

ISBN 0 86396 406 0

NO. 96/12

CHINA'S RURAL AND AGRICULTURAL REFORMS:  
SUCSESSES AND FAILURES

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February 1996

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This paper was presented at a seminar at the Department of Economics, The University of Adelaide on 19 September 1996.

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## ABSTRACT

The agricultural and rural reform process that started in 1979 has seen far more success than failure. Yet we should not neglect the important shortcomings of the reform process, especially since the future of China's food supply is involved. In this paper, I shall address both aspects of the reforms. The rural reforms have been remarkably successful in several very important ways - increasing agricultural production, increasing the quality and variety of foods, and in increasing the real per capita incomes of farm people. The rapid development of the township and village enterprises and other forms of nonfarm enterprises has been beyond even what the wildest expectations might have been. The reforms have failed to reduce the significant income inequalities that have long existed in China - between rural and urban areas and regionally. In fact, both types of inequality are now greater than they were when the communes existed or even before 1949. The regional inequality has grown primarily in response to economic opportunities while the growing urban-rural inequality has been due to deliberate policy decisions. The urban bias in China is very strong and, unfortunately, there is no indication that it is decreasing or is likely to do so in the future.

## **China's Rural and Agricultural Reforms: Successes and Failures**

The agricultural and rural reform process that started in 1979 has seen far more success than failure. Yet we should not neglect the important shortcomings of the reform process, especially since the future of China's food supply is involved. In these remarks I shall address both aspects of the reforms. But let me first start with the successes. There can be no doubt - the reforms have greatly benefited both rural and urban people.

### **Agriculture before the reforms**

Before describing the reforms and the outcomes, a brief word about the organization of agriculture and rural life prior to 1979 is in order. The Communists came to power in China through the support of farm people. They were promised land and for a very brief period, land was divided among the farm population. But as in the case of the Soviet Union, the land was rather quickly taken away. Land reform was completed throughout China by 1952. After two intermediate steps, Mao forced China's farm people into the communes in 1958. Under the interim organizational forms farmers had either retained ownership of their land and other property or were rewarded to some degree on the basis of their contribution of land and property. However, in the commune system all land and

other property was taken from farmers without any compensation and became collectively owned.

The creation of the communes as part of the Great Leap Forward was but one feature of the greatest man made disaster in the history of the world. Other aspects of the Great Leap were the backyard iron furnaces which were to help China overtake Great Britain in steel production and the enormous programs of building dams and levelling land that required tens if not hundreds of millions of workers to engage in heavy work, resulting in the neglect of farm work in 1958. A horrible consequence of the Great Leap, combined with the self delusions that enveloped Mao and his followers, was the 1958-1961 famine that claimed the lives of at least 30 million people or approximately 5 percent of the entire population of China (Yang 1996, pp. 37-38).

The famine need not have occurred. It was not due to crop failure; the famine started in 1958, the year of the China's largest grain crop until then. The famine was due to enormous policy errors, starting with the huge drain on the food supplies caused by the heavy work burdens of the Great Leap. The fervour created by the Great Leap combined with Mao's claims that socialism either had or would produce beyond what the world had ever seen resulted in a process of misinformation designed to confirm the immediate and overwhelming success of the socialist policies. The desire to supply the leadership with what it wanted

to hear resulted in a claim that the 1958 grain output was 375 million tons or double that of 1957. The actual production was perhaps 200 million tons, little more than half the original claim. Lies were built on lies and those who knew the truth were afraid to inform the leadership for fear for their lives (Becker 1996, Ch. 16).

Because the leadership believed the exaggerated estimate of grain production, the amount of grain procured was increased to such a high level that it left too little grain in the countryside to provide food for the farm population. Local leader's vied with each other to maximize the amount of grain delivered to the state, doing so in part to justify the lies about the amount of grain produced (Becker 1996, Ch.8). Excessive amounts of grain were delivered even when it was known that not enough was left to avoid starvation for those who produced the grain.<sup>1</sup>

Mao's belief that China's grain problem had been solved resulted in two remarkable decisions made while a famine was underway or just beginning. In August 1958 he told an audience in Hebei Province: "How can you eat your way through so much grain?"

