

Urban-Rural Balance, Regional Coordination and Land Transfer in China

Ling Zheng, Yaping Wei, Kang Cao, Songpo Shi, and Jinxing Wang

Abstract—It's difficult for China's current land transfer institutions limited to county-wide to solve the contradiction between urban-rural development and construction land shortage. On the basis of analyzing China's construction land transfer system, and evaluation toward Transfer of development rights (TDR) practices in Anhui and Chongqing, the passage proposes: (1) we should establish a multi-level land indicators trade market under the guidance of regional spatial objectives, and allow land transfer paid across cities and counties within a specific area following the regulation of both government and market; (2) it would be better to combine organically the policy intentions of land plan, regional plan, urban plan and economic plan, and link them with land indicators transfer to promote a wider range of urban-rural balance and regional coordination.

Keywords—China's land institutions, transfer of development rights, urban-rural balance, regional coordination.

I. INTRODUCTION

IN recent years in China, the rapidly-growing demand for urban construction land couldn't be met effectively and appropriately under the strict policies of land supply control as well as land transfer. As a result, construction land shortages have gradually become so important an issue that we cannot ignore in urban development. Among the various solutions explored positively in China, a land transaction application submitted by Si County and the city of Maanshan in Anhui Province to the provincial committee gathered a lot of attention as the crucial point of the application was to try to transfer construction land indicators paid from the poverty-stricken Si County to the rapidly developed Maanshan, which was intended to solve the different problems during their urbanization. However, as it was against the policies of land transfer limitation in China¹, the application failed ultimately¹.

By carefully analyzing, we find that the above application actually applied for the transfer of land construction right. This right is part of the land development rights (LDR). Wang, et al. (2011) studied these rights in China and argued that: (1)

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China's land indicators transfer was the transfer of land development rights led by local governments, not the real market transaction in the true sense; (2) a market mechanism and a new policy framework were necessary in China, and we should allow construction indicators replaced by agricultural land trade nationwide publicly and allow rural construction land trade be free.

The limitations of the study was: (1) land development rights was simply regarded as construction rights but not as useful policy tools; (2) too much emphasis was put on the effect of market which is inappropriate for a wider range of urban-rural balance and regional coordination.

In view of this, our paper is composed of four parts: (1) analyzing China's existing land transfer institutions in the perspective of land development rights; (2) pointing out the deficiencies of the existing system; (3) summarizing and evaluating two representative (Transfer of development rights) TDR practices in China; (4) putting forward a few policy recommendations to optimize China's land transfer system.

II. CHINA'S CURRENT LAND TRANSFER INSTITUTIONS

A. Land Development Rights and Land Transfer

There's no formal definition of land development rights in China so far[1]. In accordance with the US Land Development Authorization Act, they're rights land owners can set their land or buildings on it for particular purposes under the development law, including area, density, capacity and height[2]. TDR means land owners can transfer or sell part or all of the development rights to others through market and new rights will accumulate on the transferee one[3].

According to the definition above, current land transfer system in China is actually a simple TDR mode arising from the contradictions between farmland protection and urban construction. Over the years, a red line was used to ensure the quantity of arable land no less than 18 million mus, meanwhile with a large number of arable lands used for non-agricultural construction beyond the line. In order to keep a relative balance between the occupation and complement of cultivated land, China's land department developed policies in 2004 that newly increased farmland could be exchanged for local urban construction land in proportion, and the left farmland indicators could be checked unified by provincial land departments[4]. By that time, China's TDR mode had taken its initial shape.

However, in actual practice, the occupation and complement policies were barely efficiently carried out and the phenomena of 'occupation first and then retrieval', and 'quality and quantity by retrieval much inferior', were outstanding. Considering the problems during practices, governments

subsequently explored extension policies linked the addition of urban construction land with the reduction of rural construction land[5]. In 2010, it was further cleared that construction land replaced by farmland could only be used in county-wide in the important 'Central First Document'. By that time, a relatively complete TDR framework had finally taken shape in China. Representative TDR practices included Chengdu 'demolition and combination', Jiaxing 'separation and exchange'" and Chongqing 'land tickets trade', etc.

