

**THE RISE OF AGRARIAN CAPITALISM WITH
CHINESE CHARACTERISTICS:
AGRICULTURAL MODERNIZATION, AGRIBUSINESS
AND COLLECTIVE LAND RIGHTS**

Qian Forrest Zhang and John A. Donaldson*

Hundreds of thousands of customers crowd into the 370 outlets of Kentucky Fried Chicken in Chinese cities every day. Where does the fast-food giant source the vast amount of chicken to feed such demand? In the United States, this would come from large-scale chicken farms and poultry-processing plants. How do the millions of small household agricultural producers in China meet the volume and standard demanded by fast food giants like KFC?

Xinchang Foods, located in Shandong Province's Changyi County, is a major supplier of poultry meat to KFC, as well as to other brands like Yum! Brands and Wendy's. It has an estimated capacity to process 200,000 chickens each day. However, the chickens and ducks that the company processes are still raised by individual farmer households scattered around Changyi and neighboring counties. Forty per cent of the company's poultry comes from approximately 10,000 farmer households who signed contracts with the company to supply chickens and ducks of specified quality. Another 40 to 50 per cent comes from production bases set up by the company in the area, which lease farm land from rural collective organizations and employ local farmers.

Xinchang Foods and the tens of thousands of farmers who produce for the company are a part of a major trend that is rapidly transforming agricultural production and rural life in China. Responding to market opportunities and government initiatives, agribusiness companies like Xinchang Foods and farmers like those in Changyi County are re-organizing the distribution and utilization of productive factors—labor, land and capital—and transforming the traditional

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household-based operation toward scaled-up, specialized, commercialized and vertically integrated agriculture.

In what forms are agribusinesses entering agriculture and interacting with farmers? How are land, labor and capital now controlled by corporate and individual actors, and then organized into agricultural production? In this article we argue that agrarian capitalism is expanding in China. The means of production, such as capital and land, are increasingly controlled by agribusiness, while direct producers increasingly sell their labor for a living. We document various forms in which agribusiness companies are conducting transactions with individual agricultural producers. We also argue that China's unique system of land rights—featuring collective ownership but individualized usage rights—has acted as a powerful force in shaping interactions between agribusiness and direct producers. It provides farmers with a source of economic income and political bargaining power and restricts corporate actors from dispossessing farmers of their land. We find strong norms protecting farmers' collective land rights in the agricultural sector, contrary to the received wisdom about weak protection of land rights in China.

In the rest of the paper, we first review the policy context in which this transformation has taken place. Next we introduce our method of data collection, summarize the five forms of agribusiness–farmer interaction found in our study, and analyze each of the five forms in depth. We conclude with a discussion of the causes and characteristics of the rise of agrarian capitalism, with a focus on the role of the land rights system.

The Household Responsibility System and its Discontents

The Household Responsibility System (HRS) started by Deng Xiaoping in 1978 brought land use rights to rural households, providing more leeway for farmers to select crops and to market surplus production.¹ Agricultural productivity increased sharply in the years following the reform, due to the new incentives introduced by the new land system, combined with increases in grain procurement prices and other actions of the state.² The HRS is credited with bringing, nearly single-handedly, hundreds of millions of poor farmers out of poverty—the fastest rate of

¹ David Zweig, *Freeing China's Farmers: Rural Restructuring in the Reform Era* (Armonk: M. E. Sharpe, 1997); Daniel Kelliher, *Peasant Power in China: The Era of Rural Reform, 1979-1989* (New Haven: Yale University Press, 1992).

² For effects of enhanced incentives, see Justin Yifu Lin, "Rural Reforms and Agricultural Growth in China", *American Economic Review*, Vol. 82, No. 1 (1992), pp. 34-51; John McMillan, John Whalley and Lijing Zhu, "The Impact of China's Economic Reforms on Agricultural Productivity Growth", *Journal of Political Economy*, Vol. 97, No. 4 (1989), pp. 781-807; for effects of state policies, see Terry Sicular, "Redefining State, Plan and Market: China's Reform in Agricultural Commerce", *The China Quarterly*, No. 144 (December 1995), pp. 1020-64; David Zweig, *Freeing China's Farmers*; John A. Donaldson, "The State, the Market, Economic Growth and Poverty in China", *Politics and Policy*, Vol. 35, No. 3 (2007), pp. 898-929.

rural poverty reduction in world history. By the end of the mid-1980s, however, the central government's investment in agriculture dwindled, as the government's attention and resources turned to urban development while fiscal decentralization saddled government bodies at the grass roots with increasingly stringent fiscal discipline and declining revenue transfers from higher-level governments.³ During much of the 1990s, agricultural growth stagnated.⁴

By putting individual households in charge of small and often scattered pieces of contracted farm land, the HRS reinstated farmers' incentives, which were sharply curtailed under collectivized farming. At the same time, however, this move also reduced the scale of Chinese agriculture and reduced levels of mechanization.⁵ Although in the years immediately following the reform production began to exceed the strict boundaries of the household in some cases—with some families hiring outside labor and renting the land of others⁶—the presence of large-scale production and the role of agribusiness in the process of growing crops was quite muted. To be sure, firms were involved in the processing and distribution of agricultural products but, by-and-large, in the vast majority of China, production was contained largely within small and scattered plots of land and carried out by members of rural households with severely constrained capital.

Critics of decollectivization—from the left, right and center—lamented the potential loss of productivity caused by dividing communal land.⁷ The “scattered,

³ Christine P. W. Wong, “Central–Local Relations in an Era of Fiscal Decline—the Paradox of Fiscal Decentralization in Post-Mao China”, *The China Quarterly*, No. 128 (December 1991), pp. 691-715; Jean C. Oi, *State and Peasant in Contemporary China: The Political Economy of Village Government* (Berkeley: University of California Press, 1989).

⁴ Loren Brandt, Jikun Huang, Guo Li and Scott Rozelle, “Land Rights in Rural China: Facts, Fictions, and Issues”, *The China Journal*, No. 47, (January 2002), pp. 67-97; R. W. Mead, “A Revisionist View of Chinese Agricultural Productivity?”, *Contemporary Economic Policy*, Vol. 21, No. 1 (2003), pp. 117-31; Azizur Rahman Khan and Carl Riskin, *Inequality and Poverty in China in the Age of Globalization* (New York: Oxford University Press, 2001).

⁵ There are of course numerous areas in China, especially in wheat-growing areas, where mechanized farming still prevails. See, for example, Andrew B. Kipnis, *Producing Guanxi: Sentiment, Self, and Subculture in a North China Village* (Durham: Duke University Press, 1997).

⁶ See, for instance, Jonathan Unger, *The Transformation of Rural China* (Armonk: M. E. Sharpe, 2002).

