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# Market-driven Land Nationalization in China: A New System for the Capitalization of Rural Homesteads

**Abstract:** The rural collective land system plays an important role in urbanization; however, it hinders the capitalization of rural homesteads. Despite the significance of this system, the existing literature mainly focused on debates on privatization and nationalization of rural homesteads. However, only a few studies have proposed feasible plans for capitalizing fixed assets. To fill this research gap, this study discusses the conflict between market demand and legal limitation of the marketization of rural homesteads. The weaknesses and strengths of radical nationalization and privatization are also comprehensively evaluated. The concept of market-driven nationalization is proposed to overcome the weakness of radical nationalization and privatization while maintaining their strengths as much as possible. Finally, an assessment of the proposed market-driven nationalization is conducted based on an institutional analysis and development (IAD) framework. The key contribution of this study is its investigation into whether radically changing the rural collective land system is appropriate in contemporary China. In addition, this study proposes a potentially feasible path for advancing the capitalization of rural homesteads.

**Keywords:** rural collective land system, urbanization, marketization of rural homestead, market-driven land nationalization, IAD framework, China

## 1. Introduction

China has experienced rapid urbanization since the introduction of the reform and opening-up policies in 1978. These policies and the resulting urbanization transformed China from a fundamentally rural society composed mainly of farmers into a substantially urban society that economically subsisted by manufacturing, finance, and other secondary or tertiary industries (Treiman, 2012). In fact, urbanization rate increased from 17.9% in 1978 to 56.10% in 2015 (NBSC, 2016). The excessively fast pace of urbanization has resulted in various economic and social problems (Yu, Wu, Shen, Zhang, Shen, & Shan, 2015; Wu et al., 2017; Bao et al., 2017). One such problem is the widening rural–urban economic gap (Peng et al., 2015; Bao and Peng, 2016). Since the communist period of the People’s Republic of China (PRC), the rural–urban economic gap became one of the most prominent problems faced in China’s urbanization. Urban areas benefited from decades of market-oriented reforms that the rural society has never experienced. Such contrast has attracted significant research attention. Many studies have argued that the economic gap is rooted in various institutional biases, which created sharp disparities in educational opportunities, health

care, housing, political status, and other public aspects. These disparities are believed to be influenced by China's unfair property rights arrangement for rural lands.

A series of marketization reforms on urban land property rights began in 1978, during which the Chinese Communist Party (CCP) implemented its reform and opening-up policy. In 1979, some cities were selected to privatize the urban housing owned by the state since the formation of the PRC. In the 1980s, the land market gradually flourished with the introduction of land leasing and other relevant marketing activities. For example, real estate developers were legitimized to rent land or acquire land use rights from the state for commercial purposes. In the late 1980s, the majority of urban residents acquired ownership of their own houses because of the land reforms with the abrogation of previous land or housing regulations (Li & Li, 2006). The data verified by the Ministry of Land and Resources showed that the privatization rate of urban housing reached 83% in 2007, with land held by individuals or organizations amounting to 10.4 billion m<sup>2</sup> (Wang, Wang, Su, & Tao, 2012). The reform experienced by rural homesteads is another story. The institutional change of rural homesteads can be roughly divided into three phases (Zhu, Chen, & Fu, 2012). From the establishment of PRC to the early 1962, rural homesteads were permitted to be transacted, leased, and inherited by law. In fact, rural homesteads, at this time, were privately owned by farmers. From the early 1962 to the late 1990s, rural homesteads were owned by rural collectives and cannot be transacted or leased; however, the rights of farmers to use and occupy rural homesteads were permitted by law. The ownership transfer of rural homesteads was granted in return for the social security provided by rural collectives. Thus, the social security of farmers in this period was characterized by a collective-owned land system, which is considered beneficial in enlarging the range of social security. The last phase started from 2000 to the present. During this period, rural homesteads were still owned by rural collectives, used by members of collectives only, and cannot be transferred outside the original collective. Once transferred, the original users cannot apply for another rural homestead. In conclusion, such restrictions created an entire market of small rural homesteads with limited opportunities for purchase and sale, thereby preventing the marketization of rural homesteads. However, the illegal transaction of rural homesteads during this period infested many places, especially the outskirts of the developed regions in China. In fact, 10% to 40% of rural homesteads in Beijing were illegally transferred in different villages (Yao, Wei, & Zhang, 2007). Compared with urban land, the marketization of rural homesteads was delayed, though various tentative reforms were recently implemented in some cities (Jinghua Newspaper, 2015). Table 1 summarizes the important guidelines of rural homestead management extracted from No.1 document of CPC Central Committee in the 21<sup>st</sup>

century.

<Insert Table 1 Here>

Various problems occurred due to the delayed reform of rural homesteads. First, rural construction land is wasted. According to the United Nations, the rural population declined at approximately 13% from the 1990s to 2005. The decrease is expected to remain unabated, which reached a minimum of 40%. However, the rural homestead expanded by roughly 130,000 ha from 2000 to 2008, thereby showing an abnormal rise relative to the decrease in rural population (Wang, Wang, Su, & Tao, 2012). Approximately 2 million ha of rural homesteads were estimated to be left unused in 2012, which generates a phenomenon called hollowed village (Huang, 2012). Second, facilitating migrant workers to realize urbanization is difficult. A survey conducted in 2012 indicated that approximately 70% of new-generation migrants with an average age of 23 years were willing to settle in big cities (Bo, Ping, & Warren, 2015). Despite this, rural migrants found it difficult to settle down in cities due to the high cost of living in urban areas. Unused rural homesteads have a large economic value that can be used by migrant workers for consumption, investment, or others to help them improve their lives in immigrant areas. However, this value remained unexploited because of the restrictions on the transactions of rural homesteads. Third, much illegal land use exists. Informal transactions of rural homesteads and the houses built on them began to spread in the countryside, especially in the suburbs of developed regions, because of the booming demand for reduced housing prices in urban areas and ample supply of housing in the countryside (Chen, Wang, & Huang, 2015). However, given that rural homesteads belonged to rural collectives and cannot be traded outside, any clandestine transaction between collective members and outsiders was not acknowledged by law (Wang & Zhu, 2014).

The current institutional arrangements for rural homesteads prevented their residents from gaining any external benefits. As Williamson (2000) indicates, the aspiration of economic agents to maximize their potential benefits induces an institutional change when the initial institutional arrangement loses its efficiency and gradually becomes a fetter to economic agents, that is, institutional change begins when external benefits occur (Zhu, Cai, & Chen, 2009). The constraint on the transactions of rural homesteads and the inequality of property rights between urban–rural construction lands resulted in great public concern about sacrificing farmers' benefits. Many scholars have investigated the rationality of the current institutional arrangements for rural homesteads. To benefit rural residents, several scholars have proposed a complete

privatization of rural homesteads. Privatization would make rural homesteads function similar to state-owned construction land, which is consistent with the requirement for an “identical land with identical rights” (tong di tong quan) (Cai, 2005; Jiang, An, 2003; Zhang, 2008). However, other studies have claimed that land privatization in socialist China would be a violation of the constitution; nationalization of rural homesteads was proposed as a solution because the land use rights of urban state-owned construction land can be successfully transacted in a modern market economy (Xu, 2005; Yan & Wang, 2005; Liu & Yi, 1998; Tan, Wang, & Zhao et al, 2006; Ma & Yang, 2007). However, a large body of literature has focused on either nationalization or privatization, and it rarely considered both as one feasible option.

The present study proposes a feasible method that favors the marketization of rural homesteads. The remainder of this study is organized as follows. Section 2 conducts a literature review to examine the institutional changes relating to rural homesteads from an international perspective. The review reveals the changing trends and aids in establishing a general understanding of the conflicts between market demands and institutional constraints. A comprehensive appraisal of the weaknesses and strengths of the radical nationalization and privatization of rural homesteads is then carried out to investigate the feasibility of both approaches in Section 3. In Section 4, a new system of market-driven nationalization is proposed, and the preliminary operational mechanism of this system is introduced. In Section 5, an assessment of the newly proposed market-driven nationalization is conducted using the institutional analysis and development (IAD) framework. Section 6 concludes this study and specifies areas for future studies.

## **2. International experience of institutional changes of land property rights**

The arrangement of land property rights is an important factor in improving productivity of society and developing the state as shown in Fig. 1. The decline of South America and the rise of North America are good examples. On the one hand, the experiences of Spain and Portugal, as the 16th–18th century suzerains of South America, significantly differed from that of the United Kingdom, which was the suzerain of North America. In the early 16th century, when Spain and Portugal began to colonize Latin America, the Iberian Peninsula was the on cusp of transitioning from feudalism to capitalism. However, this transition spanned for a long and intermittent period beginning with the reinforcement of feudalism under the rule of Philip II in the 16th century to the re-ascendance of capitalism during the Bourbon Dynasty in the 18th

century; this extremely weakened Spain in extricating itself from the influence of feudalism (Burns & Charlip, 2009). In the early 16th century, more than 50% of land was owned by aristocrats, with a further 20% controlled by the Roman Catholic Church. These lands could not be traded or transferred according to the law at that time. Land property rights of farmers were granted by kings only when the farmers paid their taxes. Hence, property rights during this period were neither stable nor protected by law. As a result, the development of Spain's agriculture became stagnant to the point that food supply was straitened and could not even meet the demands of the citizens (Han, 1997).

