

Crossing the River While Feeling the Rocks

Land-tenure reform in China

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n 1977, China's Anhui Province was facing food shortages and flooding that brought the province to the verge of famine.

Agricultural productivity was languishing under large-scale, collectivized agriculture, in which farming was managed by communes made up of thousands of people rather than by individual households. In desperation, some communes in the province began secretly allowing farmers to manage their own plots. This small group of farmers achieved stunning improvements in food production, greatly exceeding the productivity of the communes.

The success of these farmers marked the beginning of a massive shift in Chinese agriculture. In 1978, facing up to the weak performance of collective agriculture in many areas of the country, the Chinese Communist Party reluctantly embraced these experiments, giving rise to the Household Responsibility System in which parcels of collective land were allocated to farm households. Once permitted, the system spread throughout China like wildfire. Four years later, more than 90 percent of the country's farmland had been parceled out to more than 160 million farm households.¹

The shift to household farming, along with other factors (such as reforms in the state's procurement system for agricultural goods, better seeds for rice farmers, and investments in irrigation) led to dramatic increases in food production and reductions in poverty. The per capita incomes of rural people doubled in just five years.² Widespread hunger was averted, and hunger and

malnutrition fell dramatically. Although reforms spread across China rapidly, they were generally advanced through careful experimentation— "crossing the river while feeling the rocks," according to Deng Xiaoping, China's paramount leader from 1978 to 1992.³

Reform Begins: Desperation and Experimentation

By the late 1970s, China had had more than two decades of experience with collectivized agriculture. When the Chinese Communist Party came to power in 1949, it had launched a brief "land-to-the-tiller" program, but it soon switched to a system of collective agriculture, creating production cooperatives in 1952 and then scaling them up to communes in 1959 (see box next page).

The collectivization of agriculture was expected to benefit from economies of scale and to provide a base for the development of rural industries, but the results were disappointing. Grain production rose by 13 percent during the land-to-the-tiller period (1949-52) and continued to increase less strongly during the agricultural cooperatives period (1952-58). With full collectivization in the Great Leap Forward in 1958, grain production declined and the country suffered serious famine during 1960–63. And during the 20 years that followed (1957-78), the amount of commercial grain contributed by each rural resident fell from 85 to 63 kilograms. Food shortages were rife throughout the country, and food rationing was introduced in urban areas. During the 1970s,

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Collective Agriculture and the Shift to Household Responsibility

In the 1950s, the Chinese government adopted a collective system of agriculture in which land was held by the state, and peasant households were reorganized into communes. Each commune was composed of an average of 5,000 households and consisted of several production brigades, themselves further divided into production teams of 20–30 households. The commune might manage as much as 4,000 hectares. Work on private plots was prohibited.^a

As the shift to household responsibility took place in China beginning in 1978, many communities went through three main stages. In the first stage, the production team was assigned a quota and the whole group was then rewarded or punished according to its performance. In the second stage, a specific plot and output quota were assigned to the household. If the household produced more output than the quota, the excess output would be given to the household or shared between the household and the production team. The third phase—the Household Responsibility System—was identical to the second phase except that there was no unified allocation of income by the production team, so that all excess output went to the household. Not all communities went through all three stages, and many that did moved through them in successive years.

a. Fan, S., and P. G. Pardey. 1995. Role of inputs, institutions, and technical innovations in stimulating growth in Chinese agriculture Environment and Production Technology Division Discussion Paper No. 13. Washington, D.C.: International Food Policy Research Institute

an estimated one-third of the rural population lacked a stable food supply.⁴

In 1978, driven by famine and the collapse of confidence in collective agriculture, a few production brigades in Fengyang County in Anhui Province—a poor region plagued by flood and famine—secretly distributed land to their member households to farm. These farmers relied on their memories of household farming and their ongoing experience with small household food plots, which many farmers managed even under collectivized agriculture. These small plots—usually smaller than 0.02 hectares—were several times more productive than their collectives' land.⁵

That first year's productivity increases in Anhui were impressive. Some brigades that had returned to household farming had production increases of two to five times those in unconverted brigades. Local officials embraced the reform, which was then carried out under the protection of Wan Li, the provincial governor of Anhui.

The time was right for the Communist Party to consider a change. In 1976, Chairman Mao died and the Cultural Revolution came to an end. China's agricultural sector was in turmoil, with grain failures and famine occurring in parts of the country. Although the Communist Party had expressly forbidden a return to household farming

as late as 1977, the following year it stated that the breakup of communal lands into household holdings was an option.