⁷ William H. Hinton, *The Privatization of China: The Great Reversal* (London: Earthscan Publications Ltd., 1991); Xiao-yuan Dong, “Two-Tier Land Tenure System and Sustained Economic Growth in Post-1978 China”, *World Development*, Vol. 24, No. 5 (1996), pp. 915-28; Guo Li, Scott Rozelle and Loren Brandt, “Tenure, Land Rights, and Farmer Investment Incentives in China”, *Agricultural Economics*, Vol. 19, No. 1-2 (1998), pp. 63-71; Loren Brandt, Jikun Huang, Guo Li and Scott Rozelle, “Land Rights in Rural China”; Chris Bramall, “Chinese Land Reform in Long-Run Perspective and in the Wider East

small and weak” nature⁸ of household-based farming created two major problems. First, it made it difficult for producers to use modern farming equipment and thus resulted in a loss of economy of scale. Second, it made farmers more vulnerable to the risks and shocks associated with specialized commercial farming. For individual farmers, the costs associated with obtaining accurate and timely market information, acquiring the necessary skills and equipment needed for new commercial crops, and marketing the harvest to consumers are often prohibitively high. As a result, farmers tend to ensure survival first. Although they do produce cash crops, they are reluctant to adopt new technologies or crop varieties, or respond to market opportunities.⁹

Stagnation in agricultural production led to widespread calls for new measures to increase agricultural output. Proposed solutions included further developing and disseminating agricultural technology, securing farmers’ land rights or even privatizing farm land to enhance farmers’ incentives, and, of the most interest to this study, scaling up production to achieve economies of scale by introducing large enterprises and modern technologies into agriculture. To reduce productivity loss caused by land reform, Japan, South Korea and Taiwan had all worked to consolidate the overly parcelized land resulting from their policies of land reforms.¹⁰ Two decades after the HRS reform, the Chinese government also found itself battling the negative legacies of that reform.

Interestingly, in the road map for China’s rural development, the central leadership under Deng Xiaoping had already identified the next step. In 1990, Deng articulated his vision as follows:

The reform and development of China’s socialist agriculture, from the long-term perspective, requires two great leaps (*liangge feiyue* 两个飞跃). The first leap is dismantling peoples’ communes and implementing the Household Responsibility reform. This is a great advance and should be maintained in the long term. The second leap is meeting the needs of

Asian Context”, *Journal of Agrarian Change*, Vol. 4, No. 1-2 (2004), pp. 107-41; R. W. Mead, “A Revisionist View of Chinese Agricultural Productivity?”.

⁸ This is often summarized in Chinese literature as “scattered, small, and weak” (*san, xiao, ruo* 散、小、弱).

⁹ Chinese scholars summarize this problem as “small farmers vs. big markets” (*xiao nonghu da shichang* 小农户、大市场).

¹⁰ On other governments’ consolidation efforts, see Chris Bramall, “Chinese Land Reform in Long-Run Perspective”, It is, however, a debatable issue as to whether land consolidation really leads to productivity gains. If farm size increases, but not to the extent of allowing mechanization and not associated with increased labor input, land productivity may actually decline due to reduced per unit labor input and a lower intensity of land-use. Land consolidation has to be carried out in certain specific ways—for example, moving land to more efficient users—to increase productivity. See Qian Forrest Zhang, “Retreat from Equality or Advance toward Efficiency? Land Markets and Inequality in Rural Zhejiang”, *The China Quarterly*, No. 195 (September 2008) for a discussion [Is this date correct?].

scientific agriculture and socialized production, properly developing scaled-up operation, and developing the collective economy.¹¹

These “Two Leaps” have since become the guiding vision for the central government’s agricultural policies. Deng further elaborated: “the rural economy eventually needs to become collectivized (*jitihua* 集体化) and coordinated (*jiyuehua* 集约化) ... agricultural modernization is impossible if each household works on its own”.¹² Since Deng had completed the first leap, Deng’s successors needed to make the second leap.

The policy shift from HRS to the second leap started in the mid-1990s. The central leadership under Jiang Zemin started to articulate “agricultural modernization” in more concrete terms by proposing policies in a series of policy statements: the Ninth Five-Year Plan (passed in 1996), Jiang’s report to the 15th Party Congress in 1997, and the 1998 document of “Decisions by the Central Committee of the Chinese Communist Party on Several Key Issues in Rural and Agricultural Works” which was issued in 1998. The central leadership stated clearly that the goal of agricultural modernization (*nongye xiandai hua* 农业现代化) was to make the transition from traditional to modern agriculture and from uncoordinated and low-scale operation (*cufangshi jingying* 粗放式经营) to coordinated and large-scale operation (*jiyueshi jingying* 集约式经营). The central government characterized a modernized agriculture as commercialized (*shangpin hua* 商品化), specialized (*zhuan ye hua* 专业化), scaled up (*guimo hua* 规模化), standardized (*biao zhun hua* 标准化) and internationalized (*guoji hua* 国际化).

The central leadership also identified agricultural vertical integration (*chanye hua* 产业化) as the main means to achieve agricultural modernization.¹³ Vertical integration refers to two parallel processes: first, scaling up production of a crop in a region, because without a large enough volume harvested, further processing and marketing of the crop will not be economically viable;¹⁴ and, second, integrating cultivation with processing and marketing. The central government believes that vertical integration helps to bring farmers into markets and to bring modern technologies into farming. At the center of the government’s vertical

¹¹ Xiaoping Deng, *Deng Xiaoping wenxuan* (Collected Works of Deng Xiaoping) (Beijing: Renmin Chubanshe [The People’s Publishing House]), 1993) p. 355.

¹² Xiaoping Deng, *Deng Xiaoping nianpu, 1975–97* (Chronicles of Deng Xiaoping, 1975–97) (Beijing: Zhongyang Wenxian Chubanshe [The Central Archives Press], 2004) pp. 1349–50.

¹³ Throughout this article, we use “agricultural modernization”, or “modern agriculture”, to refer to the mode of agricultural production including specialization, vertical integration, corporatization, commercialization and large scale. We refrain, however, from making claims about whether this modernized agriculture is necessarily more efficient, which is an empirical question that needs to be answered with data.

¹⁴ The scaling up here, however, does not necessarily mean that production needs to be done at a supra-household level. It could simply mean that more households in a region shift to growing a certain crop, so the scale of production for that crop increases in a region.

integration campaign is the promotion of “dragon head” agribusiness companies (*longtou qiye* 龙头企业) as vehicles for vertical integration.¹⁵ Both central and local governments can bestow “dragon head” status to agribusiness companies. The designated “dragon head” enterprises can receive government support, including easier access to loans from state banks, but the criteria of designating “dragon head” enterprises is more lenient the further one moves down the administrative hierarchy. Consequently, local “dragon head” enterprises often receive nothing more than the title. Nevertheless, agribusiness companies have proliferated in recent years. One survey found that in 2004 there were 114,000 officially recognized “dragon head” enterprises nationwide—a four-fold increase from 27,000 in 2000—and that 84.5 million rural households were working with these companies.¹⁶

In light of these developments, we contend that the second leap has indeed started and China’s agricultural development is entering its fourth reorganization, following the land reform, collectivization and the HRS. Yet this shift in rural China has barely been discussed in English-language literature.¹⁷ This paper addresses this silence.

Selecting Cases, Identifying Pathways

Our fieldwork was conducted in 2007 in different localities within two Chinese provinces, though we also draw on insights from previous fieldwork in other provinces and from secondary sources. Since patterns of growth of agribusiness may vary between coastal and inland provinces, each author visited one province from China’s eastern and inland regions (Shandong and Yunnan), though Chinese sources show that the rise of agribusiness is a nationwide phenomenon.¹⁸ For each

¹⁵ Scott Waldron, Colin Brown and John Longworth, *Rural Development in China: Insights from the Beef Industry* (Aldershot: Ashgate, 2003); Scott Waldron, Colin Brown and John Longworth, “State Sector Reform and Agriculture in China”, *The China Quarterly*, No. 186 (June 2006), pp. 277-94.

