La réforme agraire en Chine rurale depuis la moitié des années 80

Cet article analyse les principaux aspects de la réforme agraire en Chine rurale depuis la moitié des années 80. Il explique le système chinois actuel de responsabilité du ménage en insistant notamment sur ses faiblesses institutionnelles, et expose les hypothèses quant à la nature et à la direction d'une réforme agraire plus poussée avancées par les économistes chinois. L'article analyse en particulier quatre modèles de réforme représentatifs et expérimentaux mis en œuvre depuis cette période. Enfin, des leçons sont tirées du passé en vue de façonner la réforme à court et à moyen termes.

Reforma agraria en la China rural desde mediados de los años ochenta

En el presente artículo se examinan los principales aspectos de la reforma agraria en la China rural desde mediados de los años ochenta. Se expone el sistema actual de responsabilidad familiar de China, describiendo sobre todo su debilidad institucional, así como los debates teóricos sobre el carácter y las orientaciones de la ulterior reforma agraria entre los economistas chinos. Se analizan en particular cuatro modelos representativos de reforma experimental desde mediados de los años sesenta, ilustrando sus comienzos, funciones y resultados primarios. Por último, se extraen algunas enseñanzas del pasado para definir la reforma futura a corto y medio plazo.

Land reform in rural China since the mid-1980s¹

Fu Chen Professor, Deputy Dean, College of Economics and Trade, South China Agricultural University, Guangzhou, China John Davis Director and Research Fellow, Centre for Rural Studies, Queen's University of Belfast, United Kingdom

This article reviews the major issues of land reform in rural China since the mid-1980s. Arguments are provided on China's current household responsibility system, mainly focusing on its institutional weaknesses. The theoretical debates on the nature and directions of further land reform among Chinese economists are also discussed. The paper particularly examines four representative experimental reform models put in place since the mid-1980s, illustrating their beginnings, functions and primary performance. Finally, some lessons are drawn from the past to shape the reform in the short- to medium-term future.

Land reforms are currently being pursued in socialist countries as well as in the independent States of the former Soviet Union and Central and Eastern Europe (CEE). However, the reforms differ from country to country. Typically, China's land reform has concentrated on land use rights reform, while in the former Soviet Union and CEE countries farmland privatization has generally been seen as a crucial component in economic transition. Although abundant literature deals with agrarian restructuring in the former Soviet Union and CEE countries (e.g. Csaki, 1990; Csaki and Lerman, 1994, 1996; Brooks and Lerman, 1993, 1994, 1995), comparatively little has been published about the reform taking place in China, particularly in the past decade. By any standard, there are many good reasons for watching closely over China's farmland reform.

This article reviews the major issues of land

reform in rural China since the mid-1980s and in particular examines four experimental reform models. Given China's huge size and its diversity in natural endowment and economic development, it is very difficult to carry out an inclusive study. Thus this paper restricts the analysis to some of the main issues and cases to shed light on the current approaches. As institutional innovation is being driven by the weaknesses of the existing agrarian system, an overview of the current household responsibility system is given, focusing mainly on its institutional weaknesses. Bringing about further reforms is bound to be a difficult and contentious task. The range of ideas and suggestions has been extensive. As theoretical studies generally precede changes in practice, a section examines the debates and controversy on the nature and directions of agrarian reform among Chinese economists. This is followed by an analysis of four recently initiated local reform cases which, in the authors' view, represent the main approaches to China's agrarian reform since the mid-1980s. The paper concludes with a discussion of the lessons from past reforms that might help to shape future measures.

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LIMITATIONS OF THE HOUSEHOLD RESPONSIBILITY SYSTEM

Land reform has characterized rural China since the founding of the People's Republic in 1949; there have been three major farmland reforms. First came a radical farmland revolution in the early 1950s. By expropriating land from landlords and distributing it to landless peasants, China achieved the goal of tillers having their own land – the dream of Chinese farmers for thousands of years – and created a stratum of private smallholders. Like other socialist countries, China shaped its farmland policy from the well-known model of the Soviet Union, which was characterized by collective ownership and unified collective operation.

To reach this target, China carried out its second land reform, a campaign of collectivization in the mid-1950s. During the process individual farmers were compelled to join collectives. The collectivization finally developed an institution called the People's Commune. With centrally controlled property rights and a misapplied egalitarian principle of distribution, the communes destroyed farmers' operational freedom and their enthusiasm for production. Much literature illustrates the poor performance of the commune system (e.g. Stavis, 1982; Lin, 1982; Lin, 1987; Chen, 1994).

At the end of the 1970s China launched an economic reform, pioneered by rural reform. China broke with the Soviet doctrine, introducing a family-based contract system, the so-called household responsibility system. Since then, household responsibility has been the nationwide statutory pattern of agricultural land tenure.² Honoured as the third land revolution in China, the household responsibility system has proved a great success. There is no doubt that the system generates incentives for production by giving farmers freedom of land use rights and decision-making, linking rewards closely with their performance. As a result, China's agriculture has been dramatically revived. After 30 years of stagnation, growth in agricultural output in the first half of the 1980s accelerated to a rate several times the previous long-term average. Between 1978 and 1984, output of the three main crops, namely grain, cotton and oil-bearing crops, increased at annual rates of 4.8 percent, 7.7 percent and 13.8 percent, respectively, compared with the average rates of increase of 2.4 percent, 1.0 percent and 0.8 percent per year from 1952 to 1978 (State Statistical Bureau, People's Republic of China, 1985). Production of grain, the most important farming product of the country, reached a peak of 407 million tonnes in 1984, which represented a net increase of more than 100 million tonnes within only six years. The fundamental problem of feeding the giant population, which had been a great pressure in China for several centuries, was basically solved. However, a big drop in grain output was witnessed in 1985, 6 percent off the previous year, followed by stagnation until the 1990s. It appeared that the household responsibility system had exhausted its benefits, although clearly neither the dramatic growth in the first half of the 1980s nor the stagnation in the second half was the sole result of land institutional reform. However, it did have an important role, alongside, for example, real grain price changes.