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<sup>1</sup> The percentage of the grain crop procured by the state increased from 24.6 in 1957 to 29.4 in 1958, leaving less grain in the countryside in 1958 than in the prior year. But even greater exploitation of farm people occurred in 1959 when 39.7 percent of the grain crop of 170 million tons was procured. Even though the 1959 crop was 25 million tons smaller than the 1957 crop, the state procurement in 1959 was 14 million tons greater (SSB 1984, p. 370). Farm people were starved in order to feed the cities.

What are you going to do with the surplus?" (Walker 1984, p. 100).

Believing the grain problem had been solved by the ability of socialism to achieve very high yields, Mao issued a directive calling for a long term reduction in the grain area from 80 percent to a third of the cultivated area so that land could be released for other crops (Walker 1984, p. 146). In response to the directive the grain area was reduced by 10 percent in 1959 even though the famine was well underway by the spring of the year. The 1959 grain crop was 35 million tons below the 1958 crop, but half of that decline was due to the reduction in the grain area.

Believing that China was awash with grain, grain exports were actually sharply increased in 1959 to 4.2 million tons and in 1960 were higher than in any year from 1950 through 1957 (SSB 1984, p. 397). Exports continued while millions starved. It was not until 1961 that there were significant imports of grain when nearly 6 million tons were imported (SSB 1984, p. 412).

Forcing farm families to eat at communal kitchens with free food contributed to enormous waste and excessive use of food in the summer and fall of 1958. Food supplies that needed to last for a year were consumed in a few months. Food use was not guided by prices - there was no mechanism for properly rationing the food to assure that the supply lasted until the next crop. The communal kitchens, forced on rural communities by Mao in an apparent effort to reduce the role of the family, combined with

the excessive procurement of grain were the major reasons the famine started following a bumper crop and continued with such enormous loss of life.

In 1983 I met a young man who had been 8 years old when the communal kitchen was introduced in his village. I asked him what he thought of the communal kitchen and I shall never forget his response. He said that he liked it very much, the food was both good and plentiful and he got to eat with his friends. After these comments, he stopped for a moment and then blurted out: "And then we starved."

When there is notice of the famine - I am told school textbooks even now do not mention it - it is blamed on bad weather.<sup>2</sup> This is false. True, the grain crops in 1959 and 1960 were below the average of the 1950s but this was due not to the weather but to the poor management of the communes and the effects of the famine on the energy level of farm people. It should be remembered that the 1958 grain crop was primarily the responsibility of the system that preceded the communes; the 1959 crop was the first one produced under the commune system. Had the leadership not engaged in such enormous self delusion, built upon

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<sup>2</sup> The statement applies for generally accessible material in Chinese. For objective histories of the period from 1950 to 1978, including discussions of the famine and the poor performance of the economy, outstanding works in English by Chinese authors are available. Xue Muqiao (1981 and 1986) and the other is by Liu Suinian and Wu Qungan (1986) provide excellent discussions. A rather briefer and less authoritative account can be found in Johnson (1990).

lie after lie, and not forced the communal kitchens on rural people with its enormous adverse consequences, one of the greatest human tragedies in the history of the world would not have occurred.

The commune system may be briefly described. By 1978 agriculture was organized into approximately 53,000 communes with each commune having a population of about 15,000 and an area of cultivated land of 2,500 hectares. While the organizational structure varied somewhat, each commune consisted of approximately 13 brigades that were in turn divided into 7 to 10 production teams. A production team included approximately 35 families and 60 workers. Members were paid on the basis of work points; the work points were determined primarily by the time worked with some differentiation by the nature of the work (physical difficulty). It proved impossible to relate the work points to productivity. People worked in groups and work often consisted of make work since each production team needed to maximize the number of work points earned since the net output of the commune was divided on the basis of work points. The distribution of income to a production team and its members depended on the production team's share of total work points.

