

Changes in Labor, Land, and Credit Markets Lead China's Farmers on the Path Toward Modernization

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Highlights: Structural changes in China's economy are generating changes in agricultural production. In particular, China's rural markets for labor, land, and credit are responding to changes in the larger economy and facilitating a transformation in agricultural production. Reforms in the institutions that organize land and credit allocation, in tandem with increasingly lucrative nonfarm sources of income and freer labor markets, are providing farmers with more opportunity to take advantage of developing opportunities to specialize in cash crop production.

As China's economy grows and becomes more open, the institutions and policies that affect the availability of critical inputs for agricultural production are changing. Movement of labor off-farm continues and the policies and institutions that discourage labor movement are eroding. Land-tenure practices are less idiosyncratic and capricious as formal laws to promote tenure security and rental rights have been established. New types of locally supported credit institutions have also been established, and more and more farm households are able to self-finance investments using savings from nonfarm income sources or seek private loans from households with such savings. This process of change and reform must continue if China's farmers are to compete on international markets.

With recent institutional and policy changes in the land, labor, and credit markets, more and more farmers are taking advantage of the new economic environment and making changes in their agricultural production patterns to increase their incomes. For example, farmers are increasingly turning to greenhouse cash-crop production, particularly in northern China. But to establish a greenhouse to grow cash crops (such as melons or other high-valued fruits and vegetables), households require an environment in which they feel comfortable producing cash crops and have access to credit, land-tenure security, and specific market infor-

mation that gives them the incentive, confidence, and ability to switch from subsistence crops (such as wheat and rice). Recent developments in the markets for labor, land, and credit have all contributed to creating such an environment in rural China, and all signs point to continued development of these important markets in the coming years.

The Rural Labor Market

China's rural labor market and employment structure have changed dramatically in the last 20 years as millions of rural workers found nonfarm employment, often migrating to distant areas to find such jobs. China's official statistics indicate that the number of rural workers with nonfarm employment in local rural enterprises rose from 67 million in 1985 to 127 million in 1999, and the share rose from 18 to 28 percent in that period. It is unclear, however, how many workers leave their villages for extended periods for jobs in urban areas or self-employment activities because official statistics do not cover these areas. Estimates of the number of migrants in China ranged from 30 to 100 million by the mid-1990s, with the wide range of estimates stemming from different definitions of migration and different data sources. Data from the National Agricultural Census for 1996 indicate that roughly 57 million rural workers engaged in nonagricultural activ-

ities in urban areas that year. Many observers also believe that official estimates of nonfarm employment are low, perhaps extremely low, because they overlook many sources of casual employment and services such as restaurants, construction, trade, transportation, and marketing services. Lumping rough estimates of these categories together could raise official estimates by as much as 100 million workers (Rawski and Mead).

Despite the high rate of nonfarm employment generated in the past 20 years, the number of farmers in China actually may have increased. The estimates of the number of farmers finding nonfarm employment are large but are still somewhat modest compared with the size of the rural labor force (roughly 450 million in 1999). Also, in the years before the mid-1990s, the rural labor force expanded rapidly because new workers in this period were born before China established the “one-child” policy in 1978, and the population growth rate before this policy was instituted was high. Official estimates of the number of rural workers relying entirely on agriculture are greater today (350 million) than they were in 1980 (300 million). If the most-ardent skeptics of official statistics are correct (those that believe the official nonfarm employment numbers are too low by 100 million), then the number of full-time farmers in China may have fallen to 250 million in the past 20 years. This figure still equates to a large number of farmers.

A variety of policies and institutions are thought to discourage the movement of rural labor into nonfarm employment in China. Most of the rural migrant workers who headed for urban areas in the 1990s were met by policies specifically intended to discourage rural-to-urban migration, such as the “household registration” (*hukou*) system. Occasional anti-migrant campaigns and other policies that made it difficult for migrants to bring their families to urban areas also served to discourage rural workers from seeking jobs in the cities. Despite these policies, the differences between urban and rural incomes were too great, as was the demand for labor in hard and dangerous jobs that urban workers were unwilling to take, and the flow of labor from rural areas to urban areas continued.

