

Changing Property-Rights Regimes: A Study of Rural Land Tenure in China

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Abstract

Through two rounds of land contracting, rural households have been allocated a bundle of rights in land. We observe significant differences across villages in the amount of land to which villagers retain a claim and the institutional mechanisms governing the exchange of land rights. This study reveals the perpetuation and expansion of non-market mechanisms accruing to the benefit of village cadres and state officials and only limited emergence of market mechanisms in which households are primary beneficiaries. It identifies factors in economic, political and legal domains that incentivize and enable state officials and local cadres to capture returns from use of land. Relatedly, the study finds differences in conflict over property-rights regimes. Drawing on a pilot survey carried out by the authors in November of 2011 in Shaanxi and Jiangsu provinces (192 households in 24 villages), this paper seeks to explain heterogeneity and change in property-rights regimes over time and across space.

Keywords: property rights; land; reallocation; taking; transfer; rental; China

In the Chinese countryside, ownership of land resides with the collective at either the village or small-group level. With the second round of land contracting in the mid-1990s, households were allocated elements of a bundle of rights in land for a period that was to extend for 30 years. Halfway through this 30-year period, we observe striking heterogeneity in who exercises effective rights to land (the household, village or state) and the mechanisms by which land rights are assigned. Drawing on a pilot survey carried out by the authors in November 2011 in Shaanxi and Jiangsu provinces, this paper takes a first step in generating hypotheses to explain variation in property rights over time and across space.

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The paper adapts the concept of “property-rights regime,” which was first introduced by Edella Schlager and Elinor Ostrom to characterize claims to common-pool resources.¹ A property-rights regime includes both the set of actors who have some claim on the resource and the set of rights to the resource that each actor possesses. These rights are important because they influence whether the resource is allocated to its highest value use as well as who captures the returns from resource use. Within the bundle of rights, we focus on the right of assignment. Rentals (*zhuanchu/zhuanru* 转出/转入), reallocations (*tiaozheng* 调整), village-mediated transfers (*liuzhuan* 流转), and takings (*zheng/zhan di* 征/占地) are mechanisms for reassigning claims to land. While rentals operate through the market, the other mechanisms rely primarily on authority rather than exchange. We address both *de jure* and *de facto* assignments of rights. Among actors, we focus on households, village leaders and state officials as beneficiaries of the exercise of various rights to land.

Our analysis identifies four types of property-rights regimes that reflect distinct combinations of beneficiaries and assignment mechanisms. A central tenet is that the exact configuration of property-rights regimes we observe at any point in time and place is the product of a contest among actors played out in economic, political and legal domains.² Politically more powerful players regularly win the contest by relying on non-market mechanisms. This contest can and does erupt in disputes and protests, as multiple actors seek to assert their claims to land.

The paper contributes to the literature on land and property rights in China in several ways. First, it integrates analyses of multiple types of assignment mechanisms that are commonly analysed in isolation in the existing literature. Second, the paper highlights the continued prominence of non-market mechanisms for assigning land rights, even within the agricultural sector. Third, it disaggregates the state, distinguishing village cadres and local state officials as potential beneficiaries from the assignment of land rights. These actors are constitutionally distinct and derive their power to extract land rents from different formal and informal institutional structures. Following both Masahiko Aoki and Peter Ho, this paper highlights the need for a theory of property rights that recognizes the endogeneity of institutions and captures dynamic institutional complementarities.³ Finally, it takes into account the motives of multiple agents and highlights the distributional implications of property-rights regimes for different beneficiaries.

The paper is organized as follows. The next section introduces the defining features of property-rights regimes (mechanisms and beneficiaries) as well as the data. The third section identifies four distinct regimes in the data and offers hypotheses about the causes. The paper then relates property-rights regimes to

1 Schlager and Ostrom 1992.

2 Aoki 2007.

3 Ibid.; Ho, Peter 2013.

patterns of disputes and protests. It provides several conclusions in the final section.

Mechanisms

There are four main mechanisms for assigning property rights in land: reallocations, rentals, village-mediated transfers, and land takings. Below, we offer a brief definition of each. The first three entail an exchange in use rights to collective land, while the fourth – formal takings – represents a change from collective to state ownership. Of the four, only land rentals are market based; the other three all represent non-market mechanisms. However, each one may direct land to higher-value uses.

Market

Rentals constitute a voluntary, market mechanism for reassigning parts of the bundle of rights in agricultural land. They usually occur between households but also include rental of use rights by the village to individual households. Contracts can be either formal or informal and of fixed or indefinite length.

Non-market

The next three assignment mechanisms rely on authority rather than exchange. Land reallocations entail a redistribution of usufruct rights among households by the village (or small group). In the course of a reallocation, land previously allocated to households is taken back and redistributed among existing as well as any newly formed households, typically on the basis of household size. Households may either gain or lose land involuntarily in the course of the reallocation. The amount (area) of land they are allocated can also remain the same, while the plots they are allocated change. Villages may also use reallocations as an opportunity to reassign use rights to the village collective, which may then rent out the land.

Village-mediated transfers entail the redistribution of land-use rights from households to third parties through the village or small group as an intermediary. End-users are commonly agribusinesses but also include specialized farm households. Households typically sign contracts with the village, which in turn is a signee with the end-user. In some cases, higher levels of government may play a role in organizing the transfers. These transfers may not be completely voluntary on the part of the household and represent a second form of non-market assignment.

Land takings are a third form of non-market reassignment of property rights. They involve the expropriation of collective land by the state or, informally, the village, and thus the loss of endowment by households. A taking may be tied to new infrastructure investment, for example the building of roads, or conversion

of land into non-agricultural uses such as residential or commercial real estate, or industrial parks. In the case of expropriation of farmland by the state, households are entitled by law to compensation based on the agricultural returns to land – not on the value of the land at its highest or best use. Local governments lease land thus acquired at either negotiated or competitive prices, allowing governments to capture the rent generated by selling land for higher-value use. Villages also engage in informal takings outside the regulatory purview of local government land bureaus.

Beneficiaries

We focus on three actors as potential beneficiaries from land use: households, village cadres and local officials. (Data limitations preclude inclusion of end-users like agribusinesses.) Households seek income opportunities from the allocation of labour and land-use rights, with a claim to use rights typically tied to individual registration (*hukou* 户口) in the village. Village cadres and government officials seek to manage land for both policy and personal goals, including rent-seeking.