The return to household farming required party leaders to skillfully manipulate ideological themes in the service of pragmatism. Du Runsheng, director of rural policy of the Chinese Communist Party, described three key points in the reformers' strategy for winning acceptance of the reform within the Party: (1) build the system initially within the communes rather than abolishing them outright, (2) allow the populace to choose from among a number of forms of organization, and (3) allow the reform to spread gradually.⁷

Local communes adopted the new system wholeheartedly. In January 1980, only 1 percent of all production teams in China had converted to household farming, but by December of that year the figure was 14 percent. It reached 28 percent by July 1981, and 45 percent by October 1981. By the time the government recognized that the Household Responsibility System was broadly applicable, 45 percent of the production teams in China had already been dismantled. By the end of 1983, about 98 percent of production teams and 94 percent of farm households in China were farming under the new system. 9

A Parallel Reform: The State Procurement System

Around the same time that the Household Responsibility System was getting underway on a grassroots level, the Chinese government was formulating another response to the country's food crisis: major changes to the system of state procurement of agricultural products.

In 1977, the government was the only legal purchaser of many key commodities, including rice, wheat, maize, oilseeds, and cotton. Production brigades within communes were assigned quotas, and this quota production had to be sold to the state at prices set by the state. When communes were divided into household farms, meeting these quotas became the responsibility of households. This procurement system gave the government a powerful tool for influencing farmers' production.

After 1977, the government bumped up procurement prices significantly to give farmers an incentive to produce more agricultural goods. In 1979 alone, state procurement prices for major crops rose an average of 22 percent. After 1979, government purchasing prices for grain jumped by 100 percent and those for many other crops increased by 40–50 percent.¹⁰

Moreover, from 1977 onward, farmers were allowed to trade grain on free markets once they fulfilled their delivery quotas to the state procurement system. Bans that prohibited farmers from growing cash crops were eliminated. Farmers regained the right to grow vegetables or other non-quota cash crops and to sell their products in the open markets.

One of the most distinctive features of the Chinese rural reforms of the 1980s is the manner in which these procurement and market reforms were managed. Whereas most post-communist countries have made a sudden, "big-bang" transition to market prices for agricultural production, China opted for a two-track approach, maintaining quotas and set prices for quota production while at the same time liberalizing markets for non-quota production and allowing markets to control



Planting rice, China

prices for these above-quota crops. This approach provided the state with an assurance of sustained grain production and farmers with an assurance of a predictable if modest farm income during a period of great uncertainty. At the same time, it provided strong incentives for farmers to exceed quotas and to diversify into non-quota crops.

More Food and Higher Incomes for Rural Chinese

Farmers responded to the rural reforms by producing bumper harvests. Crop production grew by 42.2 percent between 1978 and 1984. During those years, the three most important crops—grain, cotton, and oil-bearing crops—grew at annual average rates of 4.8, 17.7, and 13.8 percent, respectively (see Figure 19.1). During the preceding 26 years, these crops had grown at only 2.4, 1.0, and 0.8 percent a year, respectively. Even though farmers were cultivating fewer hectares of grain during this period, the gains in productivity led to more total output. National grain output

rose from about 300 million tons in 1978 to about 407 million tons in 1984.

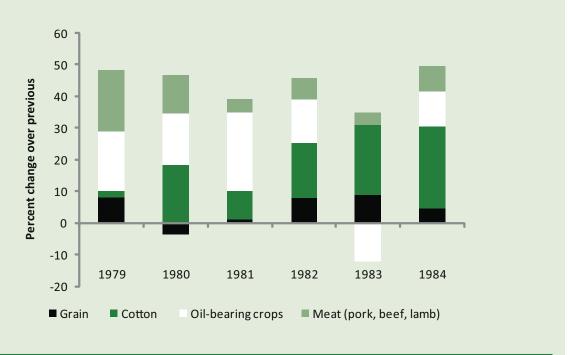
Although the increases in state procurement prices had some impact on production, the Household Responsibility System reform was the greatest impetus behind the production increases. Given the opportunity to sell part of their output at market prices, farm families responded by investing large amounts of labor and inputs to exceed their quotas, while at the same time diversifying their production into non-quota crops. Technological improvements like hybrid rice (see Chapter 11) and the practice of double cropping (growing two crops a year instead of just one) also helped. China's prior decades of massive government investment in rural infrastructure, especially irrigation, helped lay the groundwork for jumps in productivity as well.