Although the household responsibility system was a great success, as an institutional innovation it could not address everything. Several years of practice have exposed a number of limitations and weaknesses inherent in the system. First, tiny and fragmented farming units emerged as farmland was distributed to individual households that would farm it independently. The principle of land distribution was derived directly from collective ownership. Farmland in a village was owned by all of its members collectively. As a result, every member had equal claim on land property rights, and the norm for distributing land was based on the

² While the household responsibility system has been adopted in most rural areas since reform, about 7 000 villages (teams) (0.2 percent of all villages in China) remain in collective-run farms, accounting for 0.3 percent of total cultivated land. In addition, 21 000 villages (teams) have leased farmland to carry out group-based farming while adopting the household responsibility system (Ministry of Agriculture of China, 1991, 1993, 1996).

size of the peasant family. Given the abundant population and limited land, the amount distributed to each household was very small. Moreover, farmland differed from parcel to parcel in terms of soil fertility, irrigation conditions, location and so forth. A household had to obtain parcels from each of the grades. Thus, the total was not only insufficient but also fragmented and scattered around villages. Large areas of cultivated land were wasted in the form of paths and boundaries separating households' holdings. A survey conducted by the Chinese Ministry of Agriculture indicated that in 1986, among 7 983 sample villages from 29 provinces, average cultivated area per household was 0.466 ha (7 mu),³ fragmented into 5.85 plots, each plot on average 0.08 ha (1.2 mu) (Ministry of Agriculture of China, 1993) (see Table 1). This fragmented structure of family farming has remained largely unchanged and has arrested the possibilities of using relatively advanced mechanical equipment and agricultural infrastructures.

Second, farmers were shortsighted in action. According to the system, a person's eligibility for land depended only on his or her villager status, no matter when this was obtained. On the one hand, babies and villagers' newly married spouses from other villages were all eligible claimants, having equal rights to share equal amounts of land; on the other, when a villager died, his or her right would automatically disappear. As population increased, villages had to readjust the distribution structure, which further subdivided the farmland.⁴ The endless redistribution of farmland resulted in many problems:

- the situation of a small and fragmented farming structure further deteriorated;
- worried about the risk of losing their land as well as investment, farmers had no

TABLE 1 Area and fragmentation of household land

Year	Cultivated area per household (ha)	Number of plots per household	Average size per plot (ha)
1986	0.446	5.85	0.080
1988	0.466	5.67	0.078
1990	0.420	5.52	0.076
1992	0.466	3.16	0.148

Source: Ministry of Agriculture of China, 1993.

incentives to improve land conservation and agricultural infrastructure – irrigated land, one of the most important components of agricultural infrastructure in China, remained almost unchanged during the 1980s;

- farmers overexploited the soil to pursue short-term returns;
- the process of land redistribution itself was costly, requiring much labour and time in organization and implementation.

Third, farmland was generally poorly endowed with the necessary human capital. Under the household responsibility system, egalitarianism was generally the leading principle guiding land distribution, with little consideration given to interfamily differences such as labour capability, education and individual preference.⁵ As a result, some large households with a limited labour force could have too much land to work, while other smaller households, particularly those specialized in agriculture, could have insufficient land for full employment. This kind of problem was much worse in areas experiencing rapid rural industrialization and urbanization. In these areas there was a general deterioration in the agricultural labour force as the most able workers tended

 $^{^{3}}$ 15 *mu* = 1 ha.

⁴ According to a survey conducted by the Chinese Ministry of Agriculture, since the implementation of the household responsibility system in 1978, 65.2 percent of China's villages readjusted households' land – 37.1 percent once, 19.8 percent twice and 8.3 percent three times. The main reason was population growth (Kong, 1993).

⁵ There were generally four methods for distributing householdresponsibility land: on the basis of the total number of people within a village; on the basis of the available labour force of individual households within the village; by combining the preceding two methods, whereby a fixed proportion of household-responsibility land was assigned according to the total population while the remainder was allotted on the basis of labour; and by assigning land to a specialized team or group. A survey conducted by the Ministry of Agriculture indicated that these different methods were used in 69.4, 4.4, 25 and 1.2 percent of 253 sample villages, respectively (Kong, 1993). Thus land was distributed mainly on the basis of household size.

to leave the villages. Adding to the problem was the fact that those finding off-farm work did not renounce their right to farm but retained a part-time involvement. Many did not give priority to cultivation and at times even let the land lie idle. Thus, the scarcest resource was underutilized.⁶

To sum up, the household responsibility system maintained egalitarianism but was less successful in terms of economic efficiency. As for the unsolved problems, the negative aspects of the household responsibility system will inevitably become more and more of a constraint on the further development of China's agriculture. China faces a challenge once again.

THEORETICAL DEBATE ON FURTHER REFORM

As early as the mid-1980s, when the household responsibility system began to exhibit the above-mentioned problems, China started to pursue new measures to improve its agrarian institutions under a call for a second stage of rural reform. During the process, different and even divergent ideas and suggestions have emerged. The debate between contrasting viewpoints exerts considerable influence, not only on the evolution of the theories themselves, but also on reforms in practice.

In the early stages, discussions mainly focused on whether collective ownership should be maintained and what form of property rights could be adopted. Two divergent ideas drew much academic attention. One group of economists advocated farmland nationalization. Their central idea was that State ownership of farmland with individual lifelong possession could be the best solution. They argued that collective ownership of farmland did not exist in practice in rural China: rural collectives never had exclusive property rights on land under the so-called collective system. During the commune era, collectives were prohibited from selling the land they owned (except to the State) or from buying land from other owners. Farm products could only be sold to State commercial institutions at administratively low prices; thus farmers were denied the right to benefit from farming. Farmers' land use rights such as production decisions were also weakened by the rigid State procurement system. Under the household responsibility system, farmers still failed to have complete rights on land. They lacked the right to transfer their contract land, and their rights to use and benefit from the land were further weakened by administrative interference and continued State procurement. As a result of these infringements of property rights, the State was the real landowner - the biggest landlord in rural China (Din and Cheng, 1994). These economists argued that if public ownership was a kind of dogma, it would be better to abandon the name "collective" and institute State ownership instead, in order to live up to the letter and spirit of the system. Through nationalization of farmland, farmers would be granted permanent land use rights. They could buy, sell, mortgage and bequeath their rights. Although peasants would not be landowners, lifelong tenancy in effect could be as efficient as owner cultivation (Din and Cheng, 1994).