<Insert Figure 1 here>

On the other hand, although it was 100 years later in which Spain and Portugal started their colonization in South America, the United Kingdom reached the end of its bourgeois revolution in the 17th century as they set foot on North America. As a result, its advanced capitalist property rights system impelled changes in institutions, including the abolition of primogeniture (where land is not allowed to be gifted or transferred to others, except to the oldest son of the land owner), the liberalization of the labor force (although black slaves were not liberated until the civil war), and the protection of private property, especially land property rights (Stavrianos, 1993). In 1787, the US government launched the *Northwest Act* that supplied new rules for inheriting or occupying land. The *Northwest Act* was the basis of the famous *Homestead Act*, which was passed in 1862. After the westward expansion, newly reclaimed lands were nationalized by the US government and then sold to poor farmers at exorbitant prices. Motivated by the aspiration to own lands but unable to afford their high prices, the farmers occupied large areas of unclaimed lands out of the law, giving rise to numerous conflicts between farmers and the government. By resorting to various means, including violence, the illegal land property rights of farmers were finally authorized by the federal government through the *Preemption Act* in 1841, and the *Homestead Act* in 1862. The former granted farmers the priority to purchase the lands they reclaimed, and the latter authorized all US citizens to acquire 160 acres of land at no cost provided that they settle the appointed lands for at least 5 years and increase the land value (Zhang, 2013).

The *Homestead Act*, together with the previous reforms on property rights, legalized the original informal property rights, motivated people to cultivate large areas of land in the West, and attracted numerous migrants from overseas, who then constituted the main labor force for the subsequent industrialization of the US (Kissinger, 2001). Historically, the US does not differ from any other country that legalized the originally

illegal but socially practical property rights, which were ultimately transformed into social wealth through investments and other market activities (Soto, 2000).

The property rights system in South America underwent another development. Most of the governments in South American countries adopted capitalism and continued to believe that capitalism would lead them to success as was the case with their northern neighbors. However, the reality was that Latin America was associated with poverty, chaos, and war. As De Soto (2000) claims in *The Mystery of Capital*, the majority of poor countries nowadays are devoid of neither wealth nor resources to create wealth. Countries that are usually considered poor (e.g., Peru, Haiti, Egypt, or other countries scattered throughout Asia, Africa, and Latin America), are actually gifted with considerable wealth that is confined to their movable or immovable property. The absence of an integrated system for defining, protecting, and exchanging properties prevents these countries from creating wealth based on what they already possess. This notion is reflected by scholars such as Coase, who explained and emphasized the fundamental role of a well-defined and free-trading property rights system to the prosperity of a country. Integrated property rights are crucial for motivating individuals to weigh the advantages and disadvantages of appropriately employing their resources, and individual prosperity can also be an integral part of a prosperous society (Acemoglu, Johnson, & Robinson, 2001; DeLong & Shleifer, 1993; O'Driscoll & Hoskins, 2003). The assets possessed by poor people in Haiti, the poorest country in Latin America, are actually 150 times the amount of the overseas investment that this country has received since its independence. When the influence of urbanization extended its reach to remote rural areas, the migration of farmers from rural areas to cities caused the outskirts of the metropolises to flourish. However, their assets remained outside of the formal property rights system because of the complicated and excessive procedures, as well as the oversight and persecution of the government. Given the lack of authorized property rights, people's assets, including lands, houses, enterprises, and stores, only existed in informal sectors without the opportunities for transactions and capitalization. Such conditions restricted assets and capital. In fact, in Haiti, the numbers rose to 68% of urban residents and 97% of rural residents in illegal residences. These properties are not legally allowed to participate in the formal market because of the lack of integrated ownership. In which case, the approximately 5.2 billion dollars confined in these properties cannot be capitalized (Soto, 2000).

A gap exists in the development of the property rights systems in North and South America. In most South American countries, buildings are established on land without integrated ownership, corporations are operated by persons of unclear legality, and the

property rights of people are not legally confirmed and registered. On the contrary, the ownership of almost every asset in North American countries can be easily traced, thus, people's assets can be traded, mortgaged, and utilized economically and efficiently.

The UK has also experienced a series of reforms that have extricated them from rigid property rights systems. The Enclosure Movement, one of the most significant events in the rise of the UK, was considered illegal at its onset. However, influenced by a series of events that occurred in the 18th century (e.g., the industrial revolution, rapid urbanization, and the continental blockade policy launched by Napoleon), the Enclosure Movement was gradually permitted by the government and implemented nationwide. In the 19th century, the small peasant economy finally vanished in the UK because of the Enclosure Movement, and the capitalist agricultural system was established. In the first half of the 20th century, the ownership of rural land started to develop in a new direction when status between land ownership and land use rights was reversed. The original tenant farmers acquired life-long tenant rights and became practical owners of their land. By the end of the Second World War, 62% of English farmers owned farms with integrated property rights. In summary, the UK government smartly and timely accepted the formerly illegal property rights that farmers acquired in the Enclosure Movement and then established a clear land property rights system.

An integrated and clarified property rights system established during the reform can answer four questions as follows: Who owns the assets? Where are the assets? What are the uses of the assets? How long can be the assets used? More questions can be answered in terms of the economic features of assets that people can acquire from the property rights system. In such a case, people can engage in the transaction of these assets in a safe environment. These free transactions consequently expand the scale of the market, capitalize the assets of individuals, and, improve the productivity of the society.

A new set of laws protecting and defining property rights can provide a source of wealth, but legislation can be a formidable and strenuous task for lawmakers because of extensive factors such as archaic but obdurately held institutions, sophisticated social conventions, and miscellaneous predilections of the public. Any negligence of these factors can considerably strain the economy and society (Soto, 2000; Kissinger, 2001; Acemoglu, Johnson, & Robinson, 2001; DeLong & Shleifer, 1993; O'Driscoll & Hoskins, 2003). These international experiences provide useful references for the reform of Chinese rural property rights of rural land.

### **3. Nationalization versus privatization of rural homesteads**

#### **3.1 Debates on the nationalization of rural homesteads in China**

Excluding the few early years in the history of the PRC, nationalization and collectivization became mainstream policies. As the most valuable asset in a country that fosters approximately 1.4 billion people, land was also strictly regulated by China's Constitution and Land Management Law in the early stages; for example, "land located in the rural areas, including agricultural land and rural homestead, belongs to the rural collectives" (Rosato-Stevens, 2008). However, the history of the collective ownership of rural lands is not as long as that of the PRC; private ownership existed in China for thousands of years until the 1950s, during which time lands belonging to individuals were theoretically owned by emperors and could be transacted freely in the market (De Soto, 2000).

In the late 1950s, with the rise of extreme socialist movements throughout the country, China began preparing to face imminent changes that included land rights and ownership. The collectivization of rural lands was initiated in March 1961 because of the decision of the central government to establish People's Communes. Privately-owned rural lands were thereafter transferred to collectives though the property rights of housing structures built on lands that remained theoretically owned by individuals. The collectivization of rural lands, establishment of a dual-track household registration system that constrained the rural-urban population flow, and implementation of other urban-biased policies were considered as detriments to the development of the rural land and housing market (Liu, 2012).

In the late 1980s, with increased social and economic development and disposable personal income (DPI), the rural residents' desire for improved living standards, repressed in the past 30 years, was finally addressed through improved housing conditions. Freely allocated residential lands simultaneously contributed to the popularity of new and spacious houses in rural areas. Nonetheless, the building mania was accompanied with a significant decrease in the number of arable lands infringed by the increasing number of houses. Such conditions attracted the attention of the central government, which was forced to implement a series of farmland protection policies. These policies included the Land Administrative Law enacted in 1986 to not only provide a ceiling for the number of residential lands used by each village per year but to also limit each collective member to a single plot of residential land for the building residence. Similar regulations were reaffirmed in the Village and Township Housing Construction Land Use Regulation enacted in 1993 (Lin & Yi, 2011). However,

these restrictions ultimately failed in the facet of rapid urbanization during the last decades of the 20th century.

Nationalization and privatization are two opposing views that have been put forward as the future of the rural homestead system in China.