¹⁶ See Ruofeng Niu, “Zhongguo nongye chanyehua jingying de fazhan tedian yu fangxiang” (Development Characteristics and Directions in Agricultural Vertical Integration in China), *Zhongguo nongcun jingji* (The Rural Economy of China), Vol. 2002, No. 5 (2002), pp. 4-8, for results from a 2000 survey, and Yun Zhang, “Nongye chanyehua ji jingrong tuidong wenti yanjiu” (a Study on Agricultural Vertical Integration and Its Financial Support), *Huatai caijing zhengquan fenxi* (Huatai Finance and Securities Analysis), Vol. 2006, No. 8 (2006), pp. 57-64 for the 2004 figures.

¹⁷ Scott Waldron, Colin Brown and John Longworth, “State Sector Reform and Agriculture in China”, p. 292.

¹⁸ See, for example, Ruofeng Niu, “Zhongguo nongye chanyehua jingying de fazhan tedian yu fangxiang”; Jiayi Chen, Guoyu Yang and Xiaohui Wu, “Lun nongye jingying dahu” (On Big Farming Households), *Zhongguo nongcun jingji*, Vol. 2007, No. 4 (2007), pp. 12-17; Xiaoming Guo, Zujun Liao and Rao Fu, “Longtou qiye daidong xing, zhongjie zuzhi liandong xing he hezuoshe yitihua sanzong nongye chanyehua moshi de bijiao: jiyu zhidu jingjixue shijiao de fenxi” (A Comparison of Agricultural Vertical Integration Led by Dragon Head Enterprises, Intermediary Organizations, and Integrated Cooperatives:

province, we researched agricultural products which have seen the expansion of agribusiness and the implementation of vertical integration.

Vertical integration first started in Shandong during the early 1990s as a spontaneous experiment by local officials, not unlike the experiment with decollectivization by desperate farmers in Anhui and Sichuan in 1978.¹⁹ Shandong has since maintained a leading position in agricultural modernization in the country and has become the leading producer of vegetables, poultry and fruit.²⁰ Shandong thus provides the fullest demonstration of agribusiness growth. We selected one case from each from the three biggest sectors of modern agriculture in Shandong: poultry in Changyi County, vegetables in Shouguang County and fruit in Binzhou County. Among the inland and western provinces, we selected Yunnan because its unique natural endowment gives it an edge in profitable commercial crops such as coffee, rubber and flowers. In Yunnan, we examined tea, coffee, *wasabi* (Japanese horse radish), vegetables, fresh-cut flowers, fruit and rubber across five diverse sub-provincial regions: Baoshan, Kunming, Pu'er (formerly Simao), Xishuangbanna and Zhaotong. In traditional strongholds of grain production (the three Northeastern provinces and central provinces like Henan), the progress of vertical integration may be markedly different from that in Shandong and Yunnan.

During our fieldwork, we interviewed government officials, farmers, entrepreneurs, managers, staff and others who were involved in growing, harvesting, marketing and processing the selected agricultural products. In addition, we visited areas that were producing these products to see firsthand the changes that were occurring—both in the field and in farmers' homes. In each of these areas, market-dominated relations of production have emerged. During our fieldwork, we encountered agribusinesses of different sizes, origins and descriptions. The involvement of such businesses both required and created a scale of production that exceeded the household.

In the rest of this paper we depict five distinct forms of agribusiness. We differentiate these types by the ways in which the agribusinesses relate to the direct producers—the farmers. Overall, this typology identifies multiple pathways

An Analysis from the Perspective of Institutional Economics), *Zhongguo nongcun jingji*, Vol. 2007, No. 4 (2007), pp. 40-47.

¹⁹ How farmers' experimented with decollectivization is a well-told story. See, for example, Justin Yifu Lin, "The Household Responsibility System Reform in China: A Peasant's Institutional Choice", *American Journal of Agricultural Economics*, Vol. 69, No. 2 (1987), pp. 410-15. See Shumin Han, "Shandongsheng Weifangshi nongcun hezuo jingji zuzhi fazhan zhuanguang diaocha" (An Investigation of the Development of Rural Economic Cooperatives in Weifang City, Shandong Province), *Zhongguo nongcun jingji*, Vol. 2007, No. 8 (2007), pp. 56-63 for the spontaneous start of vertical integration.

²⁰ Hongbing Li, "Zai nongye chanyehua fazhan zhong peiyu he tigao nongmin zuzhihua chengdu yanjiu" (A Study on Nurturing and Strengthening the Organization of Farmers through Developing Agricultural Vertical Integration), *Nongye jingji wenti* (Issues in Agricultural Economy), Vol. 2008 [Is this number correct?], No. 1 (2008), pp. 99-102.

through which agribusiness is leading the growth of agrarian capitalism in rural China (see Table).²¹

**Table: Relationships between Agribusiness and Farmers in China—
A Typology**

Form	Role for Agribusiness	Role for Direct Producers	Harvest	Class Relation
1. Commercial farmer	Purchase product, provide training	Work independently on allocated family land	All for commercial exchange	Direct producers can be dominated by purchasers through unfair terms of trade.
2. Contract farmer	Form purchasing contracts, provide technical support	Work on allocated family land to fulfill company contracts	Sold to contracting companies	Direct producers are dominated by the company, but retain some flexibility.
3. Semi-proletarian with Chinese characteristics	Form bases through leasing village farmland, hire villagers	Work as company employees on collective land rented to companies	Belongs to the company	Direct producers are dominated by the company, but enjoy a degree of entitlement.
4. Semi-proletarian farm workers	Form bases through leasing wasteland, hire migrant laborers	Work on company land as company employees, but have allocated land at home	Belongs to the company	Direct producers are dominated by the company, but have family land as fall-back option.
5. Proletarian farm workers	Form bases through leasing wasteland, hire landless laborers	Landless, work on company land as employees	Belongs to the company	Direct producers are completely dominated by the company.

As we move through this typology, we find variations along two dimensions: first, the control over—and use of—labor and land changes. Across these forms, agribusiness firms have varying degrees of control over labor and land *vis-à-vis* direct producers. Second, with changes in the control over land and/or labor, social relationships between actors also change. Most notably, the power

²¹ In organizing these forms on a table, we do not imply a stage model, as if forms will shift successively up or down the forms on this table. Instead, we see these forms as parallel pathways that co-exist, at least for a time. One does not necessarily lead to another.

relationship between rural residents (whether acting as contractors or farm workers) and the agricultural firm is strikingly different in each form. In all cases, the institution of land rights plays a crucial role in shaping such relationships. We argue that the collective land rights system in rural China allows rural residents to resist acquisition by agribusiness of more control over farm land. With this in mind, we sharply disagree with growing calls to eliminate this institution and privatize farm land in China.

Form 1: Commercial Farmers

By commercial farmer, we refer to rural households that grow crops exclusively for commercial exchange, and meet their subsistence and other needs by buying grain on markets instead of by growing it. Although many rural households have long participated in the market by selling surplus grain or economic crops, “commercial farmers” move completely out of producing subsistence crops.