Although these arguments are persuasive, the idea of farmland nationalization was not seen as likely to find public acceptance. The first objection of opponents was financial. They asked if the State would need to pay to effect the transfer of land. Although the ownership of collective farmland is ambiguous, it was unlikely that the State could get the land free; it would have to pay at least part of the price. The government would then have to consider social and political risks. An agreement to pay would entail financial embarrassment. In addition, opponents wondered whether the State would

⁶ In theory, land mobility and regrouping could be achieved through land marketing. However, in the absence of the proper legislation and mechanisms for land mobility, few land transfers took place. A survey indicated that in 1990, 2.09 million households subcontracted 0.425 million hectares of farmland, representing only 1 percent of households and 0.44 percent of farmland under the household responsibility system. During the ensuing years there were only small changes. In 1992, the figures were 4.73 million households and 0.769 million hectares of land (2.3 and 0.9 percent, respectively), and in 1994 the figures decreased to 2.38 million households and 0.63 million hectares of farmland (Ministry of Agriculture of China, 1991, 1993, 1996).

be able to manage farmland as well as collectives do. Some economists bitterly criticized the idea of land nationalization as intending a return to the abolished commune system; others viewed it as a kind of quasiprivate ownership. Given the strong objections, farmland nationalization is unlikely to be put into practice.

A second group of economists was willing to accept the critique of collective ownership; however, instead of farmland nationalization, they advocated individual ownership. They argued that only under individual farmland ownership would it be possible to overcome the above problems. To defend themselves against criticism for advocating privatization, they tried to find theoretical support. They argued, by the theory of Karl Marx, the founder of socialist thought, that socialism would rebuild the society on the basis of socialized individual ownership. Accordingly, some took the view that the vital difference between socialism and capitalism is whether the main production means are owned by all individuals or by a small number of individuals - the former case being socialism. They argued for a break with the theoretical doctrine that socialist ownership could only be through State and collective ownership (Li and Li, 1989; Lin, 1989).

The idea of farmland individualization was presented as a rebellion against tradition and orthodox theory. However, it is likely to be very problematic in practice. Beyond its current political impossibility, several objections need to be answered. First, the question of whether individualized landownership is really a new concept of socialism or rather capitalism by another name is a source of much controversy; there is certainly no consensus on this point, and many would disagree with the abovementioned "modern" interpretation of socialist ownership. Second, most economists do not consider land individualization or privatization an appropriate solution to existing land problems in China. Bearing in mind the Chinese historical experience, they argue that under private ownership land fragmentation could be further worsened. Third, although

the private sector was eliminated immediately by decree, its re-creation would require very careful consideration and planning: hasty transition would entail social and economic risks. The unfortunate problems encountered in rapid agrarian privatization in the countries of the former Soviet Union and Eastern Europe are well documented (Nikonov, 1992; Novoselov et al., 1993; Brooks and Lerman, 1995; Peters, 1995). Moreover, a 1991 survey indicated that Chinese peasants did not show much enthusiasm for land privatization (Xia, 1992). Only 13.5 percent of the sampled peasants agreed with the idea, 79 percent expressed a negative attitude, and the remainder did not specify their ideas (Table 2). The reason might be that for several centuries most Chinese peasants greatly suffered from a lack of land. They may wish to avoid the perceived risks associated with privatization. However, there is probably also a feeling of ambivalence: they prefer at the moment to opt for a collective form of ownership although they are unhappy with aspects of the current system. There is clearly a need for a more up-to-date review of peasants'

As the theoretical debate developed, a third group of Chinese economists took the view that it was more feasible to improve land use rights than to change ownership of land. They argued that both approaches, i.e. nationalization and individualization, were still strongly trammelled by the previous doctrine where the concept of ownership was overstressed and taken as the sole key point of property rights. Following modern theory

attitudes on this issue.

TABLE 2	
Peasants' attitudes towards lar	nd privatization

Village income level	Agree with land privatization?			
level	Yes	No	Unknown	
		(%)		
Lowest	23.1	73.1	3.8	
Lower	9.6	86.5	3.9	
Middle	12.8	79.1	8.1	
Higher	13.3	77.9	8.8	
Highest	13.9	74.4	11.7	
All villages	13.5	79.0	7.5	

Source: Xia, 1992.

they believed that ownership was, on the contrary, just one of the components of property rights. Other components include the rights to consume, to obtain income from and to alienate assets (Barzel, 1989). The purpose of property rights is to define interests and obligations among participants sharing an asset. Without the clarification of property rights, participants could shoulder burdens for others and this could generate problems such as moral hazard and free riders. According to the theory of property rights, the ownership of land in rural China is clear, but the property rights of farmers are very incomplete. Land is owned by farmers collectively rather than individually, but the land use right is granted to farmers as individuals. In theory, farmers should have an exclusive use right which should mean the freedom to consume, to obtain income from and to alienate the use right at their will. In practice, however, farmers' land use rights are insufficient. Their rights to consume and to obtain income from land are weakened by the State procurement system and distorted prices. Furthermore, farmers are prohibited from transferring their land use rights. These drawbacks, in combination with the problem of frequent land redistribution, lead farmers to feel that they are only nominal owners. As a result of the ambiguous status of land use rights, farmers' incentives to take care of their land are considerably weakened. In addition, as land use rights are not tradable, it is difficult for land markets to develop. Thus, the problem of land fragmentation remains highly intractable. If there is no possibility of changing landownership, there exists, nevertheless, vast scope for improving the land use rights system. At present, therefore, the most important thing is to clarify farmers' property rights so as to foster their production incentives and prevent further farmland fragmentation.