How well did the commune system function? Poorly, very clearly. Grain output per capita in 1978 at 195 kilograms was less than the 203 kilograms in 1957. An authoritative analysis,

based primarily on State Statistical Bureau data, estimated that per capita daily calorie consumption for 1955-58 was 2,256 and 2,287 in 1975-78 - no significant change (Piazza 1986, pp. 85-86).

Xue, an elder statesman among Chinese economists, described the two decades from 1957 to 1977 as follows: "Between 1957 and 1977, living standards almost remained the same. The average wage was not raised, the peasants' food grain was not increased, and about one in every three peasants led a hard life." (Xue 1981, p. 176).

The communes were not only economic institutions; they were civil and political institutions as well. They constituted the local government, controlling the police and what passed for a system of justice. They were responsible for all the functions normally carried out by local government and thus had enormous control over the lives of their members.

It should be noted that while private consumption per capita probably did not increase during the two decades of the communes, public consumption did. In the rural as well as urban areas, the increase in expenditures on education and public health resulted in significant declines in illiteracy and infant mortality and increased life expectancy. Life expectancy at birth was 36 years in 1950, increasing to 64 years in 1979 (World Bank 1983, p. 98) while the percentage of children in elementary school increased from 27 in 1950 to 90 in 1980 and secondary school enrolment

increased from about 20 percent to 40 percent over the same period (World Bank 1983).

### **Rural Reforms - Major successes**

It is most unlikely that there has ever been a series of agricultural reforms in any country that have come close to the achievements of the Chinese reforms. Gross agricultural output grew at an annual rate of 6.3 percent for 1979 to 1994 and a significant part of this growth came without resource cost to the rest of the economy. Three measures of the increase in agricultural production are given in Table 1 - gross agricultural output and grain and meat production.

**Table 1**  
**Measures of Agricultural Output**

Year	Agricultural Gross <sup>1)</sup> Output	Real Agriculture 's GDP <sup>2)</sup>	Grain Output <sup>1)</sup> (million tons)	Meat Output <sup>2)</sup> (Million tons)
1978	100	100	305	9.5
1980	109	104	321	13.0
1983	138	135	387	15.0
1984	155	153	407	17.0
1985	161	155	379	19.3
1986	166	161	392	21.1
1987	176	168	403	22.2
1988	183	172	394	24.8
1989	189	178	408	26.3
1990	203	191	446	28.6
1991	211	195	435	31.4
1992	224	...	443	34.3
1993	242	...	456	38.4
1994	263	...	445	45.0

1995

465

50.0

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1) State Statistical Bureau (1995): FBIS-CHI-96-043, March 4 1996, p.74.

2) Includes pork, beef, mutton, and poultry. Output for 1978, 1980, 1983, and 1984 estimated by author. Other years from State Statistical Bureau 1995.

The early reforms so improved the incentives facing Chinese farm people that a large percentage of the 50 percent increase in output from 1979 to 1984 resulted from increased labor effort and more intelligent use of inputs, including human capital. Some estimates indicate that the change in incentive structure due to the adoption of the household responsibility system increased agricultural output by 20 to 30 percent without any claim on additional resources from the rest of the economy (Lin 1988, McMillan 1989). In other words, the rest of the economy got something for nothing; the only "cost" was reducing the arbitrary power of the bureaucracy.

The increase in agricultural production was translated into an increase in daily per capita caloric intake of 30 percent to 2,600 in the 1990s. But not only did the calorie availability increase but the quality and variety of food improved enormously.

Prior to the early 1980s, when the state monopoly over production as well as food distribution in the cities still existed, each autumn families in northern cities purchased 100 kilograms of cabbage per family member to provide them with nearly there only

source of green vegetables for the winter. In October and November there were piles of cabbage on nearly every street corner, or so it seemed.

