

The structure and changes of China's land system

China's land system

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Abstract

Purpose – The purpose of this paper is to analyze the structure and changes of China's land system. To achieve this aim, the paper is divided into four parts. The first part gives a brief introduction to the structural characteristics of the Chinese land institutional arrangements; the second part analyzes the reform process of the land system in the past 40 years and its path of change; the third part engages the discussion about the historic contribution made by the land institutional change to rapid economic growth and structural changes; and the final part is conclusion and some policy implications.

Design/methodology/approach – After 40 years of reforms and opening up, China has not only created a growth miracle unparalleled for any major country in human history, but also transformed itself from a rural to an urban society. Behind this great transformation is a systemic reform in land institutions. Rural land institutions went from collectively owned to household responsibility system, thereby protecting farmers' land rights. This process resulted in long-term sustainable growth in China's agriculture, a massive rural-urban migration and a historical agricultural transformation. The conversion of agricultural land to non-agricultural uses and the introduction of market mechanisms made land a policy tool in driving high economic growth, industrialization and urbanization.

Findings – Research shows that the role of land and its relationship with the economy will inevitably change as China's economy enters a new stage of medium-to-high speed growth. With economic restructuring, low-cost industrial land will be less effective. Urbanization is also shifting from rapid expansion to endogenous growth so that returns on land capitalization will decrease and risks will increase. Therefore, China must abandon land-dependent growth model through deepening land reforms and adapt a new pattern of economic development.

Originality/value – This paper gives a brief introduction to the structural characteristics of the Chinese land institutional arrangements, analyzes the reform process of the land system in the past 40 years and its path of change, and evaluates the historic contribution made by the land institutional change to rapid economic growth and structural changes.

Keywords Structural change, Economic performance, Land institution

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Land institution is a fundamental arrangement in China's political and economic system. Land institutional reform is a key and sensitive area of China's overall reform. The unique disposition of the land institutions and its change are the engine of China's rapid economic growth and structural change. The reform of the rural land system in the early 1980s marks the beginning of China's reform and opening-up, promoting its rural transformation and system transition, while change of the urban land system since the late 1990s has promoted the shifting of China from a rural country to an urban-rural society, giving rise to a historic transformation.

This paper is comprised of four parts. The first part gives a brief introduction to the structural characteristics of the Chinese land institutional arrangements; the second part analyzes the reform process of the land system in the past 40 years and its path of change; the third part engages the discussion about the historic contribution made by the land institutional change to rapid economic growth and structural changes; and the final part is conclusion and some policy implications.

1. The structure of China's land institution

From the perspective of the land institution's impact on Chinese economic and social transition, the Chinese land system is a complete institutional structure, made



of farmland institutional arrangement, rural homestead land institutional arrangement, land conversion institutional arrangement and urban land use institutional arrangement.

1.1 Farmland household contract system under collective ownership

Rural contracted land has the largest percentage among all types of land in the country and involves the largest percentage of the population. At the end of 2015, China had a total of 645,456,800 hectares of agricultural land, of which 134,998,700 hectares were farmland (2 billion and 25 million acres)[1], with a total of 134,236,800 hectares, accounting for 99.44 percent of the total farmland, contracted to 23,057,400 households (Dongyu, 2015). The rural contracted land system was deemed to be a basic arrangement influencing agricultural performance, farmers' rights and social stability.

Compared with other rural institutions in history, since the Communist Party of China (CPC)'s ruling, the rural land system has thoroughly changed China's countryside. In traditional rural China, rural land was privately owned by farmer households. Family farming, mainly consisted of self-employed and tenant farmers were the main operators of small-scale farmland. The ownership rights and management rights of the farmland have been equally protected by law and contract, and the cultivation rights to a large extent had the de facto attributions and functions of ownership (Xiaotong and Haoxing, 2007). After the CPC came to power, it installed socialism based on public ownership, promoting China's transition from a rural economy to an industrial one (Zedong, 1991). For this purpose, the new regime conducted a series of state-led system recreations in rural areas (Runsheng, 2005). As a result, a unique collective ownership system of rural land was formed, which had the following characteristics: first, as a form of public ownership in rural areas, collective ownership was applied to rural land and the state implemented comprehensive political and economic control over the rural areas through people's communes, production brigades, and production teams. Second, the collective land property right, in fact, was exercised by the state. The land use right in the production teams was controlled by senior officials. Production teams were not entitled to selecting what crops would be planted, and the right to revenue was truncated due to procurement by the State. The public accumulation and the distribution to the production team members were conditioned by first completing the task assigned to them by the State. Third, the agricultural economic activities and labors were arranged in a unified way by the production team, and production results were distributed in a uniform way based on the working points (Qiren, 1995).

Due to the change in the political climate and the inefficiency of the state-controlled collective ownership and unified operation system, China launched the rural land reform in the late 1970s and early 1980s. Through grassroots innovations, official support and policy implementation (China Rural Development Research Group, 1984), a new rural land system acceptable to relevant agents was formed, stating that the rural land was owned by the collectives and contracted to the village households. The system first, stated that the reform should adhere to the premise of land collective ownership under the socialist system of public ownership. At this point, the state continuously produced documents to declare collective ownership unchanged and emphasize that land contracted to each household is different from private ownership[2]. The collective ownership framework was reserved as "three levels of ownership and the production team as the basic unit." The relation between peasants and the land was defined as a contractual relationship. Under collective ownership, rural land was not allowed to be bought or sold. Second, contracts were formed between the state, collectives and households. The initial contract arrangement was tacitly selected by farmers, something later regarded as a tripartite contract. The contract structure was "contributing adequately to the state, paying enough to the collectives, and retaining the remaining part." This meant that under the premise of commitment and fulfillment of the

national tasks and collective obligations, farmers could obtain the residual claim of the collective land. Third, collective ownership was explicitly defined as ownership of the collective members.