From the above brief review, it is clear that Chinese economists all agree about the need for further clarification of land property rights, but they hold different views on how this should be done. In the absence of a universally accepted approach, recent land reform initiatives have been guided mainly by the ideas of the third group of economists, which are seen to be less socially and politically risky and more easily accepted by the central government. Under the principle of adhering to collective ownership of farmland and reforming land use rights, the government has issued a number of policies and measures. For instance, in 1983, households were allowed to exchange their labour with others and to employ limited amounts of labour for farm work. For the purpose of providing better incentives for soil conservation and investment, leaseholds were extended to 15 years in 1984, and then to 30 years in 1995. In the late 1980s, rural households engaged in non-farm business were allowed to sublease their land to other villagers in order to prevent land from being left idle. Meanwhile the central government also encouraged more flexible measures to be carried out at the local level. Experimental land reform models were initiated in selected locations of various provinces in the mid- to late 1980s. Thus, China is actively pursuing appropriate models to guide further land reforms.

NEW MODELS AND RUDIMENTARY ACHIEVEMENTS

As the preceding analysis has shown, frequent readjustment of householdresponsibility land has been creating big problems because of further fragmentation of farmland and the shortsighted behaviour of farmers. The policy-makers' hope of basically stable, small adjustments was based on the strong desire to stop or slow down the fragmentation; however, the outcome in practice has been an entire redistribution and in a structural sense has been totally negative. The redistribution proved very difficult to prevent because of the fundamental importance of land for subsistence agriculture and for avoiding starvation among the growing population in rural areas. Nevertheless, solutions are being sought with urgency. Different regions have reacted to their own sets of economic possibilities in a variety of ways, utilizing different organizational forms and development strategies to meet their different needs and priorities. The government has

conducted experimental reforms in selected districts to encourage localities to try different methods. This section examines four new models of land reform adopted since the mid-1980s. Most of these reforms have been carried out in the experimental districts and therefore have had considerable national impact on the land reform process.

Meitan: fixed responsibility farmland within a contract term

Located in northern Guizhou, Meitan is a county with a rural economy typical of the province (Li and Din, 1994; Meitan Rural Reform District Office, 1994). About 93 percent of its population of 400 000 is engaged in agriculture. Meitan is rather poorly endowed with farmland. In 1987 the total 30 000 ha of cultivated land occupied only 17 percent of the territory; per caput cultivated land was a mere 0.087 ha. In the process of implementing the household responsibility system, land fragmentation emerged as a big problem because of population growth and land redistribution. The level of fragmentation was very high. According to a survey, the average household's cultivated land was divided into 15 plots, with the largest 0.13 ha and the smallest 0.005 ha. In one extreme case, a peasant householder with seven family members had 128 plots of farmland. The boundaries and paths between plots occupied nearly 12 percent of active land area in the county. The fragmentation had become so intolerable that farmers expressed a strong desire to stop land redistribution.

The initial local government response was to make another distribution and then to fix the structure for 20 years. However, most peasants disagreed with this idea. An investigation among 510 peasant households showed that 64.7 percent wanted to stop redistribution at once. Therefore, a local policy, extending the tenure term to 20 years (originally 15 years) and fixing contract land within this period irrespective of births or deaths of household members, was initiated in December 1987. After careful trial in two villages the policy was extended to all rural areas of the county. Following adoption of the policy, farmers were granted inheritance rights on their land and the ability to exchange land with one another, to subrent, to pool land and to mortgage for credit. Meanwhile, the local government encouraged households to farm wasteland and to develop small family businesses such as processing and animal breeding, and surplus labour was encouraged to find work outside agriculture.

Several years after adoption of the policy some rudimentary effects can be seen. First, most local farmers have welcomed the policy. According to an investigation, only 10 percent of households asked for land readjustment; they complained that the original land distribution in the early 1980s had been unfair, rather than the policy itself. Second, farmers had greater incentives for land investment and conservation. By 1993, 100 000 ha of new land were developed (average 0.03 ha per caput), which represented one-third of the per caput farmland of the county in 1978. Land fertility grades were advanced and farmers increased their purchases of fixed means of production. Third, land fragmentation was to a large extent brought under control. In 1991, the area occupied by paths and boundaries between plots was almost the same as it had been in 1987. Land subdivision now took place mainly within households as children matured, instead of being redistributed among the households of a village. In addition, farmers' attitudes towards increasing family size changed. Traditional Chinese culture equates more children with more happiness. However, under the new land system, as new babies are not able to get land during the contract term, 41.4 percent of the sampled households showed a negative attitude towards having more children.

In 1993, the policy of fixing contract land was formally legislated as the provincial land management law and applied in all rural areas of the province. In 1995, when the Chinese Government issued the new land policy, in advance of the first 15 years' tenure coming due, Meitan's experiment was included in the central government document. Although the document just suggests that appropriate villages should consider the policy, its inclusion shows that after eight years of experimentation in a small local county, the policy of fixing land is gradually becoming integrated into national institutional arrangements. This is indeed a significant change.

Pingdu: a two-land system

The strong desire in China for social equity in land matters may limit the applicability of the fixed land system in national terms. An alternative which seeks greater economic efficiency while attempting to maintain a degree of social equity is the so-called twoland system. The system originated in Pingdu, a county-level city in Shandong Province.

Pingdu is an area where cultivated land and collective economic infrastructure were relatively well developed in the People's Commune era. After adoption of the household responsibility system, Pingdu was confronted with a growing number of issues that were difficult for individual farm households to handle. These included encouragement of the use of advanced agricultural machinery and equipment and the continuing development of agricultural infrastructure in order to improve production conditions and expand output.

In 1984, Pingdu adopted the two-land system on a trial basis. The total cultivated land in a village was divided into two parts: food land (kouliang tian in Chinese) and contract land (chenbao tian). The two kinds of land have different functions: food land is for family consumption and contract land for commercial farming. All households have their own food land and can choose whether or not to take contract land. Usually, parttime farmers only take charge of food land for subsistence production; they also pay taxes, including the State agricultural tax. Households which also take contract land have an obligation to fulfil government procurement quotas and pay taxes. However, they can sell their surplus production in the free market. This incentive enhances their enthusiasm for production on contract land.

