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THE NEW DEVELOPMENT STRATEGY AND RURAL REFORMS
IN POST-MAO CHINA

by

Ajit Kumar Ghose

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Preface

The institutional reforms which have been implemented in rural China since 1978 are scarcely less radical than those implemented during the period 1958-65. While during 1958-65 a private peasant economy was transformed into a collective economy, the post-1978 reforms have virtually transformed a collective economy into a peasant economy though without private property rights in land. Such a radical shift, particularly in a country whose record in rural development has been widely regarded as exemplary, has naturally appeared as a puzzle to most China observers. Perhaps it will be years before the puzzle is satisfactorily resolved; in the meantime, the search for clues must continue.

One important clue is that the institutional reforms constitute part of a new, well-worked-out development strategy. They have been accompanied by a whole range of shifts - in price-wage-tax structures, in consumption-accumulation balance, in industrial production structure, in planning processes, and so on. And there is little doubt that all these shifts are mutually consistent. An implication is that the rural reforms may not necessarily have been inspired by rural problems; rather they may have been logical corollaries of a general reorientation of development strategy.

This indeed is the conclusion reached in this paper, which has attempted to identify some basic features of the new development strategy and to situate the rural reforms in this wider context. The author had the opportunity to undertake a research trip to China in 1982 as a member of a team of economists which included, apart from the author, Keith Griffin, Ashwani Saith, Azizur Rahman Khan, Eddy Lee, John Enos and Kimberly Griffin; the Institute of Agricultural Economics of the Chinese Academy of Social Sciences was the host institution in China. The qualitative and quantitative information collected by the author in the course of this trip and the data available from China's official and academic publications provide the empirical base for the study.

The present paper forms part one of a two-part study on China's rural economy which has been undertaken within the framework of a research project on collective agriculture presently being implemented by the Rural Employment Policies Branch.

Dharam Ghai
Chief,
Rural Employment Policies Branch
World Employment Programme

The new development strategy and rural reforms
in post-Mao China

1. Introduction

The third plenary session of the Eleventh Central Committee of the Chinese Communist Party, held in December 1978, marked a watershed in China's economic history. A new phase of economic and social development has since been initiated, goals and priorities have been substantially revised, relative weights and inter-relationships of the production sectors (state, collective and private) have been radically altered and a series of structural reforms have significantly modified the production relations within the collective sector, particularly in the rural economy. Most outside observers have been puzzled by these changes, especially by those in the commune system which had so far been almost universally recognised as the crowning achievement of the Chinese revolution.

The dominant view in China is that these changes were necessitated by three basic factors:

- (i) an urgency of raising the consumption and living standards of the masses and, correspondingly, of reducing the rate of accumulation;
- (ii) a realisation that unemployment and under-employment of labour had reached serious proportions and that the problem could not be effectively handled without modifying the structure of the economy; and
- (iii) a recognition that the existing production relations had become a fetter on the development of the productive forces in the countryside.

China's development strategy, operative during 1953-1978, had been remarkably successful in guaranteeing a minimum level of living to the entire population. But it was also characterised by a very

high rate of accumulation and a correspondingly low growth of personal consumption. The current concern for raising living standards stems in part from a genuine desire to raise the level of personal consumption of the population. It also arises from an attempt to solve a persistent problem of the Chinese economy, namely, low returns to investment. This is generally attributed to the fact that the rate of investment was far too high in relation to the availability of skilled manpower and infrastructural facilities and to the persistent over-emphasis on heavy industries leading to over-production in that sector.

Raising the level of living of the masses, however, involved not only alterations in the consumption-accumulation ratio in the state budget but also the provision of adequate supplies of the consumer goods which would be required to satisfy the extra demand arising from increases in disposable incomes. In particular, production of food and light industrial goods needed to be stepped up. This required agricultural output to grow at a faster rate than had been achieved in the past. Within agriculture, more land would need to be devoted to the production of crops which are used as raw materials in the light industrial sector. Given the virtual impossibility of extending the cultivated area in the short run, this implied a decline in the land area devoted to the production of foodgrains. A faster rate of growth of foodgrains production thus had to be achieved in the face of declining land area. It was in this context that the recent reforms of the rural economy were undertaken. Clearly, the Government takes the view that within the framework of the commune system as it had evolved over the period 1958-1978, accelerating the growth rate in agriculture and altering the structure of agricultural production were impossible tasks. Among the reasons identified, the most important are "bureaucratism" or "commandism" in decision-making and "egalitarianism" in distribution which had become deeply rooted practices in the communes and which discouraged initiative and hard work among commune members.

Added to these imperatives was the pressing need to solve the problem of unemployment and under-employment. Following the failure of the rather ill-conceived attempts to absorb part of the growing urban labour force in rural communes, urban unemployment emerged as a major problem.¹ At the same time, even the commune system, with its massive capacity to organise labour for capital construction and to develop non-agricultural enterprises on the basis of local resources, could not, in the face of a high rate of growth of the rural labour force, prevent the emergence of significant seasonal unemployment.² The Government, therefore, gradually came to the view that the problem could not be solved without relaxing some of the constraints on the development of the collective and private sectors of production. Hence the alterations in the relative weights and inter-relationships of the three production sectors. Such alterations, moreover, were expected to help expand production of basic consumer goods in the short run.

The rural reforms in particular are designed to promote the development of the private economy within a collective framework so as simultaneously to resolve the problems of incentives and employment. Perhaps there is an additional motivation behind the reforms, though this has not been explicitly stated. Following the establishment of the commune system, internal migration (rural-rural or rural-urban) had been made virtually impossible.³ While this prevented the growth of urban slums, so typical of the cities in the Third World, and forced a search for localised development in the communes, it also preserved and even accentuated the rural-urban and regional inequalities arising from differences in the resource-population balance. The recent reforms have the effect of relaxing some of the restrictions on the mobility of labour and thus provide a mechanism for mitigating these inequalities to an extent.⁴

Given this context, this paper addresses itself to two sets of issues. The first set concerns the distinguishing features of the new development strategy, the role which the rural economy is expected

to play in this context and the extent to which the rural reforms are intended to enable the rural economy to play this role. The second set concerns the nature of the reforms themselves, their immediate consequences and the fresh problems to which they may give rise.⁵

2. Development strategies: old and new

Barring brief periods of widespread disruption caused by political upheavals, China's economy grew at a much faster rate than that of most developing countries over the period 1950-1978 (see table 1). What is even more remarkable is the fact that this growth was achieved largely through the mobilisation of domestic resources (see table 2).⁶ Since 1958, the year which marked the end of the reconstruction period (first five-year plan) and the launching of the commune movement, the economy has generated extraordinarily high rates of accumulation and investment.⁷ The rate of accumulation has hovered around 30 per cent of the national income and the rate of net investment in fixed assets has hovered around 15 per cent of the national income (see table 3). Mobilisation of resources took place not only at the level of the state; massive resources were also mobilised at the level of the collective enterprise. It has been estimated, for instance, that about two-thirds of the investment undertaken in the communes was financed by the communes themselves.

The basic mechanisms employed by the state for extracting an investible surplus were discriminatory pricing (or the "price scissors" as it is called in China) and taxation of industrial and commercial enterprises; agricultural taxes provided only a small and declining portion of the state revenues. Relative prices of agricultural products vis-à-vis industrial products were set in such a way that the state-owned industrial enterprises (particularly those producing light industrial products and farm inputs) made huge profits and these profits were directly transferred to the state.⁸ Thus it was the price mechanism, and not taxation, which acted as the major means of extraction of a surplus from agriculture. Over time, relative prices moved in favour of agriculture as costs of production

Table 1: Growth of national income, gross value of agricultural output and gross value of industrial output, 1950-1981

	Average annual rate of growth		
	National income	Agriculture	Industry
1950-52	19.3	14.1	34.8
1953-57	8.9	4.5	18.0
1958-62	-3.1	-4.3	3.8
1963-65	14.5	11.1	17.9
1966-70	8.4	3.9	11.7
1971-75	5.6	4.0	9.1
1976	-2.7	2.5	1.3
1977	7.8	1.7	14.3
1978	12.3	9.0	13.5
1979	7.0	8.6	8.5
1980	6.9	2.7	8.7
1981	3.0	5.7	4.1

Sources: 1. Dong Fureng, "Relationship between accumulation and consumption" in Xu Dixin, et.al., China's search for economic growth (Beijing, New World Press, 1982).

