Egalitarian Redistributions of Agricultural Land in China through Community Consensus: Findings from Two Surveys

Sherry Tao Kong and Jonathan Unger*

ABSTRACT

Most of China’s rural communities have engaged in periodic reallocations of fields in order to re-equalize household landholdings on a per capita basis, despite a national law that prohibits this. The practice of re-equalizing landholdings tells us much about the rural household economy, farmers’ perceptions of property rights, and grass-roots community cohesion. Based on two questionnaire surveys of more than 600 villager small groups (former production teams) in Anhui Province, this article explains why such land reallocations have occurred, which types of villages have most often engaged in this egalitarian practice, and how and why the practice has altered during the last 15 years as rural conditions change.

Since the abandonment of collective agriculture in the early 1980s and the adoption of family-based farming, agricultural land in a great majority of China’s rural communities has been redivided among neighboring households at least once and in some cases periodically, usually in order to recreate an equal division of land on a per capita basis. This practice has been made possible by the fact that, among China’s farm households, land ownership is shared collectively by a group of neighboring households. Examining these egalitarian land redistributions illuminates an almost unique coping strategy to which Chinese farmers have resorted to surmount difficulties in their household economy, and the circumstances in which they are willing to transfer fields from one household to another.

In this article, we ask: what are the attributes of the rural communities that have carried out such egalitarian land reallocations, and what types of farming villages have not done so? How has this practice been affected over the past three

* We wish to thank Graeme Smith for his vital work on the surveys, and Liu Pengling and his students at the Anhui Agricultural University for successful implementation of the province-wide Anhui survey. We also owe thanks to Wenda Yan for preparing the dataset. Anita Chan, Andrew Kipnis, Luigi Tomba and three anonymous referees provided valuable comments on the article’s contents. We gratefully acknowledge funding from the Australian Research Council, which made this research possible.

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decades, as the Chinese economy and villagers’ livelihoods have changed? We also examine the roles of rural officials vis-à-vis farmers and the central state. In the face of central government opposition to such land reallocations, did local officials seek to block them, did they turn a blind eye, or did they defy the government by encouraging and helping to initiate redistributions? Did rural officials’ actions change over time?

To investigate all these facets of grass-roots land reallocations, in mid-2008 two surveys were conducted in Anhui Province. Anhui is a good locale for such surveys. The province lies in the interior agricultural heartlands and straddles the two major types of agriculture in China. Wheat (along with cotton and soybeans) predominates in the northern part, in the flat Huai basin that extends from the North China Plain, and wet rice agriculture is important in much of the province’s relatively hilly southern half, which lies adjacent to the Yangtze River.

The larger survey collected a wealth of information from 476 villager small groups (cunmin xiaozu 村民小组) spread across 57 of Anhui’s rural counties. Villager small groups consist of a cluster of 15–50 adjacent households, which in a large, compact village comprises a neighborhood and in a dispersed village may be a small hamlet. Formerly, during the period of collective agriculture, they were called production teams (shengchan dui 生产队). These continue today to own the agricultural land in most parts of China, while their member families have the right to cultivate the land apportioned to them without any rental charge. Since agricultural land is held at the villager-small-group level in China, it is the most appropriate unit to examine for the purposes of this survey.

A very detailed survey questionnaire was drawn up, requesting information on all of a villager small group’s reallocations of land over the past quarter century. In addition, information was collected on the small groups’ crop productivity and average household incomes, as well as on a wide range of other village- and villager-small-group characteristics. Graeme Smith, who was a research associate of the project in 2008, played a large role in the questionnaire’s design, and Liu Pengling, a teacher at Anhui Agricultural University, took responsibility for the survey’s implementation. Liu asked his students from Anhui villages to obtain answers to the survey questionnaire from their own and a few neighboring villager small groups when they went home for the summer of 2008. To secure accurate information, they interviewed the group head in each villager small group; the post is held not by an official but rather by a farmer selected by fellow group members. The group head examined the villager small group’s records to answer.

1. Anhui has one of the largest rural populations in China (42 million in 1978 and 51 million in 2007), accounting for about 79 per cent of the province’s population; the share of agriculture in the province’s GDP averaged 34 per cent between 1978 and 2005, which is high compared to most provinces. Anhui tongji nianjian 2007 (2007 Anhui Statistical Yearbook) (Beijing: China Statistical Press, 2008).

2. All of the villager small groups in this survey and in the single-county survey are still rural and continue to engage in agricultural production. None has converted to becoming shareholding property companies, as has happened in urbanized and industrialized villages in provinces such as Guangdong.
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questions relating to the past. In many cases, this information was supplemented by interviewing knowledgeable farmers.

A second survey was arranged separately within a single county in Anhui during the Chinese New Year of 2008. Seventy schoolteachers from throughout the county who had been raised in villages were asked to seek out similar information for their own and neighboring villager small groups. Information was obtained for 91 villager small groups in the county. To avoid the complications that arise when combining surveys, this paper will deal with the two surveys separately, and will largely concentrate on the survey that was carried out across Anhui by university students.