B. Deficiencies of land transfer limited to county-wide

China's TDR practices based on the county-wide land transfer institutions have indeed alleviated the shortages of urban construction land to some degree. For example, about 2000 mus of urban construction land were perfectly obtained by farmland replacement in the poverty-stricken Si County in 2010, under the conditions of no planning indicators got from Suzhou although it should have.

Even so, however, the current land transfer institutions still need to be optimized for further development and main deficiencies are as follows:

1) Hard to realize relatively sufficient urban construction land

The county-wide policies were intended to realize relatively sufficient construction land properly during urban development, but failed at the transfer range.

On the one hand, comparatively intensive development during urban expansion of major cities often leaves very limited rural land for reclamation. Moreover, not only urban land prices, but also rural demolition costs and the difficulties of rural reclamation are greatly raised up by urban land shortages. The result is major cities cannot get the intended large quantities of construction land under the county-wide land policies. 17 key projects in Dangtu, Maanshan, were stagnated just because of lacking construction land in 2009 alone.

On the other hand, extensive development, limited financial capacity, inadequate public facilities and weaker development potential usually make underdeveloped small cities unable to attract large quantities of foreign capital and high-end projects. Land transfer will not be preceded smoothly or even break off once the supporting funds is lacked end. As a result, even small cities with giant reclamation potential also cannot receive sufficient construction land under the limited land policies.

2) Hard to narrow regional development gap

Back to the former case, if the surplus construction land indicators in Si County were allowed to be transferred to the rapidly developed Maanshan, and the prices were set by actual land use in Maanshan, then not only numerous funds could be brought to Si County, but also land shortages be solved in Maanshan. In other words, if land indicators can be transferred paid across cities and counties, the development problems of 'no adequate land in major cities and no sufficient funds in small cities' can both be solved. Then the wide range of land transfer policies will become a useful tool on urban-rural balance and regional coordination in its true sense.

However, it's just a wonderful assumption under the current system. As in real cases, construction land with a same scale by

replacement is often used to develop industries in small cities and commercial development in major cities; the huge land revenue differences between them seriously widen the regional gap instead of promoting regional coordination.

3) Hard to match land urbanization with population urbanization

The matching degree of population urbanization and land urbanization is an important standard to measure urbanization quality[6]. Overall, the match degree in China is very low and population urbanization usually falls behind. From 2000 to 2007, China's urban construction area had expanded by 7% with urban population increased only by 4%. In many cases, farmers' land was urbanized but farmers themselves were not.

We can conclude that, if land indicators still cannot be transferred paid across cities and counties, current policies will aggravate the degree of mismatch continuously. On the one hand, the limited transfer range cannot realize the added value benefits of land, so that the underdeveloped areas cannot settle down the farmers appropriately after reclamation, which directly lead to the lag of population urbanization. On the other hand, land urbanization often drops behind in developed areas. Considering the demolition costs of rural construction land, cities usually occupy farmland during urban sprawl, so that lots of villages were annexed by cities or adjoin the cities, leading people in these villages urbanized but land not.

III. TWO TDR PRACTICES ACROSS CITIES AND COUNTIES

Some leading areas attempted to transfer land indicators paid across cities and counties although they're against the policies. We'll analyze the two TDR practices in Anhui and Chongqing.

A. Two TDR practices across cities and counties

1) Land indicators transactions in specific sub-region - Anhui Wanjiang demonstration area

Wanjiang demonstration area in Anhui Province occupies an area of 76,000 square kilometers with nine cities and two counties included. It had a population of 30.79 million and a GDP of 840.6 billion Yuan in 2010, occupying 45% and 68% of the whole Anhui Province. The demonstration area is an important developed pole during Anhui rising and is planned to form a regional spatial structure of "one axis, three poles with two points". The three poles are Hefei, Wu-Ma-Chao (Wuhu, Maanshan and Chaohu) and An-Chi-Tong (Anqing, Chizhou and Tongling) (Fig. 1).