Different from the “commune members” in the collective farming period, who contributed to the nation with his own labor and gained certain income, the “collective members” under the household responsibility system could not only equally obtain the land and the assets owned by the collective, but also enjoy the rights to all assets grown out of collective land. The collective ownership after the reform, in fact, became an entitlement set of collective members, which strengthened the identity of collective membership. Fourth, the clarification of property right in the contracting of farmers on the agricultural land meant the separation of the collective ownership from the right of use, making that contracting right was a real right, strengthening the dominant position of the farmers, constantly improving farmers’ right to use the contracted land, and granting them the right to revenue and transfer. Fifth, the implementation of the family farming system: by eliminating the farming system under which production teams organized production and distributed revenues, families replaced the production teams to be the unit of agricultural production, economic decision-making, and income allocation. Farming households then became the operating entity of agricultural management, institutionalized by passing relevant laws.

1.2 Rural homestead system under collective ownership

The rural homestead system is regarded as a crucial arrangement with political and social impact. Among all rural lands, the homestead land is an important one concerning farmers’ residence and property right. As of 2015, there are 140,134 hectares of village-use land (Huizhen, 2015), of which the homestead is approximately 133,300 hectares (Huizhen, 2015).

Historically, farmers’ residence and homestead land have been the private rights of farmers, and land rights are inseparable with the right to residence on the land (Xiaojun and Shengsan, 2010). During the land reform and in the period of Cooperative Movement, the homestead land and the residence on it are privately owned by farmers. It is in the period of the people’s commune, when it begins to, respectively, establish the rights of homestead and the residence, in which it is not permitted to rent or sell the homestead, but in which the right to use in the long-term belongs to each household. The house is always owned by the members and can be bought, sold or rented (Shufeng, 2015). By the early 1980s, when rural reform started, the structure of the homestead system, which was collectively owned and used by farmers, was still in its infancy: first, homestead ownership was owned by the production team, and commune members were prohibited for renting, buying and selling homestead (Shouying, 2014). Second, a homestead was separated from its residence rights, the farmer household had the long-term right to use the homestead, and had the exclusive ownership of the residence, which could be bought, sold, leased, mortgaged or pawned, and the right to use the homestead was transferred with the sale and lease of the residence (Shouying, 2014). Third, it was established that the homestead could be acquired for free in accordance with the application of the collective membership (Shouying, 2014).

1.3 Land conversion arrangements under the dual ownership

In the past 40 years, China’s high-speed economic growth has been accompanied by a rapid industrialization and urbanization. The scale and model through which of the agricultural land is converted into non-agricultural land have had a significant impact. From 2003 to 2015, 11,561,800 hectares[3] of agricultural land were turned into non-agricultural land. The conversion of agricultural land into construction land included the urban and rural construction land. From the perspective of ownership, there were two ways, i.e., conversion by the collective and expropriation by the government.

From the beginning of the rural reform to the revision of The Land Administration Law in 1998, the channel for the conversion of agricultural land to collective construction land was open. In the early 1980s, a large number of surplus labor force was released along with agricultural reforms, and the government encouraged farmers to use collective land to set up township and village enterprises. As a result, rural construction land increased rapidly. Land utilized by township and village enterprises in China was estimated to be 15,700 hectares in 1978 and about 56,300 hectares in 1985. The scale of land utilized by town or village enterprise was expanded by 2.6 times. From 1981 to 1985, the average new farmers' residence was more than 600 million square meters per year.

Till 1987, when the old Land Administration Law was implemented, there were three channels for rural land to be converted to non-agricultural construction: first, as long as the construction was in conformity to the township (town) village construction planning, and the county level people's government approval was obtained, "rural residential construction, township (town) village enterprise construction, township (town) village public facilities, public welfare construction and other township (town) village construction could be carried out." Second, in the event that a collective agricultural economic organization needed land to organize joint ventures with enterprises owned by the whole people, or enterprises of collective ownership, it "may requisite the land in accordance with the provisions of the State construction requisition. The agricultural collective economic organization can also, according to the contract, use the land use rights as its contribution to joint management." Third, residents with non-agricultural hukou could use the collectively owned land for residential construction, under the approval by the county people's government (Shouying, 2008).

On the other hand, land requisition was the main tool for agricultural land converted to non-agricultural use. Especially after the passage for collective construction land was closed, land conversion by expropriation was the only legal way. The Constitution of 1982 backed the principle of the Constitution of 1954 in which the state may, in the interest of the public, conduct land requisition. However, it also put forward for the first time that urban land shall be owned by the state, and the rural land shall be owned by the collective, a land ownership structure in which two ownership systems coexisted and were divided[4]. The Land Administration Law promulgated in 1987 insisted the principle of public interest for land requisition. However, the definition of public interest is very broad: the State may conduct land requisition "for economic, cultural, national defense, and social and public undertakings," and the land requisition compensation was based on the principle of original use. The sum of land compensation and resettlement subsidies were raised to be no more than 20 times the average annual output of the three years prior to the requisition of the land. Additionally, employment and hukou status were provided to the peasants whose land was taken[5].

1.4 Urban land use system under state ownership

Before the reform, China implemented a system of free and indefinite flow of land supply. The Land Administration Law of 1987 stipulated two types of land use modes, administrative allocation and paid transfer. The urban land-use institutions after the conversion of land into state-owned not only provided land security for the rapid advancement of industrialization and urbanization, but also was an important source of capital for urban construction.

2. Land institutional change in the reform era

2.1 Rural land system has moved toward the direction of strengthening farmers' property rights

2.1.1 Legally clarifying the connotation of collective ownership. The Rural Land Contract Law and the Property Law defined the connotation of collective ownership as "land collectively

owned by peasants in rural areas that is fundamental to the basic rural operation system"[6], and that "the collective owner of collective land, in accordance with the law, is entitled to possess, utilize, dispose and obtain profits from the collective land" (see footnote 6). The "peasant collective" as the subject of land ownership has three levels – namely "the village peasant collective," "the intra-village peasant collective," and "the township (town) peasant collective" (Liming and Youjun, 2012).