2. State Statistical Bureau, Statistical Yearbook of China, 1981 (Hong Kong, Economic Information Agency, 1982).

Note: The growth rates are in real terms. Gross value of output in agriculture includes gross value of output of non-agricultural enterprises run by production teams and brigades.

Table 2: State budget revenues, 1950-81 (billion yuan)

	1950	1957	1965	1978	1979	1980	1981
Total revenue	6.519	31.019	47.332	112.112	110.327	108.523	106.429
Enterprise profits	0.869	14.418	26.427	57.199	49.290	43.52	34.701
Tax revenue	4.898	15.489	20.430	51.928	53.782	57.17	62.946
of which:							
Taxes on agriculture	1.910	2.967	2.578	2.840	2.951	2.767	2.811
Foreign borrowing	0.302	0.699	0.006	0.151	3.639	4.301	6.028
Other revenues	0.450	0.413	0.469	2.834	3.616	3.528	2.758

Sources: 1. World Bank

2. Beijing Review, various issues

3. State Statistical Bureau, op.cit.

Table 3: Accumulation and investment (as percentage of national income) 1950-1982

Period	Accumulation	Investment*
1950-52	-	-
1952	22.07	7.4
1953-57	24.2	-
1957	24.9	15.2
1958-62	30.8	-
1963-65	22.7	-
1965	26.3	12.3
1966-70	26.3	-
1971-75	33.0	-
1975	33.1	15.6
1976	30.9	-
1977	32.3	-
1978	36.5	15.2
1979	34.6	14.9
1980	31.6	14.8
1981	28.3	11.1

*Investment refers to investment in capital construction undertaken by the state and individual state-owned enterprises.

Sources: 1. Dong Fureng, op. cit.

2. Economic Re-adjustment and Reform (Beijing Review, Special Feature Series, 1982), Appendix tables.

3. State Statistical Bureau, op.cit.

in agriculture rose in consequence of increasing use of modern inputs (see table 4). But labour-productivity in the industrial sector grew faster than the wage rate so that the profits of the state-owned industrial enterprises suffered little. The state was also able to tax away a large part of the profits of collective industrial and commercial enterprises. All this is easily observed from the figures presented in table 2.

The communes generated additional investible surpluses through both direct and indirect means. Accumulation funds were maintained at the level of communes, brigades and teams. In the case of the communes and brigades, the sources were the profits of the industrial and commercial enterprises run by them. In the case of teams the value of a work-point was determined only after accumulation funds had been set aside.⁹ It is probable that in some poor communes, accumulation funds existed only in account books. But no one doubts that in a large number of communes, the rates of internal accumulation and investment were very high. Perhaps more importantly, most communes succeeded in mobilising labour on an impressive scale for purposes of construction activities and thus transformed part of the consumption funds into investment.

Not surprisingly, this process of accumulation had its counterpart in a relatively slow growth of consumption of the population (see table 5). Radical economic reforms in the immediate post-revolutionary period had virtually eliminated luxury consumption, and this made it possible to guarantee a basic subsistence for all and to ensure a reasonable rate of accumulation at the same time. But afterwards, an acceleration in the rate of growth of national income usually served to accelerate the rate of accumulation so that consumption growth was less than proportionate. It has already been noted that industrial wage rates grew at a lower rate than labour productivity, and this is supported by the data presented in table 6. In fact, the real wage rate in state-owned enterprises recorded a decline over the period 1957-1978. The wage policy, therefore, acted as an effective instrument of restraining urban consumption, particularly since during the period 1958-1978, the urban

Table 7: Initial and terminal levels and average annual growth of per capita production of selected consumption items

Item	Per capita production					
	Level 1952	Growth 1952-78	Growth 1957-78	Growth 1965-78	Growth 1978-81	Level 1981
Grain (kg)	288	0.4	0.2	1.3	0.9	328.5
Edible oil (kg)	7.3	-0.4	0.0	2.2	n.a.	n.a.
Pork, beef, mutton (kg)	5.9	1.6	1.8	1.1	12.5	12.7
Sugar (kg)	0.8	4.4	2.8	1.1	10.5	3.2
Cotton cloth (metre)	6.7	2.2	1.9	2.0	7.7	14.3
Wrist watches (per 1000 persons)	0.0	-	62.4	19.2	27.3	28.8
Sewing machines (per 1000 persons)	0.1	16.3	12.7	8.5	27.6	10.4
Bicycles (per 1000 persons)	0.1	17.7	9.0	10.0	25.8	17.6

Sources: 1. Economic readjustments and reform, op.cit.

2. Beijing Review, various issues

3. State Statistical Bureau, op.cit.

Table 5: Average annual rate of growth of disposable incomes

	1952-78	1957-78	1965-78	1978-81
1. Per capita real income: total population	2.29	1.82	2.16	12.85
2. Per capita real income: peasants	2.23	1.99	2.20	14.57
3. Per capita real income: workers and staff members	2.07	1.43	1.92	9.25
4. Growth of real wage rate (in state-owned enterprises)	0.55	-0.58	-0.40	3.93
5. Growth of real per capita collective distributed income (in the communes)	-	2.35	-	-

Source: Table 4 and Appendix tables 1, 2 and 3.

Note: Items 1, 2 and 5 have been estimated by deflating the money incomes by the retail price index. Items 3 and 4 have been estimated by using the cost-of-living index of staff and workers as the deflator.

Table 6: Rates of growth of labour productivity and wage rates in state-owned enterprises

Period	Labour Productivity	Wage rate
1952-57	8.7	7.4
1957-62	-5.4	-1.5
1962-65	23.1	3.3
1965-78	1.7	-0.001
1979	6.4	9.5
1980	2.0	13.9
1981	-1.8	1.1

Source: State Statistical Bureau, op.cit.

private economy was virtually abolished and even the urban collective economy was much reduced in significance (see Appendix table 4). In the communes, distributed collective income grew slowly, sideline production was often discouraged and private plots were abolished in a few cases. However, the consumption of the urban population rose faster than real wage rates because of a steady decline in the dependency ratio. The average number of people supported by each urban wage-earner was 3.6 in 1952, 3.15 in 1957, 2.06 in 1977, 1.83 in 1980 and 1.77 in 1981.¹⁰ Consumption of the commune members, on the other hand, rose at a rate lower than that of per capita collective distributed income because of a relative decline in incomes from non-collective sources.

The relatively slow growth of consumption, however, could be viewed as a necessity imposed by the slow growth of agricultural production relative to the population rather than as a result of deliberate policy. Per capita foodgrains output registered a growth of 0.4 per cent during 1952-1958 and 0.2 per cent during 1957-1978; per capita production of edible oil declined during 1952-1978 and registered zero growth during 1957-1978 (see table 7). It is clear from the estimates of implied income elasticities of demand for grains and edible oil presented in table 8 that the growth in per capita disposable income, slow though it was, almost certainly created excess demand for these basic consumption items. It was only through the operation of a strict rationing system that the Government managed to guarantee a minimum level of food consumption for all.¹¹

Since the rationing system made it impossible for the excess demand to have any influence on either the prices or the distribution of most of the food items and cotton cloth, the demand for consumption items such as wrist watches, sewing machines and bicycles probably rose faster than would have been warranted by the growth of disposable income. However, the production of these consumption items also grew at a rapid rate (see table 7). It is difficult to suggest that the growth of production of these items was inconsistent with the growth of demand (note the values of implied income elasticities of demand in table 8).¹²

Table 4: Price indices, 1952-80 (1950 = 100)

	1952	1957	1965	1978	1979	1980	1981
Cost of living of staff and workers	115.5	126.6	139.0	144.7	147.4	158.5	162.5
Retail price index	111.8	121.3	134.6	135.9	138.6	146.9	150.4
Agricultural procurement price index	121.6	146.2	187.9	217.4	265.5	284.4	301.2
Rural market price index	111.0	120.9	192.2	246.0	234.9	n.a.	n.a.
Industrial products sold in rural areas	109.7	112.7	118.4	109.8	109.9	110.8	111.9
Source: 1. World Bank							
2. State Statistical Bureau, op.cit.							