Data

We draw on data from a pilot survey, conducted by the authors, of household representatives and village cadres covering 192 households in 24 villages in six counties in Jiangsu and Shaanxi provinces. Within each village, eight households were selected randomly. Four villages in each county were drawn to be representative of the county. The counties in each province were selected to be representative of rich, middle- and low-income areas in each province. The two provinces are broadly representative of the coastal and interior regions of China and present notable contrasts. Open-ended interviews were conducted in non-sample households and villages in both provinces in advance of the pilot survey. The primary purpose of the pilot was to collect information on major changes in household land, village-level processes involving these changes, county interventions in land management, and disputes that arose in this context, going back to the second round of land contracting beginning in 1996 and continuing through 2011.⁴ Overall, our household- and village-level data provide a mutually consistent picture of changes in land and property rights over this period.

Table 1 provides a snapshot of household land endowments for 1996 and 2011 for Shaanxi and Jiangsu. We divide land into four basic types: agricultural, forestry, uncultivated and residential land. We define a household's land endowment as land acquired through the allocation of land rights to households by either the village or small group. Households also access land through contracting in from

4 One shortcoming of the survey was that it did not collect information on rentals in earlier years. We draw on data from other surveys to help fill this gap.

Table 1: Landholdings by Province

	Land in 1996			Land in 2011				
	<i>Ownership Type</i>	<i>Average per Household</i>	<i>Allocated to household (mu)</i>	<i>Ownership Type</i>		<i>Total Access</i>	<i>Average per Household</i>	
	<i>Allocated to household (mu)</i>	<i>Allocated (mu)</i>		<i>Contract from village (mu)</i>	<i>Contract from other household (mu)</i>	<i>(mu)</i>	<i>Total (mu)</i>	<i>Allocated (mu)</i>
Shaanxi								
Agriculture	862.0	9.0	873.2	47.9	137.9	1054.9	11.0	9.1
Forestry	797.8	8.3	797.8	223.0	25.0	1045.8	10.9	8.3
Uncultivated			169.0	0.8		169.8	1.8	1.8
Residential	74.1	0.8	73.2	1.2	2.9	77.3	0.8	0.8
Total	1733.9	18.1	1913.2	272.9	165.8	2347.8	24.5	19.9
Jiangsu								
Agriculture	532.9	5.6	325.7	0.0	6.3	332.0	3.5	3.4
Forestry	12.5	0.1	12.5	0.2	0.0	12.7	0.1	0.1
Uncultivated			0.0	0.0		0.0	0.0	0.0
Residential	58.6	0.6	53.7	1.4	2.9	55.1	0.6	0.6
Total	604.0	6.3	391.9	1.6	9.2	399.8	4.2	4.1

Source:

Authors' survey.

the village or other households for a fee. Households may also contract land out. They lose land endowment through takings and village-mediated transfers. By definition, the amount of land that a household has available to use will be equal to its endowment plus any land rented or contracted in, minus any land contracted out.

In 1996, total land endowments in Shaanxi were on average three times larger than they were in Jiangsu (18.1 versus 6.3 *mu*) and more than 50 per cent larger with respect to agricultural land (9.0 versus 5.6 *mu*). These differences were further magnified by the gap in forestry land. Some of Jiangsu's disadvantage was offset by the fact that nearly two-thirds of its agricultural land was paddy, which enjoys higher productivity, and by a longer growing season that allows for multiple cropping. Between 1996 and 2011, differences in land endowments between the two provinces widened, primarily through changes in agricultural land. In Shaanxi, it remained more or less the same, but in Jiangsu, it fell from 532.9 *mu* to 325.7 *mu*, a decline of 40 per cent.

Property-Rights Regimes

Data from the pilot study allow us to examine change over time in six regions/periods for the two provinces of Jiangsu and Shaanxi over the years 1996–2000, 2001–2005, and 2006–2011. Recalling the definition of a property-rights regime as embodying distinct combinations of assignment mechanisms and beneficiaries, the study identifies four specific regime types: non-market/household; non-market/state; non-market/state and village; and, finally, fully mixed (that is, both market and non-market assignment with diverse beneficiaries). [Figures 1 and 2](#) use both village- and household-level data to provide a visual representation of the property-rights regimes found in each region/period. [Tables 2 and 3](#) correspond to the figures.

In order to explain the emergence of distinct regimes, we develop hypotheses reflecting different combinations of four main causal factors: off-farm labour-market opportunities for household labour, administrative targets facing local officials and village cadres, legal constraints on land reallocations, and demand for land in non-agricultural uses. [Table 4](#) shows how the factors – in economic, political and legal domains – intersect to shape regime type. The following sections relate regimes and causal factors in detail.

Regime 1: non-market mechanism with household beneficiaries

The first period (1996–2000) in Jiangsu and the first (1996–2000) and second (2001–2005) periods in Shaanxi reflect a single property-rights regime: non-market mechanism with households as the primary beneficiary ([Figures 1 and 2](#)). The non-market mechanism that dominates is reallocations. [Table 2](#) presents village-level data to show that between 1996 and 2011, 35 reallocations were carried out in total, with more than half occurring between 1996 and 2000. On average, villages

Figure 1: **Property-Rights Regimes: Village Data**

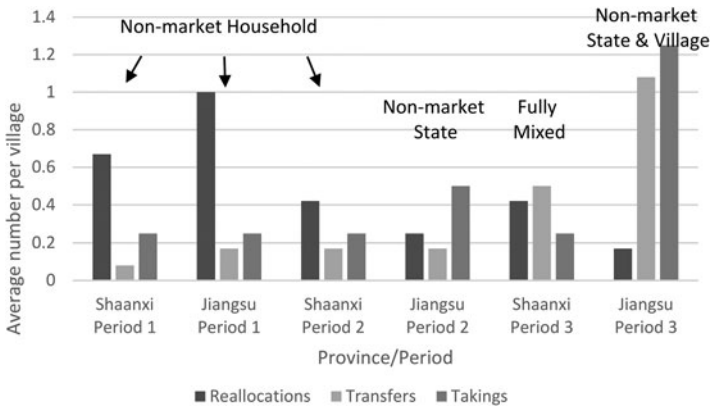
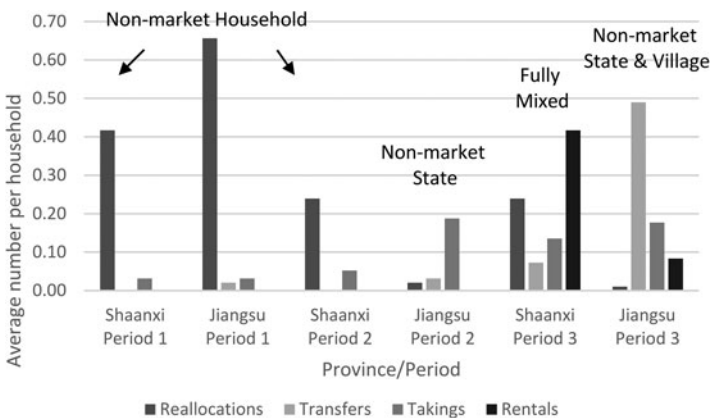


