German, this paper probe into and put out the theoretical model of compensation standard and distribution of land value increment in land requisition. Finally, the paper comes to the following conclusions: (1) compensation standard of land requisition should be determined by the land market price of its utmost utilization, (2) the peasants whose croplands were partly expropriated should also have due distribution for their living, (3) all the losses caused by land requisition should be compensated and (4) 30% of land value increment in the land requisition should belong to the peasants.

Keywords: compensation of land requisition; land value increment; theoretical model

#### **1** Introduction

The present land requisition system in China formed in the period of planned economy which was related to the catch-up strategy of giving priority to the development of heavy industry. Due to the contradiction between lack of capital and large amount of capital heavy industry required, the government reduced interest rate, exchange rate, salaries, daily necessities, resources and price of raw materials to promote the development of heavy industry (Lin Y F., Cai F., and Li Z. 1994), and the price of land is also reduced.

*Ways of Land Requisition in Construction*, which was issued in December of 1953, is the earliest land requisition policy in China since PRC came to existence. The contents and standard of compensation had much in common with the present one. Therefore, the present compensation measures in land requisition still kept the shortcomings of that in the period of planned economy, resulting in the unscientific compensation standard, incomplete compensation contents and unreasonable distribution in land increment, etc. These problems affected the peasants' life and the stability of the society, which aroused great attention of the Central Government. In 2006, Central Government's "No.1 Document" stressed that the compensation system for peasants who lost their land should be improved. During NPC (National People's Congress) & CPPCC (Chinese People's Political Consultative Conference) Annual Sessions 2006, Premier Wen Jiabao pointed out that land transfer fees should be compensated to the peasants to guarantee peasants' benefit in the process of urbanization. Based on the survey, this paper probe into and put out the theoretical model of compensation standard and distribution of land value increment in land requisition.

### 2 The theoretical mode of compensation standard in land requisition

The standard and contents of the compensation in land requisition are different from each country. However, there are three compensation standards in land requisition both at home and abroad (Chen Q. S. 1998): (1) the principle of complete compensation, (2) the principle of incomplete compensation, and (3) the principle of corresponding compensation.

In China, there is no definite explain for the compensation principle of land requisition, actually, it is carried out according to the principle of incomplete compensation.

According to Land Administration Law of the People's Republic of China, the compensation standard is based on the original use of land and calculated by 6-10 times of the average output of the previous three years.

Due to the inadequate market information for agricultural products, weak ability to adapt to the market, inefficient governmental administration and uncertainty of land use mode, planting systems, market situation and so on, the peasant could not always utilize agricultural land use optimally (Wang H. 2002). So, "6-10 times of the average output of the previous three year" could not reflect the optimal use of land. For example, the land which should be used to plant cotton has to be taken for planting rice for various reasons. In such a situation, the potential price of the land is underestimated, let alone using the calculation method of 6-10 times of the average output in the previous three years. Obviously, the present calculation method for compensation by timing the output of present land use is just the extension of land compensation standard of the planned economy.

China is a socialist country which gives great emphasis on the benefit of the whole country. Moreover, we are still in the primary stage of social development. The low level of economy and lacking of capital make it impossible for China to adopt the principle of complete compensation, which will inevitably give financial burden to the country and the society so that the economic development of the country could be affected. However, it is not in conformity with the requirement of socialist democracy and the fairness of law by just emphasizing the benefit of the society without considering the security of the citizen's legal right. In fact, it is quite unfair if the compensation could not help those who are requisitioned to get back to their original level of life.

Therefore, we should adopt the principle of corresponding compensation. According to the principle, the theoretical mode of compensation standard in land requisition includes the following:

(1)The compensation for the Land Requisitioned

To be clear, this paper supposes:

The requisitioned lands use for agriculture and the net profit of the present use is g(t);

The net benefit for optimal use of the requisitioned land is h(t);

 $h(t) \ge g(t)$ 

 $h(t) \ge g(t)$ .