SURVEYING LAND REALLOCATIONS

Several surveys undertaken across China in the 1990s and the early 2000s showed that a high proportion of farming communities have engaged in land reallocations among their households. A survey in 1993 found that 36 out of 40 sampled villages in four largely grain-growing counties in Sichuan and Hunan Provinces had undergone such redistributions at least once. A 1994 survey of 800 farming families from eight counties located in four provinces with quite different economic conditions found that 70 per cent of the farmers had participated in such land reallocations. Similarly, a survey in 1995 in four provinces showed that 72 per cent of 215 sampled villages had redistributed the land, and a majority had done so more than once. The Chinese government has produced comparable survey results. A 1997 sample survey by the Ministry of Agriculture of 271 villages reported that 80 per cent of the villages had redistributed landholdings among households, and 66 per cent had done so more than once. Finally, a survey in 2003 of 96 villages in six provinces revealed that 86 per cent had participated in such land reallocations. Laying out these survey results side by side suggests that the percentage of communities which have carried out land redistributions has continued to rise over time.

3. The Anhui-wide survey includes two villager small groups from this county, but neither of these is included in the teachers’ survey, so the two survey data sets do not overlap in any way.
8. Personal communication from James Kung, of Hong Kong University of Science and Technology. We are indebted to Professor Kung for sharing this information with us and for permitting us to publish the figure in this paper.
The results from our Anhui-wide survey in mid-2008 show that 452 out of the 476 villager small groups in the survey—that is, 95 per cent of all the groups—had reallocated their fields at least once since 1984. The survey that was implemented for our project in that same year by schoolteachers in a single county—one with a strong agricultural base—shows that 98.7 per cent of the surveyed villager small groups had reallocated land, and had conducted an average of 3.8 land redistributions since 1984. Since Anhui is more dependent on agriculture than most of China’s provinces, this extraordinary incidence of land reallocations by farmers in their villager small groups may well be somewhat higher than the national average. But what is evident in these Anhui figures and in previous surveys alike is that reallocating land among households has been part of the fabric of the rural economy in a great majority of villages.

Anhui was the first province in China to return to family farming. By June 1981, 69 per cent of its production teams had done so, with the figure rising to 95 per cent by the end of 1982. However, several of the teams in our project’s Anhui-wide survey turned to family farming as late as 1983. Thus, in order to have a similar timeframe for all of the villager small groups in the survey, the redistributions of farmland which we take into account occurred during the period from 1984 to 2008.

Previous surveys have not normally focused on villager small groups, even though this is the level involved with land ownership and redistribution, but have rather interviewed households or focused on the administrative village, which lies one level up from the villager small groups. Almost all of the previous surveys also lumped together all the recorded land redistributions, without taking account of the periods within which they occurred or whether the frequency of, and reasons for, redistributing land were changing over time. Our Anhui surveys break new ground in all of these respects.

Figure 1, based on the Anhui-wide survey, shows how many land readjustments occurred each year between 1984 and 2008. Two facts are immediately noticeable: 1) the number of redistributions spiked dramatically in 1995, when more than a quarter of all of the villager small groups engaged in land reallocations; and 2) the annual number of reallocations occurred at a considerably higher level in the decade before 1995 than in the decade after the 1995 peak. Because both the numbers and reasons for land redistributions differed between the pre-1995, 1995 and post-1995 periods, this paper will sometimes focus separately on each of these three periods.

Figure 1 includes land reallocations that were implemented for a variety of reasons. For instance, a new factory site might occupy a slice of villager small

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group land, or the government might build a road through the land, in which case a villager small group would reassign landholdings so that all of its member families would still have land. However, by far the most frequent reason for a land reallocation was internally driven, decided upon by villager small groups in order to provide extra land for families that had grown in size by reducing the landholdings of families that had shrunk. Table 1, below, reveals that about 77 per cent of all the land redistributions in the Anhui survey which occurred during the first decade of family farming (1984–94) were carried out to adjust for changes in family size, so as to re-equalize landholdings on a per capita basis. Table 1 also shows that, in the survey implemented by schoolteachers in one county (a rice-producing county where agricultural productivity is above average for Anhui), the percentage of land reallocations carried out to adjust for changes in family size and to re-equalize landholdings was even higher—94 per cent.

This practice of re-equalizing landholdings is rarely observed in other parts of the world, nor was it practiced traditionally in China. To understand why

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10. The average rice paddy output per mu (a fifteenth of a hectare) in the single-county survey is 1,305 jin (a jin is half a kilo), compared to an average output of 1,050 jin of rice in the Anhui-wide sample survey.
Chinese farmers have turned to this unusual practice, it becomes necessary to look back to China’s recent past.

**THE ORIGINS OF EGALITARIAN LAND REALLOCATIONS**

The ownership of agricultural land ownership in China today is a legacy of the Mao era, when hamlets and village neighborhoods throughout China were organized into “production teams” whose families worked the land together and divided up the harvest yields in kind and cash, based on how much labor each family had contributed.