In the past, policies and institutions at the village level also discouraged movement into nonfarm employment, particularly movement by whole households. Studies indicate that family or political connections were important for accessing jobs in rural enterprises because local leaders often rationed these jobs.

Deposits and fees to access rural industrial jobs also served as a barrier to nonfarm employment. In addition, because households lose their land-use rights if they leave the village, land-tenure practices also discourage labor movement out of agriculture. Others argue that grain-quota delivery policy, whereby farmers are obligated to sell a fixed amount of grain to the state, serves to “keep” farmers in agriculture.

The reform of policies that discourage labor mobility and access to nonfarm employment has begun. Starting with the early-1990s campaign that promoted “leaving the village without leaving the countryside” (*li cun bu li xiang*), China’s leaders have encouraged rural laborers to seek work in nearby towns, rather than cities. This policy was primarily motivated by the desire to increase employment opportunities for the enormous rural labor force without threatening the stability of urban areas. In addition, most rural enterprises no longer ration jobs or favor workers with connections as they once did because these enterprises have faced an increasingly competitive environment and have been forced to adopt hiring policies that raise productivity and reduce costs. Land-tenure security is also increasing so that rural households with migrant workers are less likely to lose land, and several provinces have announced that they will no longer enforce mandatory grain-quota delivery policies. In recent years, some villages became more active in trying to generate nonfarm sources of income for farmers, often by promoting activities that lower the costs of searching for jobs. Increasingly, county-, township-, and village-level labor offices are promoting migration and other paths to nonfarm employment.

By the late 1990s, many urban leaders began to establish, on a small scale, policies to encourage and facilitate certain types of labor movement into cities. Recognizing the critical role rural migrants play by filling important but undesirable jobs in their cities, such as construction and trash collection, urban officials implemented policies that made it easier for migrants to live and work in the cities, such as creating legal spot labor markets and curtailing crackdowns on migrants. Recently, China’s government has stepped up efforts to reform the household registration system, and many speculate that the system will soon be abolished.

The changes in China’s labor market are affecting agricultural production in many ways. For example, the rapid growth in nonfarm employment may be reducing the overall supply of labor for agricultural

production, at least from the levels that would exist without nonfarm employment. Farmers are increasingly comparing returns from agricultural work to potential earnings in nonfarm work. This comparison encourages farmers to raise their productivity in farm work. In addition, off-farm sources of income increase household wealth and allow farm households to self-finance small investments. China's increasingly mobile rural labor force also benefits agricultural producers by lowering transaction costs. Information received through off-farm workers, particularly workers who migrate to local towns and urban areas, has facilitated farmers' movement from subsistence production to production of cash crops for distant markets.

The Rural Land Market

China's agricultural economy faces a scarcity of land, accounting for only 7 percent of the world's arable land resources. Exactly how much land China uses for agriculture is unclear. Before the Census of Agriculture, which reported farm household data for 1996, official statistics showed the amount of cultivated land in China was below 100 million hectares and falling, from 95.67 million hectares in 1990 to 94.97 million hectares in 1995. The 1997 Census of Agriculture, however, revealed that cultivated area was 130.04 million hectares in 1996, much larger than earlier official estimates. The pre-census estimates were based on an administrative reporting system that tended to underestimate cultivated area, since land endowments are used to determine local tax obligations. Pre-census estimates of sown area are believed to have been more accurate.¹

The potential for expanding cultivated land in China is extremely limited. Urban industrial, commercial, and residential uses are competing with agriculture for China's limited land resources. By 2020, China expects to have at least 50 percent of its population living in urban areas, up from 36 percent in 2000. In addition, China has begun to take fragile land out of agricultural production for environmental reasons. Much of this land is being reverted to wetlands, forests, or grasses. It will be difficult to make up future losses of land through expanding double cropping. In most of the areas where double cropping could be introduced, at least one crop would have to rely on scarce irrigated water.

¹ China's statistical reporting services have not reported sown acreage since the census adjustment in 1996.