2.1.2 Improving property rights of the farmers for the contract land. Land contract rights are a special type of usage property rights, and contracted land is the farmer's property (Suinian, 2002). Legislation clearly states that contracting farmers are entitled in accordance with the relevant law to use and obtain profits from the contracted land, to transfer the land contract rights, and to organize production, operation and disposal of the products. If contracted land is expropriated by law, the contractor shall have the right to receive the appropriate compensation (see footnote 6). During the contract period, the collective shall not recover or adjust the contracted land so as to continuously extend the right to subcontract (see footnote 6). In order to restrict any infringement of the public authority on farmers' land property rights, it is expressively stipulated that within the statutory period of the contract, no organization or individual shall interfere in farmers' production and management autonomy, the contracted land shall not be unlawfully adjusted or claimed, the wishes of farmers shall not be contravened by forcing the transference of the contracted land, and farmers shall not be illegally encroached on contracted land[7].

2.1.3 Extending the land contract period for contracting farmers. The land contract period of 15 years in 1984[8] was extended to 30 years for a second round of the contract[9]. The third plenary session of the 15th Central Committee of the CPC held in 1998 granted farmers a long-term and guaranteed land-use right[10]. During the third plenary session of the 17th Central Committee of the CPC, "the contracting farmers' land rights can't be changed for a long time" was proposed[11] and the third plenary session of the 18th Central Committee of the CPC further reaffirmed this provision[12].

2.1.4 Redefining membership rights of collective ownership. The Central Rural Policy Research Office conducted a pilot experiment in Meitan County, Guizhou Province, in the late 1980s, in which "neither increase nor reduction in family members lead to an increase or reduction in the land for the family." In 2002, the previously mentioned pilot results were written into the rural land contract law. The land contract law clearly states that "the State shall protect the long-term stability of the rural land-contracted relationship," and that "within the contract period, the collective should not adjust the contracted land."

2.1.5 Changing the contract conditions. On the one hand, the obligations to the state attached to the land were changed gradually. First, the task of providing grain by farmers was reduced. Farmers began entitled to plant freely beyond their tasks and were allowed to exchange food for currency. This reduced the link of farmers' land to grain tasks. Second, the central government implemented grain marketing system reform, the state bought grain in a market-oriented way. Grain tasks from peasants and land were terminated. Finally, the state provided farmers with grain subsidies. On the other hand, the collective obligation changed. In the 1990s, farmers had to provide a collective accumulation fund, and a public welfare fund. The assessments of burdens on contracting farmers were overwhelming. Subsequently, the "one act, one discussion" way adopted. The farmer's obligation was not linked to the burden with the contracted land. Changes in State and collective obligations amplified the residual claim of farmers' land rights (Qiren and Shouying, 1997).

2.1.6 The family farming system as a constitutional approved system. In 1991, it was proposed for the first time that "the two-tier management system based on household contract management that combines unification and separation shall be stabilized in the long term, and constantly enriched and perfected as a basic system of the Chinese rural

collective economic organization” (see footnote 11). The Constitution of 1999 explicitly states that “rural collective economic organizations implement the two-tier management system based on household contract management and combining unification and separation.” The Law on the Contracting of Rural Land of 2002 formally proposed the “national implementation of rural land contracted management system.” In 2008, the third plenary session of the 17th Central Committee of the CPC emphasized that, “the two-tier management system based on household contract management combining unification and separation is suitable for the Socialist market economy, which is in line with the characteristics of the basic rural management system for agricultural production, constitutes the cornerstone of the party’s rural policies, and must be unwaveringly adhered to” (see footnote 11).

2.2 The homestead land system was toward the direction of land use control

2.2.1 The collective organization has the actual ownership right for collective homestead. Unlike the ownership of the cultivated land was moving toward membership rights of collective ownership, the collective organizations had stronger power to control the homestead. For the owner of the homestead, the collective organization was by no means a legal level of entity, but one exerting real rights to control, usage and income (Shouying, 2015). And the collective body was entitled to the allocation of the village’s land for homestead, to recovery of the part possessed by farmers in excess of the size stipulated by law, and to control of the collectively owned vacant land, public use land and business use land (Shouying, 2015). In some villages that conduct village reconstruction and land improvement, the collective controls the right to revenue from the balance of the homestead indicator.

2.2.2 The households in the village enjoy the residence right of homestead land. The law stipulated that the holders of the rights of homestead use had the right to possess and use all land owned by the collective and had the right to use the land to build houses and its ancillary facilities. However, provided that one family could only own one homestead, any application by a rural villager who has sold or rented their house would not be approved. If the homestead was destroyed by natural disasters or other causes, the use right of the homestead was eliminated. The villagers who lost their homestead would receive new homestead (Shouying, 2015). However, the right to use the homestead could not be transferred, mortgaged or benefited. But the farmer’s house was private property, and they were entitled to buy, lease, mortgage and transfer it.

2.2.3 Only members of the collective economic organization were eligible to apply and obtain a homestead (Shouying, 2015). Non-members of the collective economic organization could not obtain it. The restrictions on the acquisition of homestead by non-members were gradually tightened. In 1982, the application of retired staff, soldiers and Overseas Chinese who settled in rural areas could be granted[13]. The Land Administration Law of 1987 permitted non-agricultural residents in cities and towns to build houses after the approval of the county people’s government, and the Regulations on the Implementation of the Land Administration Law of 1991 were still open to using collective land for housing by urban non-agricultural residents. By 1999, a significant change occurred. It was stipulated that “the farmer’s residence should not be sold to urban residents. Urban residents cannot be granted to use farmers’ collective land for housing[14].” The document No. 28 of 2004 “prohibited urban residents from buying homestead in rural areas[15].”

2.2.4 The strengthening of homestead use control. Rural homesteads that occupied agricultural land were included in the annual plan. It was stipulated that the indicator representing rural homestead to occupy agricultural land should be added among the annual plan indicators that each province (district, city) issued to each county (city) for urban and rural construction. The previous indicators should be related to the newly increased cultivated area in the rural construction-land consolidation.