Now that most nonstaple foods reach consumers through the private sector and farmers produce, with only some exceptions, what is profitable for them to produce, a wide variety of fruits and vegetables are available in northern cities throughout the year. Another major change in the food supply situation has been the enormous growth in the production of animal products, primarily meat. Meat output in 1995 was more than five times the output in 1978. This is an enormous increase. If production has, in fact, reached 50 million tons, this means that the per capita consumption of meat has reached South Korea's recent level.<sup>3</sup>

Much is often made of the fact that the growth of agricultural output was very rapid up to 1984 and then slowed - some have even used the word stagnated. True, there was some significant catch up in terms of productivity when the very inefficient communes were abolished. From 1979 to 1984 gross agricultural output increased at an annual rate of 7.6. From 1984 to 1994 the annual

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<sup>3</sup> There are apparent inconsistencies in the data on meat consumption and production. In 1994 the household surveys indicate that per capita meat consumption in rural and urban areas average about 16 kilograms while the production data indicate an availability of about 37 kilograms for the same year (SSB 1995, pp. 267, 285 and 354). It may well be that the data from the household surveys fail to reflect the amount of meat consumed in canteens and restaurants, but it seems unlikely that this alone could explain the large difference in the estimates of meat consumption and availability.

rate of increase was 5.4 percent. The growth of grain production did slow after 1984 - for the first 6 years of reform the annual growth rate was 4.93; for the next 10 years the growth rate was only 0.9 percent.

Was the use of grain in China constrained by production from 1984 to 1994? I think the answer is in the negative. China imported grain during the first half of the 1980s and it was a net exporter in 1992, 1993 and 1994. While the government may have exported more grain in 1994 than it should have - 4.2 million tons - market prices did not indicate that the net exports in 1992 (2 million tons) and 1993 (9 million tons) were too large since grain prices fell in these years.<sup>4</sup> The growth of domestic grain production met the growth of domestic demand between 1979 and 1994, including a large increase in stocks held by farm households.<sup>5</sup> In 1979-1984 China imported 13 million tons annually. Thus during the years of the reform, up to 1994, China moved from being a net importer of grain to a modest net exporter.

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<sup>4</sup> One might ask why China exported any grain in 1994. Nominal grain prices increased by nearly 50 percent in the last quarter of 1993 and by the end of 1994 were nearly double what they were at the beginning of the year. The government undertook various efforts, albeit unsuccessful ones, to limit the increase in grain prices. Yet exports continued.

<sup>5</sup> Grain stocks held by farm households in China are enormous compared to the grain stocks in the rest of the world. In China grain stocks serve two very important purposes for farm households - one is as a hedge against inflation and the other is as insurance against income variability or for consumption smoothing. Grain is an important consumption good, still providing more than three fourths of total calories, and it is readily salable. Bank deposits are not a good hedge against inflation since in inflationary periods the interest rate is below the rate of inflation.

This occurred even with the enormous increase in meat production and the use of grain as feed, a new development in China.

As noted, there was little or no increase in real per capita incomes for the two decades under the commune system. Table 2 provides data on the changes in rural and urban per capita incomes for the years of the reforms. The increase in the real incomes of rural people has been very great - income in 1994 was more than three times what it was in 1978. National data are not available for urban areas until 1981. It is evident from the data on the ratio of urban to rural incomes that the early effects of the rural reforms was to narrow the difference between urban and rural incomes - the ratio declined from 2.24 in 1981 to less than 1.9 for 1982-84. But the disparity started to increase in 1985 and is now almost certainly larger than it was under the commune system, or for that matter, prior to 1949.<sup>6</sup>

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<sup>6</sup> The data in Table 2 do not reflect the numerous subsidies that are given to urban households but not to rural households. For example, rent for urban households is highly subsidized while rural families must pay the full cost of their housing. If all subsidies were included for 1994, urban incomes were more than three times rural incomes.