According to the PRC's Constitution and Land Management Law, rural land is owned by the rural collective, and only members of the collective can enter into contracts and manage the land of that collective (Rosato-Stevens, 2008). Except within the collective itself, the transactions of rural homesteads are highly restricted. However, the marketization of urban lands is different. According to the current law, urban land is owned by the state and cannot be transacted to individuals or organizations, but the separation of ownership and land use rights allows land use rights to be transacted through market-oriented means (e.g., bid, auction, and listing) (Han & Wang, 2010). Considering the success of the marketization of urban lands, some believe that the capital value of rural homesteads and highly efficient land use can be realized through nationalization. Xu (2005) states that nominal collective-owned rural homesteads exhibit a state-owned relationship, which leads to ambiguous property arrangements and unclear boundaries. Under these circumstances, the property rights of rural residents are vulnerable to infringement; local governments and corrupt officials may exploit these rights by rent-seeking, forcible expropriation, and other means. Yan (2005) claims that influenced by the household contract responsibility system, farmers actually pay minimal attention as to who owns a given land as long as the land is under their charge at present. Liu (1999) believes that the rural collective land ownership system has become obsolete because of the current trend of marketization in China and thus proposes that the value of rural lands be released through nationalization. These studies point out the advantages of nationalization as follows:

- (1) Prevents unnecessary disputes over ideologies and reduce risks of radical reform because the nationalization approach essentially conforms to the ultimate requirement of socialist public ownership;
- (2) Strengthens the macro-control of land, which helps restrict land annexation;
- (3) Does not weaken the land rights of farmers but rather bestows them with additional practical rights from acquiring tractable land use right even with the transfer of the illusory ownership to the state;
- (4) Improves the efficiency of rural land use gained from a set of clear property rights;
- (5) Benefits the sustainable development of agriculture.

Under current institutional arrangements, farmers are only responsible for the lands they contract from collectives. Therefore, they lack either the incentive or the power to

oversee the management, maintenance, and construction of main agricultural infrastructures. Many believe that nationalization is a good solution to prevent the short-term actions of farmers and the people who should be responsible for the supply of public goods because responsibility is transferred to a clear entity with the capacity to cover businesses involving public goods (He, 2010; Wen, 2009; Tan, Wang, & Zhao, 2006; Zhang & Yang, 2007; Kong, 2010).

### **3.2 Debates on the privatization of rural homesteads in China**

Those with opposing views also express important concerns. First, given that millions of people maintain complicated property relationships, how could the nationalization of rural land be realized? The expropriation of land by the government with low compensation appears to be an economical method, but it actually entails high social costs. Governments must first determine whether the opposition from people who lost their lands in this manner and the potential consequent social turbulence are acceptable and can be handled sufficiently well. Purchasing seems to be a moderate approach with minimal risk of opposition from the people. However, purchasing a large area of rural land involves heavy public expenditure, which may not be affordable for governments at all levels. In addition, a new government administration system must be established to deal with the large amount of additional work involved. Second, the nationalization of rural land would break the promise of CPC to Chinese farmers in the early years of the PRC. Considering political needs and communist ideals, the CPC was devoted to establishing a rural society of “land to the tiller” and promised that rural lands would be equally allocated to all farmers. The nationalization of rural lands may blemish the reputation of the CPC. Third, the government becomes the landowner after nationalization, but it is unlikely to undertake agricultural production. Therefore, small-scale farming by individuals in the old system continues in the new system. Realizing large-scale and intensive agricultural management, which is one of targets of nationalization, remains problematic.

The privatization view is mainly held by economists such as Prosterman and Hanstad (1990), Cai (2005), Zhang (2008), and Wen (2010). Wen (2010) highlights that the current land system is actually a compromise between egalitarianism and efficiency, which sacrifices economic efficiency to establish an unreasonable egalitarianism. Yang (2002) indicates that the restrictions imposed on the rural land contractual management and homestead use rights make contracted land extremely unstable. As a result, farmers are prone to take short-term actions, which can ultimately lead to the extensive utilization of lands or to a situation similar to “the tragedy of the commons.”

However, those who oppose the privatization of rural lands assert that it carries a potential risk of land annexation and conflicts with the essence of socialism (He, 2010; Wen, 2009; Tan, Wang, & Zhao, 2006; Zhang & Yang, 2007; Kong, 2010). Understandably, the economic value of lands deserves much attention in this market-oriented society, but the multiple roles of lands cannot be overlooked. Lands are not only an asset with considerable wealth but also a guarantee of people's residence rights. Through privatization, rural residents can finally acquire the land rights that they should have acquired a long time ago. However, in reality, contemporary farmers in China are a group of restricted information receivers, vulnerable bearers of market risks, and poorly educated workmen. They remain underprivileged, are easily lost, and faced with failure in a ferociously competitive world. After making wrong decisions or being coerced into relinquishing their land property rights, fighting against injustice is difficult. As a result, privatization may induce panic to the people before justice prevails. In addition, the means for realizing privatization remains controversial. An appropriate and acceptable approach for farmers to acquire land rights is not yet available. Purchasing land at market price or lower is extortionate to farmers. Bestowing lands upon farmers without any restitution is unacceptable to either the state or collectives. Therefore, most hold a pessimistic attitude toward the privatization of rural land because of such feasibility concerns. Table 2 illustrates the advantages and disadvantages of nationalization and privatization as summarized from existing studies.

<Insert Table 2 here>

### **3.3 Pilot experiment on the marketization of rural homesteads in Chongqing**

Concerned with the inefficient use of rural homestead and potential food crisis caused by the loss of farmland, some local governments took measures to improve the rural land system. As such, the Chongqing securitized land exchange system (*di piao zhi du*) is considered a successful venture in the marketization of rural homesteads and farmland protection. The Chongqing government launched the securitized land exchange system in 2008 according to the principles of "balanced use and compensation" (*zhan bu ping heng*) and "linkage between urban and rural construction land usage" (*cheng xiang jian she yong di zeng jian gua gou*). By adopting this system, villagers who have migrated to cities and are willing to transfer their abandoned rural homesteads can choose to reclaim the homesteads. The area of reclaimed homesteads can generate an equivalent quota of construction land that can then be auctioned on a special market. The resulting profits can then be shared among the rural collective, villagers, and local government at a specific ratio. The Chongqing securitized land exchange system is beneficial for several reasons. First, it promotes farmland protection

because the newly generated construction land quotas can theoretically only be used when the quality and quantity of the reclaimed land reaches a certain standard. Second, the land-related profits of peasants are augmented through this market-oriented system. Statistics from the Land Resource Management Department of Chongqing indicated that the newly-added construction land conveyance and land reclaiming fees were around 30–40 CNY/m<sup>2</sup>, compared with the 1.333 million CNY/ hm<sup>2</sup> land security transaction price, resulting in a nearly three-fold increase in the land value (Fu, 2012). Finally, in contrast to the land requisition system in which farmers cannot refuse or bargain with the government, participating in a land securitized exchange system very likely earns the willingness of rural land-owners, which prevents menace, coercion, and other illegal behaviors and promotes public confidence in the government (Mo et al., 2017).

However, widespread concern emerged from the limitations of the system. First, the quality of reclaimed farmland cannot be guaranteed. Driven by the notion of the rational economic man, the local government might intentionally lower the acceptance standard to quickly obtain newly-added construction land quotas. In the village of Shiti in Chongqing, a large area of reclaimed land was left idle because of its poor quality. As one villager said, “There is too much rubble in the land for it to be cultivated” (Du, 2010). Second, an upsurge of newly added construction quotas was generated with the development of the land securitized exchange system; however, prior to improvements in land expropriation compensation and resettlement, large-scale land security transactions inevitably increased the ranks of farmers without land, jobs, or social security. Third, the relatively short supply of land security directly affected the price, which even exceeded the sum of the land conveyance fee. For instance, the sum of the land transference and land reclamation fees in 2011 was around 1.099 million CNY/hm<sup>2</sup>, but the lowest price of land securities in the first 6 transactions was 1.206 million CNY/hm<sup>2</sup>, an excess of approximately 30% (Mo et al., 2017). From the perspective of the holders of the securities, they have to assume the cost from auction losses, or they have to pay a cost which is higher than what they would have paid directly for the land use rights. The extra cost is likely to be shifted onto consumers through either way, ultimately increasing housing price. Finally, although the quota of construction use is transferred to urban areas, the reclaimed farmland from rural homesteads remains owned by the rural collectives, which do not deal with the core disputed issue of rural land ownership. This system mainly accelerates urban development through providing more construction quotas in urban areas. This situation means that only a portion of the value of rural homesteads is realized compared to the urban construction land transactions in urban areas. In addition, the reclaimed rural homestead still cannot be

used for construction, which blocks potential commercial development if it can be owned by urban demanders with more capital. Merely one-off cash is inputted in rural areas when implementing land exchange without continuously capital input. This system therefore still cannot realize the goal of increasing capital input in rural areas and promoting rural development. Therefore, this system partially solves the problem of idle rural homesteads, but this system contributes little to rural development itself and may result in potential idle farmland in future.

Instead of land expropriation, which was almost the only means of converting rural land to state-owned construction land, Chongqing's securitized land exchange system essentially enables farmers to transact their idle homesteads, a process which can be considered a market-driven transfer of rural homesteads. Therefore, the Chongqing securitized land exchange system provides a useful reference for the new system proposed in this research. However, the design of the new system should avoid the shortcomings of the extant one, including excessive government intervention, the potential living predicament of landless farmers, the low affordability for land demanders, and the incomplete realization of land use right of rural homesteads.