The key feature of the two-land system is division according to usage. As food land is to guarantee peasants' living essentials, it is distributed relatively evenly or equitably. In Pingdu, it is distributed on the basis of household size and average grain consumption. The norm reflects local conditions: 225 kg of grain per caput per annum for basic food consumption; 400 kg of grain per household per annum for animal feed (normally two pigs and ten chickens per household); and 20 kg of grain per mu of land (0.067 ha) for seed planting. A total of 350 kg of grain is estimated to be needed by each person. Given the local grain yield average of 650 to 700 kg per mu, at least 0.5 mu (0.033 ha) farmland should be granted to each person as food land.

As to contract land, the main concern in allocation is efficiency. Farmers bid competitively for this land. The bid price in Pingdu normally reflects obligations towards government procurement and the collective as well as land tax (approximately 4 yuan renminbi⁷ per mu of land). Bid prices differ depending on the grades of land. In 1988, the price range per mu per annum in Pingdu was 53 to 71 yuan (US\$6.36 to \$8.52), which typically represented 30 to 40 percent of annual net income per mu of farmland. However, allocation of contract land is not decided only based on price. Some intervention is still judged to be necessary to prevent excessive competition between farmers resulting from the scarcity of the farmland resource and limited employment opportunities outside agriculture. Usually a limit on cultivated area of between 5 and 15 mu (0.33 to 1 ha) per labour unit is imposed, depending on the land endowment of the locality.

To encourage larger-scale operation and to avoid fragmentation, contract land is offered in relatively large parcels, usually between 20 and 30 *mu* (1.33 to 2 ha), depending mainly on locality and land quality. Household group bidding is strongly encouraged in order to promote cooperative activity. The land is

⁷ 1 yuan renminbi = US\$0.12.

normally allocated for five years and the contract cannot be changed within this term. However, during the term the relative amounts of food and contract land can be altered if changes in household size take place. If a household increases in size, the village will reduce its contract land area or, alternatively, its procurement obligations so as to increase the capacity for subsistence production. If a size reduction occurs the process operates in reverse. Thus, the frequency of changes in the level of active contract farming land per household is reduced.

After only a relatively few years of operation the two-land system has achieved some encouraging results. First, the previously even allocation of land among households has changed considerably. Some 30 percent of 120 households surveyed in 11 villages had increased their land areas, 50 percent of these by as much as 5 mu (0.33 ha) (Jiang, Chen and Jia, 1994). Just over 9 percent of households cultivated only food land using female labour; as a result, male workers were able to concentrate on non-agricultural business. Agricultural performance was also much improved. Total grain output increased from 795 000 tonnes in 1987 to 1.041 million tonnes in 1994. Grain yield per unit of land increased by 32.4 percent. At present, Pingdu ranks tenth in grain output among 2 200 counties and county-level cities in China.

In the short period since Pingdu adopted it, the two-land system has developed from a couple of village experiments to nationwide practice. By the early 1990s it had become a nationally accepted and popular form of agrarian institutional innovation. Table 3 shows the main results of a series of surveys conducted by the Ministry of Agriculture. In 1990, there were 1.19 million villages and 37 million hectares of farmland under the two-land system in one form or another, accounting for 26.9 percent of China's total villages and 38.2 percent of total cultivated land where the household responsibility system was implemented. In 1992, the twoland system peaked at 1.7 million villages and 39.3 million hectares of farmland, 32.3

TABLE 3 Development of the two-land system in China^a

Region	Number of villages (tens of thousands)		Area (million ha)			
	1990	1992	1994	1990	1992	1994
National	119.2	170.0	117.7	37	39	42
East	58.8	115.8	n.a.⁵	15	15	14
Central	27.8	30.4	n.a.	16	19	20
West	32.6	23.8	n.a.	5	5	7

^a Excludes Tibet.

^b Not available. Source: Ministry of Agriculture of China, 1991, 1993, 1996.

percent of total villages and 44 percent of total cultivated land. By 1994, the percentage of villages under the two-land system had decreased slightly, to 31.5 percent, but the land area had increased to 47.8 percent (Ministry of Agriculture of China, 1991, 1993, 1996).

Why has the two-land system achieved such success in a relatively short time? The most plausible explanation is that by separating the household's land into two the new system institutes a workable means of preserving social equity while at the same time allowing the pursuit of greater efficiency.

Shunyi: collective farm

In the above two cases, individual farming, the core of the household responsibility system, remained largely unchanged. However, as was shown earlier, although individual farming succeeded in stimulating farmers' production incentives, it led to land fragmentation. Reconsolidation of farming land has thus been regarded as one of the goals for further reform currently under discussion. Perhaps surprisingly, collective farms reappeared in some rural areas close to urban centres and some coastal provinces of China in the late 1980s. Considerable concern was raised, even among Western scholars (e.g. Reisch and Vermeer, 1992), that this development could signal a return to the People's Commune system.

Shunyi, a suburb county northwest of Beijing, is one location of such collective farms. According to a 1994 survey, collective farms in Shunyi county occupied 62.8 percent of total cultivated land, about 9.7 ha per employee (Luo and Zhang, 1995). A very important factor in the successful establishment of these collectives was the relatively high level of rural industrialization. Shunyi's location near a major consumption centre meant that it was blessed with many marketing channels, many means of transportation and advanced communication facilities. The area also had developed strong non-agricultural rural enterprises, and many rural people sought employment in township enterprises: 60 percent of the rural work force had abandoned farming. Part-time farming had become the mainstream. Farmers had gradually lost enthusiasm for farming as the contribution of agriculture to household income declined. The problems of agriculture in the area are demonstrated by the fact that the annual growth rate of grain output was 6.4 percent from 1978 to 1984 but fell to 1.2 percent from 1984 to 1986 (Luo and Zhang, 1995). Most part-time farmers even wanted to return their entire land entitlement to the village cooperatives.