The commercialization of subsistence-satisfaction brings important changes to farmer households. While still relying on family labor and contracted family land, these households derive their subsistence from markets, which often link them with remote actors and social processes that lie beyond the local village community. It also exposes them to unforeseeable risks emanating from a diverse set of sources, including false or untimely market information, fraudulent transaction partners and price fluctuation. The commercial crops that they grow, such as coffee, are often more vulnerable to weather changes than are staple grains. An unexpected frost in 1999 in southern Yunnan, for example, ruined the livelihood of many commercial coffee growers. Furthermore, the cost associated with the storage, transportation, preliminary processing and marketing of the crops are prohibitively high for isolated individual farmer households. Thus, unless there are some intermediary agents helping to lower transaction costs and stabilize markets, the rational choice for farmers is to rely on subsistence farming as a survival-first strategy.²²

Commercial farming by rural households, not a new phenomenon in rural China,²³ was eliminated under collectivization. Its re-emergence depended on the

²² See James C. Scott, *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia* (New Haven: Yale University Press, 1976) for the classical statement on subsistence farmers’ survival-first strategy. See Housi Cheng, “Bianyuan yu gudaο: guanyu Yunnan shaoshu mingzu diqu pinkun chengyin de yizhong jieshi” (Peripheries and Islands: An Explanation on the Cause of Poverty in Ethnic Minority Regions in Yunnan), *Zhongguo nongcun guancha* (China Rural Observations), Vol. 1999, No. 6 (1999), pp. 603-10, for an analysis of its manifestation among Chinese farmers. This problem has also been discussed by Lansheng Sun, “Guanyu dingdan nongye de jingjixue fenxi” (An Economic Analysis of Contract Farming), *Nongye fazhan yu jingrong* (Agricultural Development and Finance), Vol. 2006 [Is this number correct?], No. 6 (2006), pp. 11-27.

²³ Philip C. C. Huang, *The Peasant Family and Rural Development in the Yangzi Delta, 1350–1988* (Stanford: Stanford University Press, 1990), for example, documented the

marketization of agricultural products, without which the commercial households could neither sell their crop nor buy grain. In the 1980s, local governments attempted to coordinate marketization and facilitate the development of commercial farming, with limited success.²⁴ Now, a diverse set of agribusiness firms are acting as the intermediary agents, lowering transaction costs and providing stable markets to commercial farmers.

The trailblazer in Yunnan's coffee industry was the Swiss multinational firm Nestlé. When it started in 1989, in addition to introducing coffee varieties suited to the local climate, Nestlé had also to provide, upon request, technical training and assistance to farmers inexperienced in this trade. The company also provided training to local technicians, on the condition that they subsequently train farmers in coffee production. This training has been popular: by 2007, Nestlé had held 66 programs and trained, free of charge, over 2000 local coffee growers.²⁵ Over 18 years, Nestlé has gradually developed the two sub-tropical regions of Pu'er and Xishuangbanna in Yunnan into a base that provides a steady supply of quality coffee beans to be processed into instant coffee in its factories in Dongguan, Guangdong, for the domestic market. Nestlé, however, does not enter into any formal or contractual relationship with coffee growers. The company did not and could not force farmers to shift from grain to coffee. It merely purchases directly from farmers at the current global market price, through a number of buying stations which it established to facilitate the transaction. Through its long presence in the region and the large volume of purchase (Nestlé now buys more than 5,000 tons of beans from Pu'er Municipality, a third of the region's total output), Nestlé has provided a stable market for local commercial coffee growers, reducing risks and thus encouraging farmers to shift to coffee.

On the other side of the grower-purchaser equation are farmers like Mr. Chen and his wife. The Chens, living in the rural areas of Pu'er Municipality, have shifted from growing corn to growing coffee beans. This shift occurred over a series of steps. At first, while he and his family tended the corn on his own plot, Mr Chen worked in an ad hoc manner at Beigui, a local coffee-growing TVE, where he earned cash to supplement his subsistence farming and also learned the skill of growing coffee. Soon afterwards, just as Nestlé started buying coffee

highly developed commercial farming in the Yangtze River Delta in the late Imperial period.

²⁴ Many of such state-led development plans failed disastrously. For example, Scott Rozelle, Linxiu Zhang and Jikun Huang, "China's War on Poverty" (Stanford: Stanford University, 2000), Working Paper, No. 60, pp. 1-51 describe a state-initiated project to encourage farmers in one poor region to produce frozen rabbits. Ultimately, the project failed due to the farmers' lack of experience and training, and nearly every household lost its entire investment. Moreover, officials, far from being blamed, actually received funding for a second phase of this initiative, which they invested in non-poor villages.

²⁵ All figures cited about our cases, unless otherwise stated, are from interviews and fieldwork.

beans in the area, Mr Chen switched from working for Beigui to growing coffee beans on his family's land. Like most of his neighbors, Mr Chen soon moved completely out of growing corn. Then, as now, the family sells exclusively to Nestlé, which has proven to be a dependable buyer, purchasing coffee beans at the international price (some computer-savvy farmers even check the international price on the Internet). The family owns some preliminary processing equipment, with which they shell, clean, dry and split coffee beans before delivering them to Nestlé. The family also purchased a truck, their second, which they use to deliver the coffee to Nestlé's buying station and to purchase grain, inputs and other needs. Through growing coffee, the Chens have been able to afford to send their children to schools in the municipal seat, where they live during the week.

Risks associated with commercial farming are still clearly on the minds of both Nestlé and the coffee growers. What concerns Nestlé is farmers pulling up their coffee shrubs and shifting to other crops when the market price falls (which happened in 2001 and 2002), affecting the steady supply that it needs. The company's representatives in Pu'er therefore encourage farmers to grow more than just one crop to hedge their risk and also to maintain a sustainable coffee operation. Farmers who ignore this advice, like the Chens, are directly exposed to the perils associated with bad weather and falling price. The 1999 frost, in fact, resulted in large losses for the Chen family but, thanks to the capital they had accumulated in previous years, they avoided bankruptcy and the damaged shrubs grew back the next year.

In order to shift out of grain production into a commercial crop, most rural families require some type of outside impetus. In some cases, when roads (even humble dirt roads) link local areas to marketing towns and beyond, middlemen can come in to purchase such crops, inducing households to increase commercial production. Often, however, entrepreneurs and companies provide the needed access to skill, capital and market. In the Chen's case, the initial outside stimulus was the Beigui Coffee Company. This local, subsequently privatized, TVE provided Mr Chen with the chance to gain skills in growing coffee, as well as to acquire much-needed cash. Subsequently, the relatively stable market provided by Nestlé encouraged the Chens to shift exclusively to growing and processing coffee beans.

Commercial farmers like the Chens enter into new sets of relationships with individual, corporate and state actors, who often mediate their interactions with markets. In such relations, agribusiness firms exert no control over the land or labor which belongs to the direct producers. The commercial farmers are usually not under any direct domination or exploitation, other than the unfavorable terms of trade they may endure on the open market.

Form 2: Contract Farmers

In dealing with independent commercial farmers, agribusiness has to face the uncertainty of fluctuating supply caused by farmers shifting in and out of a commercial crop—sometimes dramatically—when prices for that crop change.