Table 8: Implied values of income elasticities of demand for selected items

	1952-78	1957-78	1965-78	1978-81
Grain	0.17	0.10	0.60	0.07
Edible oil	-0.17	*	1.02	-
Pork, beef, mutton	0.70	0.99	0.51	0.97
Sugar	1.88	1.54	0.51	0.82
Cotton cloth	0.87	0.93	0.93	0.66
Wrist watches	-	24.45	8.89	2.19
Sewing machines	7.03	6.98	3.94	2.22
Bicycles	8.17	5.38	4.63	2.10

*Undetermined

Sources: Tables 5 and 7.

Note: These estimates are based on the formula:

$$\begin{array}{l} \text{(rate of growth of)} \\ \text{(per capita income)} \end{array} \times \begin{array}{l} \text{(income elasticity)} \\ \text{(of demand)} \end{array} = \begin{array}{l} \text{(rate of growth)} \\ \text{(of per capita)} \\ \text{(demand)} \end{array}$$

Growth of production of industrial consumer goods, such as sugar and cotton cloth critically depends on the growth of agricultural production. The rates of growth in demand for certain items are also interlinked, e.g. cotton cloth and sewing machines. It is obvious that a slow growth of agricultural production limits the growth of consumption not only of such items as foodgrains but also of certain industrial products. There are, of course, industrial products (e.g. bicycles, wrist watches, etc.) whose consumption and production do not depend on the performance of agriculture. Given the comprehensive and effective rationing system existing in China, it was feasible to restrain the consumption of certain items whose production could not be increased rapidly and yet allow a rapid growth of consumption of those industrial products whose production is wholly independent of agricultural production. But even here there were important constraints. For example, household electrical goods could not be introduced in rural areas on a significant scale until the rural electrification programme made substantial progress. Even in 1978, only 9.9 per cent of the electricity generated in the country was utilised in rural areas and a large proportion of the villages did not have electricity. Thus even in the case of industrial products, the list of items whose consumption could be promoted on a mass scale was not large. A strategy of increasing consumption through the introduction of a whole range of sophisticated industrial products would have required not only efficient demand management but also growing income inequality.

In this context, a comparison of China's experience with that of the non-socialist countries of the Third World is revealing. Firstly, the growth of per capita consumption was in fact higher in China than in most non-socialist countries at comparable levels of development.¹³ On the other hand, the proportion of national income devoted to consumption in any given year was much lower in China than in other countries.¹⁴ The implication is that while the primary determinant of the ratio of consumption to national income is the level of income inequality, the primary determinant of the growth of consumption is the growth of national income. A tentative hypothesis is thus suggested: in economies where the supply of basic necessities

is limited and inelastic, a reduction in income inequality implies (in the absence of a massive inflow of external resources) a rise in the rate of accumulation and hence an acceleration in the rates of growth of both national income and consumption. The converse is also true. Secondly, the tendency of consumption to grow at a rate lower than that of national income is quite general. In non-socialist countries, the tendency arises because growing income inequalities tend to reduce the aggregate income elasticity of consumption. In China, however, the tendency arose because of the operation of some direct constraints on the growth of consumption.

The appropriate ratio of accumulation to consumption is a subject of intense discussion in China today. Many economists feel that the rate of accumulation had been far too high during 1957-78, not only because it "unduly" restrained current consumption but also because it involved a considerable waste of resources since matching development of manpower resources and infrastructural facilities was not feasible. The implicit presupposition is that the national rate of accumulation was the given parameter in Chinese economic planning.¹⁵ A different case is arguable, however, in so far as the foregoing analysis is valid. It can be supposed that the given parameters were the objectives of guaranteeing a minimum level of living to the entire population and of reducing income inequalities. On this assumption, the rate of growth of consumption was determined primarily by the rate of growth of agricultural production. The rate of accumulation was then determined as a residual category. The rate of accumulation, in turn, determined another important ratio - the ratio of investment in heavy industries (producing mainly producer goods) to that in light industries (producing mainly consumer goods). Many Chinese economists have argued that this ratio was unduly high. As the data in table 9 show, the ratio was indeed very high. But it has already been noted that the growth of production of light industrial consumer goods was fairly consistent with that of overall consumption (or disposable income) of the population.¹⁶ To the extent that this observation is valid, the high priority accorded to heavy industry would seem to be a mere consequence of the high rate

Table 9: Distribution (in percentages) of investment expenditures
(capital construction funds)

	Agriculture	Light industry	Heavy industry	Non- productive	Others
1953-57	7.6	6.8	38.7	28.3	18.6
1958	10.5	7.3	57.0	12.1	13.2
1959	10.5	5.2	56.7	13.2	14.4
1960	13.0	4.0	53.3	13.6	16.1
1958-62	11.4	6.5	54.9	13.4	13.8
1963-65	18.4	4.1	48.0	17.2	12.3
1966-70	11.4	4.7	54.5	11.3	18.1
1971-75	10.3	6.9	52.1	13.4	17.3
1976	n.a.	n.a.	n.a.	14.9	n.a.
1977	n.a.	n.a.	n.a.	16.7	n.a.
1978	10.7	5.4	54.7	17.4	11.8
1979	14.0	5.8	46.8	27.0	6.4
1980	9.6	9.1	41.7	33.7	5.9
1981	6.8	10.0	40.3	41.3	1.6

Note: Non-productive investment includes investment in housing, public health, public utilities (culture and education) and construction of facilities for administrative organs. Others include investment in banking and insurance, public welfare facilities, etc.

- Sources:
1. Dong Fureng, op.cit.
 2. Liang Wensen, "Blanaced development of industry and agriculture", in Xu Dimin, op.cit.
 3. Beijing Review, various issues.
 4. State Statistical Bureau, op.cit.

of accumulation. Indeed, this feature underlies another important characteristic of China's heavy industry - its tendency to cater to its own needs. Given the rates of growth in agriculture and in light industry, the heavy industrial sector could not have sustained a high growth rate merely on the basis of demand generated outside the sector itself. While this pattern of development of heavy industry has certainly been somewhat wasteful, it is difficult to see how this could have been avoided.

This last argument, however, is not wholly valid; for while the feasible rate of growth of personal consumption dictates a rate of growth of light industrial production, it merely provides a lower limit to the growth of heavy industries (the upper limit is undetermined). It is arguable, therefore, that social consumption (e.g. housing, education, health care, recreation and culture, etc.) could have been improved at a faster rate than was actually done. As the data in tables 9 and 10 show, the rates of non-productive accumulation and

Table 10: Non-productive accumulation (as percentage of total accumulation)

1953-57	40.2
1958-62	12.9
1963-65	34.5
1966-70	25.5
1971-75	22.6
1976	18.0
1977	25.8
1978	25.9
1979	32.5
1980	34.1
1981	n.a.

Source: Dong Fureng, op.cit.

investment were not very high during the period 1957-78. There is also some evidence to show that the growth of social consumption did not always keep pace with that of population.¹⁷ One valid criticism of the development strategy pursued during the period 1957-78, therefore, is that too much emphasis was placed on the development of heavy industry and too little on the growth of social consumption.

This caveat notwithstanding, it should be clear that if one is to argue that the high rate of accumulation was not an economic necessity (given the social objectives) but was the result of political decisions and ideological biases, one would have to presume that the rate of growth of agricultural production could have been much higher with an alternative policy package. In this context, many Chinese economists have argued that at least three aspects of the pre-1978 agrarian policy acted as constraints on the growth of agricultural production:

- (a) inadequate investment;
- (b) very slow improvement in the terms of trade for agriculture; and
- (c) inappropriate relations of production in agriculture.

The last two of these factors will be examined in the following section. Here we can examine the aspect of investment in agriculture.