The county (city) land and resources management department should prioritize the allocation of the same amount of land conversion indicators for the construction of farmers' houses from the overall annual plan indicator after the new cultivated land area was inspected and verified (Shouying, 2015). However, in fact, this was difficult to implement. The reason was that the approval of the homestead was conducted by each county (city) according to the rural homestead occupation of agricultural land planning indicator assigned to the county (city) by the province and the actual needs of rural villagers for housing construction. The county (city) at the beginning of each year submitted applications to the province (district, city) for approval of agricultural land transition. Upon approval, the county (city) would approve the provision of the homestead house by house. For the houses that could be built by villagers on the idle land, old curtilage base or unexploited land, the village, township (town) could review level by level and implemented by township (town) one by one after the batch approval by the county (city) (Shengping and Shouying, 2007).

2.3 The land conversion is monopolized by local government

Since 1992, China has changed the policy on land conversion to collective construction activities. The rural land has to go through requisition and transfer as state-owned land when it is used as construction land[16]. The revised Land Administration Law, promulgated in 1998 legally restricted the passages for agricultural land conversion into collective non-agricultural construction land, excluding farmers using collective land for non-agricultural construction, except the "use of land collectively owned by peasants of the collective economic organization approved in accordance with the law for the establishment of township and village enterprises and construction of residences by villagers, or use of land collectively owned by peasants approved in accordance with the law for the construction of village (township) public facilities." The law explicitly stipulated that "the right to use of land collectively owned by peasants shall not be transferred, retransferred or leased for non-agricultural construction," and it reserved the provision that "rural collective economic organizations may jointly organize enterprises with other units and individuals in the form of equity participation of land use rights and joint operations."

The Land Administration Law of 1998 followed the principle of land requisition for public interest, and the structure of urban and rural dual ownership, and original-use-based compensation principle, but the sum of land compensation and resettlement subsidies were raised to no more than 30 times the average annual output of the three years prior to the requisition of the land. This law also made two provisions that have a significant impact on land conversion: first, the establishment of the "land use control system." The state shall formulate a general plan for land use, stipulate land use, control the total amount of land used for construction, and examine and approve annual construction land quota[17]; second, if any unit or individual is required to use land for construction, they shall apply for the use of the state-owned land in accordance with the law (see footnote 17).

The problems arising from land requisition became more and more serious as the process of industrialization and urbanization accelerated. The Ministry of Land and Resources began a pilot reform of the land requisition system in 2001[18], and based on the pilot project, implemented on a trial basis in 2005 the standard of unified annual production and the comprehensive price of land requisition within the area. The calculation of the comprehensive price follows this principle: within the construction land designated by the general plan of the urban district, both zone classification and the calculation of land requisition compensation standard were based on the types, output value, location of the land, agricultural land grade, per capita cultivated land quantity, land supply and demand relation, local economic development level, lowest living standard of urban residents, etc.[19]. Although the comprehensive zone price of land requisition considered the land development rights of land-requisitioned farmers,

the scope of implementation of this standard was limited to the urban and town areas, and a large number of land requisitions outside this range were still carried out in accordance with the production (i.e. the original use) standard (Yuzhe *et al.*, 2008).

After 2003, the central government clearly called for the reform of the land expropriation system. The Third Plenary Session of the Sixteenth Central Committee of the CPC pointed out that the content and direction of the reform of land requisition were “in accordance with the principle of safeguarding the rights and interests of farmers, controlling the scale of land requisition, improve the land requisition procedures, and strictly define the public and the business use. Land requisition should meet the general planning and use control of land, and give the farmers reasonable compensation in time.” The Fifth Plenary Session of the Sixteenth Central Committee of the CPC called for “improving the reasonable compensation mechanism for land-requisitioned farmers”[20]. The Sixth Plenary Session of the Sixteenth CPC Central Committee called for “the strict control of the scale of land requisition, acceleration of the reform of land requisition system, improvement of the compensation standard, exploring effective ways to ensure farmers’ interests and long-term stable income, and arrangement of farmer’s employment and social security of land-requisitioned farmers”[21].

The Central Government No. 1 document in 2006 clearly called for “speeding up the pace of land requisition system reform, and based on the requirements of reducing the scope of land requisition and improving the compensation method, expanding the resettlement approaches and standardizing the requisition procedure to further explore the reform experience”[22]. The Central Government No. 1 document in 2008 clearly called for “continuing to promote the reform of land requisition system, standardize the procedures of land requisition and raise the compensation standard, improve the system of social security for farmers whose land was requisitioned, and establish the dispute mediation adjudication mechanism for land requisition”[23]. The Third Plenary Session of the Seventeenth CPC Central Committee proposed that “for the land that is beyond the urban construction land use planning, farmers shall be allowed to participate in the development and operation of the non-public welfare projects, that subject to approval, occupy rural collective land, in a variety of ways in accordance with the law and that the lawful rights and interests of the farmers shall be protected” (see footnote 11).

In 2010, the Ministry of Land and Resources set up a pilot reform of the land requisition system in 11 cities within the national comprehensive reform pilot zone, the main content of which included: the distinction between public welfare and non-public welfare land, the reduction of the scope of land requisition, the improvement of compensation and placement mechanism of land requisition, as well as the way of examination and approval for agricultural land conversion and requisition. The non-public welfare land project stipulated in the Guidance on Pilot Work, mainly included tourist entertainment, commercial services, industrial warehousing and other types of facilities which were built subject to the approval in accordance with the law. It affirmed narrowing the scope of the land requisition. It stipulated that, within the scope of urban construction land identified in the general plan of land utilization, in addition to the peasant collective land that may be used in accordance with law, the construction land involving collective land shall be allowed in principle to be expropriated. The land beyond the scope of urban construction land identified in the general plan of land utilization, non-public welfare land, should be withdrawn from the land requisition scope, and the rural collective land shall be, subject to the approval, obtained in other ways. Unfortunately, due to the short time and the small scope, the pilot was not effective (Tang, 2011).