According to the present use of land, the land value, the sum of discounted g(t),is:

$$R(t) = \int_0^\infty g(t) e^{-rt} dt$$

According to the optimal use of land, the land value, the sum of the discounted h(t), is:

$$C(t) = \int_0^\infty h(t) e^{-rt} dt$$

According to the original use of land for compensation, the peasants' loss is:

$$\Delta V_1 = \int_0^\infty \left[ h(t) - g(t) \right] e^{-rt} dt$$

The compensation for the requisitioned land could not be compensated only by its original use, because the use of the farming land does not always reflect its optimal utilization. The compensation of the land requisitioned should be based on the land market price from the optimal use of land for farming. In such a situation that agricultural land lacks exchange market, land price could be calculated from the result of agricultural land classification and grading.

(2)The resettlement compensation for the peasants whose land is requisitioned

In the process of land requisition, a lot of peasants will lose their land and live in a relatively unacquainted city. It should take a long time for those peasants to change their rural awareness into city awareness (Chen D. W., and Jin Y. F. 2002), i.e. changing their ways of living, producing and behaviors into that of city residence. At the same time, because the peasants have lost land, the focus of contradiction is to solve the problems for their survival and development. Therefore, it is essential to give social security for those land-losing peasants and help arrange their work or give them allowance.

The resettlement compensation includes those peasants whose land is partly requisitioned but not all. They should be compensated for the decrease of land may lead to their lower living standard. The resettlement compensation for those peasants may accord calculation of the multiple of the output of the agricultural land

in optimal utilization (such as 5-10 times), which varies from place to place.

(3) The compensation for the separation of the remaining land and damage of neighboring land

This is a very important kind of compensation that is always ignored. The present compensation standard in China does not include this. The separation of land may lead to lack of scale economy in land use. The negative effect of land use may bring about the damage of the neighboring land. The living level of the peasants will be reduced if the damages of the remaining land and neighboring land caused by land requisition.

(4)Other compensation for supplementary damages

If the owner of land or those who are damaged in the operation, they should be compensated. If land requisition brings the loss to the rent owner, the compensation should be paid to those who rent it. Other factors such as the loss caused by measurement, investigation and so on should be compensated.

In addition, with the continuous economic development, the socialist democracy and legal system becoming more and more improved in China, the compensation principle should be transferred to the principle of complete compensation.

### 3 The Theoretical Model of Distribution of Land value Increment

According to investigation (Bao H. J., and Wu C.F. 2002), the fees for requisition is 750-900 thousands yuan (RMB) per hectare in Zhejiang, Shanghai, Jiangsu and other places. Further more, what the peasants get is just 10-15 percent of the fees.

Once the agricultural land is transferred into the construction land, the price of construction land will rise to ten times or over that of the agricultural land. According to investigations, the fees for requisition is 750-1,500 thousands yuan (RMB) per hectare, while the total transfer fees for rent can reach 7,500-9,000 thousands yuan(RMB) per hectare, some even reach 15,000 thousands yuan (RMB) per hectare. As investigated, if land value increment is 100, then the peasants who own collective land use right only get 5-10 percents, the collective economic organizations who own the ownership of collective land get 25-30 percents, the rest 60-70 percents goes to the governments (see Fig. 1).

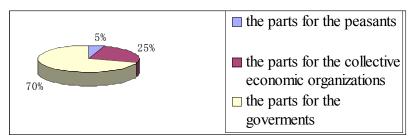


Fig. 1 the Distribution of land value increment in the present

Why the peasants and collective economic organizations get so small in the present and how could the distribution of the land value increment conform to the principle of justice? It is necessary to anatomize the thought of charging land value increment.

The thought of "charging land value increment" indicates that the increment benefit from land requisitioned should go to the country. The reason is that the increment benefit comes naturally from social and economic development. However, the increment does not actually go to the country. As is said in the above, the middleman such as the real estate developer or the local government gains most of the benefit. The peasants, as land right owner, get almost nothing.

From the angel of social justice, the peasants who occupy nearly 70 percents of the population in the country have the right to obtain the increment t from land requisitioned, as they are the most important part of the society. In the present binary structure between town and country, the increment from land requisitioned belonging to the peasants is the main source for establishing social security fund of peasants. Of course, it is the main source for the social security fund of the peasants who lose their land.

So how much is the increment that belongs to the peasants? According to the relationship between land use and land price in Germany, we will discuss the distribution mode of land increment combining the general land use planning, urban planning and part of the collected materials in China.