Figure 2: **Property-Rights Regimes: Household Data**



carried out 1.5 reallocations, with only five of 24 sample villages reporting no reallocation at all. Reallocations, on average, entailed approximately 67 per cent of village land. The decision to reallocate was most commonly made by the local government (19/35) or the village (10/35), and the single most important reason for the decision was expiration of land contracts issued during the first round of land contracting and the initiation of the second round.

Table 3 provides data at the household level. Altogether, households reported 152 changes as a result of reallocations since 1996, usually tied to changes in household size. The number of affected households was slightly larger in Shaanxi than in Jiangsu. In half (75/150) of the cases for which we have complete information, households experienced an increase in the land they were allocated; in more than a third (54/150) of the cases, they reported a reduction, and in 21 cases, there was no change in the amount of land allocated, but the plots they

Table 2: Number and Frequency of Land Changes by Province (Village Data)

	1996–2000	2001–2005	2006–2011	1996–2011
Shaanxi				
Reallocations	8	5	5	18
	0.67	0.42	0.42	1.50
Transfers	1	2	6	9
	0.08	0.17	0.50	0.75
Takings	3	3	3	9
	0.25	0.25	0.25	0.75
Sub-total	12	10	14	36
	1.0	0.8	1.2	3.0
Jiangsu				
Reallocations	12	3	2	17
	1.00	0.25	0.17	1.42
Transfers	2	2	13	17
	0.17	0.17	1.08	1.42
Takings	3	6	15	24
	0.25	0.50	1.25	2.00
Sub-total	17	11	30	58
	1.42	0.92	2.50	4.83
Total	29	21	44	94

Notes:

The top number is the total number in a province and the bottom number is the average number of incidents per village.

Source:

Authors' survey.

were allocated changed. In this regime, both village-mediated transfers and land takings are relatively rare events.

Regime 1: hypothesized driving factors

The non-market household regime described above is most likely to occur when there are limited off-farm opportunities for household labour, cadres face pressure to meet agricultural output targets, legal restrictions on reallocations are weak, and there is little demand for land outside of agriculture (Table 4).

When households have limited off-farm opportunities, demand for farmland to generate income is higher. At the beginning of the household responsibility system, arable land per capita was roughly 1.5 *mu*, there were very few off-farm opportunities, and nearly every household wanted more land to farm. Estimates made on the basis of the National Bureau of Statistics' (NBS) rural household survey for 1996 reveal that, in Shaanxi, wage income per capita was only 197 yuan, or 17 per cent of total household net income per capita. In Jiangsu, wage earnings were 1,191 yuan, or five times larger, but this represented only one-third of total household income per capita. James Kung and Shouying Liu link early reallocations with village decisions, consistent with household

Table 3: Number of Land Changes by Province (Household Data)

	1996–2000	2001–2005	2006–2011	Total
Shaanxi				
Rentals*			40	40
Reallocations	40	23	23	86
Transfers	0	0	7	7
Takings	3	5	13	21
Jiangsu				
Rentals*			8	8
Reallocations	63	2	1	66
Transfers	2	3	47	52
Takings	3	18	17	38

Notes:

Rental is the number of occurrences of renting-in land in 2011 as reported by households. The total number of households per province is 96.

Source:

Authors' survey.

Table 4: Factors Determining Regime Type

Factors (domains)	Property-Rights Regime			
	1. Non-market household	2. Non-market state	3. Non-market state and village	4. Fully mixed
Off-farm labour market (economic)	–	~	+	+
Administrative targets (political)	+	+	+	+
Legal constraints on reallocations (legal)	–	~	+	+
Demand for non-agricultural land (economic)	~	+	+	~

Notes:

Nature of factor: – weak; ~ emerging; + strong.

preferences, to accommodate changes in population (labour supply).⁵ Limited off-farm opportunities and strong household demand for agricultural land likely shaped the non-market household regime found in Jiangsu in period 1 and in Shaanxi in periods 1 and 2.

Cadre pressure to fulfil central government grain quotas also shaped the non-market household regime. Quotas were officially eliminated only in 2003–2004, midway through period 2.⁶ On the margin, village cadres may have reallocated land among households with an eye to facilitating grain quota fulfilment.⁷

5 Kung and Liu 1997.

6 Li, Wang and Jia 2011.

7 Brandt, Rozelle and Turner 2004.

Moreover, local “use-it-or-lose-it” rules enforced by village cadres, in conjunction with generally high demand for agricultural land, likely reinforced household perceptions that land rights were insecure and so may have discouraged rentals among households. Resulting inefficiencies in land use among households may have provided village cadres with additional incentives to resort to non-market mechanisms to reallocate land.

Before the mid-1990s, the formal legal framework governing rural land allowed reallocations to assign rights. In 1993, the State Council began to promote restrictions on the common practice of reallocating land. Such restrictions came into force gradually over time with the 1998 Land Management Law (LML) and 2002 Rural Land Contracting Law (RLCL).

Finally, in the sample counties and villages, demand for non-agricultural land was modest in the early periods.