The Third Plenary Session of the Eighteenth CPC Central Committee decided to make a general deployment of the land system reform, the content of which was as follows: under the premise of conforming to planning and use control, the rural collective construction land

shall be allowed to be leased, transferred and to participate in equity, and enter into the market at identical price and rights to the state-owned land; to narrow the scope of land expropriation, standardize the land requisition procedure, and improve the safeguard mechanism for the land-requisitioned farmers, that shall be reasonable, standardized and multivariate; to expand the range of paid use of state-owned land and reduce the allocation of non-public welfare land; to improve the secondary market for land lease, transfer and mortgage; to establish a reasonable mechanism to adjust the price ratio of industrial land to residential land, and raise the price of industrial land. The above pilot program was carried out across the country[24]. The adoption on February 27, 2015 at the Thirteenth Session of the Standing Committee of the Twelfth National People's Congress of the Decision to Authorize the State Council to Temporarily Adjust the Relevant Legal Provisions in the Administrative Areas of the 33 Pilot Counties (Cities and Districts) in Daxing District, Beijing (NPC Regular Session (2015) No. 1), and the implementation of the General Office of the CPC Central Committee and the General Office of the State Council of the Opinions on Rural Land Expropriation, putting collective-owned operational construction land into market, homestead system reform pilot work (Zhongbanfa (2014) No. 71), officially began the rural land three system reform.

2.4 Capitalization of urban land

On December 1, 1987, the land use right for a land lot of 8,588 square meters was publicly auctioned for 50 years in Shenzhen. This was the first time that land use rights in China entered the market as assets (Shouying, 2008). The amendment of the Constitution in April 1988, deleted the provision that land shall not be rented, at the same time added the provision that "land use rights can be transferred in accordance with the provisions of the law." In May 1990, the State Council issued the Interim Regulations on the granting and transfer of the right to use state-owned land in cities and towns, which clearly stipulated that land use rights can be transferred in three ways, agreement, bidding and auction.

The Land Administration Law of 1998 clearly stipulated that "the land use right can be transferred in accordance with the law" and "the State shall implement the system of paid use of state-owned land in accordance with the law." The State shall, as a representative of the land owner, transfer the state-owned land use rights in a certain period of years, by agreement, bidding, or auction, to the land users, which shall pay for the land use rights to the State in accordance with the agreement of the assignment contract. Since 1999, the land paid use system reform has been increased continuously, which reduced the proportion of allocation and increased the proportion of paid use.

In May 2002, the Ministry of Land and Resources issued the Provisions on the Assignment of the State-owned Land Use Right by Means of Bid Tendering, Auction and Listing, Decree No. 11, stipulating that business, tourism, entertainment and commercial housing, and other types of business use of land, must be transferred by bid tendering, auction or listing. The total land area transferred by Shouying (2012) "bid tendering, auction and listing," and the price, increased from 6,600 hectares and 49.2bn Yuan in 2001 to 66,500 hectares and 549.2bn Yuan in 2006, respectively. Since the issuance of the State Council No. 28 document in 2004, which stipulated that the transfer of industrial land must be carried out by bidding, auction, or listing, the proportion of state-owned construction land transferred by bidding, auction and listing was rising annually. In 2001–2010, the proportion of land transferred by bidding, auction and listing increased from 7.3 to 88.3 percent. The proportion of the revenue through bidding, auction and listing accounted for 92.23 percent of the total revenue in 2010 (see Table I).

Under the current land system, the government not only is the sole arbiter in the transformation of rural land into urban land, but also has the exclusive power to transfer the land from the countryside to the city in the process of land conversion. With the land

Table I.
Transferred land and the land transferred by bidding, auction, and listing (BAL) in the past few years

Year	Area unit 10,000 ha	BAL percentage (%)	BAL		State-owned land transfer	
			Price Billion RMB	BAL percentage (%)	Area 10,000 ha	Price Billion RMB
2001	0.66	7.30	49.2	—	9.04	—
2002	1.81	15	96.924	—	12.05	—
2003	5.19	27.78	—	—	18.68	293.776
2004	5.21	29.16	325.368	55.20	17.87	589.414
2005	5.72	35.05	392.009	71.21	16.32	550.515
2006	6.65	28.60	549.209	71.54	23.25	767.689
2007	11.53	50.91	1,007.486	82.47	22.65	1,221.672
2008	13.36	81.91	952.874	92.87	16.31	1,025.98
2009	18.83	85.30	1,509.85	94.90	22.08	1,591.02
2010	25.73	88.27	2,600	95.94	29.15	2,710
2011	30.47	91.25	3,020	95.87	33.39	3,150
2012	29.3	90.77	2,550	94.80	32.28	2,690
2013	33.88	92.32	4,040	96.19	36.7	4,200
2014	25.15	92.53	3,180	95.21	27.18	3,340
2015	20.44	75.20	2,860	85.63	22.14	2,980

Source: Collected from the *Bulletin of China Land and Resources*

conversion, the government replaces the peasant collective as the owner of land and the operator of urban land. This has become the main tool for the mode of seeking development with land (Shouying, 2012).

3. The economic performance of land system change

China's high economic growth over the past 40 years is well known as the "economic miracle" (Yifu *et al.*, 1999). In the period between 1978 and 2016, the GDP annual average growth rate reached 14.996 percent, the industrial value added rate grew by 14.14 percent annually, and the urbanization rate increased by an average of 3.11 percent annually. Land system change has had a major impact on the economic growth. The agricultural land reform has promoted the growth of agricultural production and released a large population out of the villages, providing a micro-foundation for China's economic transformation. Although strict farmland protection system has been implemented, the ample supply of land in the region with development opportunities has ensured high economic growth. Attracting investment at the distorted industrial land prices by local governments and land supply to provide industrial park infrastructure, has contributed to high-speed industrialization, which has made China a world-class manufacturing factory. Land capitalization and land finance has provided the enormous amount of capital needed by China's urban development and promoted the rapid urbanization.