In response to farmers' requests, collective farms were introduced in 1986 to achieve a more optimum-scale operation. However, the operation of these collective farms is significantly different from that in the People's Commune era. Normally, the village provides agricultural machinery and is responsible for developing infrastructure. Collective farms are titled as the farming enterprises of the village with which they have signed a contract. The collective farms operate independently. The employees of the farms earn wages rather than the working points of the old commune system. After completing the contract, which usually includes fulfilling State procurement quotas and an offering to the cooperative, collective farms distribute part of their surplus as a bonus to employees according to their performance; the remainder, as the farm's profits, is set aside as a common accumulation fund. Those who returned their land use rights to the villages are given the privilege of purchasing grain at lower prices for their own consumption.

Apparently, the collective farm is subjected to a system of collective responsibility rather than an individual household contract system. Since the collective farm is registered as an enterprise of the village, it is possible for the village to transfer some profits from non-agricultural enterprises to the collective farm. The effects of this kind of operation are controversial. On the one hand, agricultural infrastructure is rapidly improved by the financial support from non-agricultural enterprises; on the other, as productivity is also benefited by the improved infrastructure, the collective farm may be encouraged towards free-ride behaviour. This problem was common under the old commune system and casts a shadow on the collective farms' future operations.

Available evidence suggests that there have been some major achievements in the performance of collective farms in Shunyi. Although the total grain output and the yield per unit of land increased modestly between 1986 and 1994, grain output per agricultural worker grew dramatically - eightfold - during the same period. Agricultural productivity has been improved significantly by rapid farming mechanization from ploughing to harvesting on the collective farms. Surprisingly, employees of collective farms currently earn higher incomes than part-time farmers employed by township enterprises. The internal accumulation of the collective farms reached 60 million yuan in the five years from 1987 to 1992 (RIDA, 1995).

Nanhai: a farmland shareholding cooperative system The Shunyi-style system is not the only collective model to re-emerge: there are other variants of this model throughout rural China. However, the farmland shareholding cooperative system has emerged as a completely different type of collective and has aroused strong interest. So far, it is confined to the Pearl River Delta area of Guangdong Province. The farmland shareholding cooperative system was initiated at the end of 1992 on an experimental basis in Xiabai, an administrative-level village of the county-level city of Nanhai. Nanhai has emerged as one of the major growth areas in China over the past two decades; it is well known as one of the so-called "four tigers" in the area because of its rapid industrialization and urbanization. (The other three "tigers" are Zhongshan,

Dongguan and Shunde.) In the process of rapid development, land reform emerged as an issue of great importance for two main reasons.

First, reform was necessary to improve agricultural performance. While rapid rural industrialization was achieved, agriculture had gone into decline. Increasingly, rural labour, particularly young educated workers, found employment in non-agricultural sectors, and agriculture suffered through loss of human capital. Workers that shifted to non-agricultural sectors still kept their household-responsibility farmland because of the perceived risks associated with losing land property rights. Therefore, farming in most villages was mainly undertaken by the elderly, females and even children. Agricultural development became an urgent issue as it was recognized that social and economic modernization could not be sustained without agricultural development.

Second, it was necessary to develop a comprehensive land use planning system. The process of rapid rural industrialization and urbanization led to the conversion of a great deal of land to non-agricultural uses. The rational use of land resources became more and more important. There were very difficult conflicts. On the one hand it was considered necessary to preserve agricultural land, but on the other, the strategy of promoting rural industrialization and urbanization (called "leaving the land but not the countryside, entering the factory but not the city") led to excessive growth in the number of small factories and towns and to enormous waste of scarce land (for a detailed discussion see Fu, 1995). There was a need for land utilization to be reorganized, but it was not clear who the responsible authority should be. Rural land was in the hands of natural villages, the basic unit in rural China, but the natural village was too small to manage it effectively. The administrative village, a higher-level rural organization, had the capacity but was not the landowner. In an attempt to resolve the conflicts, the farmland shareholding cooperative system, a kind of land-as-stock system, was initiated.

In the farmland shareholding cooperative

system the first step is valuation of the farmland. Currently, in the absence of a standard approach, three valuation methods may be applied: one based on the the prices paid by government for land conversion; one based on the net incomes of land after deducting input costs; and a mixture of the first two methods (Nanhai Rural Reform District Office, 1994). Although the methods are imprecise, this has not hindered the implementation of the system.

The key aspect of the system is the distribution of land shares to individual peasants. Cooperative membership serves as the main criterion for share entitlement. Age is an additional consideration; children are normally entitled to half shares. Farmers receive their shares - paper entitlements without any payments. When land shares are allocated, there is no actual distribution of physical plots. Furthermore, the shares cannot normally be withdrawn or transferred (although in some cases the shares can be transferred to the next generation). After receiving land shares, farmers return their land use right to the natural village to which they belong. The natural village then offers the land entitlement to the administrative village to which it belongs. The administrative village is now in charge of land use. Usually an agricultural company subordinated to the administrative village will be founded, which becomes responsible for agricultural land. The land is contracted to individual specialist farmers or farming teams based on a bidding process. In practice, most peasants do not bid to farm the land. However, as they are land shareholders they are able to share dividends and also to promote their ideas at shareholder meetings.

The farmland shareholding cooperative system is still in the early experimental stage, yet the effects are encouraging. Within only three years the system was introduced to almost all villages in Nanhai and other rural parts of the Pearl River Delta area, and it has been welcomed by the local people. Agriculture is much improved. Introducing the system has made large-scale farming possible. By 1993, the cultivated area per labour unit in Nanhai had increased to 7.6 ha, ten times more than before the system was introduced (RIDA, 1995). In Xiabai, the birthplace of the system, grain production has been contracted to a group of 30 farmers. They manage the farm independently and provide the main source of grain for local consumption.

Administrative villages have made comprehensive land use plans, taking account of the needs of the three main land use areas, namely agriculture, industry and city construction. Thus it is likely that land use will be organized in a more rational and efficient manner. In the long term, moreover, the emergence of the land shareholding system may act as a catalyst for rural industrialization and urbanization because of more efficient use of land and labour.