In the period of production teams, households had been assigned small plots (ziliudi 自留地) near their homes on which to grow vegetables for their own consumption, and the size of these plots expanded and contracted each year as families added and lost members. In addition, families who could not earn enough to feed all their children had obtained an annual grain ration for each of their young children, “on loan” from the production team; years later, when the children became teenagers and entered the team’s labor force, the cost of this grain was finally deducted from the family’s earnings. Villagers who had become accustomed to their production teams making these economic adjustments in order to balance out the family cycle were favorable to continuing such adjustments in the post-Mao period, albeit in a different form, as being in their family’s long-term interests.

In the early 1980s, under Deng-era policies, when agricultural fields were handed over to households to farm independently, each household in a production team normally received an equal amount of land on a per capita basis and

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<tr>
<td></td>
<td>No.</td>
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<td>Industrial development</td>
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<td>Road-building</td>
<td>29</td>
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</tr>
<tr>
<td>Other</td>
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<tr>
<td>Total no. of land redistributions</td>
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a contract providing it with its allotted fields over the long term, while the land's ownership was still held by the former production teams. In 1984 the central government decreed that the fields were to remain with the family for at least 15 years; subsequently, in November 1993, the government declared that expiring household land contracts were all to be extended for a further 30 years.

Most farmers have not opposed the system of collective villager-group land ownership and household farming. In fact, a clear majority have preferred the villager small groups to retain ownership of the land, rather than each household having full private ownership rights. For example, a 2004 survey of 306 farm families spread across 40 rural counties in Anhui found that 71 per cent of the respondents favored retaining what the Chinese author referred to as “land cooperatives”, while only 7 per cent were opposed.12

One reason is that this has provided an opportunity to reallocate landholdings. Generally, at each reallocation, families which had expanded through births or weddings and faced a shortage of land gained larger landholdings, and those which had been reduced through deaths and the departure of daughters to be married lost land. Each time, the land reallocations have recreated a near-equal per capita provision of land.

Notably, this is one of the few ways in which villager small groups have acted cohesively as communities in the decades since household farming commenced. Once farming was carried out on relatively small plots, large machinery was often left to rust, rather than being shared among families, and farmers almost never organized themselves into informal purchasing or marketing cooperatives in order to gain advantages in the market. Yet a large majority of them have engaged in land reallocations, which are very difficult to carry out and which create winners and losers in each villager group. Families obviously felt that much was at stake here for their household economies—enough to overcome a reluctance to act as a community in other respects.

THE ROLE OF LOCAL OFFICIALS AND THE CENTRAL GOVERNMENT

In our Anhui-wide survey, the villager-small-group heads were asked, “In the most recent land reallocation that your small group has carried out, who proposed it (tichu 提出)?” When land is taken away from a villager small group for

12. “Nongmin dui nongdi zhidu gaige de renzhi—jiyu Anhui sheng nonghu diaocha ziliao fenxi” (Farmers’ Sense of the Agricultural Land System Reforms—Analyzing the Materials from a Survey of Anhui Province Farm Households), Zhongguo nongcun jing ji (Chinese Rural Economy), No. 7 (2005), p. 46. Similarly, in a 1994 questionnaire survey of 800 farm families in eight counties spread across China, only 14 per cent of the respondents declared that they preferred permanent land ownership rights to be held by each household. Sixty-five per cent favored periodic land reallocations to redistribute plots to families which had grown in size, and only 19 per cent were opposed. James Kung and Shouying Liu, “Farmers’ Preferences Regarding Ownership and Land Tenure in Post-Mao China.”
road-building or industry, it can be presumed that the responsible officials might propose that the remaining land be reallocated among member households, so we only examine here the land redistributions that were for household demographic purposes. The rural officialdom did not derive any benefit from such land allocations, so our findings may come as a surprise. As Column 1 of Table 2 shows, in the initial decade between 1984 and 1994, about two-thirds (67.1 per cent) of the land redistributions reported in answer to this question were proposed by county and township officials, and an absolute majority of the proposals during this early period stemmed from the county officialdom. (Generally, county officials in rural China are known to take initiatives more often than township officials.) It appears that they were aware of and responding to the problems faced by a growing number of farming families.

The central government did not share this perspective. The top leadership in Beijing instituted a very high-level decree (zhongfa 中发) in late 1993 discouraging land reallocations. The decree, which was jointly issued by the Party Central Committee and the State Council, noted that new household land contracts were

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<td>8</td>
<td>9.3</td>
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<tr>
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<td>12.9</td>
<td>8</td>
<td>9.3</td>
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<tr>
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<td>2</td>
<td>2.9</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>A portion of the group members</td>
<td>8</td>
<td>11.4</td>
<td>8</td>
<td>9.3</td>
</tr>
<tr>
<td>Others</td>
<td>7</td>
<td>10.0</td>
<td>13</td>
<td>15.1</td>
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13. The survey question asked about the most recent land reallocation, on the grounds that small-group heads and other group members were most likely to remember the most recent reallocation accurately. The villager small groups listed for the 1984–94 period are all groups whose most recent land reallocation occurred then. Since the characteristics of these groups may differ from the villager small groups that reallocated land in later periods, the Table may not be wholly accurate in depicting the changes over time in the proposal process. A few respondents chose more than one answer to this survey question, so the column totals add up to a bit over 100 per cent.