#### **4. New system of the market-driven nationalization of rural homesteads**

Discussions over the reform of the rural homestead system have been ongoing for a long time. Unfortunately, these discussions have primarily emphasized the issue of ownership and overlooked the core issues. Several local governments have made tentative reforms, but their failings prevented the marketization and capitalization of rural homesteads. Note that the absence of a clear and integral set of property rights has confined considerable wealth within rural homesteads and caused inefficient land use. Consequently, rural homesteads are unavailable for urban demanders, with an unequal land market established among rural residents.

Given the problems, objectives, and the environment of the reform, several scholars have concluded that radical nationalization and privatization are unrealistic in contemporary China (Qian, Zhang, Wu, & Skitmore, 2015). However, constructive reference for impending reforms in rural areas can be gleaned from the history of the reform of state-owned urban construction land in the last century. Debates over the choice between nationalization and privatization indicate that each option represents unique difficulties. Privatization of rural lands involves challenges which can be characterized by ideological conflicts, public panic, unaffordable land prices for farmers to purchase ownership, and social instability caused by the potentially large

number of homeless and destitute farmers who may fail in the market (He, 2010; Wen, 2009; Tan, Wang, & Zhao, 2006; Zhang, & Yang, 2007; Kong, 2010). By contrast, nationalization involves fewer risks. First, the CPC declared that rural lands belong to rural residents or collectives. In practice, however, the concerns of farmers are less about ownership and more inclined toward ways in which land can be utilized similarly to urban land usage. Furthermore, farmers require a means of capitalizing on unused rural homesteads. Second, the government bears the financial burden of adopting nationalization. Considering the precedent achieved by the private sector in the successful supply of public goods, the present study proposes a novel system that may help actualize the capitalization of rural homesteads through market-oriented nationalization. The operational mechanism of this system is illustrated in Figure 2.

**<Insert Figure 2 here>**

Homestead transactions within the market-oriented nationalization system follow six steps:

(1) A special rural homestead market, characterized by justice, fairness, and openness should be established, and rural residents should be granted the right to transact homesteads without any violation of land planning or other relevant laws. According to the *Decision on Major Issues Concerning Comprehensively Deepening Reforms* launched in the Third Plenary Session of the 18th CPC Central Committee in November 2013, the establishment of a unified national land market covering both rural and urban areas is on schedule. Hence, the rural homestead market should be an integral part of the former and provide experience for the subsequent establishment of a nationwide urban–rural land market.

(2) Discussions and negotiations over the details of contracts should involve a face-to-face process between rural residents and land demanders that completely conforms to the willingness of both sides. Rural residents must be required to submit written applications on the transactions and relinquishment of relevant rights on traded homesteads to the collectives to which they belong. The principle of the market economy should be followed during the negotiation process. Scholars have worried that some rural residents may be deceived into selling their homesteads at a much lower price. Should that worry come true, the government should exercise the preemption right to purchase rural homesteads with a market price to protect the interests of rural residents.

(3) For the transactions, the government must provide a special agency, exchange, and other services to facilitate and supervise the deals. Suppliers and demanders are generally required to trade face-to-face. An independent party may be invited to

supervise the transaction to safeguard the interests of rural residents.

(4) The ownership of a rural homestead is transferred to the state, and the land use right is transferred to land demanders. This step is realized simultaneously with Step 3. Notably, the proposed market does not generate the third type of land ownership, i.e., privatization. After the transaction, the state owns rural homestead, whereas land buyers obtain land use right. This market design fully considers the realistic demand of governance, which enhances the feasibility of its implementation.

(5) The land demander then pays the negotiated price, relevant taxes, and administrative fees to the state. The land use fee is considered higher than the negotiated price contracted between the demander and the original holder of the traded land. An additional fee is calculated on the basis of a certain ratio concerning immediate economic factors (e.g., interest rate, traded land location, and potential land use). Taxes and administrative fees will then be incorporated into the local budget as the income of the landowner, namely, the local government.

(6) The local government pays the original landholder (rural resident) the negotiated price agreed upon in the contract. The negotiated price is recommended to obtain a secondary allocation between farmers and collectives for two reasons. First, as the statutory owner of collective land under the rural collective land ownership system, the rural collective should be compensated following the transaction of its assets. Second, the compensation apportioned to collectives can be used as a social security fund in case of market failure and when a need arises for the original collective members. In addition, the individual's benefits should be emphasized as the primary incentive when sharing the price for farmers to participate in this proposed system.

## **5. Assessment of the market-driven nationalization based on the IAD framework**

The IAD framework proposed by Professor Ostrom in the 1980s is used to analyze how the attributes of resources and participants, along with the rules in use, influence the structure of the action arena, the incentives of individuals, and the corresponding outcomes (Kiser & Ostrom, 1982). The action arena, comprised of the action situation and participants, is used to describe a social space wherein a series of activities coexist (e.g., individual interactions, goods exchange, services, problem solving, and competitions). The action situation is influenced by seven variables: the collective of participants, the position of participants, the collective of allowable actions, the potential outcomes, the control level on various decisions from different participants, the income and cost, and the available information (Dolsak & Ostrom, 2003). The action arena is also affected by three other groups of exogenous variables: the attributes of resources, the attributes of participants, and the rules in use. Participants in the action

arena are initially influenced by the attributes of resources (e.g., exclusiveness, competitiveness, or rareness of resources). Moreover, the participants are guided by a socially recognized code of conduct, the common understanding of the action situation, the heterogeneous predilection of each participant, and by other factors designated as the attributes of participants in this context. Finally, an exogenous variable called “the rules in use” impact the decision making of participants by describing or regulating what is allowable, inhibited, and necessary (Kiser & Ostrom, 1982). The rules in use generally signify the concretization of forcibility in terms of the rule of identity, boundary, choice, range, information, and payment (Poteete, Janssen, & Ostrom, 2010).

### **5.1 Action arena, participants, and action situation in the context of rural homesteads**

According to Ostrom’s IAD theory, participants at a particular action arena are constantly involved in and influenced by one or a few more action situations; furthermore, such situations can be used to describe how the participants’ behaviors and the corresponding results are influenced by an institution or system (Ostrom, 2010). As stated, seven variables can be used to describe how action situations function, namely: the collective of participants, the position of participants, the collective of allowable actions, the potential outcomes, the control levels exerted by different participants on various decisions, the income and cost, and available information. In the next subsection, given that there is one common action arena for them, the behaviors of participants involved in the current rural homestead system and the corresponding results will be discussed through a brief description on the influence of the seven variables.

- (1) Position of participants. Three types of participant position exist in the context of rural homestead system: First, political pundits or central government leaders; Second, technocrats and civil service officials from local governments; Third, the potential rural homestead sellers, academic experts, technocrats, social media workers, and rural homestead demanders who could hold any of the other types of positions mentioned.
- (2) Collective of participants. This term is used to describe the attributes of the participants, including their number, form, and other backgrounds, all of which are considered the most important attributes. The number of all participants mentioned above is unclear and difficult to calculate, but as one of the major participants, the potential rural homestead sellers could be estimated based on the number of migrant workers from rural areas. As stated, more than 280 million migrant workers now

exist in China, which is a sizeable group worthy of serious attention.

- (3) Collective of allowable actions. Participant actions are complex and, in most circumstances, unpredictable, but the actions that all participants have taken reflect deviation or consistency to the expectation of policy makers in terms of the influence of a certain institution or policy. As mentioned, numerous illegal transactions of rural homesteads have occurred in the outskirts of many major cities in China. To some extent, such outcome reflects that the actions of other participants have deviated from the expectation of policy makers.
- (4) Potential outcomes. In this context, potential outcomes have three aspects. First, the direct outcomes achieved by participants because of the current or the changed rural homestead system. Examples include the income generated by the transaction of rural homesteads accompanied by the improvement of living standard or the punishment from the illegal transaction of rural homesteads. Second, the potential cost that officials from the governments at all levels may incur when choosing to change or maintain a certain system which is closely related to social stability and economic development. Third, the results of performance evaluation, namely, an evaluation of the direct outcomes, cost, and relevant influence aforementioned.
- (5) The control levels exerted by different participants on various decisions. According to their different identities, the control levels wielded by participants are ranked from high to low, such as from political pundits from central government, to technocrats and civil service officials from local governments, and to other participants such as rural homestead holders and demanders, academic experts, and social media workers.
- (6) Available information. The availability of information to different participants in this context is decisive with regard to the actions they will take and shall influence the comprehensive effects on the society and the economy. For example, whether political pundits and technocrats are fully aware of the needs of other participants on this arena or whether the rural homestead sellers are wholly cognizant of the kind of risks or benefits they incur with illegal transactions would influence their subsequent actions.
- (7) Income and cost. Income and cost represent an incentive for or hindrance to all potential actions, hence, theoretically, any outcome is related to both. In the context of the rural homestead system, all participants expect their income to be proportional to their investment, whether ownership is changed or maintained. However, note that the social benefit is hardly monetized because of its fuzziness and uncertainty. Consequently, a qualitative description is considered more appropriate for this research as this work highlights social equity instead of efficiency.