DISCUSSION AND CONCLUSIONS

Although it is clear that China has been making substantial progress with land reform, the pace has been somewhat slower than expected. All the new approaches remain in the experimental stages and no mature national model has emerged. At this stage in the process it is difficult to judge the models' performance relative to one another or to conclude which one might be more effective. However, four tentative conclusions can be drawn about the experiences to date; these insights should be valuable for steering the reforms in the short- to medium-term future.

Land reform in China has emerged as a difficult issue of trade-off between social equality or equity⁸ and economic

efficiency. It seems apparent that land reform in China since the mid-1980s has been caught in this dilemma: where social equality or equity considerations predominate, economic efficiency has been held back. For example, the fixed responsibility land in Meitan can only be maintained for one contract term (20 years); after that, redistribution of land cannot be avoided. The land shares distribution in Nanhai also illustrates the trade-off, with land shares allocated equally and the relative contribution of labour to the collective largely ignored.

The two-land system, probably the most suitable for many rural areas in China as it is less restricted by local conditions, has not realized its potential. Recently, the speed of implementation of the two-land system has slowed down substantially. A key factor has been that it is more difficult to pursue efficiency under the system than was hoped. In the case of Pingdu, the small-scale farming structure remained largely unchanged after adoption of the two-land system. Originally, the contract land was intended for development of largerscale commercial farming. However, in practice, contract land was leased to households largely based on family size, much as under the household responsibility system. Table 4 shows that nationally, since the early 1990s when the two-land system was adopted, more than 60 percent of total contract land in sampled villages has been leased on the basis of household size, around 30 percent on the basis of household labour and only 6 to 7 percent through bidding competition, the approach most likely to secure a relatively efficient scale of commercial farming. Thus, the system has not given people much new experience.

In looking closely at the situation, an important lesson might be learned. Currently, the goals of equality or equity are still outstandingly important. Thus, an effective reform strategy in China in the current environment must satisfy these criteria and then seek efficiency incrementally. Otherwise, it is unlikely that any reform approach or process can succeed.

The clarification of land property rights has proved to be still at an early stage.

So far farmers have had insufficient property rights. For example, in the cases of Meitan and Pingdu, farmers' land property rights are

⁸An important distinction can be made between equality (egalitarianism) and equity. The former is concerned primarily with the humanity of individuals and upholds their right to a share in resources and rewards based entirely on their human condition regardless of their contribution to social and economic progress. The latter is concerned more with the contributions that individuals make to progress; this is the primary basis on which their share in resources and rewards is to be based.

TABLE 4

Basis for leasing contract land under the two-land system (%)

Year	Household size	Household labour	Bidding	
1990	64.0	29.9	6.1	
1992	60.9	33.2	5.9	
1994	68.0	25.0	7.0	

Source: Ministry of Agriculture of China, 1993, 1996.

still unstable. As the contract term progresses to the due date there will be great uncertainty among farmers and an expectation of loss of productive capacity. This will tend to perpetuate the problem of underinvestment in land and fixed assets. In the case of Nanhai, the land shares are really just paper entitlements, which lack the real attributes of shares in a joint stock company. In particular, farmers cannot get compensation for their shares even when they move to a city and are no longer active in their village. This lack of incentive tends to make farmers reluctant to leave their village. Thus, surplus agricultural labour continues to grow in villages, slowing down the progress of rural industrialization and urbanization.

As the inadequacy of property rights hinders the reform process, further clarification of farmers' land rights will undoubtedly be a key issue. However, this area is still very controversial. Study is urgently needed on the nature and extent of land property rights that should be granted to farmers and protected. Otherwise, it is likely that the reform process will continue to be frustrated and may well stall.

This issue also raises questions about the role of central and local governments. To date the central government has tended to stand back and leave decisions to the local authorities. However, the latter are calling for a clear general statement of policy; there would seem to be some justification for this position, as the issues are clearly of fundamental national importance.

The implementation of land reforms in China has reflected and will continue to reflect the diversity of local conditions. In the early 1980s, the household responsibility system emerged as the dominant national institution in rural China. By contrast, the deepening of the reform process since the mid-1980s has reflected much more the diversity of local conditions and circumstances, and no universal model has emerged. As the local conditions are hard to change, reform will continue to reflect diversity, at least in the medium term. Indeed, to ignore local conditions and needs would delay and even distort the process of structural change in the countryside.

It seems clear that the most successful reforms have taken place where there has been a clear understanding of local specificity and no excessive reliance on an imposed imported model. In addition, particular attention must be paid in the future to the prevention of unnecessary administrative interference and excessive rent-seeking behaviour. There have been instances where reform has been used as a vehicle for different goals. For example, it is reported that the two-land system was heavily distorted in some places; the introduction of the system served as a means of levying high charges for contract land, and as a result contracts were disrupted and some farmers lost half their original land. The consequence has been a change in farmers' attitudes to the two-land system, from one of welcome to one of rejection (Ministry of Agriculture of China, 1996).

Successful further land reforms in China depend on the creation of a dynamic environment. Apart from the dilemma between equity and efficiency alluded to above, it is clear that the appropriateness of particular models and the pace of land reforms to a great extent depend on the state of overall development of the rural economy, and particularly non-agricultural industry. For example, it is reported that in some coastal areas of China, the two-land system is developing towards a one-land system; local farmers are said to be abandoning their food land completely and this land is being tilled by farms organized by villages (People's Daily, 1996). However, as has been noted earlier, the Shunyi-style collective farms have

encountered problems as well concerning property rights relations between the farms and the collectives, and thus there are clear problems in moving towards recognition for this model.

Nanhai's farmland shareholding cooperative system seems less in dispute. The system was initiated against a background of rapid rural industrialization, where either the farmers wanted to abandon farming or local villages had considerable financial capability to support agriculture. As it is to be expected that in the next few decades rural China will become more and more industrialized, it may be legitimate to ask whether this system, or a further development of it, has the potential to become more popular or even adopted as a national model.