14. The following Tables are based on the information collected in the Anhui-wide survey.
to be issued for a much-lengthened period of 30 years, and that after these new contracts were handed out land reallocations would no longer be permitted. To quote: “after the original farmland contracts expire, these shall be extended again for 30 years with no changes” (zhai yuanding de gengdi chengbaoqi daoqi zhihou, zai yanchang sanshinian bubian 在原定的耕地承包期到期之后，再延长三十年不变). Commentaries published officially in China then and later made clear that “no changes” (bubian 不变) meant that no further land redistributions were to occur among villager-group households during the next three decades.

Since 69 per cent of Anhui’s production teams had distributed the farmland to member households by mid-1981, this meant that most of the original 15-year tenures would expire in 1995 and 1996, when new 30-year contracts would be drawn up. Until then, land redistributions did not directly violate central government policy. Thus, in 1995, rural officials across Anhui proposed a round of land reallocations to re-equalize per capita landholdings before the new contract system went into effect. This explains the dramatic spike in land redistributions shown in Figure 1. In that single year of 1995, a quarter of all the villager small groups in our Anhui-wide survey redistributed land. Of these land reallocations, 68.6 per cent (Column 2 of Table 2) were proposed by county and rural township officials. The very fact that so many rural officials made such proposals in the same year, but neither the year before nor the year after, suggests that this surge may have been coordinated by the provincial authorities.

A surprising number of county and township officials continued to propose land redistributions after the new 30-year land contracts came into effect, despite the central government’s strong disapproval. Table 2, Column 3 shows that, during the next few years (1996–98), close to 45 per cent of the proposals still originated with county and township officials.

The central government further tightened restrictions on land reallocations in August 1998, in a new Land Management Law that rendered most forms of land redistributions illegal (they were only to be permitted under “isolated” conditions), but even so, they continued to occur up through the time of the survey in 2008. As Table 2, Column 4 shows, a quarter of the post-1998 redistributions for household demographic purposes were proposed by county and township officials. Land redistributions persisted even after a stricter PRC Village

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15. The 1993 decree (zhongfa) was titled “Zhonggong zhongyang, guowuyuan guanyu dangqian nongye he nongcun jingji fazhan de ruogan zhengce cuoshi” (Certain Policy Measures Taken by the Party Central Committee and State CouncilRegarding Contemporary Agriculture and the Development of Village Economies), and was issued on 5 November 1993.

Land Contract Law was passed in March 2003 which closed various loopholes and effectively banned these land reallocations.17

Even though some rural officials remained supportive, increasingly over time the initiative had to come from the grass roots. According to interviews collected during the single-county survey, families feeling economic pressures because of an increase in family members would approach the villager group leader to urge that landholdings should be readjusted, until the group leader felt it incumbent to raise the issue with the villager group as a whole. In the most recent redistribution among those villager small groups that continued to reallocate land during the post-1998 period (Column 4), a little over 61 per cent of the initiatives originated with members of the villager group or with the group leader.

THE DECISION-MAKING POWER TO REALLOCATE LAND

A common view of Chinese rural governance is that it is top-down—that once rural officials have decided upon something it gets forced upon farmers.18 While this was true of many of the other issues facing Chinese villagers, it was not the case when it came to the important question of land distribution. Even when county or township officials in Anhui proposed a redistribution of land, it was normally left up to the villager small groups to decide whether or not to proceed with one. In point of fact, our data show that 68 per cent of the group heads stated that, when land redistributions are proposed for demographic reasons, their group requires a vote of popular consent before a redistribution can be conducted.

A separate multiple-choice question, which asked who made the decision in the most recent land reallocation, confirms that the process most often involved democratic decision-making. Even in the initial decade of 1984–94, when county and township officials were the predominant proposers, they were directly involved in the decision-making only 23.9 per cent of the time, whereas a democratic decision-making process was employed 68.9 per cent of the time (and villager-small-group assemblies made 57.7 per cent of all decisions). Since the statistics do not show any significant trends over time, Table 3 exhibits the results for the entire 1984–2008 period.

In short, as Table 3 shows, the decision of whether or not to proceed with a redistribution of land most often rested with an assembly of the small-group households, regardless of who first proposed it. The group head would call for a

17. The law’s title in Chinese was “Zhonghua renmin gongheguo nongcun tudi chengbao fa”. Articles 22 and 26 stipulated that households’ 30-year land contracts could not be violated.

meeting, which was normally held at the group leader’s home during the winter, before the spring planting season. One representative from each household was invited to participate and to vote. Often, the meeting was convened during the Chinese New Year when the village’s migrant workers were home for the holiday, so that they could attend. Our Anhui survey statistics show that, on average, a three-quarters vote of approval (74.87 per cent in the survey statistics) was needed in the small-group assemblies before a land reallocation could take place. In practice, some groups strove for an even greater degree of consensus. Several interviewees reported that, if necessary, a second meeting was held, and if need be a third, until unanimity or an overwhelming consensus was reached.