One solution to that problem is to establish a formal contractual relationship with farmers, usually in a contiguous area. In this relationship, the company typically provides farmers with technology, training, service and, in many cases, start-up capital. Although the farming households *retain control over their household land* and their own labor, in return for company support they sign a contract, generally locking them into a selling price, with the promise to sell their entire harvest to the company. We call these households “contract farmers”.

One of the many examples that we discovered of this type of production is Xinchang Foods, a Shandong poultry-meat processing company, whose story opened this article. In addition to the poultry-processing facilities, this company also has two plants for processing microwavable food, such as TV dinners. Each day, the company processes an estimated 200,000 chickens and 60 tons of pre-cooked food. Established in 1988, the company now reportedly employs more than 8,000 people, and has revenue in excess of 800 million yuan. Xinchang Foods had been a state-owned enterprise under the grain bureau, but was changed in 2001 to a shareholding company totally divested from the bureau, with all workers holding stocks in the company. The company estimates that about 40 per cent of its meat supply comes from its approximately 10,000 contract farming households.²⁶ It provides baby chickens and ducklings, two to three days after hatching, to the participating farmers, as well as feed, basic equipment, vaccines and medicines, and management advice. The company guarantees a minimum, or “protective”, price (*baohu jia* 保护价), pays immediately upon delivery and overall has established a solid relationship with the farmers over the course of the previous decade.

Farmers who produce under contract with this company confirm much that the company says. Mr. Zhao, for instance, husbands more than 8,600 ducks for the company. In this manner, he can earn 1500 yuan on average each month. However, he does argue that the company uses its size and market position to hold down the purchasing price. Mr. Zhao lives in an urbanizing area and his family land has shrunk from 1.7 *mu* per capita to about 0.3 *mu*, because of land expropriation by the state for urban expansion. Now, instead of growing grain, Mr. Zhao and his family dedicate most of their land to raising ducklings, retaining a small plot for growing melons and vegetables. Given their limited land, animal husbandry might be one of the few viable options that the Zhao family has left in the agriculture sector. In instances like these, when household land shrinks dramatically due to urban sprawl, agribusiness makes it viable for farm families to continue in agriculture. In his relationship with Xinchang Foods, Mr. Zhao retains his entitlement to land use rights provided by the village collective. Nevertheless, he has relegated much of the control over production and the final products to the company, which has sole the purchase rights (monopsony) over the products.

²⁶ A further 40 to 50 per cent of their production comes from a more formal contract with village governments, the third form in our typology, discussed below.

We saw many other examples of this form of agribusiness-led agricultural modernization. For example, in a very poor area of northeastern Yunnan's Zhaotong Municipality, farmers signed contracts with a local entrepreneur (a former local government official) to grow Japanese horseradish (the crop that produces *wasabi*) for export to Japan. In exchange for signing the contract, farmers received training and the start-up capital needed to grow this expensive crop. Many coffee and tea processing firms in Yunnan have also established production bases with contract farmers. Cases like this are also widely reported in Chinese publications, as well as in English-language journals.²⁷

Like the commercial farmers who have given up subsistence agriculture and now rely on production of commercial crops, these contract farmers grow economic crops for commercial exchange, deal with outside actors and buy food on the market for their own consumption. However, because of their lack of access to capital, market or skill, contract farmers have to enter into formal contractual relationships with a more powerful and resourceful corporate actor. Contracted farmers commit legally to selling only to the contracting company. By providing them with the needed capital, skill and/or market access, the corporate actor reduces contract farmers' negotiating power and profit margin. In this relationship, farmers provide only labor and land.

Theoretically, contract farmers do enjoy one advantage: they can shield themselves from market risks by obtaining protective prices for their products.²⁸ In our fieldwork, we routinely found farmers, and sometimes even local governments, who tried to obtain protective prices from contracting companies, often to no avail. County governments in Yunnan's Baoshan Municipality, for example, demanded a protective price from Nestlé when the latter floated the idea of establishing a production base there. These demands only pushed Nestlé away

²⁷ For Chinese publications, see, for example, Fengqin Liu, "Buwanquan heyue yu luyue zhang'ai: yi dingdan nongye weili" (Incomplete Contracts and Obstacles to Contract Enforcement: The Example of Contract Farming), *Jingji yanjiu* (Economic Research Journal), No. 4 (2003), pp. 1-22; Kaiwen Feng, "Cunmin zizhi, hezuoshe he nongye chanyehua jingying zhidu de xietiao yanjiu: laizi Shandong Yantai de diaocha baogao" (Co-Evolution of Rural Self-Governance, Cooperatives and the Institution of Industrialized Agricultural Production: A Survey Report from Yantai, Shandong), (*Chinese title?*) *Chinese Rural Economy*, No. 2 (2003), pp. 45-50; for English publications, see Dinghuan Hu, Thomas Reardon, Scott Rozelle, Peter Timmer and Honglin Wang, "The Emergence of Supermarkets with Chinese Characteristics: Challenges and Opportunities for China's Agricultural Development", *Development Policy Review*, Vol. 22, No. 5 (2004), pp. 557-86; Hongdong Guo, Robert W. Jolly and Jianhua Zhu, "Contract Farming in China: Perspectives of Farm Households and Agribusiness Firms", *Comparative Economic Studies*, Vol. 49, No. 1 (2007), pp. 285-312.

²⁸ In their survey, Guo *et al.* found that only 27.3 per cent of contracts in their survey featured a price floor, with 23 percent based on a fixed price. The remaining 44 per cent of these contracts were based on the market price, offering farmers little protection. See Hongdong Guo, Robert W. Jolly and Jianhua Zhu, "Contract Farming in China".

to Pu'er, where the company encountered no such requirement. Even when a protective price is specified in the contract, however, it may not help in real terms. In the case of Mr Zhao, for example, when market price dropped below the protective price, the company simply raised prices for the feed and medicines that they sold to farmers to offset the above-market margin it paid for the ducks.

Due to the dominant position of corporate actors, contract farmers like Mr Zhao are typically not as well off as independent commercial farmers. Partly in response to their unfavorable position *vis-à-vis* the companies, contract farmers often violate contracts and sell some of their harvest to other purchasers who offer higher prices. Companies call this the "middleman problem", after the itinerant middlemen who drive around and secretly purchase products from companies' production bases. In other cases, contract farmers cut corners in the production process, resulting in product defects.²⁹

The middleman problem and corner-cutting have led to the dissolution of many contractual relationships. One report finds that, within the studied area, some 80 per cent of the contracts between firms and farmers had been breached by one party or the other.³⁰ Another survey of contract farmers in Shandong's Yantai Municipality found that 90 per cent of farmers said that they would breach their contracts if a better price was offered on the market.³¹ In fact, Nestlé started its coffee operation in Yunnan with the contract farming model, only to abandon it later because of the rampant middleman problem. Companies that have managed to maintain their production bases and fend off middlemen rely on personal relationships, market monopsony or geographical inaccessibility.³² Due to these difficulties, we believe that contract farming as a form of agrarian capitalism is unstable and likely to be transient, changing to either commercial farming or to the form that we discuss next.³³

²⁹ See Hongbing Li, "Zai nongye chanyehua fazhan zhong peiyu he tigao nongmin zuzhihua chengdu yanjiu", for an example in Shandong where organic vegetable product exported to Japan was rejected due to high traces of pesticide.