3.1 Land is the engine that drives China's high economic growth

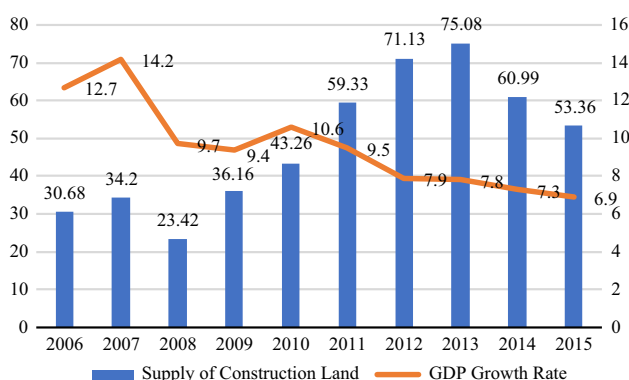
China's traditional development model relies on high growth and high investment. Because the municipal and county governments are the real land owners, land was the main tool for local governments to pull up growth and promote investment. Over the past 40 years, the land had in fact undertaken dual function: on the one hand, the central government had to implement the most stringent farmland protection system to safeguard national food security; on the other hand, various governments loosely managed the land to ensure high growth. They were reflected as follows: first, under the pursuit of GDP, through the ample supply of land to pull local economy. During 2003–2012, the total annual supply of state-owned construction land increased from 286,400 hectares to 690,400 hectares, an average annual increase of 10.27 percent. Second, the supply of land increases when

economic growth slows down (see Figure 1). Third, ensuring growth by regional policy of land supply. The land supply targets before the global financial crisis focused on coastal areas with large demand for land, which guaranteed the demand for land in high speed development regions; fourth, under the control of the annual plan, local construction land quota, which were increasingly scarce, were mostly used for the development of capital cities and major development zones. The flexible supply of construction land under the strict farmland protection ensured the high economic growth.

3.2 Farmland reform and agricultural transformation

A stable and efficient rural land institution was the prerequisite for China to promote overall reform and structural change in the past 40 years. The first function of rural land institution in China, a country that has long been based on agriculture, is to stabilize both food supply and society. The rural land reform improve land use efficiency in the direction of clarifying property rights, but also made it possible to launch the structural change in rural areas:

- (1) The family management system has been established and persisted in agriculture, which became the microcosmic foundation of China's agricultural growth. The family management system was generalized since 1984. In 2016, despite the growth of new types of agricultural management, the family contracted land still accounted for 99.4 percent of the cultivated area. The production of food crops increased from 407.305 million tonnes in 1984 to 616.25 million tonnes in 2016, which can be attributed to the progress of agricultural technology, the increase of modern investment, and the stability of the family management system which is also fundamental.
- (2) The reconstruction of human relationship to the land has promoted the structural transformation. In traditional rural China, farmers were tied to the land; during the state industrialization period, the peasants were excluded from the process of industrialization, and even were bounded to the collectively owned land; after the implementation of the family contract system, the peasants were able to participate in the local industrialization of the rural areas and subsequently go out from their villages to participate in the industrialization of other places, becoming the main force to promote China's structural revolution.
- (3) The rural institutional reform and structural change promoted the transformation of the agricultural development model. The farmland transfer accelerated, reaching



Source: Land and resources China statistical yearbook and data from the National Bureau of Statistics

Figure 1. Supply of construction land (10,000 ha) vs GDP growth rate (percent)

36 percent in 2016, agricultural inputs shifted mainly from the manpower to machinery. The driving force of agricultural development has shifted from focusing on the improvement of the agricultural productivity of the land to the improvement of its labor productivity (see Table II).

3.3 The allocation method of industrial land and high-speed industrialization

After the reform and opening-up policy, China entered a new road of industrialization, including the rural industrialization of collectively owned land in the countryside from the 1980s to the mid-1990s and park industrialization after 1990s. With the new pattern of industrialization, China has become the world's factory. The supply method of industrial land under the unique land system has played a significant role.

The rural industrialization after the mid-1980s was driven by the fact that much surplus labors looked for a way out after the agricultural land reform. Under the restraint of rigidities of the urban system and the impossible entry of the rural labor force, the government could only permit peasants to build enterprises on collectively owned land, which amounted to permit the entry of collectively owned land into the non-farming land market. Prior to the revision of the Land Administration Law of 1998, the two main parts that used construction land in China were both located in the countryside. One was peasants who built houses with more income after the reform. The other was peasants who built township enterprises on collectively owned land. Between 1993 and 1998, the non-farming construction land increased from 224,824 hectares to 367,854 hectares, of which the land of township and village enterprises decreased from 13,943 hectares to 8,180 hectares representing a total of 4.5 percent (see Table III). Peasants have their own advantages in developing rural industrialization on

Table II.
Land system vs
agricultural
transformation

Year	2010	2011	2012	2013	2014	2015
Proportion of rural household contracting (%)	94.09	94.45	96.89	98.15	98.37	99.41
Farmland transfer rate (%)	14.67	17.85	21.25	25.70	30.32	33.29
Proportion of rural residents going out	58.38	59.49	59.87	61.61	63.16	63.68
Proportion of agricultural net income (%)	29.07	27.18	26.61	26.54	25.70	25.09
Total power of agricultural machinery (Million kWh)	927.8048	977.3466	1,025.5896	1,039.0675	1,080.566	1,117.281
Land productivity (kg/ha)	4,973.58	5,156.89	5,301.76	5,376.60	5,385.10	5,984
Labor productivity (Kg/person)	1,960.10	2,075.23	2,167.99	2,260.95	2,316.94	2,410.30

Source: *Agricultural Statistics of the People's Republic of China*, edited by China's Ministry of Agriculture, published by China Agriculture Press

Table III.
Statistics on the actual
use of non-agricultural
construction land
(unit: hectare)

Year	Non-agricultural construction land	Township collectively owned construction land	Land of township enterprises
1993	224,824	30,183	13,943
1994	186,630	22,023	9,826
1995	190,376	19,909	11,621
1996	171,467	14,897	6,235
1998	367,854	16,558	8,180

Source: China Land and Resources Yearbooks

collectively owned land. Since the land belongs to collective ownership of peasants, they do not have to pay the land cost for building enterprises on their own land. They can avoid the restriction of impaired capital in the initial stage of enterprises. Rural enterprises would solve the problem of land utilization through land redistribution in the collective or acquire land usage of collectively owned land by low land rent. This development method also profits from the untying of national rural policy for peasants at that time. The rural industrialization on collectively owned land changes the layout of national industrialization radically. Until 1993, each of state-owned enterprises, township enterprises and foreign-owned enterprises accounts for one third of national value of the gross output (Xiaolin, 2003).