Efforts to persuade the families who would lose land often hinged on the argument that the land reallocations favored different families at different times, in keeping with the family cycle, and that those who would now lose land had gained it at a previous reallocation or would regain it in the future when they needed it more. In many cases, villager small groups guaranteed this by establishing schedules for future land redistributions. In the 2008 Anhui-wide survey, 40 per cent (187 out of 475 villager small groups) reported that they redistributed land at fixed intervals. In the survey of the Anhui county which benefits from a productive rice-based agriculture, an even higher proportion—64 per cent (58 out of 91 villager small groups)—reported readjusting household landholdings at fixed intervals.

The appeal to families’ long-term economic interests was sometimes reinforced with appeals to equity: that this was the right thing to do. As a survey respondent noted in 2008, “As the population changes, it’s reasonable (heli 合理)
that after several years a land reallocation will ensure that everyone has land”. As a second respondent observed, “Local people still consider that having reallocations is a necessity, that it’s a principle of being fair and reasonable (公平合理), to resolve poverty, and to be appropriately caring”.

These and similar comments accord with what social scientists label a “moral economy” perspective. The term, coined by E. P. Thompson, relates to a situation where, when challenged by changed economic circumstances, a group of people look back to the moral order and practices of a previous period and insist that these values should guide current decisions, particularly with regard to guaranteeing their subsistence needs. In keeping with this, families needing land could rely upon a consensus within the villager small group that the old practice of guaranteeing subsistence needs throughout the family cycle should prevail.

Separately, the various villager small groups needed to decide on who was eligible to receive a portion of land. One issue, for example, was whether families who violated the official birth-limits policy should be allowed to have a land portion for their over-quota children. To do so would go against the interests of other households, since any land apportioned to over-quota children would come at the expense of the size of their own landholdings. The Anhui-wide survey asked whether over-quota children were eligible to receive land in the small group’s most recent land reallocation. Sixty-seven per cent (311) of the groups had decided that they were ineligible. Villager small groups also had to contend with the fact that families with a daughter engaged to be married often delayed the wedding if a redistribution of land was likely in the near future, in order to obtain an extra share of land before she departed. To thwart this stratagem, 13.9 per cent of the small groups established a rule that young women awaiting marriage should not be counted when land is redistributed. A separate issue was whether young women who departed a villager small group to marry were entitled to land if they later needed to return permanently to the small-group community. Interviews that accompanied the two surveys indicate that, while in many locales they were not entitled to a new portion of land, in a number of others they were. According to one group head, “women who divorce and return to their native place wait for the next land reallocation”. Another issue was whether member households who had not cultivated land for an extended period (such as families who had departed the village in order to work elsewhere in China) should receive land in the next redistribution: 23.5 per cent of the small groups in the survey decided that they should not.

19. E. P. Thompson, “The Moral Economy of the English Crowd in the Eighteenth Century”, Past and Present, Vol. 50, No. 1 (1971), pp. 78–79; “. . . the men and women in the crowd were informed by the belief that they were defending traditional rights or customs; and in general, that they were supported by the consensus of the community . . . as to what were legitimate and what were illegitimate practices”. James C. Scott applied Thompson’s thesis influentially to rural Asia in The Moral Economy of the Peasant (New Haven: Yale University Press, 1976).
Why did the other 76.5 per cent of small groups continue to make land available to families who moved away? One likely reason is that access to land back home has provided a much-wanted safety net for migrant families. If they lose their jobs in the city and cannot make ends meet, which is not uncommon in the precarious world of migrant workers, they retain an opportunity to return to the village and take up farming again. It is an option that many village householders obviously wish to keep open.

**The Types of Small Groups Most Likely to Redistribute Land**

In what particular economic circumstances did the villager small groups undertake a land reallocation? Why did some groups do so periodically, and some never, or only once or twice? Using regression analysis, we sifted out the most significant factors.\(^{20}\)

First, the easier it was to reallocate land, the more likely it was that a villager small group did so. Thus, all other things being equal, reallocations were more likely to take place within villages on the plains, rather than within those in hilly areas. In hilly territory, each field has individual characteristics—in the amount of sunshine it receives, in the quality of the soil, in the amount of moisture in the soil, and so on—and fields are also often of an irregular shape. It thus becomes quite complicated to redistribute land equitably so that each household ends up with an equal per capita share as regards crop productivity.