The State Statistical Bureau (SSB 1995, p. 258) published a comparison of per capita consumption expenditures for agricultural and nonagricultural residents. This shows substantially wider disparities than do the data on per capita incomes of rural and urban residents, and shows the decline in the consumption ratio (nonagricultural to agricultural) for the first few years of the reform. In 1978 the nonagricultural to agricultural ratio of consumption was 2.9; 1985, 2.3; 1988, 2.4; 1990, 3.0, and 1994, 3.6. The ratio for 1952 was 2.4 and in 1957, the year before the communes were established, 2.6 (SSB 1990, p.273). Recently available data for 1995 indicates that the urban-rural income ratio decreased to 2.72.

**Table 2.**  
**Annual Urban and Rural Household Per Capita Incomes, Nominal and Real, and Ratio of Urban to Rural Incomes**

Year	Urban Per Capita Incomes		Rural Per Capita Incomes		Ratio: Urban to Rural (Nominal)
	Nominal (Yuan)	Real	Nominal (Yuan)	Real	
1978	...	...	134	134	...
1979	...	...	...	...	...
1980	...	...	191	179	...
1981	500	442	223	205	2.24
1982	535	464	270	244	1.98
1983	573	487	310	277	1.85
1984	660	547	355	308	1.86
1985	749	554	398	323	1.88
1986	910	628	424	324	2.15
1987	1012	644	463	333	2.19
1988	1192	626	545	334	2.19
1989	1388	627	602	309	2.31
1990	1523	680	686	337	2.22
1991	1713	727	709	341	2.42
1992	2032	794	784	360	2.59
1993	2583	870	922	372	2.80
1994	3502	943	1221	399	2.87

Sources: State Statistical Bureau (1995) and earlier years. Price deflators are from Appendix Table 1.

A major achievement of the reforms has been the rise of nonfarm employment opportunities in rural areas. Between 1983 and 1993 approximately 80 million nonfarm jobs were created in rural areas (SSB 1995). The new nonfarm jobs contributed substantially to the increase in rural incomes in the reform period. The rapid development of the township and village enterprises and other forms of enterprises in rural areas has been a major factor in the rapid growth of the Chinese economy. The rate of output growth of

rural industries has outpaced that of the heavily subsidized state owned enterprises by four or more times in recent years. In 1994 the gross output of all rural industries exceeded that of state owned industries by almost 30 percent while the output of the TVEs alone was 90 percent of the output of SOEs (SSB 1995, p. 375).<sup>7</sup> In 1985 the gross output of the TVEs was but 22.5 percent of the SOEs gross output (SSB 1990, p. 393). Except for some tax advantages in the first three years, TVEs receive no subsidies and are expected to pay their debts and their bills, something that many SOEs don't do. **Rural reforms - shortcomings**

A major shortcoming of the reforms has already been noted, namely the widening disparity between urban and rural incomes. Since 1978 the rural China, not urban China, has been the engine of growth for the country (Johnson 1996). This outcome may well be unique in the history of the world. I know of no other country that made the transition from a low income to a middle income developing economy where the rural areas have had the dominant

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<sup>7</sup> In addition to the TVEs there are joint and individually owned enterprises in rural areas. Urban areas are still not very hospitable to privately owned industrial enterprises and 90 percent of the output of such enterprises is in rural areas (SSB 1995, p. 375). In 1994 the individually owned industrial enterprises in rural areas produced a little more than 10 percent of total industrial output, up from less than 0.5 percent in 1985. The World Bank recently provided a striking comparison between the TVEs and SOEs: "Capital-labor ratios in collective industries in China are only 25 percent of those in the state sector. Yet labor productivity (output per capita) is close to 80 percent of the level of state enterprises--and rising at more than 10 percent a year. Total factor productivity in TVEs is higher than in the state sector and is growing at 5 percent a year, more than twice the rate in state enterprises." (World Bank 1996, p. 51)

role in contributing to real output growth and generating employment as well. As early as 1991 rural GDP was approximately the same as urban GDP (Wu 1994) and by now certainly exceeds it.