Regime 2: non-market mechanism with state beneficiaries

The second period (2001–2005) in Jiangsu reflects the emergence of a new property-rights regime: non-market mechanism with state beneficiaries (Figures 1 and 2; Tables 2 and 3). Reallocations dropped off sharply in Jiangsu after 2000, with only three cases reported at the household level,⁸ and transfers occurred only rarely in this regime. The non-market mechanism that dominates is takings.⁹

Land takings occurred regularly in our Jiangsu sample of villages and households beginning in 2000, with only rare occurrences prior to 2000. Altogether, there have been 33 land takings reported at the village level since 1996, or an average of 1.4 per village (Table 2). One-third of the villages report no land takings, and so, conditional on having a land taking, the average is 2.1 takings per village. Three or more land takings occurred in 20 per cent of the villages. Land takings were nearly three times as likely to occur in Jiangsu than in Shaanxi. This difference in frequency also widened over time. An average taking involved 86 *mu*, in the course of which 109 households per village lost land. For villages experiencing takings, a total of 177 *mu* per village was taken, and 226 households lost land. This represents 20 per cent of total land in affected villages. Nearly 90 per cent of the lost land had been used for agriculture, with the rest largely residential. Almost 80 per cent of the land taken was reportedly used for “public” purposes such as roads and railways, and 20 per cent was used for commercial purposes.

Among our 192 sample households, 59 land takings were reported altogether: 6 in period 1, 23 in period 2, and 30 in period 3. Fully two-thirds (38/59) of the

8 The few reallocations that occurred in Jiangsu in period 2 were likely related to land takings and entailed the reassignment of remaining agricultural land within the village or small group after the taking.

9 Land rentals may have become more common in this period. The pilot survey did not collect information on land rental for earlier periods, but surveys for Jiangsu and other coastal provinces covering the same years suggest rental rates in the vicinity of 8–10 per cent of land allocated to households. See Deininger and Jin 2009; Tian and Jia 2004. Our data indicate that the few rentals in Jiangsu were almost entirely limited to exchanges among relatives.

takings reported by households occurred in Jiangsu. On average, a household that lost land in the course of a taking experienced a reduction in its land endowment of 2.9 *mu*. The median amount of land that households lost, 1.1 *mu*, is more consistent with the village estimate, suggesting that a few outliers may explain the difference.

The survey shows that local government actors were important decision makers in land takings. A majority of the 33 land takings reported in the village survey were authorized by the county (29/33). This is consistent with reports that most of the takings were for public purposes such as the building of roads, widening of railroads, etc. The few reports of land takings authorized by the township or village are indicative of informal takings beyond the purview of the county land resources bureau.

The data allow us to further differentiate two key issues relating to compensation for land takings: who decided the compensation and the level of compensation. For the vast majority (29/33) of takings reported at the village level, we have information relating to compensation. First, with respect to decision making about compensation, the village decided key parameters in roughly half the cases (15/29) and higher-level authorities in the other half (14/29). Compensation was either in the form of a single payment or annual payments. Where a single payment was made, average compensation per *mu* rose over time, with the average compensation per *mu* exceeding 20,000 yuan by the end of the period.

In sum, land takings took off beginning in period 2 in Jiangsu. Affected villages lost roughly one-fifth of their (mainly agricultural) land. Most takings occurred at the direction of the local government, reportedly for public purposes, and compensation reflected the agricultural use-value of the land.

Regime 2: hypothesized driving factors

The non-market state regime is most likely to occur where off-farm opportunities for household labour are more readily available, cadres face pressure to meet a range of targets and unfunded mandates, legal restrictions on reallocation are beginning to take hold, and there is strong demand for land outside of agriculture (Table 4).

Off-farm labour emerges as an important factor in period 2 in Jiangsu. By 2003, in the middle of period 2, only about one-third of the Jiangsu labour force was still employed in the primary sector compared to more than half in Shaanxi. The average off-farm wage income of rural households in Jiangsu was 2,189 yuan, more than half of total household income. By comparison, average wage income in Shaanxi was only 616 yuan, 37 per cent of total income as of 2003.¹⁰ These indicators reflect the changing dynamics of off-farm employment

10 NBS 2011.

opportunities and may help explain the sharper drop in reallocations in Jiangsu with declining household demand for land compared to Shaanxi in period 2. Moreover, before the abolition of the agriculture tax and prior to the introduction of agricultural subsidies paid to households in 2004, the “farmers’ burden” made agriculture less profitable and often resulted in abandoned (*paohuang* 抛荒) land in Jiangsu.¹¹

The non-market state regime that emerges in Jiangsu also reflects sources of growing demand for *non*-agricultural land, including takings for both public and industrial/commercial purposes. We begin by simply highlighting the existence of demand for land for non-agricultural uses, which has grown with rapid urbanization, industrial expansion and China’s huge investments in infrastructure, notably, highways. In Jiangsu, completed kilometres of highway increased 145 per cent between 1996 and 2003, compared to only 24 per cent in Shaanxi.¹² Industrial and commercial construction increased as well. By 2003, in the middle of this period, Jiangsu was 47 per cent urban. The comparable figure for Shaanxi was 33 per cent. Thus, economic factors, particularly demand for land in a range of non-agricultural uses, were important drivers of the non-market state property-rights regime.

A related political factor in Jiangsu, the assignment of land conveyance fees (*tudi churang jin* 土地出让金) to the fiscal accounts of local governments beginning in 1998, reinforced economic incentives to convert land from agricultural to non-agricultural uses. This policy followed the implementation of fiscal reforms that reduced the local government’s share of revenue from income and other taxes. Land conveyance fees by the end of the period (2005) reached 100 billion yuan in Jiangsu.¹³ Unfunded mandates for local officials reinforced these incentives. Local governments also manipulated land conversions to meet other targets, including attracting investment.¹⁴ Together, these political factors heightened incentives for local governments to engage in land takings.

In the legal domain, the framework governing land takings gave the state a monopoly over the conversion of rural to urban land. Moreover, the 1998 LML defined compensation levels paid to rural households in terms of agricultural-use value – not market value – creating rents for state officials to capture from land transactions.¹⁵ This legal framework for land takings is laid out in

11 Interviews with village cadres, Jiangsu, 2011.

12 NBS 2011.

13 “Jiangsu sheng 2005 nian churang tudi shouru qian yi yuan” (Jiangsu province 2005 land conveyance income 100 billion), Xinhua, 20 February 2006, http://news.china.com/zh_cn/news/100/11038989/20060220/13109325.html. Accessed 9 August 2016.

14 Local governments did not exclusively seek land conveyance revenue. They made some land available at low, negotiated prices in order to attract investment. Local officials faced quantitative targets for attracting investment to the jurisdiction (*zhao shang yin zi*), since investment in industry could generate growth in VAT and other tax revenues (Whiting 2011). Through 2002, 86% of land conveyance took place at negotiated prices as opposed to prices set by auction or open bidding, but in 2002 and 2006, the centre issued directives to limit land leasing at low, negotiated prices (Lin and Ho 2005).