## 5.2 Three exogenous variables influencing the action arenas of the rural homestead system

Ostrom points out that the action arena acts as a dependent variable affected by three groups of exogenous variables: the attributes of resources, the attributes of participants, and the rules in use (Ostrom, 1986). For the rural homestead system, these three groups of exogenous variables can be defined as the attributes of rural homesteads, the values of participants, and the relevant rules used in the rural homestead system, respectively.

(1) Attributes of rural homesteads. These attributes are manifested in four aspects. First, the economic attribute indicates that rural homesteads are closely related to economic activities. For example, the transactions of homesteads are considered to be a driving force of domestic demand that can boost the development building, heavy engineering, and financial industries among others. Second, the social attribute suggests that rural homesteads are closely related to the rights of rural residents, and that their maintenance and improvement is crucial for promoting the stability of rural communities. The third attribute pertains to the broken rights of rural homesteads and the inequality of the rural and urban land markets. The marketization of state-owned urban construction lands began in the late 1980s and has since achieved considerable growth. However, rural land marketization remains underdeveloped because of the stringent restrictions on the rights of disposition. Therefore, the current rural homestead market involves an unfair allocation of land resources.

(2) Values of participants. The values of participants can be characterized as the aspiration for urbanism and concerns over the preemption of urban resources. The permeation of industrialization and urbanization into rural areas has continuously increased the number of rural migrant workers, who have since become an influential social group in China. The first generation of migrant workers earned money in the immigrant areas for a temporary period and then returned to their hometowns to continue their rural living. By contrast, the new generation prefers to settle in cities to experience the benefits of advanced infrastructure, educational resources, and employment choices. Migrant workers from the countryside who move to urban areas render their rural homesteads idle, thereby causing inefficient use of land resources.

(3) Rules used in the rural homestead system. Ostrom identifies seven types of rules in use which influence the action situation and participants (although some of the rules will be absent according to specific contexts) (Ostrom, 2010). First, under the rule of identity, two types of identity are covered. Policy receivers include farmers and rural homestead demanders, and the latter could be anyone participating in the arena mentioned above. Conversely, policy makers primarily consist of officials from central and local governments. Second, the rule of boundary informs which participant could be policy receivers and policy makers. The former encompasses anyone that

participates in the rural homestead system, whereas the latter earns their identity through a certain process, standard, and requirement. As they are usually officials from governments, policy makers are qualified by their particular educational background and managerial skills. In addition, they are supposed to be enthusiastic about public service and knowledgeable about the fundamental situation of the rural homestead system. Third, the rule of choice means that once their identity is confirmed, each participant would make a clear choice. Under the current land management law, policy receivers are not allowed to transact rural homesteads. However, the reality is, many illegal transactions have transpired, suggesting that some policy receivers, especially farmers, are unsatisfied with their current identity and the choice to which they are bound, hence their inclination to break the rule of identity and choice. Fourth, the rule of aggregation can be divided into symmetrical and asymmetrical aggregations. In the context of the transaction of rural homesteads, symmetrical aggregation means that all participants are endowed with decision-making power. However, except for some small groups of participants (such as academic experts) who are endowed with the right to participate in the policy-making process, the decision-making power is mainly wielded by local and central government officers (especially the latter). Therefore, the rule of aggregation in the context of rural homesteads is asymmetrical. Fifth, the rule of range regulates the collective representing all the potential consequences of a certain action situation. The influence of this rule on participants will be discussed in the following subsection. Sixth, the rule of information refers to the manner in which prompt and accurate information in terms of the marketization of rural homesteads are acquired, which is important to all participants. For example, the transaction of rural homesteads requires access to the information of demand and supply for farmers and various rural homestead demanders. Conversely, the government must be aware of many crucial information such as the willingness of farmers, the market demand volume, and the influence of opening rural homestead markets. Seventh, the payoff rule regulates the types or extent of payoff that participants will receive when they take different actions, which, in turn influences the kind of actions they will take.

### **5.3. Comparison between market-driven nationalization and other reform modes**

Ostrom claims that the reform of an institution or system can be defined as the formation or modification of rules (Ostrom, 1986). Ostrom's IAD framework provides the aforementioned seven groups of rules to be considered when analyzing an institutional reform, namely, identity, boundary, choice, range, information, aggregation and payoff. When analyzing the reform modes of the rural homestead system (e.g., radical privatization and nationalization, as well as market-driven nationalization), three groups of rules must be altered to realize the objectives of each reform mode.

These groups include the rules of identity, choice, and range. The IAD framework indicates that the rule of identity regulates the types of identity and the acceptable volume of participants for each identity. The rule of choice is closely related to that of identity because the collective of choices depends on the type of identity that participants bear. In addition, the scale of choice influences the participants' primary rights, responsibilities, and positivity. Finally, the rule of range pertains to the collective results that correspond to each choice made by participants, which influences their potential behavior. This subsection analyzes how the change of rules influences the objectives of participants in different action arenas.

The rules of identity and choice interact. On the one hand, identity type decides the size of the collective of choices. On the other hand, change in the collective of choices decides the type of identity that holders bear (Wang, 2010). In radical privatization, the collective of choices of rural residents is enlarged because such residents are authorized to transact their homesteads. However, this change in identity requires sufficient economic power for rural residents to purchase complete ownership of their homesteads. Thus, the rule of range is altered correspondingly as manifested in two aspects. First, the gap between the rich and the poor may widen in this reform mode considering that the poor are unable to purchase their homesteads. Second, original rural residents face the possibility of investment failure. Such action concerns the participants in the formal arena because of the potential social instability from the existence of homeless rural residents.

In radical nationalization, the collective of choices similarly changes to the other modes as rural residents are also allowed to transact their homesteads. However, in this mode, the market only has one buyer (the government). Consequently, two risks emerge. First, the rural homestead market is at risk of becoming a buyer's market. The government's monopolistic position endows it with the power to restrict purchasing price. This condition forms an inefficient competitive market that infringes upon the suppliers' rights. Second, assuming that a fully competitive market exists in the context of radical privatization, the rocketing market price of real estate in China becomes a heavy financial burden for the local government such that privatization is inevitably aborted. In summary, the adoption of radical privatization forces the local government to face two outcomes: an inefficient competitive market and an unbearable financial burden, both of which denote changes in the rule of range. However, such outcomes also render the changes in the rules of identity and choice futile.

In market-driven nationalization, the rules of identity and choice for rural residents are changed through market-oriented reform. Rural residents are permitted to engage in a normal land market. Within this market, their appeals can be realized by acquiring the right to negotiate and bargain with the demanders. The rule of range is changed

correspondingly. First, the financial burden faced by the local government in radical nationalization disappears because the purchasing fund is provided by the demanders in the market. Second, the land market is a fully competitive market accessible to all eligible land demanders apart from the local government, preventing the risk of a buyer's market. Third, the privatization of the right of use of rural homesteads is not disrupted by the rural residents' economic power because their identity is transformed from demander to supplier, clearly preventing the exacerbation of social inequality. Fourth, market-driven nationalization is a gradually changing process. A special fund is extracted from the transaction amount earmarked for the security insurance of rural residents who lost their lands, thus minimizing the market risks that rural residents may face. Finally, the essence of market-driven nationalization is to realize the marketization of rural homesteads. One of the ultimate results is the nationalization of rural homesteads, which conforms to the ideology of socialistic China. Therefore, political resistance to this reform mode will be lower than that to radical privatization.

The pilot reform of rural homestead in Chongqing, which is mainly transferring the development right of rural homestead from rural areas to urban areas, mainly promotes urban development through providing more construction quotas. Yet, the proposed market-driven nationalization system can help farmers obtain income from the capitalization of rural homesteads. In addition, the involved land can be used for construction and more transactions under the nationalization ownership, which can attract more capital to be put into rural areas and promote rural development. Another important discussion regarding this new proposed mechanism involves whether it would be beneficial to the improvement of land use efficiency, especially, to the effective utilization of rural homesteads. Certain changes cannot be overlooked, such as the increase of urban per capita living space and plot ratio when idle rural homesteads are incorporated into the entire residential land market. However, it must be acknowledged that quantitative description about the change of land efficiency is rare, which can generate another important research focus for succeeding studies. However, instead of the change of land use efficiency, this research focuses on social equity.

The new proposed mechanism provides farmers with an approach through which they can directly obtain income from the capitalization of rural homesteads, minimizing the possibility of the benefits falling to governments or other organizations that merely control the transaction process. This study also considers social stability. The farmers are endowed with more practical rights to transact their rural homesteads, and ownership will not be privatized, but will be consistent with socialist public land ownership. Furthermore, the ability of settling down in cities, namely, the urbanization

of the rural population, is strengthened by adopting this mechanism because rural migrants have more capital (from their idle rural homesteads), which are used in investments, education, housing, and other services. In turn, the urbanization of the population will stimulate consumption and fuel domestic demand, which, to some extent, can be regarded as the improvement of efficiency induced by the institutional change of land. Finally, the originality and significance of this research includes two features. First, the proposed mechanism protects farmers' interests by providing them with a platform for directly transacting rural homesteads while enduring less interference from government or other organizations. Meanwhile, the ownership of rural homesteads remains consistent with socialist public ownership, which avoids unnecessary social turbulence and enhances the viability of reform in China's current situation. Second, the significance of this study is also rooted in the notion that discussions on formalities of reform should be minimized; instead, attention on the activation of assets should be increased. In this manner, the feasibility of the proposed mechanism is another form of the improvement of land use efficiency. The advantages of market-driven nationalization compared with other reform modes are summarized in Table 3.