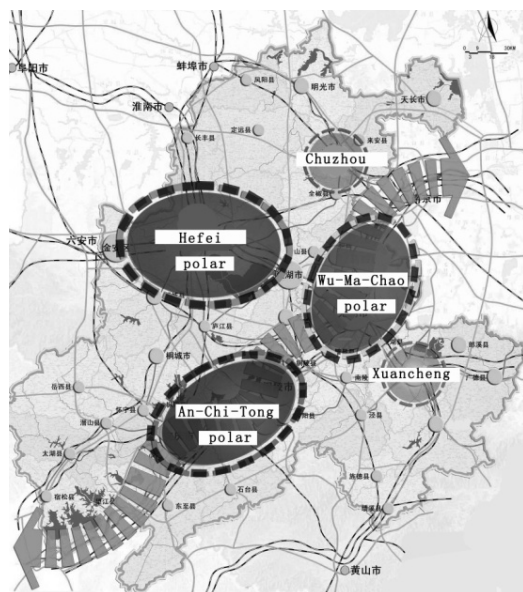


Fig. 1 Spatial structure plan of Wanjiang (2010-2015)

Anhui model intends to promote the development of the whole province by supporting the demonstration area. Major supporting policies are:

- ① Allow construction land indicators transfer paid across cities and counties in the demonstration area. This is an important innovative attempt in China.
- ② Set 10% of replaced construction land indicators aside outside Wanjiang area in Anhui, to support Wanjiang construction.
- ③ Return more than 50% of land transfer income and more than 30% of replaced construction land indicators to the reclamation side for rural construction and farmers' settlement development.

2) Land indicators transactions in whole region - Chongqing land tickets trade

Chongqing is so large a municipality in China with a provincial degree, a provincial population and a provincial area, that we can recognize it as a particular province. It has an area of 82,000 square kilometers and a total population of 28.85 million in 2010 with about 2/3 being rural population. The level of industrialization and urbanization are not high. The urbanization rate was 53.02% in 2010; the ratio of urban-rural residents income was 3.2:1 in 2011 and the gap's very giant. It was planned to form a spatial structure of 'one circle with two wings' (Fig. 2).

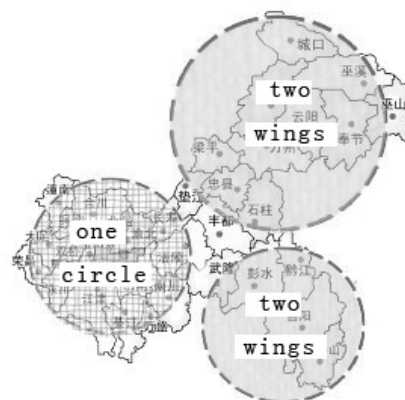


Fig. 2 Spatial structure plan of Chongqing

Compared with Anhui model, Chongqing does not take a centralized but a balanced development strategy. Major supporting policies are:

- ① Support land tickets trade within the whole region. Land tickets are construction land indicators replaced by rural homestead, village enterprises and rural public facilities, etc., and they are all verified by administration section. Tickets holders can seek an appropriate plot for construction by themselves, and apply it from the local government.
- ② Encourage tickets transactions and limit planning indicators. Planning land indicators are only for public use in Chongqing, and commercial land should be obtained by tickets trade.
- ③ Farmers of the reclamation side can receive 85% of the income (at least 96,000 Yuan per mu) and economic organizations can receive 15% (at least 17,000 Yuan per mu). The government should ensure the farmers' basic life before approving the application for reclamation [7].

B. Evaluation

Both Anhui and Chongqing tried to overcome the defects of the current land transfer institutions. They developed the comparative advantages of land use by allowing indicators transfer across cities and counties. By doing these practices, the problems of 'no adequate land in developed areas and no sufficient funds in underdeveloped areas' were solved to some extent and the gap between them was also narrowed indeed. For example, land tickets trade had accumulated 8.9 million mus in Chongqing by Jan. 2012 with 519 new villages be built and the farmers got a direct income of 12.4 billion Yuan. All these promoted rural development effectively.

However, the two models still need further optimization in actual practices and main deficiencies are:

1) Lack clear spatial direction during land transfer

There is a great possibility to make major cities expand more blindly and small cities weaker under the purely market-oriented land indicators transfer with no clear spatial direction. Usually this will lead to excessive polarization development and widen regional gap. Both Anhui and Chongqing models lacked clear spatial direction during their land transfer.

In Anhui model, by practices above it has realized the initial plan of driving the entire demonstration area or even the whole Anhui by the dual-core of Hefei and Wuhu. However, compared with other major cities in China, Hefei and Wuhu are relatively weak in urban competitiveness (Table I), so that their abilities to promote the whole province for further development are quite limited[8], such as city size and urban concentration ability. Therefore, creating multi-regional centers to achieve balanced development is a better way for Wanjiang area as well as other regions. This coincides with the three poles strategy proposed in Wanjiang plan.