15 The difference between the price received from developers and the compensation paid to farmers less any government investment in the land, e.g. sewage, water, roads, etc., represents the “rent” the state captures.

Articles 47–55 of the LML, which shaped the emergence of the state-centred property-rights regime in Jiangsu in period 2. Given contemporary legal institutions, it was difficult for households to challenge the legality of even unsanctioned or under-compensated state land takings.

At the same time in the agricultural sector, “30 years, no change” – the legal principle that farm households should control plots allocated to them in the second round of land contracting for the next 30 years – became more widely accepted after the passage of the LML in 1998 and RLCL in 2002, early in period 2. Surveying farm households, Roy Prosterman et al. report that the “30-year no-readjustment policy” was known by 90 per cent of those surveyed.¹⁶ In our survey, the figure is 83 per cent. Klaus Deininger and Songqing Jin address legal knowledge on the part of village cadres and show that “reallocation is significantly less likely in settings where village leaders are well aware of the content of the RLCL.”¹⁷ These findings suggest that the passage of the LML and RLCL, in conjunction with declining household demand for land, reduced the likelihood of reallocations.

Regime 3: non-market mechanisms with state and village beneficiaries

The third period (2006–2011) in the Jiangsu region reflects the emergence of a more complex property-rights regime relying on non-market mechanisms with both state and village beneficiaries (Figures 1 and 2; Tables 2 and 3). State land takings that reduced collective land endowments continued apace. Most takings occurred in 2010. In addition, village cadres became more active players in the management of any remaining collective land through village-mediated land transfers.¹⁸

Village-mediated land transfers emerged in period 3 as a fairly new phenomenon, with 19 of the 26 reported by our sample of villages occurring after 2005. Furthermore, such transfers were much more prominent in Jiangsu than in Shaanxi. At the household level, respondents reported that since 1995 they had given up their use rights to land through village-mediated transfers on 59 occasions. Out of these, 54 occurred after 2005 and mostly in Jiangsu (47/54); a majority of these transfers (40/54) occurred in a single year, 2011. On average, a land transfer involved 2.8 *mu*.

In a majority of the cases, the transfers were organized by either the village or small group, followed by a smaller number of cases (12/66) in which higher levels of government played an organizing role. The use rights were typically

16 Prosterman et al. 2009.

17 Deininger and Jin 2009, 36. In our survey, only one in 24 village cadres correctly responded to all four questions testing knowledge of rural land rights.

18 Information on village-mediated transfers comes exclusively from the household-level survey owing to a limitation in the design of the pilot village-level survey. In our village summary in Table 3, we conservatively treat all household transfers that occurred in the same year as a single transfer. This leads to a lower-bound estimate of the total number of transfers that might have occurred.

transferred to the village, which in turn signed contracts with the third party. In 57 out of the 66 cases, the land was used for agricultural purposes, but it was used for non-agricultural, commercial or other purposes in the remaining nine cases.¹⁹ Formal contracts were inked in more than 90 per cent of the transfers since 2005. Payments to households were typically on an annual basis, with lump-sum payments made in only a few cases. For those contracts in which payments were annual, the mean (median) payment was 1,469 (695) yuan. There are a number of large outliers, and the median is more reflective of the compensation. What we do not know is how much compensation the village or small group may have received as part of the transfer to the end-user.

In one case, village cadres, led by the village Party secretary, mobilized 220 households (about a quarter of all villagers) to transfer nearly 900 *mu* of land to the village for the duration of the 30-year land contract through the year 2026 in order to establish a village-run tea plantation.²⁰ (Similar tea plantations in the same region were also developed through village-mediated transfers and were operated by agribusiness investors from Taiwan.) According to the Party secretary, transfers back to the village were voluntary (*liuzhuan gei jiti zhong cha nonghu meiyou bu yuanyi de qingkuang* 流转给集体种茶农户没有不愿意的情况), since most labour in the village was engaged in either local or non-local off-farm employment. The village contracted back villagers' land and made annual payments to participating villagers of 400 yuan per *mu* for paddy land and more than 300 yuan per *mu* for dry land. The village itself became a residual claimant in the operation of the tea plantation.

It is noteworthy that in nearly half of the most recent transfers reported in the pilot survey, payments to households were in arrears. So, although decisions about land transfers were reported to have been participatory, with terms agreeable to villagers, payment arrears point to potentially important problems in the transfers. Households may not have been able to exit these contractual agreements, effectively resulting in loss of households' land endowments. The village itself became a dominant player in the property-rights regime.

Regime 3: hypothesized driving factors

The non-market state and village regime is likely to occur where off-farm opportunities for household labour are the major source of household income and employment, cadres face pressure to promote scale agriculture, legal restrictions on reallocations are well established, and there is strong demand for land outside of agriculture (Table 4).

In the economic domain, as off-farm opportunities increase, household demand for farmland continued to fall off; this happened more quickly and

19 In Table 4, village-mediated transfers for industry are excluded. They can be thought of as informal takings.

20 Interviews with village cadres, Jiangsu, 2011.

completely in Jiangsu than in Shaanxi. In the pilot study, village cadres reported the number of households engaged exclusively in agriculture and the number engaged in off-farm activity at the end of period 3. In the Jiangsu sample, as of 2011, the share of households working exclusively in agriculture was only 15 per cent; it was two and a half times higher in Shaanxi (37 per cent). Conversely, the share of households working in non-agriculture, either exclusively or in both agriculture and non-agriculture, was 85 per cent in Jiangsu and 63 per cent Shaanxi. Where off-farm opportunities were plentiful, and household demand for land was low, cadres responded through village-mediated transfers.

In principle, land rentals could have helped to eliminate imbalances and contributed organically to consolidation of farm size and a shift to higher-value uses in agriculture. Both consolidation and higher-value crops entail investments in the land predicated on secure property rights from the perspective of the renter. However, “use-it-or-lose-it” norms imposed by cadres, or concerns of possible predation by village or township officials that would put these investments at risk, likely undermined the expansion in the role of the market and supported village-mediated transfers as the solution to keeping arable land in cultivation.