Investment in agriculture constituted roughly about 12 per cent of total investment. The industries producing inputs for agriculture received 4 - 5 per cent of total investment so that investment in agriculture and supporting industries together constituted 16 - 17 per cent of total investment in the state budget.¹⁸ To this must be added the substantial investment made by the communes themselves,

particularly through the mobilisation of labour for capital construction. As has been noted earlier, such investments accounted for about two-thirds of total investment in agriculture.

Whether or not this investment was adequate is a question that is difficult to answer. The pace of technological change was certainly impressive (see table 11). In 1952, the proportion of farmland irrigated was only about 20 per cent; in 1978, it rose to 45 per cent. There were very few tractors in use in 1952; in 1978 there were 557,000 large and medium tractors (0.006 per hectare approximately) and 1,370,000 small hand tractors (0.014 per hectare approximately), and 41 per cent of the farmland was being machine-ploughed. Very little fertilizer was being used in 1952; in 1978, 89 kg. were being used per hectare. The rate of growth of crop output was not extraordinarily high, but it must be remembered that this growth was achieved almost entirely through yield increases. No less important is the fact that annual fluctuation in output was very considerably reduced.

Indeed, if the period 1965-78 (1965 being the year when the commune structure was finally stabilised and agricultural production was restored to the 1957-level) is considered, the record in technological change looks much more impressive. The number of large and medium-sized tractors grew at an annual rate of 17 per cent and that of small tractors at 56.8 per cent. Tractor-ploughed area expanded at an annual rate of 7.7 per cent, irrigated area at 2.4 per cent and chemical fertilizers per hectare at approximately 12.4 per cent. This was also a period of rapid expansion in commune and brigade-run non-agricultural enterprises.

Growth of crop production was impressive too, though it is clear that grains and oilbearing crops were accorded high priority. Thus, while the area sown under grains increased by 0.8 per cent over the period 1965-68, production increased by 56.7 per cent. In the case of oilbearing crops, the sown area expanded by 15.6 per cent and output increased by 43.9 per cent. Cotton and sugar crops, however,

Table 11: Technological change in agriculture

	Proportion of area irrigated (per cent)	Proportion of area machine ploughed (per cent)	Large and medium tractors in use (No. in '000)	Small hand tractors in use (No. in '000)	Chemical fertilizers used per hectare (kg)
1952	20.0	0.1	1.3	nil	neg
1957	27.3	2.6	14.7	nil	neg
1965	30.5	15.6	72.6	4	19.4
1978	45.0	40.7	557	1 373	89
1979	45.0	42.2	667	1 671	109
1980	44.9	41.0	745	1 874	127.8
1981	44.6	36.5	792	2 037	134.5

Source: State Statistical Bureau, op.cit.

showed poor results.¹⁹ In the case of cotton, sown area declined by 2.7 per cent while output increased by 3.3 per cent. In the case of sugar crops, although the sown area expanded by 68.7 per cent, output increased only by 54.9 per cent indicating a decline in yield rates.

Perhaps the wisdom of according such overwhelming priority to grains and oilbearing crops can be questioned. But on the whole, the commune system, far from hindering growth and technological change in agriculture, appears to have performed remarkably well. Indeed, the above facts throw into doubt not only the proposition that investment was inadequate but also the proposition that unfavourable terms of trade and inappropriate production relations constrained agricultural growth. It still remains arguable that it had become necessary, by 1978, to change price policies and to abolish certain practices from within the commune system. But the reasons are more convincingly sought in the changing requirements of a dynamic economy than in the errors of the past.

Since 1978, much has been done to increase personal disposable incomes of both peasants and workers. Over 1978-81, per capita real income of the peasants rose by 14.66 per cent per annum and that of workers rose by 9.93 per cent per annum. Simultaneously, the rate of accumulation has declined from 36.5 per cent in 1978 to 30 per cent in 1981; the rate of investment in capital construction has declined from 15.2 per cent in 1978 to 11 per cent in 1981; and the share of non-productive investment in total investment has risen from 17.4 per cent in 1978 to 41.1 per cent in 1981 (see tables 3 and 9). Furthermore, the share of light industry in total investment has increased significantly. Production relations in the communes have also been substantially modified with the objective of boosting both agricultural and sideline production.²⁰

The results so far have been mixed. The available evidence suggests that the production structure has not changed fast enough to meet the requirements of increased consumption. Indeed, it is probable that there exists considerable excess demand for certain

basic consumption items. Production in both agriculture and light industry has increased faster than in earlier periods but does not appear to have kept pace with the growth of personal incomes (see tables 7 and 8). As for the industrial inputs for agriculture, the production of tractors appears to have declined while that of fertilizers has increased rather slowly. In the state-owned enterprises, wages have increased faster than labour-productivity; indeed, labour-productivity has actually declined recently (see table 6). The rate of growth of national income has declined from 12.3 per cent in 1978 to a mere 3 per cent in 1981 (see table 1). And, more significantly, the share of agriculture in state investment has declined sharply.

New imbalances, therefore, have been created in the economy and these are causes for worry. No doubt some of these will be corrected in the near future. But how and to what extent these can be corrected depends fundamentally on the production and distributional consequences of the current agrarian policy and rural reforms. To an analysis of these, we now turn.

3. State policy towards the rural sector: old and new

Development efforts over the period 1949-78, notwithstanding occasional twists and turns in state policies, brought about fundamental changes in China's rural economy. It was far more integrated into the national economy in 1978 than it had been in 1949. Development of transport and communication networks had ended the traditional isolation of Chinese villages. Flood control projects, irrigation works and soil conservation activities had freed the Chinese peasants from their age-old dependence on the forces of nature. Development of collective institutions brought about a sense of security and unity or purpose, unprecedented in Chinese history, among the peasants; diseases, starvation and malnutrition had become events of the past. Agriculture had come to produce an economic surplus by 1978; rural industries made significant progress and, by 1978, accounted for a substantial proportion of income and employment in the communes.

These very developments, however, brought into existence fresh problems and emphasised the need for a reorientation of state policies. In the immediate post-revolutionary period, the primary problem was guaranteeing a basic minimum level of food consumption for the population and hence the emphasis was on the growth and stability of foodgrains production. By 1978, however, this problem was largely solved and the question of production of non-foodgrains (cotton, jute, oilseeds, sugarcane, etc.) came to the fore. Throughout the 1950s and the 1960s, a slow growth of production of these crops constrained the growth of the light industrial sector (producing some essential consumer goods). Increased consumption of food, moreover, required a greater emphasis on the production of such items as meat, eggs and fish, and less on grains. In the early phase of development, lack of adequate transport facilities necessitated a high degree of local self-sufficiency in the production of foodgrains. Since soil conditions varied widely, this could hardly be the best way of maximising food production (or overall agricultural production for that matter) in the country as a whole. With the development of transport facilities and marketing infrastructure, the strategy of regional self-sufficiency progressively lost its raison d'être and the case for specialisation became increasingly stronger.

There was also a need to reorient the investment programme for agriculture. Initially, agriculture had little economic surplus and large-scale mobilisation of labour for capital construction (small-scale irrigation works, soil conservation projects, etc.) constituted a most effective means of accumulation. The scope for undertaking such activities, however, progressively diminished and the emphasis had to shift from creation to efficient utilisation of assets and from labour-investment to capital-investment. Agricultural production, moreover, increasingly needed industrial inputs and scientific research. In any case, within the communes themselves, a shift of emphasis - from farmland construction activities to the development of industries - was taking place and, for a period, significant development of industries at the level of brigades and

communes occurred. These industries developed primarily on the basis of local resources and initially catered to the consumption requirements of the commune members and to the input requirements of agricultural production. But a sustained growth of industries needed a continuous expansion of the "market" and this could hardly be generated internally within the communes. Thus there arose a contradiction between the state-owned industrial enterprises and the commune and brigade level industries. There was also the problem of raw materials; beyond a level, commune and brigade level enterprises began to compete with the state-owned enterprises for raw materials. For all these reasons, it was only the communes located near towns and cities which could sustain a reasonable rate of industrialisation on the basis of subcontracts received from the state-owned enterprises.