After the mid-1990s, rural industrialization on collectively owned land occupied a large amount of cultivated land, caused environmental pollution, and brought about scattered industries. The Land Administration Law of 1998 brought the institutional regulation for land use into effect and gradually closed the way of using collectively owned land for non-agricultural construction. Park industrialization gradually replaced rural industrialization as the main pattern for pushing Chinese industrialization and achieved success in east China and some parks in central and western regions. The success of park industrialization profited from distinctive system advantage, it also profited from distinctive land allocation pattern. First, the government conducted investment promotion using land. The essential condition that the government could provide was the land with a low price, so investing through land at low price (provided at low price, free or even negative price) had become a common method. Second, the government conducted park infrastructure construction through land. The method of implementing infrastructure construction by the local government was that it directly provided land for companies to carry out integral development and batch lease, or mortgaged land to the bank to acquire loans to construct. The park would maintain a balance with the revenue from the enterprises. Third, settled enterprises were provided with complete land usage rights for a sufficiently long period of time. Settled enterprises in the park could use the land for 50 years. Enterprise could mortgage, sublease and transfer the possession of the land, which stabilized investment expectation of enterprises and solved financing demand of enterprise development. Land is the secret of China's rapid industrialization. Due to the disadvantages of China's land endowments, if completely relied on land market allocation, the cost of the industrial land in China would be considerably higher than the economic entities of other land resources with better endowment, and Chinese industrialization would be hindered by rising land price. Since the late 1990s, China has been looking for development by industrial land supply at a high proportion. In total, 40 percent of the land has been used every year for industrial use. It is therefore up to the government to monopolize land supplying for the primary market to lower the price of industrial land (see Table IV). Between 2000 and 2016, the levels of the national comprehensive land price, the commercial services land price and the residential land price have been increasing at an average annual rate of 8.8, 9.61 and 12.35 percent, respectively. However, the average annual increase of the industrial land price has been only 3.5 percent per year, which is far lower than the amount of increase of commercial and residential land prices. The low cost of industrial land has guaranteed rapid industrialization, which has made China the world's manufacturing plant.

3.4 Land capitalization and rapid urbanization

After 2000, urbanization in China sped up. From 2000 to 2016, the urbanization rate of permanent resident population increased from 36.22 to 57.35 percent, growing at a pace of 2.91 percent every year. Land capitalization provided a huge capital demand for urban construction. The linkage between local government's maximization of land profit and the rising of housing asset value was the major driving force for urbanization.

Table IV.
Industrial Land and
Industrial Value
Added

Index Unit	Growth rate of industrial value added (%)	Growth rate of land for industrial and mining warehouse space (%)	Growth rate of industrial land price (%)
2007	21.09	-8.34	15.67
2008	17.94	-34.44	4.81
2009	4.83	52.31	1.53
2010	19.57	7.00	5.36
2011	18.18	26.35	28.30
2012	7.05	8.31	-16.98
2013	6.43	3.04	4.48
2014	5.18	15.83	6.00
2015	1.13	-49.53	2.43
2016	4.80	-4.54	2.89

Source: China Land and Resources Bulletins, CEINET and China Land and Resources Yearbooks

First, the arrangement of bidding, auction and listing for commercial land increased the value of land capitalization. Since 2003, the total area of land transacted by bidding, auction and listing in China has been 3,953,000 hectares. China has obtained land revenue of 31 trillion 587 billion 105 million RMB. The land revenue in 2016 was 89 times as high as in 2003.

Second, huge housing demand caused by housing commercialization reform and rapid population urbanization in this period has maximized the land revenue for local governments. From 2003 to 2016, the newly added housing in China has reached 25 billion 787 million 769 thousand square meters. Real estate loans to developers and residents purchase loans have been increased by 6.85 times from 2003 to 2016. Housing price has increased by 2.88 times. The constant increase of merchandise housing price has entailed the constant increase of land price. The rising land premium encouraged local governments to acquire greater land revenue through bidding, auction and listing for commercial land. In 2001, the area of the land sold by bidding, auction and listing covered 7.3 percent of total land sold. In 2014, it has reached 92 percent. The increasing revenue acquired by selling land, on the one hand, has provided financial resource for local governments to engage in urban infrastructure construction, and on the other hand has encouraged local governments to implement urban expansion for more land capitals. From 2000 to 2015, urban construction area in China has increased by 1.42 times (see Table V).

Third, land financing provided more capital for urban development. Especially, after 2008, governments of various levels established various financing platforms. Land mortgage has been significantly increased. From 2008 to 2015, the area and amount of land mortgaged have increased from 166,000 hectares in 2008 and 1 trillion 810 billion 700 million RMB in 2008 to 490,800 hectares and 11 trillion 330 billion RMB.