From 1989 to 1994 urban real per capita incomes increased at an annual rate of 7.1 percent compared to 3.0 percent for rural incomes. Productivity growth in the SOEs was certainly less than 3 percent annually and was probably nearer to 2 percent. Where did the additional income come from? It came from the much poorer rural people whose income increased at a slower rate than the productivity growth in the rural sector. By following a wage policy that increased wages at a higher rate than productivity growth the government transferred income that was produced in rural areas to urban workers and the urban economy.

The reforms have not created a national labor market and this is no accident.<sup>8</sup> There was no intention to create a national

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<sup>8</sup> Before 1979 the markets for farm products were also highly fragmented. Mao attempted to make each province self sufficient in most food products, especially grain. One of the early achievements of the reforms was to drop the policy of regional self sufficiency and to gradually reduce the barriers to interregional trade. Gradually the government removed its controls over most farm products, retaining control over grain and cotton. In the case of grain there was a gradual reduction in the role of government and by 1993 one could say that China was on the way to a national market in grain. But with the sharp increase in grain prices in 1993 and 1994, the reforms which had removed consumer subsidies and reduced governmental intervention in the grain market were reversed. In 1994 most of the reforms that had been so proudly announced in 1993 were withdrawn - price controls and regional consumer subsidies were reinstated. But perhaps the greatest blow to the creation of a national market for grain was when Beijing abrogated responsibility for the distribution of grain and gave the provinces the responsibility for meeting their grain requirements. This means that surplus producing areas now restrict the export of grain until they are assured that enough grain is available to meet the province's requirements. This will

labor market. To do so would take away a significant part of the advantages that urban people now enjoy that are not available in rural areas. The movement of workers from rural to urban areas is severely restricted by the hukou or registration system. A person is registered where born and it is difficult to change one's registration from rural to large cities and to move and enjoy full civil and economic rights in the city. True, there are millions of temporary rural workers with jobs in the cities - farm people are recruited for jobs that are difficult, dirty and dangerous and jobs urban people don't want. But they hold these jobs at the sufferance of urban officials - they can be sent back to rural areas for any reason or no reason at all. Such workers do not have the same access to medical care or education for their children as do urban workers. When there were substantial price subsidies for grain, such workers had to buy their grain in the free market and pay the much higher market price.

The last column of Table 2 shows the widening disparity of urban and rural incomes from the mid-1980s through 1994. As of writing, final data are not available for 1995 though preliminary data indicate that there may have been some narrowing of the income differential in 1995 but much less than needed to bring the

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sharply increase price instability, as it did in 1993 and 1994. Primary responsibility for grain storage is also at provincial and lower levels and it is hard to believe that anything approaching a rational national storage program is possible. Above all else, the creation of national grain market has been set back by several years.

urban-rural income back ratio back to the 1991 level, let alone that of 1985.

### **Required policy reforms**

The rising income inequality poses a serious threat to future social and economic stability. The larger the income differential becomes, the greater will be the pressure for rural to urban migration. Delaying facing the problem will solve nothing; the disequilibrium will become greater year by year as long as economic policies continue to permit the income disparity to grow. The first set of major policy decisions needs to address the issue of rising urban-rural income inequality. If urban areas do not wish to absorb large numbers of rural migrants, and it is clear that they do not, then rational policy requires that rural areas should be made more attractive places in which to live and work. This means making large investments in rural infrastructure - roads, communication, electricity - and in providing education of the same quality as urban education and at the same cost. Such a program would necessitate a significant reduction in the special privileges now reserved to urban areas and a more equitable sharing of the productivity gains achieved in the economy.

The current set of agricultural and rural policies are inadequate to meet the problems that will face agriculture and rural life over the next quarter century. As so often happens in reform efforts, insufficient attention has been given to how a

particular sector will adapt to changing conditions that will require major adjustments and adaptation. A good example of that was the Japanese farm land reform which had major positive political, social and economic effects in its first decade or so but which has since been a major barrier to achieving farm enlargement and making Japanese agriculture competitive.