With agriculture growing at breakneck speed in the years following these reforms, the quality of life in rural China improved substantially. In just five years, from 1978 to 1983, rural people doubled their per capita incomes (see Figure 19.2). The rural poverty rate plummeted, falling from



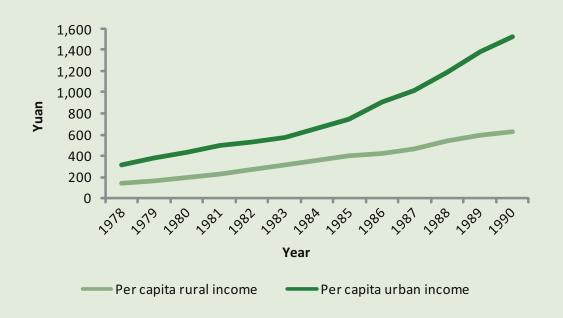
Harvesting rice in Hunan Province, China

Figure 19.1—Agricultural output in China, 1978-84



Source: Zweig, D. 1997. Freeing China's farmers: Rural restructuring in the reform era. Armonk and London: M. E. Sharp.

Figure 19.2—Per capita income of rural and urban households, 1978-90



Source: Renwei, Z. 1993. Three features of the distribution of income during the transition to reform. In *The distribution of income in China*, ed. K. Griffin and Z. Renwei. London and New York: The Macmillan Press.

76 percent in 1980 to 23 percent in 1985. The longstanding income gap between rural and urban households was reduced (although not nearly eliminated).

Both rural and urban households also acquired better access to food, and food became more affordable. In the first three years of the Household Responsibility System reforms (1978–81), calorie intake among people in rural China increased by 12 percent. In 1978, rural people were consuming 122 percent of the minimum daily requirement for a healthy life, and by 1979–81 they were consuming between 140 and 143 percent. As farmers began diversifying their crops and growing more non-quota crops, a wider array of foods found their way into markets and rural people rapidly boosted their consumption of foods other than grain.

The transformation of agriculture, large as it was, was just part of an even larger transformation of the Chinese rural economy. Workers who had been underemployed in the commune system were released from the agricultural sector to find other local work. Taking advantage of this abundance of labor, townships and collectives used new revenue earned through the Household Responsibility System to develop township and village enterprises. These enterprises, building on the commune industries and the large public investments in infrastructure during the commune period, were public but produced for the market-everything from clothing to farm tools to electronics. Like the household farms, they grew rapidly. From 1978 to 1994, the number of firms rose from 1.5 million to nearly 25 million, the number of employees increased by a factor of 4.5, and the total value of their output jumped by a factor of 80.12

Unfinished Business

Not everyone benefited from the changes sweeping across China. The rural reforms held some disadvantages for women in particular. Under the commune system, women had in theory participated as equals in collective agriculture, even though they were typically employed in more menial positions and largely excluded from management. Under the Household Responsibility System, changing labor patterns, improved economic productivity, and higher living standards resulted in a revival of patriarchal values. The rural industrialization made possible by the shift to

household responsibility also began to change the roles of women in their households, as men took on jobs in township and village enterprises and women became more responsible for agricultural production. The state allocated land to households based on household size, so in theory when a man married, his land allocation should rise, but for efficiency reasons, authorities discouraged too-frequent reallocations of land. Many villages ceased to provide for such reallocations altogether, leaving women at the risk of landlessness in cases of divorce and widowhood. Organizations such as the All-China Women's Federation noted that as women took more and more responsibility in agriculture, they had less and less satisfactory access to land.13

Property rights in rural areas remain a broader subject of concern as well. China's extension of more secure property rights to rural people has been not simply gradual but painfully slow. People in rural areas thus find it much more difficult to acquire assets in the new market economy than do their urban counterparts. A consensus within both private and official circles is emerging that rural people in China should be granted fuller and more marketable land-use rights. At the same time, however, land as it is currently distributed serves as an important social safety net. This safety net has come into play recently, as a global economic recession has reduced the demand for China's exports and factory workers have flowed back into their home rural areas. A debate continues on how to balance the efficiency of more marketable farmer rights to land with the losses to social security that such a reform would entail.

Learning from China

The Household Responsibility System reform and the other reforms it sparked have contributed greatly to China's economic development and the welfare of its citizens. The Chinese reform experience suggests some lessons for other policymakers in developing countries who are thinking through their own reform programs.