Political factors, as reflected in a range of targets imposed on local cadres, also contributed to the emergence of the new property-rights regime in Jiangsu in period 3. One such factor was food security. The importance of land to food security gained renewed attention when grain output fell between 1998 and 2004 as a result of the declining returns to grain production. One response by the Ministry of Agriculture was to promote land concentration and large-scale farming. Some sub-national governments responded to central government signals by setting specific targets for consolidating land through village-mediated land transfers.²¹ Transfers were not completely voluntary, and households could not exit from land-transfer contracts.²² Qian Forrest Zhang, Qingguo Ma and Xu Xu argue that village authorities used transfers (what they refer to as reverse renting and subcontracting) “to dispossess farmers of their contracted land without their consent, using coercive means when necessary and then sub-contract[ing] the land for higher returns, often for non-agricultural use, while pocketing benefits for themselves in the process.”²³ Administrative targets appear to be associated with non-market mechanisms (here, transfers) to assign land rights.

Similarly, informal takings – i.e. those under the regulatory radar – may have been a response to restrictive quotas on rural-to-urban land conversion. The trend of declining grain production led the central leadership in 2008 to declare a “red line,” mandating that a minimum of 1.8 billion *mu* (120 million hectares) of arable land be maintained. The centre sought to limit land conversions by

21 “Zhuanjia: buneng yi wo feng da gao tudi liuzhuan xia zhibiao jiakuai liuzhuan” (Expert: can’t go in for land transfers and set targets to speed up transfers like a swarm of bees), Sina.com, 28 November 2008, <http://news.sina.com.cn/o/2008-11-28/082314799479s.shtml>. Accessed 9 August 2016.

22 Peking University National School of Development Comprehensive Research Group 2012.

23 Zhang, Ma and Xu 2004, 1067.

more tightly regulating land. The Ministry of Land Resources established a “national blueprint,” dividing land into distinct categories in which urbanization was prioritized, encouraged, limited or forbidden.²⁴ Formally, local governments faced restrictive quotas for conversion of arable land to construction land. They also faced new minimum household compensation levels, which gradually increased over time but which remained below market values.

Strict administrative limits on land conversions, while they may have slowed the pace of formal state land takings, may also have led to more informal or illegal conversions, in some cases occurring under the guise of transfers. An example from a village where we conducted in-depth interviews is illustrative. In 2010, village leaders signed a contract with a film production company to rent 350 *mu* of land for the construction of movie sets. None of the land, which came from multiple small groups in the village, had been approved for non-agricultural use, but an application to the land management bureau for the legal conversion of only 13 *mu* (of the 350 *mu*) was in process. Limits on official land conversion made it difficult for projects to be included in the land planning process of higher-level governments. Instead, village leaders transferred land back from villagers and rented it to the film company. Local residents reported payments of 600–800 yuan per *mu* (depending on the quality of the land for farming) in annual rental payments from the village. The village received about half of its 1.2 million yuan in village annual fiscal revenue from renting out assets (primarily land) to the film company and other end-users. Here, the village was a dominant player receiving financial benefits from the informal conversion of land to non-agricultural uses.

Further policy changes, particularly the rural tax-for-fee reform, including the elimination of both township levies (*tongchou* 统筹) and village-retained fees (*ti liu* 提留), and the subsequent abolition of the agriculture tax directly affected administrations at the lowest level of the party-state hierarchy, especially townships and villages. Despite the increase in inter-governmental fiscal transfers to townships, these transfers did not fully offset the decline in revenue experienced by local governments. In this context, townships were likely to be complicit in formal and informal land takings by both higher-level governments and subordinate villages as a means of generating revenue. Land has taken on new value for rural collectives as well. With the loss in fiscal revenue, land in both agricultural and non-agricultural uses has become increasingly valuable to villages and small groups as a source of local revenue. Loren Brandt and Linxiu Zhang identify an increase in revenue derived from rentals and sales of village land.²⁵ Lanchih Po describes how village collectives organize new corporate forms to informally convert rural land to non-agricultural uses.²⁶ Informal takings allow collectives and their members to capture the gains from shifting land to higher-

24 McBeath and McBeath 2010; Ho, Samuel P.S., and Lin 2003.

25 Brandt and Zhang 2012.

26 Po 2008.

value uses, substituting for losses in fiscal revenue. The quest for local revenue sources remained an important driver of not only village-mediated transfers but also formal state land takings that continued throughout period 3. Province-wide figures show that land conveyance fees assigned to local government reached 632 billion yuan in Jiangsu in 2011. For the same year in Shaanxi, they totalled only 24 billion yuan.²⁷ Fiscal pressures, along with targets for land consolidation and restrictive quotas on the conversion of arable land, interact with high demand for non-agricultural land to increase land takings, both formal and informal.

In the legal domain, formal land law appears to support rentals on the part of individual households. According to the RLCL, farm households have the right to transfer (*zhuanbao* 转包), lease (*chuzu* 出租), exchange (*huhuan* 互换), or permanently transfer (*zhuanrang* 转让) their land within the agricultural sector (Article 32) and to receive compensation for the exchange of these rights (Articles 32 and 36). The RLCL, along with related policy initiatives, makes exchanges more acceptable at the same time as reallocations are formally discouraged. With the law's emphasis on rights to transact land within the agricultural sector, some farm households may be able to capture returns from their investments in land. However, formal household land rights are weakly implemented. In interviews, village cadres in Jiangsu describe "preventing uncultivated land" as an explicit evaluation target. Cadres strived to meet that target by "taking back" land from households that did not actively farm. In interviews conducted in 2011, Jiangsu villagers reported that they were not allowed to fallow their land (*buyunxu paohuang* 不允许抛荒) and that they could not rent their land to outsiders (*tudi liuzhuan xieyi bixu tongguo jiti buneng he wai ren sixia qian xieyi* 土地流转协议必须通过集体不能和外人私下签协议) – despite the fact that both are implicitly or explicitly permitted by the 2002 RLCL.²⁸ These limitations on household land rights likely limit the extent of land rental markets in these communities, and transfers appear to be a village-led alternative.

Regime 4: mixed property-rights regime

The third period (2006–2011) in the Shaanxi region saw the emergence of a fully mixed property-rights regime. What is most notable about Shaanxi compared to Jiangsu in period 3 is the importance of market mechanisms in tandem with non-market mechanisms (Figure 2, Table 3). Specifically, land rentals among households constitute an alternative, market mechanism for reassigning parts of the bundle of rights in agricultural land.

Through the survey, we obtained household-level information for 2011 on all current arrangements involving either the contracting in or contracting out of

27 "Shaanxi qunian mai di 243 yi" (Shaanxi land sales 24.3 billion), Sina.com, 28 September 2012, <http://news.sina.com.cn/c/2012-09-28/122025274526.shtml>. Accessed 9 August 2016.