If agricultural production is to continue to grow at a rate approximately equal to demand growth, the current set of policies will not be adequate to the task of assisting farm people to make the adjustments further economic growth will require of them. Over the next quarter century China's agriculture will need to make a substantial substitution of capital for labor if there is to be productivity growth and an increase in the real return to farm workers at approximately the same rate as the incomes of urban workers. The size of the farm operating units must be increased, not once and for all but continuously. Capital funds will be required to modernize the agricultural production process.

The current system of collective ownership of land is not capable of making the necessary adjustments. In addition, until farmers have property rights that are much more secure than the ones they now have, they will continue to invest little in farm improvements or productive capital (Wen 1989; Feder 1992).

If China is to provide most or all of its food at reasonable prices, it must modify the current policies that inhibit

investment in agriculture and those that make it difficult to modify the allocation of resources as required by changing conditions. The alternative is to go the Japanese route, which fixed the structure of agriculture as it was in the early 1950s and has paid the price in very high food costs.

Incentives must be created for the enlargement of farm operating units and for the substitution of capital (machinery) and current inputs for labor. If three desirable outcomes occur - continuous growth in the real return to the labor of rural people with food production growing at the rate required to meet the growth of demand at constant or declining real prices - the amount of labor used in agriculture must decline. It must decline as a share of national employment and in absolute numbers as well. The declining role of labor in agriculture is inevitable as economic growth occurs.

At one time not so long ago the United States had the same percentage of its labor force engaged in farm production as now exists in China; today it produces enough food for its population and exports about a quarter of what it produces. It does so while employing little more than 2 percent of its labor force on its farms. With modern technology, it takes very little direct labor on farms to produce all the food a nation requires. As economic growth occurs, more and more of the labor that contributes to food production occurs off the farm in producing farm machinery and

inputs and in research to improve technology. But even when all this is added together, the amount of both nonfarm and farm labor needed to produce food and bring it to the consumer has declined over time and is now not more than a seventh of the total labor force in the United States.

Will the system of collective ownership of land accommodate the large adjustments that Chinese agriculture will face over the next century? I think not. On the surface, it would seem that holding all the land in a village under one ownership would facilitate the enlargement of farm operating units and the substitution of capital for labor. The fact that the commune system failed to achieve a productive agriculture is suggestive but does not constitute proof that collective land ownership will suffer the same fate.

We already have evidence of a major failure of collective ownership, namely the limited investment in farm capital of any kind. Farm people save in China, but almost none of the savings have gone into agriculture. The savings have gone into housing - rural families have constructed the equivalent of more than 100 million new houses during the reform period - nonfarm enterprises, bank deposits and grain stocks. Relatively little has gone into land improvement or purchase of farm machinery and equipment.

If the title to farm land were given to those who now have use rights in the land, farmers would make investments in farm

land, machinery and equipment. Why would this occur? At the present time use rights to land are insecure. In most villages land has been reallocated periodically as demographic changes occur. If family size increases, more land is assigned; if it decreases, land is taken away. Even when family size remains constant, there is no guarantee that the same land will be available following land reassignment. Consequently the incentive to invest in land improvement, even in applying organic manure, has been reduced.

While it would be possible to have an active market in land use rights, the fact that in few areas of China such a market has developed should give pause. Transfer of such rights generally require approval by local officials and thus subject to some uncertainty. The enlargement of farm operating units requires an active land market, either for rental or sale.

The adjustment to larger farm operating units will require the creation of an active rural credit market. Such a market does not now exist so far as agriculture is concerned. The loans made by the rural cooperative banks go primarily to nonfarm enterprises; relatively little goes to support agriculture. In 1994 only a quarter of all loans went to farm households and probably not all of that went for agricultural purposes (SSB 1995, p. 575).

Throughout most of the world the ownership of land serves as the basis for creating an active agricultural credit market. Land provides the collateral for loans, especially for loans for the purchase of land for farm enlargement or for machinery and equipment.