Thus, it is possible to envisage a rural reform strategy with two main strands. One will be to ensure that the dynamic structural changes in the wider rural economy, and particularly rural industrialization, are maintained or quickened and more widely distributed. The other will be to deepen the land shareholding cooperative experiment with a view to improving the system, especially in the area of property rights of farmers.

Of course, agricultural policy and agrarian institutional innovation are not independent of one another. So far, the government has been slow to develop or deepen institutional innovations in other areas in support of land reform. For example, market signals are distorted, with the result that farmers' production incentives are weakened. The development of a land market, which would facilitate structural consolidation among fragmented small farms, has been hampered by the lack of political will to introduce effective land rights legislation. Under such an unfavourable policy environment, it is unrealistic to expect great achievements from further land reforms in isolation.

BIBLIOGRAPHY

Barzel, Y. 1989. *Economic analysis of property rights*. New York, NY, USA, Cambridge University Press.

- **Brooks, K. & Lerman, Z.** 1993. Land reform and farm restructuring in Russia: 1992 status. *American Journal of Agricultural Economics*, 75(4): 1254-1259.
- **Brooks, K. & Lerman, Z.** 1994. Land reform and farm restructuring in Russia. World Bank Discussion Paper No. 233. Washington, DC, USA, World Bank.
- **Brooks, K. & Lerman, Z.** 1995. Restructuring of traditional farms and new land relations in Russia. *Agricultural Economics*, 13(1): 11-25.
- **Csaki, C.** 1990. Agricultural changes in Eastern Europe at the beginning of the 1990s. *American Journal of Agricultural Economics*, 72: 1233-1242.
- **Csaki, C. & Lerman, Z.** 1994. Land reform and farm sector restructuring in the former socialist countries in Europe. *European Review of Agricultural Economics*, 21(3): 555-578.
- **Csaki, C. & Lerman, Z.** 1996. Agricultural transition revised: issues of land reform and farm sector restructuring in East Central Europe and the former USSR. In *Plenary papers: Redefining the roles for European agriculture*, p. 61-96. Eighth Congress, European Association of Agricultural Economists. Edinburgh, UK, Edinburgh International Conference Centre.
- **Chen, J.** 1994. On property institution of the People's Commune. *Economic Research*, 7: 47-53.
- **Din, J. & Cheng, G.** 1994. Target model of farmland property institutional reform in China. *Problems of Agricultural Economy*, 10: 7-12.
- **Fu, C.** 1995. Reasons and countermeasure on stagnation of rural China's urbanization, *Economic System Reform,* 3: 108-110.
- Jiang, Z., Chen, Z. & Jia, Y. 1994. Analyses on policy effects of two-land system in Pingdu. *Chinese Rural Economy*, 4: 26-30.
- **Kong, J.** 1993. Positive analyses on agrarian institutional innovation in rural China. *Economic Research*, 2: 65-72.
- Li, C. & Li, C. 1989. Obstacles of rural reform and restructure and farmland property right. *Chinese Rural Economy*, 4: 26-29.
- Li, Q. & Din, Y. 1994. Adopting the strategy of permanently fixed farmers responsibility land. *Chinese Rural Economy*, 2: 52-55.
- Lin, H. 1989. A misunderstanding on Marxist ownership theory. *Problems of Chinese Economy*, 2: 25-29.
- Lin, Z. 1982. On the household responsibility

system. Beijing, China, Agricultural Publishing House.

Lin, J.Y. 1987. Household farm, cooperative farm, and efficiency: evidence from rural decollectivization in China. Economic Growth Center Working Paper No. 533. New Haven, Connecticut, USA, Yale University.

Luo, Y. & Zhang, H. 1995. Agrarian institutional innovation under household responsibility system. *Economic Research*, 1: 69-80.

Ministry of Agriculture of China. 1991. Survey on agrarian operation under household responsibility system in China. *Problems of Agricultural Economy*, 10: 33-40.

Ministry of Agriculture of China. 1993. Survey on agrarian operation under household responsibility system in China. *Problems of Agricultural Economy*, 11: 45-52.

Ministry of Agriculture of China. 1996. Survey on agrarian operation under household responsibility system in China. *Problems of Agricultural Economy*, 2: 38-42.

Nikonov, A.A. 1992. Agricultural transition in Russia and the other former states of the USSR. *American Journal of Agricultural Economics*, 74: 1157-1162.

Novoselov, Y.A., Streletsky, A.Y., Lewis, C.E. & Greenberg, J.A. 1993. Agriculture and economic reform in Russia. *Agribusiness*, 9(6): 623-630.

Meitan Rural Reform District Office. 1993. The experiment of agrarian institution in Meitan. *Chinese Rural Economy*, 2: 61-65.

Nanhai Rural Reform District Office. 1994. Experiment of farmland shareholding cooperative system in Nanhai. *Rural South-China*, 1: 10-16.

People's Daily (Overseas Edition). 1996. From two-land system to one-land system. 25 September.

Peters, G.H. 1995. Agricultural economics: an educational and research agenda for nations in transition. *Agricultural Economics*, 12(3): 193-240.

Reisch, E. & Vermeer, E.B. 1992. Land reform policy in China: political guidelines and tendencies. *In* E.B.Vermeer, ed. *From peasant to entrepreneur: growth and change in rural China*, p. 15-20. Wageningen, the Netherlands, Pudoc.

Research Institution of Development Assistance (RIDA). 1995. Prospects for grain supply-demand balance and agricultural development policy in China. *Overseas Economic Cooperation Fund (OECF)* Discussion Papers, 6: 59-88.

State Statistical Bureau, People's Republic of China. 1985. China Statistical Yearbook. Beijing, China, China Statistical Publishing House.

Stavis, B. 1982. Rural institutions in China. In R. Barker, R. Sinha & B. Rose, eds. The Chinese agricultural economy. Boulder, Colorado, USA, Westview Press/London, UK, Croom Helm.

Xia, Z. 1992. Model and choice of China's agrarian system. *Rural Economy and Society*, 6: 9-13.