Partially related to this, when the land was originally distributed to households in the early 1980s, each received a number of small fields of different grades: for example, a fertile and irrigated plot of land, another plot that was not irrigated, and a third that was given a lower grade because it was far from the village. Some villager small groups had only one or two grades of land, and some groups had up to 5 grades. (On average, the villager small groups in the survey possessed 2.6 grades of land.) The more grades, the more complicated it became to redistribute fields equitably among families, and our regression analysis indeed shows that, all other things being held equal, the more grades of land, the less likely it was that a land redistribution was carried out.

The importance of agricultural income to household subsistence increased the likelihood of redistribution. Using a number of specific factors relating to crops and livelihoods, we have calculated crop productivity,\(^{21}\) the population-to-productive land ratio and the degree to which a villager small group's members

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\(^{20}\) Readers who wish to obtain the tables of regressions can contact the authors at tao.kong@pku.edu.cn.

\(^{21}\) We calculated crop productivity of the main crop in terms of jin per mu. In our analysis, we generated a variable to indicate high productivity if the output of rice exceeds 1000 jin per mu or that of wheat exceeds 800 jin per mu. By these standards, 45 per cent of the rice-producing villager small groups and 49 per cent of the wheat-producing groups have a high productivity in crop production.
were dependent upon agriculture for their livelihoods. We found that, for village small groups depending largely upon agriculture, the worse the population-to-productive-land ratio (that is, the greater the pressure to secure enough per capita from the land), the more likely it was that one or more land redistributions would have occurred. Statistical analysis also shows that there was a lower incidence of land redistribution where the productivity of the main crop was low. In such areas, the population density was normally lower and the families’ labor was already strained working on a larger stretch of land. There was therefore less pressure to obtain additional low-productivity land.

For each villager group, there were thus two particularly salient factors: on the one hand, the degree of difficulty and hassle to reallocate land equitably, and on the other, the degree of pressure for more land coming from the households which were expanding.

We have already observed that, when a spike in land redistributions occurred in 1995, most of the proposals derived from rural officials, but the decision as to whether or not to proceed was still in the hands of the villager small groups. The question thus arises as to what types of small groups decided to go forward with a land reallocation. Notably, among the 137 groups that reallocated land in 1995, 100 did so for the very first time. Our statistical analysis shows that these tended to be villager small groups for whom it was more difficult to redistribute land. They had therefore not responded earlier to the increasing demographic pressures faced by some households. When it seemed in 1995 that this might well be the last time that a villager group would be able to reallocate fields to re-equalize landholdings, however, these groups finally acted. These 100 groups had a larger share of mountainous or hilly land: 65 per cent vs. 43 per cent for other groups. They also had more fragmented land plots. On average, they also had a higher number of land grades. Among the villager small groups who reallocated land for the first time in 1995, each household had 4.5 plots of land, as opposed to 2.6 plots for other groups. The data show that the pressure to obtain more land to cultivate was also lower than average, inasmuch as these 100 groups also suffered from relatively low productivity for their main crop and a relatively low share of irrigated fields.

Regression analysis also shows that the villager small groups which never—even in 1995—redistributed land because of demographic pressures either did not depend primarily upon agriculture or were faced with low crop productivity, mountainous or hilly terrain and a larger number of grades of land. In all, the villager small groups which never reallocated land for demographic reasons comprised 34 per cent of all groups. To be sure, even most of these groups were

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22. We only have information as to whether agriculture is the main source of income at the time of the survey in 2008. Our assumption is that, if agriculture was the main source of income for a villager small group in 2008, it is likely that agriculture was the main source of income in previous periods as well.
included in the 95 per cent of all villager small groups that redistributed land during the quarter century from 1984 to 2008 due to road-building, factory sites and new home-building, as well as changes in household demographics. It is also notable that, even when a new factory site or road was the sole purpose of a land reallocation, this could result in re-dividing the land in a way that re-equalized landholdings. The survey did not obtain information on how often this might have occurred, but each time it did, it would have the effect of reducing a village small group’s household demographic pressures.

The various villager small groups within a given village tended to have similar economic and geographic circumstances, so it is not surprising that their records of land reallocations tended to be relatively similar. Neighboring villager small groups affected each other—86.7 per cent of the group heads in our Anhui-wide sample reported that their group used the same reallocation procedures as other groups in their village—and that they were also influenced by whether these groups redistributed land in the same years. This was particularly the case when the proposal for a redistribution of land came down from county and township officials. As shown below in Table 4, in the initial 1984–93 period, when rural officials were apt to take the initiative in proposing land redistributions, in a majority of cases all the groups in the same village reallocated land in the same year. During 1995, when an even higher proportion of the proposals came from county and township officials, the proportion of cases in which a whole village reallocated land at the same time leaped to almost 80 per cent. In the period after 1995, when rural officials at all levels more frequently shied away from taking the initiative, villager small groups most often had to grapple on their own with the decision as to whether to redistribute land in a given year; and in almost two-thirds of cases, only a single villager small group or just a few groups in the village reallocated land at one time. Even so, more than a third of the time, small groups still acted in concert with all of the other small groups in the village.