Above all, there was the question of raising living standards in the countryside. It has already been shown that the level of consumption of peasant families rose relatively slowly over the period 1957-78 and that the basic underlying cause of this slow growth was a slow growth of per capita food production. Furthermore, the strategy of development on the basis of local resources, while admirable on many counts, tended to accentuate regional inequality in so far as the initial level of development was itself a function of the resource-population balance. There is little doubt that a significant number of communes remained quite poor.

In short, it is difficult to doubt that China's rural economy demanded a reorientation of state policies. The old policies had played their role, and their very achievements had generated new problems which in turn rendered the old policies obsolete. On the other hand, new capabilities had developed which made different state policies feasible. The industrial sector generated a growing surplus and the need for extracting a surplus from agriculture declined proportionately. An economic surplus had emerged in the rural sector and capital-investment could increasingly replace labour-investment. The problem of ensuring a minimum level of living for the entire population had been largely solved and attention could shift to a

rapid improvement in the levels of living. Production conditions in agriculture had been sufficiently improved to initiate a process of specialisation and diversification.

This is the backdrop against which the changes in state policies, introduced since 1978, have to be viewed. The changes have been wide-ranging; they not only have affected prices, procurement, taxation and marketing policies but also have involved very substantial structural reforms of the communes. The structural reforms, most significant since 1978, will be discussed in the following section. Here we shall focus on the more general macro-economic policies.

In March 1979, purchase prices for 18 major farm and sideline products were raised by fairly wide margins.²¹ Some of the prices were further increased in subsequent years. The overall purchase price index rose by 22.1 per cent in 1979, by 7.1 per cent in 1980 and by 5.9 per cent in 1981. At the same time, prices of industrial products destined for use as farm inputs (farm machinery, chemical fertilizers, insecticides, etc.) were kept virtually constant (see table 4). There was thus a very sharp rise in the relative prices of farm products. The increases, however, were not uniform for all products; they were higher for raw materials (e.g. cotton, sugar crops, etc.) and sideline products (e.g. livestock) than for grains.²²

At the same time, purchase quotas have been fixed for a period of five years on the basis of the average output levels of 1971-75. Since the output levels of 1979-81 were significantly higher than those of 1971-75, this amounted to a reduction in the sale quota as a proportion of output of the communes, thereby increasing the scope for sale at negotiated prices or in "free" markets. It also appears that for some poor communes, state purchase quotas have been abolished altogether. The real impact of price increases on the incomes of the communes, therefore, was much greater than appears from the movement of price indices.

The tax burden on rural areas has also been significantly reduced. Areas with per capita grain output lower than the guaranteed minimum level (200 kg. of unprocessed grains in rice areas and 150 kg. in other areas) have been exempted from paying the agricultural tax. With regard to commune and brigade-run enterprises the limit of non-taxable annual net profit has been raised from 600 yuan to 3,000 yuan. New industrial enterprises (exclusive of tobacco factories, distilleries, wineries and cotton mills) can now operate tax-free for two to three years instead of one to two years. In frontier counties or national autonomous areas, such enterprises can operate tax-free for five years.

The immediate impact of these measures has been a substantial transfer of resources from the state to the communes. Although the purchase prices were raised, the retail sale prices of grain and edible oil have been held constant and the retail sale prices of other products have not been raised proportionately (and where they have been raised, the government was obliged to provide subsidies to the workers and staff members). This has committed the state to a huge subsidy programme.²³ On grain alone, there is a subsidy of 0.2 yuan per kilogramme; on edible oil, there is a subsidy of 1.6 yuan per kilogramme. The total additional subsidy arising from increases in purchase prices amounted to 8.3 billion yuan in 1979 and 16.8 billion yuan in 1980. For the three-year period 1979-81, total subsidy on basic food items and clothing amounted to 41.6 billion yuan. Secondly, increases in the prices of certain farm products reduced state revenues through a reduction of profits of the state-owned enterprises. Thirdly, state revenues declined as a result of reduction and remittance of taxes in rural areas; tax revenues from rural areas declined by 2.0 billion yuan in 1979 and by a further 2.5 billion yuan in 1980. Fourthly, annual import of grains increased from around 8 million tons in 1975-78 to around 15 million tons in 1979-81.²⁴ Thus not only have state revenues declined as a result of a decline in tax revenues and in enterprise profits, increased burden of subsidies and imports has also reduced the proportion of state revenues which can be used for investment purposes.

While such a resource transfer, therefore, automatically reduces the state's capacity to invest, it cannot by itself increase either investment or consumption at the level of the communes. For the latter to happen, the production sectors have to respond in particular ways. Consumption can increase only if the production of consumables increases simultaneously. Similarly, investment can increase only if increased volumes of investment goods are available. The government's strategy, as has already been noted, has been to increase consumption by stimulating growth of the light industry. Production of farm inputs, on the other hand, has tended to decline.²⁵ The general thrust of the post-1978 agrarian policy has thus been to increase the consumption of the rural population at the expense of investment in agricultural production. The development objective itself has changed, and when this is the case, the question as to whether or not the past price policies had been right is only of historical interest.

4. The commune system in transition

(a) Evolution of the commune system: a brief historical sketch

The commune system has long been regarded as the best achievement of the Chinese revolution by many outside observers; it has appeared to them as the most appropriate institutional framework for solving the typical problems (poverty, under-employment, lack of an investible surplus, etc.) of an under-developed agrarian economy. Given its ability to ensure a basic minimum level of living for the rural population, its capacity to mobilise labour on a massive scale for capital construction, its success in generating a high degree of distributional equity and its dynamism in terms of both agricultural growth and rural industrialisation, the commune system has been widely judged as vastly superior to any institution known to be in existence in the developing world.

The story of the evolution of the commune system in China is well-known and need not be retold here.²⁶ The following brief account is only intended to place the recent reforms in their proper context. Following the implementation of the radical land redistribution programme in the immediate post-revolutionary period, peasants were quickly organised - first into mutual aid teams, then into primary agricultural producer co-operatives and then into advanced agricultural producer co-operatives. By 1956, the bulk of the peasantry belonged to the advanced producer co-operatives (each with an average membership of 150-200 farm households). In 1958, some 740,000 producer co-operatives were merged into 23,630 people's communes (each with an average membership of over 5,000 households). These huge organisations were at that stage viewed as the basic production and accounting units in agriculture.

The jump in scale, however, was too rapid and soon problems emerged. Both the peasants and the local cadres were too ill-equipped to make the commune a success as a production unit. Problems of planning, administration and accounting proved too difficult. To these were added the unusually bad weather conditions (in 1960 and 1961) and the failure of many of the "great leap forward" programmes to promote rural industry. Agricultural production slumped and a reorganisation was urgently needed.²⁷ The reorganisation process was initiated during 1962-63.²⁸ The average size of the communes was much reduced and the number of communes rose from 23,630 to more than 74,000. A three-tier system was also introduced. Small production teams (20 - 50 households) were established as basic production and accounting units. Several production teams formed a production brigade and several production brigades formed a commune. The tasks and responsibilities of these three levels of organisation were defined clearly. Teams were responsible for organising production: both farming and sidelines (raising pigs, managing orchards, etc.), for allocating labour, for distributing incomes to members, for paying agricultural taxes to the state, for fulfilling the quota of sales to the state and for maintaining collective reserves (accumulation funds, welfare funds and

contingency food reserves). Brigades were responsible for co-ordinating activities which required pooling of resources of several teams, e.g. capital construction activities, development of small-scale processing enterprises, etc. They were also responsible for organising basic social services (e.g. primary education and health services) and represented the lowest level of party organisation. Communes were responsible for promoting relatively large-scale industries, for organising transportation, credit and marketing facilities and for providing higher level social services (e.g. secondary education, hospital services, etc.). They also represented the lowest unit of government and an important level of party organisation. Commune officials were entrusted with the responsibility for collection of taxes, maintenance of public security, providing leadership and direction to commune activities, implementation of policies and programmes of the government and monitoring their effects, collection of data, providing extension services, and so on. Effectively, communes represented an amalgamation of three units - political, administrative and economic.