<Insert Table 3 here>

## **6. Conclusion**

The reform of the land system plays a significant role in the industrialization and urbanization of China. However, the marketization of rural homesteads differs from the development of the urban land market. In recent years, rapid urbanization has attracted numerous rural migrants to work and live in urban areas, whereas the highly restrictive rural land transfer system has left their rural homesteads unused. The unfair arrangement of property rights and resulting inefficient land use generated increased academic interest. However, only a few studies have attempted to address the essence of the problem, that is, the necessary but unrealized property rights for capitalizing rural homesteads, and many scholars have continued to engage in seemingly endless debates concerning privatization versus nationalization. The present study develops a plan for the capitalization of rural homesteads based on the IAD framework. Compared with radical privatization and nationalization, a market-driven nationalization is shown to prevail because (1) it realizes the marketization of rural homesteads, (2) it avoids the potential risk of widening the gap between the rich and the poor, which occurs with the adoption of radical privatization, (3) it circumvents the heavy financial burden of local

governments, which is a consequence of the adoption of radical nationalization, and (4) it reduces the possibility of ideological conflict.

This study provides an alternative measure for rural homestead reform in China in the form of a conceptual design for validation by future research. However, a reform that offers an appropriate and integrated ownership, which provides all people with a fair chance to realize individual success and social prosperity, should bestow rural residents with the right to trade their residential properties. Moreover, debates over formalities should be minimized or halted to ensure the inclusion of farmers, young rural migrants, and land demanders. Finally, regardless of the mode adopted for the future reform of land property rights (nationalization, privatization, or market-driven nationalization), due attention should be provided to the consequences of the reform rather than to its orientation.

## References

- Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). The colonial origins of comparative development: an empirical investigation. *American Economic Review*, 91(5), 1369-1401
- Acemoglu, D., Johnson, S., & Robinson, J. A. (2002). Reversal of fortune: geography and institutions in the making of the modern world income distribution. *Quarterly Journal of Economics*, 117(4), 1231-1294.
- Bao, H.J., Peng, Y. (2016). Effect of land expropriation on land-lost farmers' entrepreneurial action- A case study of Zhejiang Province. *Habitat International*, 53, 342-349.
- Bao, H.J., Zhu, X.T., Cen, Y.Y., Peng, Y., Xue, J.B. (2017). Effects of social network on human capital of land-lost farmers: A study in Zhejiang Province. *Social Indicators Research*, DOI 10.1007/s11205-017-1592-6.
- Bethell, L. (1998). *The Cambridge History of Latin America*. Cambridge University Press.
- Bo, Z., Ping, L., & Warren, C. M. J. (2015). Housing prices, rural-urban migrants' decisions and their regional differences in China. *Habitat International*, 50(2015), 149-159.
- Burns, E. B., & Charlip, J. A. (2009). *Latin America: An Interpretive History*. World Publishing Corporation.
- Cai, J. M. analysis on the reform of China's modernization, urbanization, and rural land system. *The Economic Frontline*, 2005(1), 7-10. (in Chinese).
- Chen, Y. F., Sun, H., & Liu, Y. S. (2010). Reconstruction models of hollowed villages in key agricultural regions of China. *Acta Geographica Sinica*, 65(6), 727-735 (in Chinese).
- Chen, Z. G., Wang, Q., & Huang, X. J. (2015). Can land market development suppress illegal land use in China. *Habitat International*, 49(2015), 403-412.
- China's urban share of private housing is high, but perhaps not as high as the world

No.1 or No.2 <http://www.soufun.com/news/2007-09-24/1245480.htm>

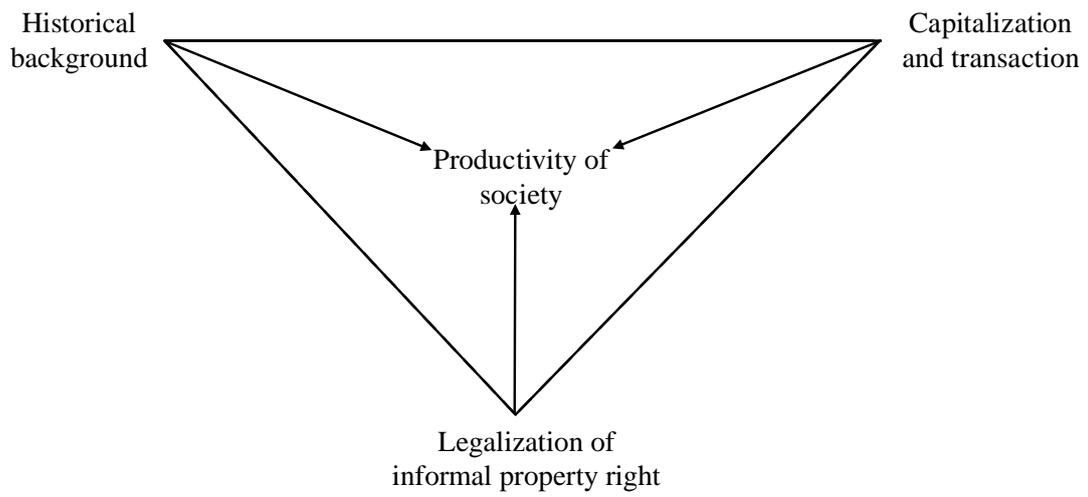
- De Soto, H. (2000). *The mystery of capital: Why capitalism triumphs in the west and fails everywhere else*. Basic Books.
- DeLong, J. B., & Shleifer, A. (1993). Princes and merchants: European city growth before the industrial revolution. *Journal of Law and Economics*, 36(2), 671-702
- Ding, C. R. (2003). Land policy reform in China: assessment and prospects. *Land Use Policy*, 20, 109-120.
- Dolsak, N. & E, Ostrom. (2003). "The challenges of the commons", in: Dolsak & Ostrom (ed.). *The commons in the New Millennium*, MIT Press.
- Dowall, D. E. (1991). Comparing Karachi's informal and formal housing delivery systems. *Cities*, 8(3), 217-227.
- Du, Z. H. (2010). The reform of land conveyance system: mode, problem and suggestion, *Nowadays Economic Research*, 2010 (2), 26-34. (in Chinese).
- Fu, H. T., & Duan. Y. M. (2012). A new exploration of farmland transfer: research on securitized land exchange system, *Agricultural Economy*, 2012 (10), 24-26
- Han, Q. (1997). The preliminary exploration of the reason why Latin America economically lag behind North America. *Word History*, 1997(3), 51-60.
- Hang, Q. H., & Wang, H. J. (2010). The boundary of market mechanism applied in the transfer of rural homestead use right. *Economic Problem*, 2010 (6), 75-78.
- He, X. (2010). *The logic of land property rights: Where should China's rural land system go?* The China University of Political Science and Law Press. (in Chinese).
- Huang, Z. H. (2012). The demand of land rights, rural homestead transfer and the transfer of rural labor force. *Journal of Public Administration*, Vol.9, No.3, July, 2012. (in Chinese).
- Jiang, Y. M., & An, Y. N. (2003). The path dependence and the innovation of the institutional change of China's rural land system. *Strategy and Management*, 2003(03), 54-49. (in Chinese).
- Jinghua Newspaper (2015). Thirty three counties and districts are selected for reform pilots of rural land system. <http://legal.people.com.cn/n/2015/0226/c188502-26597353.html> (accessed on 27 June 2017) (in Chinese).
- Kiser, L., & E, Ostrom (1982). "The three worlds of action: A metatheoretical synthesis of institutional approaches", In: E. Ostrom (ed.), *Strategies of Politics Inquiry*, Beverly Hills, CA: Sage.
- Kissinger, H. (2001). *Does America need a foreign policy?* New York: Simon & Schuster, 2001
- Kong, B. B. (2010). The consideration of the nationalization of rural land. *Legislation and Society*, 2010(08), 231.
- Lai, Y., Chan, E. H. W., & Choy, L. (2016). Village-led land development under state-led institutional arrangements in urbanising China: The case of Shenzhen. *Urban Studies*, DOI: 10.1177/0042098016629325.
- Lai, Y., Peng, Y., Li, B., & Lin, Y.. (2014). Industrial land development in urban villages in China: A property rights perspective. *Habitat International*, 41, 185-194.
- Li, S., & Li, L. M. (2006). Life course and housing tenure change in urban China: a study of Guangzhou. *Housing Studies*, 21(5), 653-670.