First, let's see how agricultural land gets value increment when it transferred to construction land. In Fig. 2, the price of agricultural land lies at the bottom of the stair model. When the government has an intention to make land planning, for instance, planning it into industry zone, then the land price may be raise 10 percents. After that, the general urban planning would make sure the general use pattern for this land. The land price rises again by 25 percents or so. After the government gives a detailed planning of the land, i.e. the particular use, construction density and floor area ratio of the land having been determined, the land price goes up about 25 percents. After the construction of infrastructures, the land price increases 25 percents. With the land development project finished according to the land planning, the land price increases about 15 percents. From the above five steps, the agricultural land realizes its benefit in transferring.

Second, we should analyze the reasons for the price rise in the above five stages individually. In the first three stages of land planning intention, general urban planning and detailed planning, the price rise is mainly caused by the government's domination, forecast and planning of the economic development. Therefore, 60%(10%+25%+25%) of the land price rise through transferring should be obtained by the government. After the stage of infrastructures, the price rise mainly comes from the completion of infrastructures such as the construction of road, water and electricity. The completion of road, water and electricity construction cannot be possible without the government's behavior (for example, the government may provide financial help to the construction of infrastructures). So, it seemed that this part of the land price rise belong to the government. However, this part of price rise should belong to all the citizens as the government uses the tax to carry on the construction of infrastructures, but the peasants don't get their benefits. In the condition of China's socialist public ownership, the government should not only represent the benefit of the city citizens but also that of the peasants. From the fact that the peasants occupy 70 percents of the population, the 25 percents of price rise should belong to the population, that is, more than 1/2 of the whole population, they should take up 15 percents of the price rise.

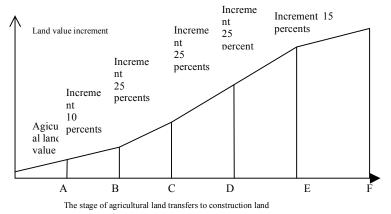


Fig. 2 The theoretical mode for the increment in land tranferring

Thirdly, in the step of completion of land development project, 15 percents of the price rise should go to the peasants as the peasants provide the material base without which there is no land increment. One thing we should point out is that in this stage, the contribution of the real estate developer is just the set up of building. The developer's intention of setting up building is to get the benefit from management and increment (including the land increment). But the price rise in this stage should not belong to the developer. This 15 percents should also be given to the peasants whose land is requisitioned and the peasants collective who have contributed greatly to the land increment. If the peasants and the peasants collective do not provide this material base, i.e. they do not give up land ownership right and land use right, the building is impossible. How could the 15 percents price rise come into being?

At last, we come to the conclusion that 30 percents of the land price rise belongs to the peasants. It is noticeable that in the five stages, the specific data of land increment is just theoretical without practical evidence. Therefore, it needs further investigation.

## 4 Conclusion

This article discussed about the theoretical model of compensation standard and distribution of land value increment in land requisition. The following conclusions are drawn:

(1)Compensation standard of land requisition should be determined by the land market price of its utmost utilization. In the present situation that there is no agricultural market transaction, the land price of optimal use could be worked out through the results of the agricultural land classification.

(2)The peasants whose croplands were partly expropriated should also be compensated. The land reduction leads to the reduction in their life quality, so those peasants should also be compensated.

(3) Increase more compensation items in land requisition. That is to say, add the compensation of residual land separation, compensation of the loss caused by harming neighboring land and other supplementary compensations. These supplementary compensations include land property right owner or the connected person's economic loss from business caused by land requisition, the leaseholder's loss caused by the transferring of buildings and other losses from measurements and investigation, etc.

(4)In the process of land requisition, about 30 percents of the land increment should belong to the peasants.

#### References

- Bao H. J., and Wu C.F.(2002), On the social security system of the peasantry whose land were requisitioned, Management World, 10: 37-42
- Chen Q. S. (1998). The compare of compensation in land requisition between Mainland China and Taiwan, Asia-Pacific Economic Review. 3: 152-156
- Chen D. W., and Jin Y. F. (2002). The problems of land property right for peasantry in land requisition, China Land, 3: 16-21
- Lin Y F., Cai F., and Li Z. (1994). The ferly in China: Developmental strategy and economy reform, Shanghai sanlianc publishing House.
- Wang H. (2002). The land requisition in the suburb: eminent domain and its compensation, Chinese Rural Economy, 2: 40-46