28 Interviews with villagers, Jiangsu, 2011.

land. The majority of agricultural land farmed by households in our survey was obtained through the allocation of collective land from the village or small group to the household; however, land contracted in either from the village or from other households represents nearly one-sixth of agricultural land farmed in the sample. Shaanxi and Jiangsu present contrasting patterns: in Shaanxi, agricultural land contracted in by households either from the village and from other households represents 4.5 and 13.1 per cent, respectively, or 17.6 per cent of total agricultural land under household management. Households also contracted from the village more than 20 per cent of the total forestry land. On the other hand, in our Jiangsu sample there was no contracting in of land from the village, and the percentage of all land contracted in from other households was a meagre 1.9 per cent.

Altogether, there were 48 contracts in 2011 to rent in land, involving 30 households (15 per cent of all households) in the sample. As suggested by the estimates reported above, this activity is much more prominent in Shaanxi and accounts for the majority of contracts (40/48) and households (26/30). This works out to be slightly less than 30 per cent of all households sampled in Shaanxi, but only 4 per cent in Jiangsu (and most rentals in Jiangsu took place in one village). The average amount of land covered by these contracts is 8.5 *mu*, with the amount four times larger in Shaanxi than in Jiangsu (10 *mu* versus 2.2 *mu*.) Most of these cases involved renting land from other households. In Shaanxi, 26 per cent of these contracts were with parties who were neither relatives nor acquaintances; in Jiangsu, the comparable figure is zero, suggesting limitations on market-based exchange. In slightly more than a third of the contracts, households contracted in additional land from either the village or small group. This was observed exclusively in two counties in Shaanxi and not at all in Jiangsu.

In the full sample, there were fewer instances of renting out land than renting in land (39 contracts to rent out land versus 48 contracts to rent in land), with 30 households renting out land, and some reporting multiple rental contracts. The cases are fairly evenly divided between the two provinces. The average amount of land covered by the contract was only 1.6 *mu*, much smaller than the average size of the land rented in. The average amount of land under contract was larger in Shaanxi than in Jiangsu (2.2 *mu* versus 1.0 *mu*). In all three sample counties in Shaanxi, households typically rented out to other households. In Shaanxi, the number of households involved in renting in was greater than the number involved with renting out; this situation may have occurred when entire families left the village but retained their land and *hukou*. In Jiangsu, renting out included both renting out to other households and renting out to the village. The latter case is concentrated in a single sample county and most likely captures a phenomenon similar to village-mediated transfers.²⁹

²⁹ In this village, no household in our sample reported renting in land, but six households reported renting out land to the village.

The property-rights regime in Shaanxi in period 3 was the most complex. Land reallocations, while less common than in period 1, continued to occur at much higher levels than in Jiangsu, with 23 reallocations reported by households in Shaanxi and only one in Jiangsu. Takings increased slightly in Shaanxi, with sample households reporting 13 instances of land takings. Transfers appeared in the reports of sampled households in Shaanxi for the first time in period 3.

Regime 4: hypothesized driving forces

The fully mixed regime is most likely to occur where off-farm opportunities for household labour are more readily available, cadres face pressure to meet a range of targets and unfunded mandates, legal restrictions on reallocation are beginning to take hold, and there is some demand for land outside of agriculture (Table 4).

Off-farm labour markets influence household demand for agricultural land. Recent studies suggest that off-farm labour opportunities are correlated with the renting out of land by households.³⁰ Zhang, Ma and Xu similarly relate renting out to non-local, or migratory, off-farm employment.³¹ In sample counties where land rentals among households were common, they served to balance local demand and supply of agricultural land among households, possibly reducing popular pressure for reallocations and thus the desire of cadres to carry them out. This effect may be tempered by political and legal factors that also come into play.

Legally, the continued role for reallocations may be surprising in light of the LML and RLCL; however, reallocations may accord with the letter of the law to the extent that they find support among two-thirds of households within a village (RLCL, Article 27).

Politically, continued reallocations may serve several functions: increasingly, they benefit collectives, enabling them to set aside land for revenue generation; they may benefit influential local households with unmet demand for land without the costs of participating in the rental market; and they spread out the costs and possible rewards among households in villages affected by land takings. Village-mediated transfers in Shaanxi in this period likely reflect the same dynamics found in Jiangsu, namely, political pressure on cadres to promote scale agriculture and to take advantage of opportunities to generate revenue for village cadres from a wider range of uses for collective land.

The fully mixed regime also reflects growing demand for land in non-agricultural uses such as expanding public infrastructure. In 2009, in the middle of period 3, highways increased 188 per cent in Shaanxi compared to 2003, the mid-point in period 2. This is consistent with the increase in takings, which were largely for public purposes.

30 Kimura et al. 2011.

31 Zhang, Ma and Xu 2004.

Disputes and Protests

In a final set of observations (Table 5), we examine the relationship between changes in assignment of land rights and disputes over land and consider the economic, political and legal factors shaping land conflict. Fully 35 per cent of all land changes identified by village cadres in the survey resulted in disputes involving households.³²

Land changes are consistently more disputatious in Jiangsu than in Shaanxi. Overall, 47 per cent of land changes reported by village cadres resulted in disputes in Jiangsu, compared to 14 per cent in Shaanxi. In the earliest period in Jiangsu, 65 per cent of land changes, involving reallocations, transfers and takings, resulted in disputes. In the middle period, 55 per cent of land changes, concentrated in state land takings, generated disputes. In the most recent period, 33 per cent of land changes – both takings and transfers – had accompanying disputes, according to cadre accounts. While the percentage of land changes accompanied by disputes declined over time in Jiangsu, the share was consistently higher than in Shaanxi, where no disputes were reported in the early period, and only about 20 per cent of land changes generated disputes in the middle and late periods.