This three-tier system remained largely unchanged till 1978, though some readjustments in the size of units occurred. In 1978, there were 52,781 communes, 692,307 brigades and 4,816,000 teams. During the Cultural Revolution, efforts were made with some success to progressively raise the level of accounting and production management. In 1978, 62 communes, 72,000 brigades and 4,629,921 teams functioned as production and accounting units.

The internal organisation of the teams underwent more substantive changes. In the early days of the co-operative movement, payments for work were made according to a piece rate system and member families were allowed to retain small private plots and livestock (including pigs and poultry). When communes were established in 1958, private plots were abolished, private sideline production was discouraged and time-rate systems of payment were emphasised. These tendencies were reversed during the period of adjustment (1962-63) when private plots were reintroduced. But again during the early

part of the Cultural Revolution (1968-1971), time-rate systems were emphasised, private sideline production was restricted and private plots were reportedly abolished in some cases. By 1978, these had been reversed again and many of the practices of the 1962-63 period were reintroduced.

Through all this turmoil, the commune system performed remarkably well in solving the basic problems of China's rural economy. As has already been discussed, growth of production was significant and the technical conditions of production were transformed. The development of rural industries was on a significant scale.²⁹ Although the level of direct personal consumption of the rural population rose rather slowly, substantial progress was made in such areas as housing, health care, education, transport and communications facilities and in the provision of such basic amenities as electricity and clean water. The living conditions of an average rural person were incomparably better in 1978 than they had been in 1957. And all this had been achieved without generating the sort of social inequalities which characterise much of the Third World.

(b) Politics, government and the economy:
interrelationships

The commune, as it existed till 1978, was a political unit, a government organ and an economic enterprise - all rolled into one. Consequently, there was no clear distinction between political work, administrative tasks and economic activities, and they always interfered with each other. In principle, this is not necessarily undesirable and it certainly proved workable. It seems, however, that certain problems were increasingly encountered. Often enough a single commune official had political, administrative and economic responsibilities and this made an efficient dispensation of any of these responsibilities extremely difficult. For example, welfare services and monitoring work might suffer during busy farming seasons, production plans might be based on political or administrative considerations without due attention to local technical conditions of production, and so on. The very development of the communes (implying an expansion in the range and scale of activities) tended to make these difficulties increasingly serious.

Given the hierarchical relationship between the three levels of the commune structure, the scope for interference by the commune officials into the activities of the teams was wide. Usually, the output targets, sale quotas and input allocations for the teams were decided at the level of the communes and were then relayed through the brigades to the teams, though such practices were not sanctioned by the Party. Given the lack of an identity of interests between the commune officials (who were salaried people) and the team members, such decisions tended to be rather arbitrary in many cases. The teams, therefore, were obliged to carry out decisions in the making of which they had not participated. Furthermore, the communes often commandeered the resources (including labour power) of the teams without compensation, although this was strictly forbidden.

This structure, undoubtedly, facilitated the fulfilment of certain quite commendable objectives, and probably came into existence because of its efficacy in this regard. In China of the 1950s and 1960s, the entire population could not be guaranteed a decent minimum level of subsistence without careful centralised planning and its effective implementation and this required a fusion of political, administrative and economic powers. Similarly, massive mobilisation of labour for capital construction could hardly have been feasible without the "leader-follower" relationship between the communes and the brigades and between the brigades and the teams.

In recent periods, however, the objectives and requirements of development had begun to shift. In particular, the objective of increasing production had replaced that of ensuring a floor to the level of production and the objective of an efficient utilisation of productive assets had replaced that of creating such assets. Furthermore, many of the old constraints (e.g. transport and communications) were no longer binding and new opportunities (e.g. inter-team, inter-brigade, inter-commune or inter-regional joint economic enterprises) presented themselves.

It is in this context that one of the boldest experiments since 1958 - that of a functional separation between politics, government and the economy - is now being conducted.³⁰ As a first step, the communes were reorganised to some extent and efforts were made to establish the production teams as autonomous units. In many cases, the level of accounting was moved back to the teams, as can be seen from the following table.

Table 12: Accounting units, 1978 and 1981

	<u>1978</u>	<u>1981</u>
Total number of communes	52 781	54 371
Number of communes functioning as accounting units	62 (0.12)	31 (0.06)
Total number of brigades	692 307	718 000
Number of brigades functioning as accounting units	72 000 (10.4)	35 754 (4.98)
Total number of teams	4 816 000	6 004 000
Number of teams functioning as accounting units	4 629 921 (96.14)	5 899 000 (98.25)

Source: Data supplied by the Chinese Academy of Social Sciences and State Statistical Bureau, op.cit.

Furthermore, steps were taken to prevent "requisition or use of the labour power, land, draught animals, machinery, funds, products and other materials of a production team without compensation". The Draft of the Revised Constitution of the People's Republic of China stipulates the re-establishment of township (Xiang) governments and retains the people's communes as collective economic organisations which no longer function as a level of political power or administration.³¹ This will not change the ownership of the communes, brigades and teams with regard to their enterprises and other collective property. The name of the commune may still be retained, or the communes may be reorganised into other suitable organisations. These measures are to be introduced in limited areas

as experiments and, on the basis of experience accumulated, will then be introduced throughout the country.

Three counties (Guanghan, Qionglai and Xindu) in Sichuan had begun experimenting with these methods even before they were sanctioned by the constitution. First-hand information is available on two experimental communes - one each in Guanghan and Qionglai counties. In both these cases, party organisation and government have been separated from the commune; the same has occurred at the level of the brigades. From an administrative point of view, each commune is now a Xiang and each village (usually a brigade) is now a sun. A division of tasks and responsibilities has been worked out. The party organisation is in charge of implementing state policies and of monitoring and studying the situation. The local government is in charge of organising and supervising tax collection, education, health care, cultural events, sports, women's affairs, family planning, etc. The leaders of communes, brigades and teams remain responsible for the management of production (industrial, agricultural and sideline) and commercial activities.

These changes have prompted changes even in the sphere of organisation of economic activities. In the case of the Zhan Xiang commune in Qionglai county, one of the brigades (Feng Huan) had been turned into a corporation in February 1980 - it was renamed as Phoenix Corporation. The brigade's five teams have been merged together to form a company which is in charge of production of grains and oilbearing crops. Three other companies have also been organised: one in charge of industrial production, one in charge of commercial activities and one in charge of sideline production (including production of commercial crops). These three companies do not have a permanent labour force and draw their workers from the first company which rewards them according to workpoints thus earned. The corporation can raise revenues by selling shares to individual households, groups of households or companies and distributes a certain percentage of the profits to shareholders. It is run by a general conference, consisting of shareholders, workers and managers,

which has the power of electing, appointing or dismissing officials. Professional management personnel (not members of the companies) sometimes sign contracts, which specify profit targets, raw materials, labour and capital equipment, with the corporation. The relationship between the corporation and the companies and that among the companies are purely contractual. The ex-commune, which has effectively turned itself into a giant corporation, now provides general guidance and technical assistance and issues instructions on targets for certain specific products. The Xiang government issues production plans for grains and oilbearing crops.

Somewhat different developments have taken place in a commune in Guanghai county. An ex-commune was first divided up into three communes (with three Xiang governments) which then placed the important industrial enterprises under the management of the giant Jinan Corporation, established in October 1980. The ex-brigades were turned into joint companies which retained control of some of the erstwhile brigade enterprises and the ex-teams were renamed as co-operatives which retained the responsibility for agricultural and sideline production. The corporation, if requested, provides technical assistance of various types to the joint companies and the co-operatives, and it can establish joint ventures in co-operation with them. It raises funds for establishing new enterprises through a sale of shares, transfers a part of the profits to the joint companies and co-operatives, recruits workers from the co-operatives and pays cash wages.

These examples give us an idea of the type of experiments now under way and the extent to which the old commune structure is planned to be dismantled. As a general rule, contractual relationships, both vertical and horizontal, are replacing the hierarchical relationships, dictated by political-administrative considerations, among different levels of collective production units. Economics, and not politics, is now in command.