First, the sequencing of economic reforms is critical. China began by providing new incentives to the mass of rural households—which had relatively egalitarian access to productive assets—thereby achieving broad benefits, gaining support for the reform process, and laying the foundation for an ever-widening reform agenda. During land reforms

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like this one, it is important to maintain existing structures for input supply and output marketing while the large production units dismantle, and to provide reliable markets for land-reform beneficiaries in the early reform years. As such, in contrast to the beneficiaries of land reforms in many other countries, Chinese beneficiaries of reform faced virtually guaranteed markets for key economic crops during the critical reform years.

Second, where labor costs are low and alternative employment is limited, small household farms can be remarkably productive, provided they have access to input supply and marketing chains.

Third, because rural resources like farmland were so broadly distributed, the poverty-reduction impacts of reform also reached broad swathes of the population, making poverty-reduction reforms in such a rural sector highly strategic.

Fourth, impressive economic growth can take place under public ownership of land if solid land use rights are in place and farmers are operating within a generally supportive and remunerative economic environment. If farmers are confident of their access to land because of a credible social commitment to land access for all families, it may be feasible to phase in stronger property rights gradually, while building new mechanisms to provide social security otherwise provided by universal land access.

Fifth, promoting the development of both agriculture and industry in rural areas can pay off handsomely if labor is plentiful and cheap and if funds are available for substantial public investments in rural infrastructure and facilities to support industry.

Sixth, process is important. Governments need to create space for local experimentation and allow



Harvested rice just separated from its stalks, China

impartial evaluations, the results of which can be conveyed to people at the highest levels of power. Even incremental reform has important benefits: it allows for learning by doing and corrections as needed, as well as the use of existing organizational resources, an avoidance of social turbulence and waste of resources and, finally, a smoother transition to new institutions.

Conclusion

The Household Responsibility System reform, as well as the other reforms that accompanied it, has had a profound positive influence on China's growth and the livelihoods of its people. They have lifted millions of people out of poverty and averted famine. Rural reforms, conducted in a spirit of experimentation, careful evaluation, and adjustment where necessary, have shown the potential for agricultural growth to take off on a massive scale under the right conditions.

NOTES

- Ho, P. 2005. Introduction: The chicken of institutions or the egg of reforms? In *Developmental dilemmas: Land reform* and institutional change in China, ed. P. Ho. New York: Routledge.
- Fan, S., L. Zhang, and X. Zhang. 2004. Reforms, investment, and poverty in rural China. Economic Development and Cultural Change 53 (2): 395-415; Gulati, A., S. Fan, and S. Dafali. 2005. The Dragon and the elephant: Agricultural and rural reforms in China and India. Markets, Trade, and Institutions Division Discussion Paper No. 87, Development Strategy and Governance Division Discussion Paper No. 22. Washington, D.C.: International Food Policy Research Institute
- 3. Chow, C. G. 2002. China's economic transformation. Oxford, U.K.: Blackwell.
- Zhang, H., X. Li, and X. Shao. 2006. Impacts of China's rural land policy and administration on rural economy and grain production. Review of Policy Research 23 (2) 607–624.
- 5. Zhang, Li, and Shao 2006.
- Lin, J. Y. 1988. The Household Responsibility System in China's agricultural reform: A theoretical and empirical study. Economic Development and Cultural Change, Supplement: Why does overcrowded, resource-poor East Asia succeed: Lessons for the LDCs? 36 (3): S199-S224.

- Du, R. 2006. The course of China's rural reform. Washington, D.C.: International Food Policy Research Institute.
- 8. Lin 1988; Lin, J. Y. 1992. Rural reforms and agricultural growth in China. *American Economic Review* 82 (1): 34–51; Lin, J. Y. 2003. *The China miracle: Development strategy and economic reform*, revised. Hong Kong: Chinese University Press.
- 9. Lin 1988.
- Zhu, L. 1991. Rural reform and peasant income in China: The impact of China's post-Mao rural reforms in selected areas. New York: St. Martin's Press.
- Piazza, A. 1983. Trends in food and nutrient availability in China, 1950-81. World Bank Staff Working Paper No. 607. Washington, D.C.: World Bank.
- 12. Oi, J. C. 1999. Two decades of rural reform in China: An overview and assessment. *The China Quarterly, Special Issue: The People's Republic of China after 50 Years* (159): 616-628.
- 13. All-China Women's Federation. 1999. Report on violation of women's land rights under the Second Land Adjustment: A Working Paper. Beijing: Department of Women's Rights and Interests.