Village cadres in both Jiangsu and Shaanxi reported that households took a range of actions to address disputes, including mediation, petitioning and protest. Households typically took multiple actions in attempting to resolve land disputes. In only 27 per cent of disputes was a single action taken. Strikingly, recourse to the courts was completely absent in cadre accounts of villager disputes over land changes. Moreover, protest, which occurred in 55 per cent of all disputes, was the most common form of recourse reported, while petitioning took place in 42 per cent of disputes, and mediation was attempted in 33 per cent. Villagers in Jiangsu were not only more disputatious than those in Shaanxi but also more contentious: 90 per cent of all protests reported by village cadres occurred in Jiangsu. While in the village-level survey cadres characterized most disputes as resolved, only one of six disputes captured in the household-level survey was considered by household respondents to be resolved – and then not to the satisfaction of the respondent.³³

32 Information on disputes was collected at both the village and household level. There are potential concerns with both types of data. First, household sample size in the pilot survey, eight households per village, is likely too small to produce accurate estimates of the number of disputes. In the survey villages, the average number of households per village is 237 in Shaanxi and 1,096 in Jiangsu; the sample included 3% and .07% of households, respectively. Second, village cadres were asked to provide information on the total number of disputes by type, i.e. disputes related to reallocations, transfers or takings. Ambiguity arose on how the number of disputes should be enumerated: do two households contesting the loss of land in a single land taking represent one dispute, or two? Third, cadres were then asked to provide detailed information on only up to three disputes. This implies that the dispute data provide a lower bound on the total number of village-level disputes. However, it is rare in these data for the same type of dispute to arise in a single year in the same village, suggesting that disputes related to the same land incident are treated as single disputes. Finally, the large number of land transfers initiated only in 2011 means that it may be too early for some disputes to be reflected in the data.

33 At the household level, the survey captured 20 disputes reported by 16 households: four over land takings, two over transfers, 13 over boundaries, and one other dispute.

Table 5: Land Changes and Disputes by Province (Village Data)

	1996–2000	2001–2005	2006–2011	Total	% Disputes
Shaanxi					
Reallocations	8	5	5	18	
Resulting disputes	0	1	0	1	6%
Transfers	1	2	6	9	
Resulting disputes	0	1	2	3	33%
Takings	3	3	3	9	
Resulting disputes	0	0	1	1	11%
Total	12	10	14	36	
% disputes	0%	20%	21%	14%	
Jiangsu					
Reallocations	12	3	2	17	
Resulting disputes	8	0	0	8	47%
Transfers	2	2	13	17	
Resulting disputes	2	1	5	8	47%
Takings	3	6	15	24	
Resulting disputes	1	5	5	11	46%
Total	17	11	30	58	
% disputes	65%	55%	33%	47%	

Source:

Authors' survey.

In the property-rights regime in Jiangsu during period 1, two-thirds of reallocations resulted in disputes. At the beginning of the early period (1996), more than 40 per cent of labour in Jiangsu was engaged primarily in agriculture. Conflict likely reflected the negative distributional consequences of reallocations for certain households within the village.

By the middle period, conflict had shifted to land takings in the non-market state regime. In takings, conflict likely reflected the legally sanctioned distribution of compensation among household, village and state, particularly the large gap between the value of the land in its new use and the level of compensation received by households. This is corroborated by household-level survey findings, in which compensation payments were the cause of disputes in three-quarters of takings cases.

In the final period, conflict occurred over both takings and transfers in the non-market state and village regime. With respect to transfers, interviews suggest that arrears in payments from the village to the household generated disputes.

Politically, the higher incidence of land disputes and protests in Jiangsu may reflect less consultative governance practices. In the earliest period, households in Jiangsu and Shaanxi reported participating in meetings about reallocations at similarly high rates; about 90 per cent of households surveyed reported attending meetings in both samples. However, survey respondents in Jiangsu were much less likely than those in Shaanxi to report that meetings addressed issues of concern to households, such as whether to carry out the reallocation, how much land to reallocate, or the basis on which land would be assigned to households.

Similarly, in the middle period (2001–2005), sampled households reported participating in meetings about land takings at similarly high rates: 100 per cent in Shaanxi and 94 per cent in Jiangsu. Once again, however, survey respondents in Jiangsu were less likely than those in Shaanxi to report that meetings addressed crucial issues such as the purpose of the taking, the size of the taking, or the basis on which households would be compensated. As land takings began to increase sharply in the middle period in Jiangsu, only 40 per cent of surveyed households reported that they supported the land takings.

The higher incidence of disputes in Jiangsu likely also reflects the higher value of land and the dominance of local officials and village cadres among the competing interests seeking to capture a share of that value. In sum, the same factors – economic, political, and legal – that shape the emergence of distinct property-rights regimes also drive disputes and protests over land.

Conclusion

This study provides a framework for analysing changes in property rights over time and space in rural China. Central to the framework is the notion of a property-rights regime, defined in terms of distinct combinations of beneficiaries and assignment mechanisms. Over time, the market has been allowed to play a more central role in the allocation of resources in the Chinese economy. In the case of rural land, however, rental – the lone market-based exchange identified in this study – has generally failed to eclipse non-market mechanisms, notably, reallocations, takings and, more recently, village-mediated transfers. The dominant role of non-market mechanisms reflects several factors. First, their role facilitates the capture of rents tied to land by state officials and local cadres. Second, as suggested by the growing importance of transfers (and earlier, reallocations) in Jiangsu in the context of “use-it-or-lose-it” rules, non-market mechanisms can be viewed as a second (or third) best solution to inefficiencies tied to market failures that the government itself has caused. Finally, the legal system has not provided a level playing field for market-based exchange of land-use rights.

The study also points to an agenda for research. Drawing on the roll-out of a revised version of our pilot survey to 60 villages, we seek to systematically link key economic, legal and political factors to changing property-rights regimes. Using household-level data from complementary surveys, we want to assess the costs of inefficiencies and insecurities in local property-rights regimes in terms of productivity and output losses. Finally, it will be critical to estimate the distributive implications of any property-rights regime. Any overall evaluation of the system will require information on both efficiency and distribution.

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Biographical notes

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摘要: 通过两轮的家庭联产承包, 土地的部分产权已经分到了农户手中。我们观察到不同村之间村民拥有土地的数量和管理土地权利交换的制度机制都存在显著不同。本研究表明有利于村干部和地方政府的行政机制普遍存在, 而有利于农户的市场机制仍然作用有限。本文区分了经济、政治、和法律因素对村干部和地方政府官员形成激励, 并使得他们从土地中获得好处。与此对应, 本文也发现了不同产权机制引起的冲突也不同。基于作者2011年11月在江苏省和陕西省进行的初步调查(24个村192农户), 本文意图解释这一土地产权机制的跨时空变化。

关键词: 产权; 土地; 土地调整; 土地征占; 土地集体流转; 土地租赁; 中国

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