(c) Collective and private production:
modes of co-existence

A small private economy has always existed alongside the collective economy in production teams ever since the three-tier commune system was established during 1962-63. All members of a team have access to small private plots which are allocated on a per capita basis. Households are also allowed to engage in private sideline production (such as pig-raising, poultry, handicrafts, etc.). Products of such private activities are exchanged in the rural fairs which have existed throughout the period. State policy concerning such production activities has gone through some twists and turns. During a phase of the Cultural Revolution (1968-71) private plots were abolished in some cases and private sideline production was discouraged.³² Towards the end of 1978, both private plots and private sideline production were declared as essential adjuncts to the collective economy. Since then, several important policy measures have been implemented which have led to a considerable increase in the importance of private production in the rural economy.

Throughout the period 1962-78, private plots accounted for 5-7 per cent of the cultivated area owned by a production team. Subsequent reforms made it permissible for a production team to distribute up to 15 per cent of its total cultivated area in private plots.³³ An equally significant measure has been the lifting of all restrictions on the types of products which may be produced on the private plots. In the pre-1978 period, no major crops could be grown on them; they were generally used to produce vegetables and fodder. These restrictions no longer exist.

All restrictions on private sideline production have also been removed. Previously, for example, there were limits on how many chickens or hogs a family could keep, what type of animals could be privately owned, and so on. Now there are only some very general rules which govern the nature and extent of sideline production. These are: (a) that sideline production should not damage the

nation's resources; (b) that sideline production should not affect collective production unfavourably; and (c) that sideline production should not lead to private trading and speculation. Evidently, these rules are so general as to be almost impossible to implement in practice. Even more significant are the newly created facilities and incentives for private sideline production. Banks have been instructed to issue loans to households for sideline production, government extension agencies have been instructed to provide technical know-how and assistance to households willing to undertake sideline production, and the marketing co-operatives have been instructed to assist peasant households in marketing sideline products.

Two other general measures have added to the significance of the above measures in boosting the private economy. The first concerns a new rule for collective labour. Previously, the entire working population in a team was obliged to devote a minimum number of labour-days in a year to collective production.³⁴ Now only one working member from each household is required to engage in collective labour. This means that in the case of labour-rich households, one or more working members may wholly withdraw from collective labour and devote themselves to private production. Secondly, expanded opportunities for exchange in the rural fairs and establishment of urban "free" markets have created new possibilities for specialisation and commodity production.³⁵ Such trends are already discernible. Small-scale poultry or dairy farms, handicraft enterprises, etc. owned and operated sometimes by a single household and sometimes jointly by a few households, are beginning to make their appearance.

The combined effect of all these measures has been a substantial expansion of the private economy in relation to the collective economy.³⁶ For the country as a whole, the value of output from private sideline activities as a proportion of the gross value of agricultural output increased from 16 per cent in 1978 to 20 per cent in 1981. The importance of sideline occupations as a source of household income has increased even more significantly as can be seen from the following table. In some areas, private sideline production

has already become the major source of household income. For example, in Sichuan province, income from sideline production constituted 53.6 per cent of a total per capita income of 183 yuan in 1981.

Table 13: Distribution of average per capita income by sources

<u>Source</u>	<u>1978 (%)</u>	<u>1981(%)</u>
Collective sector	66	52
Private sideline occupations	27	38
Miscellaneous (remittances, state subsidies, etc.)	7	10

Source: State Statistical Bureau, op.cit.

Note: Bonuses received for overfulfilment of targets and quotas are included in collective income.

It is clear that the private economy today differs from that which existed prior to 1978 in several quite fundamental respects. Prior to 1978, the role of the private economy was limited to providing the household with a few minor consumption items (vegetables, milk, meat, etc.) and sometimes with a little extra cash. Sideline activities, moreover, were generally undertaken by the non-working members of the peasant household so that their scale tended to vary directly with the dependency ratio.³⁷ Today these activities can be undertaken by both working and non-working members of a household and are increasingly oriented towards specialisation and commodity production. Added to these are the newly introduced support facilities (bank loans, extension services and marketing networks), increased size of private plots, absence of restrictions in terms of choice of products and the possibility of establishing joint enterprises by groups of households. Clearly, the scale of sideline activities need no longer be constrained by the availability of either funds or idle family labour. Joint enterprises, it should not be forgotten, can act as a camouflage for labour hiring. It is difficult to resist the conclusion that the private economy has

emerged as a potential force of differentiation among the peasantry and may thus seriously erode the basis of the collective economy.

There seem to have been two basic motivations behind the recent measures. The first is to increase the supply of certain consumption items, the demand for which was bound to increase as a result of increases in personal disposable incomes. This is clearly necessary if the increases in money incomes are to translate themselves into increases in real consumption. What is not clear is why such increases could not be achieved by expanding collective sideline activities. Second, surplus labour had emerged as a serious problem in most production teams; it was estimated to have been between 30 and 50 per cent in the country as a whole. Expansion of private sideline activities are being viewed as an effective means of utilising this surplus labour. But again, one wonders why this could not be done through expanding collective sideline activities; after all, a major constraint on the expansion of collective sidelines in the pre-1978 period was precisely a slow growth of the market (i.e. slow growth of personal disposable incomes). It is unlikely that the rate of growth of demand for sideline products, achieved during 1978-81 as a result of sudden changes in prices, procurement and taxes, can be sustained over a long period. As the growth of demand decelerates, the problem of surplus labour may reappear, perhaps in the form of open unemployment this time.

(d) Agricultural production under collective management: the responsibility systems

The term "production responsibility system", originally coined during the period of readjustments (1962-63) in the commune structure,³⁸ used to refer to a distributional principle which effectively amounted to a piece-rate system of allocating work-points to the workers in a collective production unit (usually a production team). The system was virtually abolished during the period of the Cultural Revolution when so-called "egalitarianism" was promoted as the socialist principle of distribution. Egalitarianism referred to

two basic rules. First, the system of payment was basically a time-rate system. At the beginning of an agricultural year, workers were graded according to work abilities; workers in each grade were entitled to a fixed number of work-points per day of work.³⁹ This usually remained unchanged through the year. For accumulating work-points, therefore, what mattered was the number of days a worker was formally at work rather than the actual amount and quality of work accomplished. Second, the bulk of the collective income tended to be distributed on a per capita basis through the mechanism of grain rationing. In 1978, for example, on a countrywide average, about 72 per cent of the distributed collective income was distributed on a per capita basis.

Additional restrictions, intended to generate a high rate of accumulation in the production units, were also sometimes imposed. In one province, for example, there was a rule that the value of a work-point could not exceed 1.5 yuan. There was also a rule in some areas that the per capita grain ration for the peasants could not exceed 600 jins (= 300 kg). Thus even in developed communes and production teams, consumption of the peasants tended to be unduly restrained and the link between the material prosperity of the collective and that of individual peasants was considerably weakened or even totally severed.

Such practices, to the extent that they existed, could be expected to produce serious disincentives for work. It is to combat these ill effects of egalitarianism that the production responsibility system was reintroduced in 1979. However, it soon assumed forms which altered, quite fundamentally, not only the method of distribution but also the production process itself. Indeed, the presently dominant form of responsibility system can, with justice, be called an antithesis to the very concept of collective production.

The existing forms of responsibility system can be classified into the following two basic categories:

- (a) Contracts without linkage to output: in this case the production teams (or brigades and communes when these are accounting units) enter into contracts with either small work-groups or individual labourers for certain specific tasks, usually seasonal or time-bound (e.g. weeding or transplanting). Hence the absence of any linkage to output. Certain standards are set for ascertaining the satisfactory completion of the tasks, and the tasks themselves carry a fixed number of work-points. The system thus approximates a piece-rate system.
- (b) Contracts with linkage to output: here the reward for labour depends on the level of output achieved. The system has the following three basic forms:
 - (i) Contracts along specialised lines: in this case, the collective land is divided into small parcels and the parcels are contracted out usually to groups of workers but sometimes to individual workers for production of special items (e.g. vegetables, flowers, forestry products, aquatic products, etc.). The contract for each work-group specifies the quality and levels of certain inputs and the output target for different crops. If these targets are fulfilled, the work-group concerned is allotted a pre-determined number of work-points. Over-fulfilment is rewarded in the form of additional work-points and under-fulfilment is punished by a deduction of work-points according to certain established norms. The entire output is handed over to the production team which distributes the collective income according to work-points. The work-groups are left to their own devices for distributing the group incomes among individual workers.