More efficient use of China's existing agricultural land may be a solution to some of its land-availability issues. Due to a variety of land-tenure policies, the *right to independently transfer* land between households in rural China has not always been clearly extended to farm households. With increasing nonfarm employment opportunities and growing recognition that economies of scale can be achieved by consolidating farmland, farmers have begun to demand independent land transfer rights. Local and national policymakers have responded by offering new land-tenure arrangements that could significantly affect agricultural production in China.

Farmers in China do not have full ownership rights to the land on which they farm. Instead, the land is usually owned by a collective group (or *xiaozu*, roughly 30-40 households) or, sometimes, the village itself. The owners then allocate among their constituent farm households *rights to farm* plots of the collectively owned land. Several different bundles of rights are extended to farm households in China, including the *right to residual income*. The ownership entity generally maintains the *right to reallocate* land among the constituent households.² When the right to reallocate is exercised by the collective or village leaders, farm households risk losing the plots they had farmed, and households may or may not get comparable plots. While reallocation policies are intended to ensure egalitarian access to land and a subsistence safety net for farm households, the reviews of land distribution and occasional land reallocation at the village and *xiaozu* levels also generate significant land-tenure insecurity in rural China.

Policies that increase tenure security and extend the rights to independently transfer land to other farm households have become more common. The 1998 Land Management Law explicitly mandated providing use rights for 30 years to farm households and contains language intended to limit land reallocation to only small adjustments in isolated cases. While the wording of the laws defining when leaders can reallocate land is still not entirely unambiguous, the national government policy to increase tenure security for farm households is less ambiguous than previous national reallocation policies. Land management practices are also changing at the local level. According to surveys and interviews conducted in rural China, an increasing

² This right is not usually exercised without some input from the households involved.

number of villages extended full rental rights to farm households in the 1990s.

Land-tenure insecurity and the overall land allocation system have several effects on agricultural production. Researchers have shown that land-tenure insecurity discourages investment in inputs that have a long-term payoff, such as organic fertilizer. In addition, tenure insecurity, and the general lack of formal rules governing independent land transfers between households, hinders the development of a land-rental market. These policies reduce productivity of the land by decreasing investment and discouraging land transfers from low- to high-productivity users. Land-tenure security also facilitates independent transfers.

Land-tenure policies affect the markets for other important farm inputs, such as credit and labor. Because farm households do not own their land, they cannot use it as collateral in the credit market. In addition, active village land reallocation may discourage farm households from seeking nonfarm employment due to fears of losing land. Fear of losing the land may also discourage land-rental activities, making it more difficult for households to commit labor to off-farm employment.

The Market for Rural Credit

Lack of credit hinders agricultural investment and productivity. Because farm households in China do not own land, they lack a key piece of collateral that is used to secure agricultural loans in most other countries. Formal credit institutions in China are poorly developed and are generally state-owned or state-supervised institutions that favor loans to rural industry, rather than small loans to farmers to increase agricultural production efficiency. China's credit institutions are also char-

acterized by high transaction costs that discourage households from applying for small loans. Little research has been done on the specific terms facing farmers when they seek credit from formal institutions to invest in agricultural production technologies.

The main credit institutions in rural China are the Rural Credit Cooperatives (RCC), which are cooperatives in name but are closely supervised by the state banking system. China has over 50,000 township-level RCCs and over 250,000 village credit stations operated by the RCCs. In addition, the Agricultural Bank of China has some representation, and in the 1990s local governments established Rural Credit Funds and Mutual Aid Funds to provide small loans for agriculture or emergency consumption needs in many areas. As their private savings increase, households are increasingly relying on informal credit institutions. The number of self-financed loans made privately increased significantly in the 1990s, and more and more of the private loans are interest bearing, representing a private credit market developing in rural China.

Increasing access to credit affects farm households' agricultural production decisions. Access to credit allows farmers to buy better seeds, as well as the fertilizers and pesticides that are often used in conjunction with hybrid and high-yielding seed varieties. Credit also enables farmers to invest in fixed, long-term inputs, such as a greenhouse or water-saving irrigation technology.

References

Rawski, T., and R. Mead. "On the Trail of China's Phantom Farmers," *World Development*, Vol. 26, No. 5, pp. 767-81.