However, in reality, essential elements of regional development such as land indicators are usually concentrated in major cities under the market power. Small and medium-sized cities still cannot get sufficient land and other resources if there are no specific supporting policies even though they are all critical areas in plans. In Wanjiang demonstration area, the abilities of attracting elements in Wu-Ma-Chao and An-Chi-Tong are much weaker than Hefei. If only market power works, the two areas will not grow healthy by themselves, let alone regional growth. That is to say, it's difficult for Wanjiang to transform from dual-core to multi-polar if there's no clear spatial direction during land transfer.

The main city of Chongqing may be developed excessively and finally against the balanced land strategy.

TABLE I
 COMPARISON OF URBAN COMPETITIVENESS BETWEEN HEFEI, WUHU, AND OTHER MAJOR CITIES IN CHINA IN 2010

city	built-up areas (square kilometers)	resident population (million)	GDP (billion Yuan)	Per capita disposable income of urban residents (Yuan)	Per capita net income of farmers (Yuan)
Beijing	--	1961	13778	29073	13262
Shanghai	999	2291	16872	31838	13978
Guangzhou	952	1271	10604	30658	12676
Tianjin	687	1299	9109	24293	10075
Hangzhou	486	870	5946	30035	13186
Nanjing	619	801	5013	28312	11128
Hefei	320	570	2703	19051	7118
Wuhu	135	105	1109	18727	7834

Note: sorting from 'China Urban Construction Statistics Yearbook 2010', 'China Statistics Abstract 2011', 'statistics compilation on China national economy and social development 2010-2011', 'Chuzhou Statistics Yearbook 2011', 'Ma Anshan Statistics Yearbook 2011'

2) Lack rich contents in land indicators

Standard land development rights should contain multiple policies and intentions, but in Anhui and Chongqing models they presented construction right only, without contents of promoting population urbanization, industry plan, etc.

In the aspect of protecting farmers' interests and promoting population urbanization, the land indicators recipient side in both Anhui and Chongqing models obtained large quantities of construction land with only a certain less number of funds and

land paid, much less joining in the farmers' settlement and employment. The problem is that the reclamation side is usually small cities weak in economic; they cannot promote rapid urbanization by their own strength even though they can get compensatory funds and land. In fact, if we set promoting urbanization of the reclamation side as an essential condition for indicators transactions, the whole quality of regional urbanization could be improved rapidly. For example, the reclamation side can require 10% of land indicators by replacement intended for industrial use to develop labor-intensive industries in order to solve the problem of farmers' employment.

In the aspect of optimizing regional industrial structure, taking Wanjiang as an example, industry transfer area majored in modern chemistry, modern service industry, manufacturing, innovative or high technology is one of the plan characteristics. However, in reality, the access mechanism did not link with the land transfer. It is very difficult to ensure the enterprises landed in this area all in the interests of urban development. In fact, if we set technology content, environmental impact, investment and efficiency as conditions that land indicators can take place; the problem will be solved easily and sustainable development will go on.

IV. CONCLUSION AND POLICY RECOMMENDATIONS

In summary, China's current land transfer institutions limited to county-wide cannot realize the intended comparatively sufficient urban construction land and they're not good for promoting urban-rural balance, regional coordination as well as the match development of population urbanization and land urbanization. Innovative TDR practices in Anhui and Chongqing really relieved construction land shortages to some degree, but because of lacking clear spatial direction and rich contents during land transfer, these attempts finally failed to realize a wider range of regional coordination.

Considering that the development of China's urbanization will still continue in the next 10-20 years, and the trend of regional development from single-center to multi-polar is so clear, we propose the following policy recommendations to optimize Chinese current land transfer system:

(1) Change the current planning land indicators management to a flexible one; establish a regional floated multi-level market for land indicators transactions under the guidance of regional developed targets and set a clear boundary for market trade. Allow land indicators transfer paid across cities and counties so as to maximize the regional interests following the regulation of both market and government.

(2) Improve the contents of land development rights during land transfer; combine more organically the policy intentions of land plan, regional plan, urban plan and industrial plan, and link them with land indicators transfer to promote urban-rural balance and regional coordination effectively.

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