It can be argued, of course, that collective land ownership could serve to accommodate the adjustments required of agriculture as economic growth continues. It could be argued, and was, that the communes could be the basis for a productive agriculture and perhaps they could have been, but weren't. Collective land ownership creates a monopoly situation - those who hold the political power in the village have monopoly power.<sup>9</sup> If we have learned one thing from the experience of the socialist economies, it is that not only were such systems rife with monopoly but that those who had monopoly power used it and that this was a major factor in the poor performance of such economies. Even the

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<sup>9</sup> After the above was written I received a report (Prosterman, Hanstad and Ping 1996) of the tactics local cadres used to create large scale farms in Jiangsu and Zhejiang Provinces. In each of the three counties studied the process was rife with apparent favoritism, autocratic and dictatorial. Households were induced to give up their use rights by various degrees of persuasion and coercion. In the areas studied most farmers had nonfarm jobs and one rationale for taking their land was that they did not have enough time to care for the crops and the land. In at least two villages, the operators of the large farms were brought in from the outside (p. 21 and 24). In another village all of the responsibility land (about 10 hectares) was contracted to the village leader (p. 25). Most of the efforts were to create family farms, but in some cases collective farm units were created. In some villages agricultural service stations were established to plow, plant, irrigate, and fertilize and to provide seed and fertilizer. There was no indication that the large scale farmers were provided with long term tenure or that they made investments in maintaining or improving the land.

Chinese reforms illustrate the importance of reducing the power of monopolies. Before the reforms the SOEs had enormous monopoly powers in industry after industry and in the service sector as well - they produced products of low quality, limited variety and provided services that showed little concern for the consumer. One of the major achievements of the reform process has been to significantly reduce monopoly power in both industry and services.

The competition of the TVEs and foreign enterprises have forced major changes in the SOEs while the service sector has been largely transformed by the competition of private enterprises. This is especially evident in the distribution of food but can be seen more broadly in retail services.

In the early 1990s there were campaigns to extend socialized services to the farmers - with the villages establishing machinery service units that would undertake most of the farm operations of ploughing, preparing the seed bed, planting or sowing, cultivating, apply fertilizer, and harvesting. In Hebei this campaign was accompanied by a heavy handed process of consolidating plots - farms of little more than half hectare consist of about seven separate plots. Plots were consolidated, whether farmers wanted them to be or not, to make it easier to provide the socialized services. The local provider of machinery services had monopoly power, either because others were prohibited from providing such services or the service was subsidized to make

it impossible for private individuals to compete. The campaign was soon halted and is noted here to illustrate why political control of agricultural resources, whether land or machinery, can hardly be trusted to undertake the many adjustments that will be required in the years ahead. However, recent evidence indicates that the idea of socialized services has not been entirely buried (Prosterman 1996).

Resistance to the transfer of land to farm families probably has two sources - one ideological and the other that the power of the local cadres would be greatly reduced.

Hopefully the ideological resistance will be gradually eroded as more and more industrial enterprises are transformed into stock companies in order to provide appropriate incentives for the operation of the companies. Overcoming the resistance of local cadres may be more difficult though as village people become more experienced in the election of their local officials, the local officials may become more responsive to the needs of the community rather than maintaining their own positions of power which until now was largely unchecked.

### **Concluding comments**

The rural reforms have been remarkably successful in several very important ways - increasing agricultural production, increasing the quality and variety of foods, and in increasing the real per capita incomes of farm people. The rapid development of the township and village enterprises and other forms of nonfarm

enterprises has been beyond even what the wildest expectations might have been.

The reforms have failed to reduce the significant income inequalities that have long existed in China - between rural and urban areas and regionally. In fact, both types of inequality are now greater than they were when the communes existed or even before 1949. The regional inequality has grown primarily in response to economic opportunities while the growing urban-rural inequality has been due to deliberate policy decisions. The urban bias in China is very strong and, unfortunately, there is no indication that it is decreasing or is likely to do so in the future.

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