- Lin, G. C. S. (2009). *Developing China: Land, politics and social conditions*. New York: Routledge.
- Lin, G. C. S., & Ho, S. P. S. (2005). The state, land system, and land development processes in contemporary China. *Annals of the Association of American Geographers*, 95(2), 411-436.
- Lin, G. C. S., & Yi, F. (January 1- February 14, 2011). Urbanization of capital or capitalization on urban land? Land development and local public finance in urbanizing China. *Urban Geography*, 32(1), 50-79.
- Lin, Y. L., & De Meulder, B. (2012). A conceptual framework for the strategic urban project approach for the sustainable redevelopment of “villages in the city” in Guangzhou. *Habitat International*, 36 (3), 380-387.
- Liu, C. S., (2012). *Property rights and politics: the change of China’s rural land system*. Law Press, 2012, July.
- Liu, F., & Yi, Y.(1998). The analysis on the collective rural land system from the perspective of law. *Agricultural Economy*, 1998(8), 34-35.
- Liu, Y. S., Liu, Y., & Zhai, R. X. (2009). Geographical research and optimizing practice of rural hollowing in China. *Acta Geographica Sinica* 64 (10), 1193-1202. (in Chinese).
- Liu, Y., He, S., & Wu, F. (2010). Urban villages under China’s rapid urbanization: Unregulated assets and transitional neighborhoods. *Habitat International*, 34(2), 135-144.
- Long, H. L., Li, Y. R., & Liu, Y. S. (2009a). Analysis of evolutive characteristics and their driving mechanism of hollowing villages in China. *Acta Geographica Sinica* 64 (10), 1203-1213. (in Chinese).
- Long, H. L., Li, Y. R., Liu, Y. S, Woods, M.,& Z, J. (2012). Accelerated restructuring in rural China fueled by ‘increasing vs. decreasing balance’ land-use policy for dealing with hollowed villages. *Land Use Policy*, 29 (2012), 11-12.
- Long, H. L., Liu, Y. S., Li, X. B., & Chen, Y. F. (2010). Building new countryside in China: a geographical perspective. *Land Use Policy*, 27(2), 457-470.
- Ma, J. J., & Yang, C. X. (2007). The target of the reform of collective rural land system. *Social Science Journal of Jilin University*, 2007(3), 134.
- Ministry of Construction of PRC. (2009). *National village and Township Planning Code*. Ministry of Land and Resources of China (MLRC), 2009. Reports on China’s Landuse Survey and Update in 2008. China Land Press, Beijing.
- Mo, Z. B, & Wu, Y. Z. (2017) Analysis on Chongqing Securitized Land Exchange System from the Perspective of Land Finance. *Proceedings of the 20th International Symposium on Advancement of Construction Management and Real Estate*. Springer, Singapore
- National Bureau of Statistics of China (2016). *China Statistical Yearbook*. Beijing.
- O’Driscoll, G. P., Jr., & Hoskin, L (2003). Property rights: the key to economic development. *Cato Policy Analysis*, (482), 1-17.
- Ostrom, E. (1986). An agenda for the study of institutions. *Public Choice*, 48 (1), 3-25.
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press.

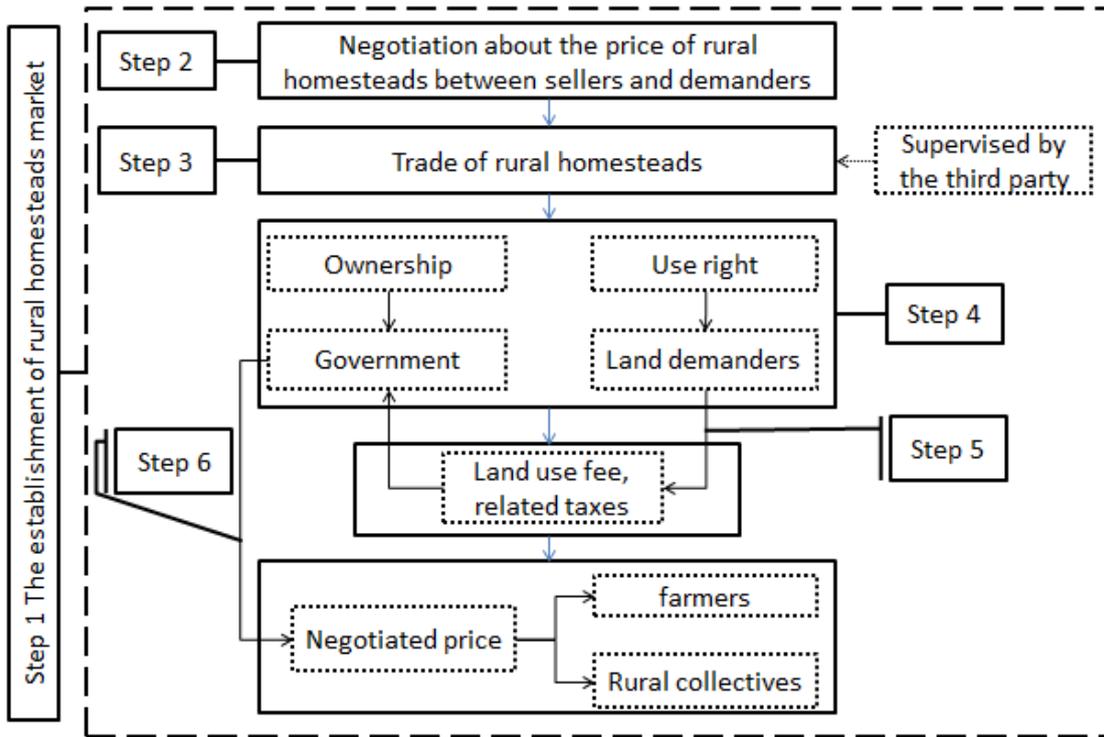
- Ostrom, E. (1999). "Institutional rational choice: An assessment of the institutional analysis", in: P. A. Sabatier (ed.), *Theories of the Policy Process*. Boulder, CO: Westview Press.
- Peng, Y. (2015). A comparison of two approaches to develop concentrated rural settlements after the 5.12 Sichuan Earthquake in China. *Habitat International*, 49, 230-242.
- Peng, Y., Lai, Y.N., Li, X.W., and Zhang, X.L. (2015). An alternative model for measuring the sustainability of urban regeneration: the way forward. *Journal of Cleaner Production*, 109, 76-83.
- Peng, Y., Shen, L. Y., Tan, C., Tan, D. L. and Wang, H. (2013). Critical determinant factors (CDFs) for developing concentrated rural settlement in post disaster reconstruction: A China study. *Natural Hazards*, 66(2), 355-373.
- Peng, Y., Shen, L. Y., Zhang, X. L. and Ochoa, J. J. (2014a). The feasibility of concentrated rural settlement in a context of post-disaster reconstruction: a study of China. *Disasters*, 38(1),108-124.
- Peng, Y., Shen, Q. P., Shen, L. Y., Lu, C. and Yuan, Z. (2014b). A generic decision model for developing concentrated rural settlement in post-disaster reconstruction: A China study. *Natural Hazards*, 71(1), 611-637.
- Posterman, R., Hanstad, I., & Li, P. (1996). Can China feed itself? *Scientific American*, 275(5), 90-96.
- Poteete, A. R., M. A. Janssen & E. Ostrom (2010). *Working together: Collective action, the commons, and multiple methods in practice*. Princeton University Press.
- Rosato Sevens, M. (2008). Peasant and land tenure security in China's transitional economy. *Boston University International Law Journal*, 26, 97-141.
- Sargeson, S. (2002). Subduing "the rural house-building craze": attitudes towards housing construction and land use control in four Zhejiang villages. *The China Quarterly*, 172, 927-955.
- Schwarzwalder, B., Prosterman, R., Ye, J., Riedinger, J., & Li, P. (2002). An update on China's rural land tenure reforms: analysis and recommendations based on a seventeen-province survey. *Columbia Journal of Asian Law*, 16(1), 141-225.
- Siciliano, G. (2012). Urbanization strategies, rural development and land use changes in China: A multiple-level integrated assessment. *Land Use Policy*, 29(2012), 165-178.
- Stavrianos, L. S. (1993). *The Global Disruption*. Commercial Press, 1993.
- Su, S. L., Yang, C. X., Hu, Y. N., Luo, F. H., & Wang, Y. P. (2014). Progressive landscape fragmentation in relation to cash crop cultivation. *Applied Geography*, 53, 20-31.
- Tan, M. H., & Li, X. B. (2013). The changing settlements in rural areas under urban pressure in China: patterns, driving forces and policy implications. *Landscape and Urban Planning*, 120, 170-177.
- Tan, Q. Y., Wang, Y. L., Zhao, Y. et al (2006). The nationalization of collective rural land under the rapid urbanization: A case of Shenzhen. *Urban Planning*, 2006, 161(1), 98-101.
- Tao, R., Su, F., Liu, M., & Cao, G. (2010). 'Race to the bottom' competition through