Table 4. Reallocation of land at the same time among small groups in a village (for household demographic reasons only)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Whole village</td>
<td>239</td>
<td>56.6</td>
<td>66</td>
<td>77.6</td>
<td>43</td>
<td>35.5</td>
</tr>
<tr>
<td>A few villager small groups</td>
<td>24</td>
<td>5.7</td>
<td>1</td>
<td>1.2</td>
<td>23</td>
<td>19.0</td>
</tr>
<tr>
<td>Our villager group alone</td>
<td>159</td>
<td>37.7</td>
<td>18</td>
<td>21.2</td>
<td>55</td>
<td>45.5</td>
</tr>
<tr>
<td>Total</td>
<td>422</td>
<td>100</td>
<td>85</td>
<td>100</td>
<td>121</td>
<td>100</td>
</tr>
</tbody>
</table>
SMALL-SCALE VS. COMPLETE LAND REDISTRIBUTIONS

Throughout the quarter century between 1984 and 2008, whenever a villager small group decided to carry out a land reallocation it faced the option of implementing a small-scale redistribution (xiaozheng 小调整) or a complete land redistribution (da tiaozheng 大调整). In a small-scale redistribution, plots of land were taken from the families that had decreased in size and were given to families that had grown, while the landholdings of other families were unaffected. In a complete land reallocation, all of the land of all of the households was entirely redistributed, and all households received entirely new fields. Normally in such cases, lots are drawn by every household to determine which new fields each family obtains. Under what circumstances did one or the other of these two methods prevail?

It might be presumed that a small-scale redistribution was the easier and more sensible method and would have predominated, but that was not always the case. In fact, examination of the land redistributions carried out during the entire period between 1984 and 2008 for all reasons combined show that half the redistributions were small scale (50.1 per cent) and half were complete (49.9 per cent). When reallocating land because of changes in household demographics alone, 57 per cent of the redistributions were small scale and 43 per cent were complete land redistributions.

Statistical analysis reveals that two factors were most salient here. First, complete land redistributions occurred more frequently in flat areas such as plains, where fields can be laid out in squares and are essentially interchangeable. In such cases, it became more viable to re-establish large, efficiently plowed fields for all families than to create a crazy quilt of land parcels by taking small patches of land from the families which had shrunk and giving them to families which had grown. Households in hilly or mountainous territory, by contrast, usually possessed a number of small fields, and it was viable to hand over one or more of these to families which had grown in size. Accordingly, when reallocations were carried out due to household demographic pressures, a higher proportion of small-scale redistributions occurred in the hilly and mountainous areas. In flat areas, 48.8 per cent of the land reallocations for household demographic purposes were complete redistributions, as opposed to 34.6 per cent in mountainous and hilly terrain.

The second salient factor was the frequency of land reallocations. A small-scale redistribution occurred, on average, at 5-year intervals. By comparison, complete redistributions took place, on average, at 9-year intervals. Long intervals increase the number of families with changes in household composition due to weddings, births, deaths and permanent departures of family members, and to reassign small patches of land to so many families became a difficult procedure.
It often became more efficient simply to implement a complete redistribution of land.\textsuperscript{23}

The statistical results presented in Table 5 reflect these findings. During the 1984–94 period, the first decade after China's return to household farming, when land reallocations were more frequent, only a little more than a third of all the reallocations for household demographic reasons were complete land redistributions. In 1995, when the great majority of the villager small groups that reallocated land were doing so for the very first time after more than a decade, the percentage of complete land redistributions jumped to close to 70 per cent. In the 1996–2008 period, land redistributions were considerably less frequent than in the first decade of household farming. In the initial decade, the average interval of land redistributions for household demographic purposes was once every 6 years, but it occurred only once in 9 years during the period from 1996 to 2008. Accordingly, complete land reallocations accounted for almost half of all the land reallocations for household demographic reasons during the 1996–2008 period.

This was the case even though the 1998 Law on Land Management entirely banned complete land redistributions, but left the door ajar for small-scale redistributions in "isolated" circumstances.\textsuperscript{24} Nonetheless, when we compare the 1996–98 period preceding the new law with the post-law period (1999–2008) (see Table 5), a decline in complete land redistributions of only 4.6 per cent

\begin{table}[h]
\centering
\begin{tabular}{lrrrrrr}
\hline
 & No. & % & & No. & % & & No. & % \\
\hline
Complete land redistribution & 152 & 36.2 & & 61 & 69.3 & & 23 & 50 & & 35 & 45.4 \\
Small-scale & 268 & 63.8 & & 27 & 30.7 & & 23 & 50 & & 42 & 54.6 \\
Total & 420 & 100 & & 88 & 100 & & 46 & 100 & & 77 & 100 \\
\hline
\end{tabular}
\caption{Small-scale vs. complete land redistributions (for household demographic reasons only)}
\end{table}

\textsuperscript{23} For a different analysis of why some of the villages in a 2003 survey practiced complete reallocations of fields whereas some undertook small-scale reallocations, see James Kai-sing Kung and Ying Bai, “Induced Institutional Change or Transaction Costs? The Economic Logic of Land Reallocations in Chinese Agriculture”, \textit{Journal of Development Studies}, Vol. 47, No. 10 (October 2011), pp. 1510–28. This 2003 survey agrees with our Anhui survey’s findings that groups with complex topographies tend to favor small-scale reallocations.