4. The conclusion

After 40 years of reforms and opening up, China has not only created a growth miracle unparalleled for any major country in human history, but also transformed itself from a rural to an urban society. Behind this great transformation is a systemic reform in land institutions. Rural land institutions went from collectively owned to household responsibility system, thereby protecting farmers' land rights. This process resulted in long-term sustainable growth in China's agriculture, a massive rural-urban migration and a historical agricultural transformation. The conversion of agricultural land to

Index	Urbanization rate	Urban construction area	Government land selling revenue	BAL percentage area	Land mortgage area	Land mortgage amount	Average selling price of commodity housing
Unit	(%)	Sq. km	Billion RMB	(%)	10,000 ha	Billion RMB	RMB/Sq.m.
2003	40.53	28,308.02	542.131	27.78	–	–	2,359
2004	41.76	30,406.19	641.218	29.16	–	–	2,778
2005	42.99	32,520.72	588.382	35.05	–	–	3,167.66
2006	43.9	33,659.8	807.764	28.60	–	–	3,366.79
2007	44.94	35,469.65	1,221.672	50.91	–	–	3,863.9
2008	45.68	36,295.3	1,025.98	81.91	16.6	1,810.7	3,800
2009	46.59	38,107.26	1,591.02	85.30	21.7	2,585.6	4,681
2010	47.5	40,058.01	3,010.893	88.27	25.82	3,530	5,032
2011	51.27	43,603.23	3,150	91.25	30.08	4,800	5,357.1
2012	52.57	45,565.76	2,690	90.77	34.87	5,950	5,790.99
2013	53.7	47,855.28	4,200	92.32	40.39	7,760	6,237
2014	54.77	49,772.63	4,294.03	92.53	45.1	9,510	6,324
2015	56.1	52,102.31	3,365.773	75.20	49.08	11,330	6,793

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Table V.
Land capitalization and urban expansion

Source: CEINET Statistics database, *China Land and Resources Yearbook*, etc.

non-agricultural uses and the introduction of market mechanisms made land a policy tool in driving high economic growth, industrialization and urbanization. However, we need to recognize that the role of land and its relationship with the economy will inevitably change as China's economy enters a new stage of medium-to-high speed growth. With economic restructuring, low-cost industrial land will be less effective. Urbanization is also shifting from rapid expansion to endogenous growth so that returns on land capitalization will decrease and risks will increase. Therefore, China must abandon land-dependent growth model through deepening land reforms and adapt a new pattern of economic development.

Notes

1. Ministry of Land and Resources: 2016 Land and Resources Bulletin.
2. Refer to The Central Committee of the Communist Party of China, January 1, 1982: Summary of the National Rural Work Conference.
3. Refer to Ministry of Land and Resources. China Land and Resources Bulletin 2004 [Z] and Ministry of Land and Resources. China Land and Resources Bulletin 2016 [Z].
4. Refer to the National People's Congress: Constitution of the People's Republic of China (Adopted at the Fifth Session of the Fifth National People's Congress on December 4, 1982, Announcement, Promulgation and Implementation of the National People's Congress on December 4, 1982).
5. Refer to the Law of the People's Republic of China on Land Administration (Adopted at the 16th Session of the Standing Committee of the Sixth National People's Congress of the People's Republic of China on June 25, 1986, Promulgated by Order No. 41 of the President of the People's Republic of China on June 25, 1986 to go into effect on January 1, 1987).
6. Refer to the Law of the Peoples Republic of China on Land Contract in Rural Areas (Adopted at the 29th Session of the Standing Committee of the Ninth National People's Congress on August 29, 2002).

7. Urgent Circular of the General Affairs Office of the State Council on Properly Solving the Current Rural Land Contract Disputes. (Telegram No. 21 (2004) sent by the General Office of the State Council) [Z] (April 30, 2004).
8. Refer to Circular of the Central Committee of the Communist Party of China on Rural Work in 1984 [Z] (January 1, 1984).
9. Refer to A Number of Policy Measures Promulgated and Implemented by the Central Committee of the Communist Party of China and the State Council on the Current Agricultural and Rural Economic Development [Z] (November 5, 1993).
10. Refer to Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Agriculture and Rural Work [Z] (October 14, 1998).
11. Refer to Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Promoting Rural Reform and Development [Z] (October 12, 2008).
12. Refer to Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening the Reform [Z] (November 12, 2013).
13. Refer to Regulations of the State Council on the Administration of Land for Construction of Villages and Small Towns (Guofa No. 29 (2004)) [Z] (February 13, 1982).
14. Refer to Circular of the General Office of the State Council on Strengthening Management of Transfer of Land and Strictly Banning Speculative Land Dealing (Guofa No. 39 (1999)) (May 6, 1999).
15. Refer to Decision of the State Council on Deepening Reform of Strict Land Management (The General Office of the State Council No. 28 (2004)) [Z] (October 21, 2004).
16. Refer to Circular of the State Council on Several Issues concerning the development of real estate industry (Guofa (1992) No. 61) [Z] (October 4, 1992).
17. Refer to the Law of the People's Republic of China on Land Administration (Revised and Adopted at the Fourth Session of the Standing Committee of the Ninth National People's Congress of the People's Republic of China on August 29, 1998).
18. Since the year 2000, Heilongjiang province has practiced the standard of unified annual production for the main types of land requisition in each city and county. Hangzhou city in Zhejiang province, Nanjing city and Suzhou city in Jiangsu province no longer estimated the compensation fees, but a comprehensive consideration of land use, land location conditions, local economic development level and land supply and demand and other factors, combined with the level of social security of local urban residents, to determine land requisition compensation standards.
19. Refer to the Circular on the Formulation of the Unified Annual Land Output Standards for Land Requisition and the Comprehensive Land Price of Land Requisition Plots (Guotuzifa No. 144 (2005)) [Z] (July 23, 2005).
20. Refer to the Decision of the Central Committee of the Communist Party of China on Some Issues Concerning the Improvement of the Socialist Market Economy (October 14, 2003).
21. Refer to the Decision of the Central Committee of the Communist Party of China on Several Important Issues in Constructing a Socialist Harmonious Society (October 11, 2006).
22. Refer to Some Opinions of the Central Committee of the Communist Party of China on Promoting the Construction of a New Socialist Countryside (December 31, 2005).
23. Refer to Some Opinions of the Central Committee of the Communist Party of China on Strengthening Agricultural Infrastructure Construction and Further Promoting Agricultural Development to Increase Farmers' Income (January 1, 2008).
24. Refer to The Central Committee of the CPC, 2011: Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening the Reform (Adopted at the Third Plenary Session of the Eighteenth Central Committee of the Communist Party of China), Offprint, People's Publishing House.

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