³⁰ Fengqin Liu, "Buwanquan heyue yu luyue zhang'ai: yi dingdan nongye weili".

³¹ Kaiwan Feng, "Cunmin zizhi, hezuoshe he nongye chanyehua jingying zhidu de xietiao yanjing".

³² In Mr. Zhao's case, the company prevents him from selling to middlemen by asking for a high deposit for each of the ducklings he takes, a measure that may not be easily replicable for other crops.

³³ This is consistent with a survey conducted by China's Ministry of Agriculture that reveals that, among the different types of relationships between farmer and firm, the proportion of contract farming relationships dropped from 70.8 per cent to 49.0 per cent. See Ruofeng Niu, "Zhongguo nongye chanyehua jingying de fazhan tedian yu fangxiang", also reported in Xiaoming Guo, Zujun Liao and Rao Fu, "Longtou qiye daidong xing, zhongjie zuzhi liandong xing he hezuoshe yitihua sanzong nongye chanyehua moshi de bijiao".

Form 3: Semi-proletarian Farm Workers with Chinese Characteristics

From a contracting company's perspective, a long-term solution to the middleman problem can only come from gaining greater control over the growing and harvesting process and changing farmers' incentive structure. One way of doing this is to establish production bases by renting the land (use rights) from the collective owner, the village, and hiring village residents as company employees to work on the land. In some cases, rural households still work on the piece of household land allocated to them by the collective—although now rented to the company base—growing whatever the company asks them to grow. In other cases, land is consolidated and household boundaries erased, and the farmers simply work for the company on company land. Even when farmers continue to work on the allocated household land, a profound change has happened: they are now only providing labor in the production process; the land use rights and the right to dispose of harvest from the land are controlled by the company.

We add the appendage “with Chinese characteristics” because, without the unique institution of collective land ownership and individualized land use rights in rural China, this form might not exist. In this form of agribusiness, the companies typically establish contractual relationships with village collective authorities, not with individual farmers. Because collective land ownership restricts village authorities from disenfranchising rural residents from their land, it also restricts companies from denying village residents jobs on company production bases. Without such a restriction, an enclosure movement led by agribusinesses could easily throw many farmers off their land and into the army of reserve labor.

In this form of vertical integration, farmers become semi-proletarian. They still have an entitlement to collective land (and, in fact, often receive rent), but they have to sell their labor to the company for wages. In a sense, the farmers trade their land use rights for jobs. Their entitlement to collective land gives them entitlement to company jobs, and thus, they “own” their jobs in a way unlike fully proletarianized workers.

Like many of the other companies discussed here, Shandong's Yuhua Date Company started as a TVE, but was later privatized. In 1987, the company began growing dates in bulk, exporting some to outside markets. About one-third of their date production takes this semi-proletarian form. They lease farmers' land for 30 years from the village collective, and hire village residents to grow, manage and harvest date trees. Farm workers are paid individual wages, based on the acreage of trees they tend. Yuhua does not pay farm workers for the dates they harvest, arguing that the company owns the harvest, while workers' labor has already been compensated in wages. Through a team of foremen and managers and a hierarchical organizational structure, Yuhua controls and manages the land rented and the farm workers hired. As a result, they reportedly have little problem with farmers selling their produce to middlemen, which is deemed theft of company assets.

Taiwan's Qianhui Flower Company, based in Chenggong County, Yunnan, rents 70 per cent of its land from collectives through contracts of at least seven years. It then pays villagers a monthly wage to grow and harvest the flowers on their own land. This company currently has 10 such bases throughout Yunnan, using them to grow a wide variety of flowers in different environments. This company emphasized that once the household is contracted, the farmers cannot individually withdraw their land from the arrangement, because the land is contracted through the village committee. Like Yuhua, Qianhui does not have problems with middlemen. It considers selling the product to outsiders a criminal offense, and works with local law enforcement agencies to enforce its contracts.

In a third case, Mr. Liu, a naturalized American citizen, created the only cattle ranch of scale in Yunnan province. About half of his land is rented from individual households who then work on his farm. In yet another case, SinoChem invested in rubber plantations in Xishuangbanna, in southern Yunnan. In response to a government request to develop the region through the rubber industry, SinoChem has also rented three large plots from the collective authorities of three villages. The company provides fertilizers and seeds to farmers, who grow and harvest rubber tree plants on their own plots of land. The company then manages them through a hierarchical structure, with farmers separated into work teams, and each team further separated into smaller units.

In these examples, although the farm workers do benefit economically, they clearly lose autonomy. Compared to contract farmers, semi-proletarian farm workers have not only relinquished use rights over their collective land (although they often receive rent for that) but are also subjected to tighter company control in the production process. As a result, they lose control totally over the harvest. Despite these shortcomings, when rural residents lack capital and know-how, they often benefit financially by making this sort of arrangement with agribusiness. From the company's point of view, this form is a relatively painless way to obtain control over farm land and overcome the middleman problem. However, companies have also found ways to obtain even greater control over their employees, the production process and the harvest.

Form 4: Semi-proletarian Farm Workers

Under this form, the company controls the land of its production bases and hires rural workers. The farm worker, who migrates to the company's production base, still possesses use rights over his or her own land, but that land is elsewhere—and has usually been rented out to relatives, neighbors or entrepreneurs. Hence, we classify these laborers as "Semi-proletarian Farm Workers": they sell labor for wages, yet still retain access to some means of production, although not directly used.

The Dahongpo Coffee Plantation in western Yunnan Province controls a base of some 7,000 *mu*, of which 4,500 *mu* is currently cultivated with coffee plants. Established in 1989, the company began as a TVE led by a vice township head. In 1998, the government privatized company debt, sorted out the assets and sold the

entire company to this former local leader. The company leases land that was previously classified as wasteland—mostly on mountain slopes—with long-term leases that expire in 2030. The company got capital support from the Bank of Agriculture and an ear-marked World Bank loan to invest in infrastructure building. In the early years the local government was also involved in attracting poor peasants to come and grow coffee on the base.

At Dahongpo, the entire process of growing and harvesting is tightly controlled by the company. Like most others of its kind, this company provides land, training, fertilizer, pesticides, seeds and other inputs. The company has a hierarchical organizational structure to supervise farm workers. Six hundred or more farm workers (in 168 farming households) are divided into four teams, each managed by a group of full-time supervisors and technicians (in total, the company hires 15 full-time managers and technicians). The company passes down orders through this hierarchy on every production procedure, from when to apply fertilizer and pesticide to when to start harvesting. Materials such as seeds, fertilizers and pesticides are also distributed by the company, through the teams, to each worker family. The company does not charge rent, but establishes a production quota for each *mu* of land. The company and farm worker split the within-quota harvest on a 6:4 ratio, and 100 per cent of the sales from the above-quota harvest belongs to the farm worker. Company representatives acknowledge that the harvest belongs to the company, but argue that the company chooses to give workers a share in the harvest—in lieu of wages—in order to attract workers. The company's control of land and close monitoring of the entire production process mean that farm workers have much less flexibility than contract farmers, who work on their own land. Farm workers not only have great difficulties in “stealing” the harvest and selling it to middlemen but they also face dire consequences if caught doing so. The company will kick workers off the farm as punishment. As a result, company representatives claimed that there is no middleman problem.