- negotiated land leasing:: an institutional analysis and empirical evidence from Chinese cities. *Urban Studies*, 47(10), 2217-2236.
- Treiman, D. J. (2012). The “difference between heaven and earth”: Urban-rural disparities in well-being in China. *ScienceDirect*, 30(2012), 33-47
- Wang, H., Wang, L. L., Su, F. B., & Tao, R (2012). Rural residential properties in China: Land use patterns, efficiency and prospects for reform. *Habitat International*, 36(2012), 201-209.
- Wang, Q. (2010). Assessment and introduction of Ostrom’s IAD framework. *Economics Dynamics*, 2010(4), 137-142.
- Wang, Q. X., Zhang, X. L., Wu, Y. Z., & Skitmore. M (2015). Collective land system in China: congenital flaw or acquired weakness. *Habitat International*, 50(2015), 226-233.
- Wang, W. G., & Zhu, Q. Y. (2014). How does the rural homestead enter the market? A study based on the case of rural homestead transaction in Huajia village. *Tribune of Political Science and Law*, Vol. 32, No.3, May, 2014, 93-99. (in Chinese).
- Wang, Y. P., Wang, Y., & Wu, J. (2009). Urbanization and informal development in China: Urban villages in Shenzhen. *International Journal of Urban and Regional Research* 33 (4), 957-973.
- Wen, J. (2010). The way out from the trap of the current land system: allowing land privatization. *China and World Affairs*, (2), 100-113.
- Wen, T. (2009). Why China should not privatize land? In *Chinese red flag papers* (Hongqi Wengao), Vol. 2.
- Williamson, O. E. The new institutional economics: Taking stock, looking ahead. *Journal of Economic Literature*, 38(2000):595
- Wu, C. J. (1997). The new development of rural China. *BEVAS-SOBEG* 1, 101-105.
- Wu, F., Zhang, F., & Webster, C. (2013). Informality and the development and demolition of urban villages in the Chinese peri-urban area. *Urban Studies*, 50 (10), 1919-1934.
- Wu, Y., Zhang, W., Shen, J., Mo, Z., & Peng, Y. (2017). Smart City with Chinese Characteristics against the Background of Big Data: Idea, Action and Risk. *Journal of Cleaner Production*. <http://dx.doi.org/10.1016/j.jclepro.2017.01.047>.
- Xiang, Q. (2009). Analysis of model of land transfer under the principle of coordinated urban-rural development: Chongqing as an example. *Agricultural Economy*, 5, 58-61 (in Chinese).
- Xu, L. (2005). The analysis on the deepening reform of China’s rural land property right system. *Theory and Reform*, 2005, 5(2), 89-92.
- Yan, Y. Q., & Wang, Z. H. (2005). Nationalization: the reform path of the collective rural land system of China. *Journal of Xiangtan University*, 2005, 29(2), 102-107.
- Yang, X. K. (2002). The underlying problems of the China’s reforms: the reform of land system. *Strategy and Management*, 2002(5), 1-5.
- Yao, L., Wei, X. Y., & Zhang, B. (2007). Transfer of rural homesteads in outskirts of Beijing. *China Land*, 2007 (2), 36-39.
- Yu, T. W. A., Wu, Y. Z., Shen, J. H., Zhang, X. L., Shen, L. Y., Shan, L. P. (2015). The key causes of urban-rural conflict in China. *Habitat International*, 49(2015), 65-72.

- Zhang, H. F. (2008). The institutional change of PRC's rural land system: A analysis paradigm of path dependence. *Agricultural Economy*, 2008(01), 95-98.
- Zhang, H. X. (2013). Comparison of land property rights between China and America in 19th Century. Fudan University.
- Zhang, Z. X. (2012). Research on land securitized exchange system, Fujian Normal University, 2012 (in Chinese).
- Zhou, Q., & Liu, S. (1994). Meitan: Yige Chuantong Nongqu de Tudi Zhidu Bianqian. [Meitan: changes in the land tenure system of a traditional agrarian community]. In Q. R. Zhou (Ed.), *Nongcun Biange yu Zhongguo Fazhan, 1979-1989 (Villages transformation and China's development, 1979-1989)*, Vol. 2 (pp. 657-726). Hong Kong: Oxford University Press.
- Zhu, X. H., Cai, T. X., & Chen, L. G. (2009). The explanation of the reform of the transfer system of the use right of rural homestead based on institutional economics. *China Land Science*, Vol. 23, No. 4, April, 2009, 35-42. (in Chinese).
- Zhu, X. H., Chen, L. G., & Fu, J. Q. (2012). Tendency and implication of rural residential land system change. *China Land Sciences*, Vol. 26, No.7, Jul, 2012, 39-43.



**Fig. 1** Conceptual framework of the international institutional changes in land property rights



**Fig.2** The operational mechanism of the market-driven nationalization of rural homestead

**Table 1.** Important guidelines of rural homestead management extracted from No.1 document of CPC Central Committee

Document name	Year	Relevant contents
Opinions on policies to promote farmers' income growth	2004	...actively explore various means for rural non-agricultural construction land to enter the land market...
Opinions on policies to enhance rural governance and improve comprehensive agricultural productivity	2005	...enhance management for rural homestead and construction land, encourage land consolidation and village renovation, promote newly developed rural industry companies to be concentrated in town areas, and improve the utilization ratio of rural land...
Opinions on promoting new socialist countryside construction	2006	...enhance planning and management for rural homestead, save rural construction land, carefully implement renovation of houses and infrastructures, avoid large amount of demolition, which burdens farmers...
Opinions on actively promoting modern agriculture and making solid progress in new socialist countryside construction	2007	...improve rural human settlement environment, implement pilots of village planning, save rural construction land...
Opinions on strengthening agricultural infrastructures, advancing agriculture development and promoting farmers' income growth	2008	...the urban people are restricted to buy rural homestead and rural houses, consolidation of rural homestead should be legally regulated...
Opinions on promoting stable development of agriculture and farmers' income growth	2009	...actively make rural land use planning and rural construction planning, scientifically and reasonably arrange rural construction land and rural homestead, revise standards of rural homestead according to the regional resources, and orderly push forward rural land management reform after perfecting relevant regulations and supporting policies...
Opinions on promoting urban-rural coordinated development and enhancing rural development basis	2010	...promote property rights registration for ownership of rural collective land, and use right of rural homestead and rural construction land; the saved land generated from consolidation of rural homestead and village renovation still belongs to the rural collective...
Opinions on advancing rural technology innovation and continuously enhancing supply abilities of agricultural products	2012	...accelerate rural cadastral survey, carry forward registration and certification for use right of rural construction land including rural homestead; accelerate revision of land management law, and establish sound land management system...
Opinions on accelerating developing modern agriculture and enhancing vitality of rural development	2013	...accelerate cadastral survey of rural land including rural homestead, complete registration and certification for rural land as soon as possible; reform and improve rural homestead system, strengthen rural homestead management, and protect farmers' use right of rural homestead according to the laws...

Opinions on comprehensively deepening rural reform and accelerating modernization of agriculture	2014	...reform rural homestead management system, improve allocation policies of rural homestead; accelerate cadastral survey of rural land including rural homestead...
Opinions on deepening reform and innovation and accelerating modernization of rural development	2015	...conduct pilot reform of rural land expropriation, marketization of rural non-agricultural construction land, and rural homestead system; protect farmers' use right of rural homestead according to the laws, reform the allocation way of rural homestead, and explore new guarantee mechanism of houses for farmers...
Opinions on implementing new development concept, accelerating modernization of agriculture, and realizing the goal of comprehensive well-off	2016	...accelerate registration and certification for use right of rural homestead based on integration of land and house; carry forward pilot reform of rural land expropriation, marketization of rural non-agricultural construction land, and rural homestead system; improve right protection and acquirement of rural homestead...
Opinions on promoting structural reform of agricultural supply side and cultivating new energy for agriculture and rural development	2017	...explore means to utilize idle rural houses and rural homestead and improve farmers' income; allow the saved rural construction land generated from rural homestead consolidation to be used for rural tourism development through dividends and joint operation...

Source: Adopted from No.1 document of CPC Central Committee

**Table 2.** The pros and cons of nationalization and privatization

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	<b>Nationalization</b>	<b>Privatization</b>
<b>Pros</b>	Avoids unnecessary disputes over ideology	Avoids farmers' short-term actions
	Avoids land annexation	Improves land use efficiency
	Farmers obtain a tradable land use right	Realizes the capitalization of rural homestead
	Better sustainable development of agriculture	
	Land use efficiency could be improved	
<b>Cons</b>	Purchasing or expropriation are both unfeasible	Bears the risk of land annexation
	Breaks the promise that CPC pledged to farmers	Conflicted with socialism
		Bears the risk of social security in case of investment failure
	Unable to realize large-scale farming	Purchasing or gifting are both unfeasible

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**Table 3.** Comparison between the market-driven nationalization and others based on the IAD framework

Action arenas and participants	Demands of each arena	The current rural homestead system	The system after direct privatization	The system after direct nationalization	The system after market-driven nationalization
Central government arena (pundits)	Social stability	uncertain	no	yes	yes
	Improvement in people's livelihood	no	uncertain	uncertain	yes
Local government arena (technocrats and officials)	Stability of local finance	yes	no	no	yes
	Development of local economy	yes	uncertain	no	yes
Informal arena (peasants, academics and informal associations)	Social security	yes	no	uncertain	yes
	Capitalization of rural homesteads	no	uncertain	uncertain	yes