\textsuperscript{24} The relevant section of the 1998 law is Article 14.
appears. The logic favoring complete redistributions after longer time intervals trumped any risks stemming from the new law.

THE DECLINE IN LAND REDISTRIBUTIONS

Figure 1 shows a sharp reduction in land reallocations after the spike of 1995, and this persisted to the date of the 2008 survey. Our statistics show that, between 1996 and 2008, only 33 per cent of the small groups reallocated land for demographic reasons. Why was there a sharp reduction in the numbers of groups redistributing land, and in the frequency of their reallocations?

One cause was undoubtedly the reduction of advocacy of land redistribution by rural officials in the wake of the central authorities’ decrees and new laws, but this does not appear to be the major factor. In the interviews with small-group heads that accompanied both our Anhui-wide and single-county surveys, almost none expressed much awareness of or concern about the government’s bans on redistributions, and practically none noted that rural officials opposed or ever interfered to prevent redistributions.

Why, then, did so many small groups cease or reduce land redistributions for demographic reasons after 1995? The Anhui surveys suggest that changes in the rural economy greatly reduced the pressure to reallocate land. Far higher numbers of young villagers have been leaving the countryside to take up work in factories and construction sites in urban areas. In many villages, this means a reduced dependence on agriculture and, with more labor away, it also means reduced population pressure on the land. These two factors lower the likelihood of land reallocations, and our project’s Anhui-wide survey results show this.25 We tested, through two sets of regressions, whether work migration was the most salient factor in the reduction of land redistributions during the post-1995 period.26


26. First, we used a set of multivariate Ordinary Least Squares regressions to investigate the role of work migration in explaining the overall number of land redistributions between 1996 and 2008. The degree of migration is captured by the migrant–population ratio in the villager group, namely, the number of migrants (working outside one’s own county) as a proportion of total population. Controlling for a host of factors, including agriculture being the main source of income, topography, population–land ratio, main crop productivity, having a mine or factory in the village, and land redistribution following a fixed term, we found that migration is consistently negatively associated (statistically significant at 5 per cent level) with the total number of land redistributions after 1995. Second, we ran a set of logit regressions testing whether, as a dependent variable, land redistributions due to demographic reasons were reduced or equal to zero after 1995 (if yes =1, and =0 otherwise). To focus on the changes in the frequency of land redistribution, we excluded villager small groups that have never conducted any land redistribution since 1984 (24 groups) or
With both sets of regression analysis, the results show a significant association (statistically significant at a level of 5 per cent) between work migration and a lower incidence of land redistributions.

What do current trends portend for the future? We can expect that, as time passes, an ever smaller proportion of the rural populace will depend on agriculture for a living. Evidence from China in recent years also reveals that the official restrictions against permanent migration to the cities are being enforced more weakly and that growing numbers of rural migrants are staying permanently and bringing their families to live with them. As fewer villagers depend upon agriculture for a living and as fewer retain a strong foothold in the countryside, the demographic pressures to reallocate land will continue to decline. In line with these trends, in the 2008 Anhui-wide survey only 16 per cent of the group heads believed that their groups will reallocate land during the next ten years; 45 per cent believed that their groups would not, and 38.5 per cent answered that they did not know.

At the same time, though, 85 per cent of the small-group heads declared support for continuing to carry out land redistributions, and only 15 per cent did not. In short, the great majority perceived a continued value in land reallocations. One interviewee in the single-county survey saw it as a matter of promises and fairness, and explained that some villagers had given up land in previous reallocations in the expectation that they would regain land during a future one. Others noted that the long-term or permanent departure to the cities of migrant workers upsets the land balance in villager small groups, necessitating new land redistributions. Others saw a continued need for a safety net: as one interviewee explained, “In our small group, we’ve never had a case of anyone who’s gone out and then came back and didn’t get a share of land”. A number of group heads also noted a recent upsurge in a desire to farm. One observed: “Before fees were eliminated, farmers didn’t want to farm. Since then, they want land, and want reallocations so as to obtain land”. Another noted: “Since the Party Central Committee and State Council abolished the agricultural tax [in 2006] and implemented a policy of agricultural subsidies, in my small group some of the households that have added members have urgently sought to increase their landholding”.

In short, while most villager-small-group heads feel that the overall pressures to reallocate land were insufficient to prompt a redistribution, many of these same respondents observed that a portion of their group members favored one and that others might need it in time. In light of this, the practice of land reallocations might not disappear as the rural economy continues to change. Only time will tell.

have conducted a land redistribution only once, in 1995 (93 groups). Controlling for the above-mentioned variables, a higher migrant–population ratio consistently contributes (statistically significant at 5 per cent level) to a higher probability of reduced frequency or zero land redistribution between 1996 and 2008.