Nevertheless, the company gives farm workers a generous cut of the proceeds and has provided land for migrant farm workers to build their own housing. The ready availability of “wasteland” in the area and the relatively tight labor supply (the area has a large minority population, who are less receptive to the idea of becoming hired employees) means that the company has to offer better terms to attract migrant laborers, whose access to collective land at home also serves to strengthen their bargaining power.

Because of China's collective land system, such companies rarely control prime farm land. During interviews, company representatives repeatedly stressed that, if they had obtained access to better farm land not burdened with a population of entitled villagers, they would not have bothered with the wasteland they currently used. When facing the choice of renting collectively owned land and then hiring villagers versus opening up wasteland and hiring migrant laborers, many companies eschewed the former because of the complex relations that it creates between companies, village authorities and villagers. In this form, the

farm workers' bargaining power is quite constrained, resting in the form of an escape clause—the land back home which the worker retains.

Form 5: Proletarian Farm Workers

The final form that has emerged in China is similar to the previous type, except that the farm workers are landless laborers without alternative livelihoods. The Beigui Coffee Company started off in the 1980s as a TVE under the prefecture Supply and Sales Cooperative (SSC) in Yunnan's Simao Prefecture (now Pu'er Municipality), and re-formed as a stockholding company in 1998, with the SSC holding the majority stake and workers each holding shares. Of the 10,000-*mu* base that the company controls, half is rented from farmers and half was previously classified as wasteland which the company leased long-term (50 years) from the village collective. The operation involves 2,000 farmers, most of whom are stable farm workers who moved their entire families from poor areas, primarily Zhaotong Municipality in northeastern Yunnan.³⁴ However, unlike the previous forms, the company encourages peasants to give up their land rights in their home villages and obtain a local permanent resident permit, which, however, does not grant them any entitlement to collective land. These farm workers have no land rights either in Pu'er or in their home areas, although they do receive the right to participate in local elections at their new residence in Pu'er. In a sense, these re-located migrant workers become second-class citizens in their adopted villages—they are members of the villages, their children can go to local schools, they have most of the political rights of any other villager, but they do not have access to collectively-owned land. Their dependence on manual labor is clearly shown in the fact that most men in these migrant families have to sell their labor in other jobs as temporary workers, while the women do the actual farm work on the coffee plantation.

This arrangement also makes the farm workers closely dependent on the company. Workers can earn income from three sources: first, for each *mu* of coffee shrubs under their cultivation, they earn a labor wage of 15 yuan; second, as a bonus to give workers more incentive, the company also pays a weight-based purchasing fee for the coffee beans; and third, workers can also earn a picking fee during peak harvesting season. Like Dahongpo, Beigui takes total control over the production process. Given Beigui's larger size (2000 workers in 600 households, compared to 600 workers in 168 households at Dahongpo), the company organizes their production in a three-tiered hierarchy: company–farms–teams. While team leaders are selected from farm workers, managerial staff at the farm level are full-time employees of the company. Overall, the company is supervised by more than 30 salaried staff, managing the production process in a top-down manner.

³⁴ Mr. Chen, described above, is an exception, having worked for years for Beigui as a temporary worker.

The company argues that the farmers are far better off today than they used to be. Given that these farmers are from one of China's poorest areas, and that they do migrate to Baoshan voluntarily, that is likely to be true. The company estimates that farm workers earn between 20,000 and 30,000 yuan per household, which is far higher than the net rural income of any county in Zhaotong prefecture. While these farm workers benefit financially to some degree and emerge from poverty, in political and social terms they have the least bargaining power of the farmers that we have discussed. Since land acts as a type of insurance policy for poor farmers, the fact that Beigui asks farmers to switch their household registrations and therefore lose their original land entitlements makes them even more dependent on the company. On the other hand, the company's need to attract farmers to work on the base limits the extent to which they can exploit this dependence.

More interestingly, these migrant farm workers are relocated to villages where farmers have their own land usage rights. The two groups of farmers live right next to each other. Most of the relocated landless farm workers live at the center of the village in houses built by Beigui, with a few living in company-built housing in the field. Local villagers, many of whom have become wealthy growing vegetables and other commercial crops, live in self-built houses on their own land, surrounded by coffee groves. Although these two groups of villagers do socialize with each other, a sense of distinction between the two was palpable through our conversations with both.

Summary and Discussion

In some rural areas in today's China, the central government's vision of a "second leap" into modern agriculture has become a reality. The household-based, small-holding agricultural production reinstated by the HRS has been transformed into specialized, commercialized, vertically integrated and larger-scale agriculture that is competitive in export markets. Shouguang County in Shandong Province, for example, boasts the largest vegetable production base and vegetable trading market in the country, with hundreds of long-haul trucks departing daily to ship vegetables to all corners of the country. The entire county's farmland is fully covered by greenhouses for growing vegetables. Chenggong County in Yunnan, where agriculture has shifted entirely to commercial flower and vegetable production, now houses the largest flower trading and auction market in Asia, ships fresh-cut flowers to markets in neighboring Asian countries as well as the United States, and is projected in 10 to 15 years to become the biggest flower producing and exporting area in Asia, if not in the world.³⁵

In this process of modernization of China's agriculture, agribusiness companies of different sizes and various origins are playing a key role.

³⁵ Keith Bradsher, "Bouquet of Roses May Have Note: 'Made in China'", *The New York Times* (25 September 2006).

Agribusinesses have provided stable markets for scattered and isolated small producers through either regular large-volume purchasing (as in Form 1, the case of Nestlé and commercial coffee farmers) or formal contracting arrangements (as in Form 2, Xinchang Food and contract duck farmers), making specialized commercial farming a stable and viable option for otherwise risk-averse and vulnerable small producers. These companies have also directly entered agricultural production to organize larger-scale farming operations by renting and consolidating land, hiring laborers as farm workers, introducing new technologies and integrating farming vertically with food processing and marketing.

Our research underscores how relationships between farmers and agribusiness firms are shaped by rural China's system of collective land ownership and individualized land use rights. This system has proven to be not only adaptable but, in fact, conducive to the development of rural markets and agricultural modernization. The separation of individualized land use rights from collective ownership facilitates the circulation of land and the consolidation of parcelized land into larger operations, paving the road for the scaled-up production needed by agribusiness.

On the other hand, collective ownership protects agricultural producers—to various degrees—from domination, exploitation and dispossession by outside capital. Nearly all of the companies that we interviewed expressed a desire to expand their production bases. The primary barrier to expanding these bases is the lack of land—or, put in another way, the difficulty in wresting control of collective land from rural households. In fact, the many companies and entrepreneurs that have formed bases have had to do so on previously unproductive, marginal land. In many other countries, battles pitting powerful corporations against unorganized small farmers have led to smallholding farmers being dispossessed. In China, farmers' protected land rights provide them with a tool to resist pressure from the companies. As a result, agricultural modernization in rural China has progressed in the more equitable ways described in these pages. An army of landless vagabonds has not emerged.

In our fieldwork, we found that the norms of collective land ownership are surprisingly strong. We did encounter farmers who complained bitterly at the deal that they received when their land was expropriated for urbanization (we also encountered farmers who liked their deals, the consistent income and the urban residence permit that this entailed).³⁶ However, we encountered no cases where farmland was taken from farmers by agribusinesses to form agricultural production bases. In fact, interviews with government officials, company managers, entrepreneurs, scholars and farmers revealed the depth and strength of

³⁶ For studies on the seemingly rampant land grabs in rural China, see, for example, Xiaolin Guo, "Land Expropriation and Rural Conflicts in China", *The China Quarterly*, No. 166 (June 2001), pp. 422-39; Yongshun Cai, "Collective Ownership or Cadres' Ownership? The Non-Agricultural Use of Farmland in China", *The China Quarterly*, No. 175 (September 2003), pp. 662-80.

the norms and regulations protecting the rights of farmers to their land. Not only are such norms about the sanctity of farmers' entitlement to farmland backed by formal regulations and traditional practices but they have also acquired moral weight. Most informants were even shocked at the idea of trying to force the farmers to give up their land in order to pave the way for larger-scale agribusiness.

To be sure, there were cases of companies throwing their political weight around. One entrepreneur used his pull with local authorities to have forested land reclassified as wasteland, allowing him to purchase it from the village and create a privately owned and operated commercial orchard. He then used help from his brother-in-law, who was the village head, to form the base on favorable terms. Despite the use of company power, however, in no case did we encounter land grabs in order to form production bases. Some companies in Yunnan, unhappy with the restrictions they faced under China's collective land system, have ventured into Laos, Vietnam and Myanmar to acquire land and expand their production.

Critics may contend that, because collective ownership restricts companies from faster expansion, it slows down agricultural modernization, causes a loss of efficiency and thus should be scrapped in favor of privatization of farm land.³⁷ Under private land ownership, companies (or individual entrepreneurs) can mechanize farming more quickly by acquiring land without having to absorb any labor attached to it.³⁸

This alleged efficiency gain, however, has not been substantiated empirically. Data have shown that, even in its miniscule scale, China's grain production has reached a level of per capita output comparable to that in the most developed countries, thanks to continued technological innovation and intensive labor input.³⁹ Against this background, it is hard to see how replacing labor with

³⁷ For English sources, see, for example, "How to Make China Even Richer", *The Economist*, Vol. 378, No. 8470 (2006), p. 11; Gershon Feder, Lawrence J. Lau, Justin Yifu Lin and Xiaopeng Luo, "The Determinants of Farm Investment and Residential Construction in Post-Reform China", *Economic Development and Cultural Change*, Vol. 41, No. 1 (1992), pp. 1-26; Tom Miller, "Rural Reform Stays Silent on Land Rights", *Financial Times* (27 March 2006). Within China, land privatization remains a politically sensitive issue. Calls for land privatization are often not openly published. One vocal advocate for it is Hui Qin, see, for example, Hui Qin, "Nongmin diquan liulun" (Six Comments on Farmers' Land Rights), *Shehui kexue luntan* (Tribune of Social Sciences), Vol. 2007, No. 9 (2007), pp. 122-46.

³⁸ Larger scales of production can also raise productivity through allowing easier adoption of technology, greater integration with the market and better management to reach standardization. As we have shown, however, these goals are equally achievable under the current system and thus do not give the privatized system any edge.

³⁹ Scott Rozelle, Jikun Huang and Keiji Otsuka, "The Engines of a Viable Agriculture: Advances in Biotechnology, Market Accessibility and Land Rentals in Rural China", *The China Journal*, No. 53 (January 2005), pp. 81-111.

machines could further increase labor productivity, let alone land productivity or total output.⁴⁰ Even if it did, it is only efficiency-inducing from the capital owner's perspective. It certainly is not more efficient for the displaced laborers, and can cause efficiency loss for the country if land productivity and total output decline as a result of declining land-use intensity under mechanized farming. Furthermore, replacing labor with machines may not even be cost-saving for capital owners, as skilled farming labor is cheap and large farming equipment is expensive.

Privatization of land would have detrimental effects on Chinese farmers. The very advantage which advocates of privatization cite—that of being able to use the land as collateral to obtain loans—is a primary mechanism through which banks, corporations and landlords in other countries have been able, legally, to dispossess farmers of their land. During inevitable downturns due to misfortune or poor weather, farmers with few other assets to service the loan face foreclosure on their land and ultimate landlessness.⁴¹

This current study is limited in at least two aspects. First, we did not study the main grain-producing regions in central and northeastern China. One could argue that the flat topography and the less labor-intensive nature of growing staple grains make agriculture there different from the kind of labor intensive commercial crops cultivation that we studied in Yunnan and Shandong. Cultivation of labor-intensive cash crops can scale up without reduction in labor input, making it compatible with the current land system in rural China. However, scaling up the cultivation of staple grains, which is more susceptible of mechanized production, may require sharp reductions in labor input—a process that is resisted under the current land system. Therefore, it is possible that agribusiness's entry into the cultivation of staple grains is discouraged by the current land system. We do not necessarily see this as a problem, however.

We also omitted another equally important pathway to agrarian capitalism, the rise of entrepreneurial farmers.⁴² The same set of conditions that led to the growth of agribusiness has also encouraged entrepreneurial farmers to expand production through renting land and hiring labor. These entrepreneurs face many challenges, especially lack of access to capital. Entrepreneurial farmers also come in different forms, ranging from a single household to various forms of cooperatives. This important topic needs to be investigated in future studies.

⁴⁰ Research suggests that privatization would bring minimal productivity gains to China's agriculture sector, and that the social costs of privatization in the absence of strong legal protections for farmers would be high, see Guo Li, Scott Rozelle and Jikun Huang, "Land Rights, Farmer Investment Incentives, and Agricultural Production in China" (Davis: University of California, Davis, 2000), Working Paper, pp. 1-24.

⁴¹ See, for example, Anirudh Krishna, "Escaping Poverty and Becoming Poor: Who Gains, Who Loses, and Why?", *World Development*, Vol. 32, No. 1 (2003), pp. 121-36.

⁴² Xiaoming Guo, Zujun Liao and Rao Fu, "Longtou qiye daidong xing, zhongjie zuzhi liandong xing he hezuoshe yitihua sanzong nongye chanyehua moshi de bijiao", offers a preliminary comparison of these two models of agricultural modernization.

Thirty years ago, the HRS established the institution of household-based land use rights under collective ownership, giving Chinese farmers an economically inalienable entitlement to land—a crucial resource that is denied to farmers in most other countries. Today, even as many farmers turn to off-farm jobs, most maintain their land rights back home as insurance. Critics have worried that Deng Xiaoping’s reforms would condemn China’s farmers permanently to inefficient, low-tech, small-scale, traditional agricultural production. The shortcomings of the household responsibility system, together with policy changes unfavorable to the agricultural sector, led to rural stagnation in the 1980s. As a result, the government has sought ways of expanding production through vertical integration and other forms of modernization. Current forms of agribusiness generally allow agricultural production to expand and modernize without eliminating the crucial institution that benefits hundreds of millions of farmers. Collective land ownership has proven to be a flexible system that allows agribusiness to grow through a variety of forms, while maintaining a modicum of rights and material benefits for China’s farmers.