- (ii) Contracts with households with fixed input and output targets and work-points (Bao chan dao hu): the operational principles of this system are similar to those of the system described above except that the land in this case is parcelled out to individual households. Land is allocated partly on a per capita basis and partly according to the number of workers in the households.

- (iii) Contracts with households with fixed input targets and delivery quotas (Bao gan dao hu): this system is in essence equivalent to the fixed-rent tenancy system. Collective land is parcelled out to individual households, in most cases partly on a per capita basis and partly according to the number of workers in the households. The production team fixes not production targets but delivery quotas (which are used to pay taxes, to fulfil state purchase quotas and to retain collective reserves) and the level of application of material inputs. All output in excess of delivery quotas is retained by the households and there is no collective distribution of income. The households thus have a considerable freedom in the choice of product mix and incentive to maximise output. The most distinguishing feature of this system is that neither the value of labour nor the distribution of income is determined at the level of the accounting unit. The value of labour, being linked to the value of output, can obviously vary across households.

The relative importance of these different forms of responsibility systems (as in June 1982) can be seen from the following table:

Table 14: Forms of responsibility systems

<u>Responsibility system adopted</u>	<u>Percentage of accounting units</u>
(a)	8
(b)(i)	5
(b)(ii)	12
(b)(iii)	75

Source: Data supplied by the Chinese Academy of Social Sciences.

Note: The figures are approximate estimates.

Various permutations and combinations of these four basic systems are observed in practice, as the following data (table 15) for Sichuan and Yunnan provinces illustrate.⁴⁰ This variety of forms is explained by the fact that, as a rule, the choice of the form is left to the accounting units themselves and most units have been experimenting with different forms with a view to identifying the most suitable one. The state has only set the following guiding principles (frequently referred to as "three constants and four unifications"): no change of ownership, no change of accounting level, no change in the system of distribution at the level of the accounting unit, management under the unified leadership of the accounting unit, a unified plan of production, a unified arrangement of the labour process (division of labour between agriculture, industry and sidelines) and a unified management of assets (farm implements and machinery, draught animals, irrigation systems, water conservancy projects, etc). The accounting units must also retain the responsibility for paying taxes, for fulfilling state purchase quotas and for maintaining collective accumulation funds, welfare funds and contingency grain reserves. They remain responsible, moreover, for assisting the deficit households and five-guarantee families.

Table 15: Responsibility systems in Sichuan and Yunnan provinces

Responsibility system adopted (July 1982)	Percentage of accounting units	
	Sichuan	Yunnan
Contracting without linkage to output	1.32	6.8
Contracting with work-groups or individual labourers:		
(a) along specialised lines	0.38	5.4
(b) not along specialised lines	9.45	1.8
<u>Bao chan dao hu</u>	17.06	1.4
<u>Bao gan dao hu</u>	64.46	63.8
Contracting grain areas to households (either <u>bao chan dao hu</u> or <u>bao gan dao hu</u>) and commercial crop areas to labourers (may or may not be along specialised lines)	3.35	-
Contracting agricultural production to households (<u>bao gan dao hu</u>) and sidelines to labourers along specialised lines	-	20.4
Irrigated fields contracted to work-groups (may or may not be along specialised lines) and unirrigated fields contracted to households (<u>bao chan dao hu</u> or <u>bao gan dao hu</u>)	3.97	-
Responsibility system not adopted	0.01	0.4

Source: Data supplied by the Sichuan and Yunnan branches of the Chinese Academy of Social Sciences

In view of the current emphasis on developing diverse systems to suit diverse local conditions, it is remarkable that the household contracting system has acquired such an overwhelmingly dominant position. In the country as a whole, about 87 per cent of the accounting units are practising this system. Bao gan dao hu alone is being practised by about 75 per cent of the teams. This picture is corroborated by the data for Sichuan and Yunnan provinces. Past trends indicate, moreover, that those practising bao chan dao hu are inclined to shift to bao gan dao hu rather rapidly. Once again, therefore, a uniform system is seemingly being promoted throughout the country. It is only the highly developed communes (usually located near the cities) which appear to have been able to resist the change.

Clearly, the most significant consequence of the introduction of responsibility systems has been the re-emergence of the household as the basic unit of production in the Chinese countryside. This implies a fundamental change in the labour process: control over labour allocation has passed, to a large extent, from the collective on to individual households. In the case of bao gan dao hu, even the valuation of labour is no longer a matter of collective choice. Thus the laws governing the distribution of land and other productive assets among peasant households have once again emerged as principal determinants of production patterns, labour process and income distribution.

Under the household contracting system, it is usually the households who bear the costs of current inputs; they receive credit from the team for the purpose. The teams retain control over the distribution of modern inputs such as chemical fertilizers, pesticides, etc. These are allocated to the teams by the state; teams allocate them to households in accordance with landholding. As for draught animals and farm machinery, these are contracted out by the teams to individual labourers who provide services to households on demand for a fee, earn work-points and are rewarded by the teams. The teams also impose certain restrictions concerning the use of land and labour on the households: no land-leasing or labour-hiring is

allowed and unauthorised construction on collective land is forbidden. Furthermore, the teams reserve the right of periodic reallocation of land.

But any fundamental change in the production system always generates pressures for further change and some of the above regulations are in the process of being relaxed. Moreover, there are some genuine anomalies. For example, timeliness and speed of completion of particular operations significantly influence land and labour productivities and hence influence the value of labour under the bao gan dao hu system. Dependence of peasant households on hiring of services of draught animals and farm machinery, therefore, is bound to lead to conflictual situations. Similarly, when land is allocated partly on a per capita basis and partly according to the number of workers in a household, the worker/land ratio will vary across households. Pressures for equalisation of the worker/land ratio through land-leasing or labour hiring, therefore, are likely to exist. Hence a ban on land-leasing and labour hiring tends to give rise to an anomalous situation.

Thus attempts strictly to implement the restrictive regulations by the teams would either be unsuccessful or, if successful, would prevent an optimal combination of factors of production. There would, therefore, be an understandable tendency for the teams to relax controls or simply to ignore violations of the rules. Signs are already there. In some teams, draught animals have been sold to individual households on an instalment basis. In many areas, peasants can buy and sell draught animals in "free" markets. Many households in richer areas are reported to have bought small tractors. It would be most surprising if the households did not have informal arrangements for buying and selling of chemical fertilizers and for hiring of labour.⁴¹ Pressures are also likely to be generated for setting unreasonably low output targets and delivery quotas since few households would be willing to risk paying penalties for underfulfilment. If inequities in the allocation of work-points existed under the old system, there is no reason why similar

inequities may not exist in the allocation of land and material inputs today. Although there is the provision for periodic reallocation of land by the teams, to attempt such reallocation too often would be impractical and would tend to negate the very incentives the household contracting system is supposed to provide. All this seems to suggest that the new system can lead to significant peasant differentiation. Above all, it is doubtful if labour mobilisation on a significant scale for capital construction, a basic strength of the old system, would be at all feasible under the new system.⁴²

Against these disadvantages is the fact that the household responsibility system does provide strong incentives to peasant households for maximising output. As individual initiatives are brought into play, productive efficiency is likely to increase in the short run. Long-term growth, however, depends on a different set of factors: accumulation, investment and technological change. The emergence of the household as the basic production unit, the expansion in private commodity production and the possibilities of peasant differentiation may cause a sharp discontinuity in the trajectory of these variables. It is generally held in China today that as forces of production develop, the objective need to raise the scale of production will provide compelling reasons for the peasants to move towards a collective mode of production. But could it not provide compelling reasons for them to demand greater scope for private accumulation? Or could not the peasants begin to condition the development of the forces of production in such a way as to suit the requirements of small-scale production?

(e) The commune system in transition: an overview

The structural reforms of the commune system were initiated with a view to countering the disincentive effects of "bureaucratism" and "egalitarianism" on the rural labour force. Attempts to overcome "bureaucratism" have led to the functional separation of political units, administrative organs and economic enterprises within the commune structure - a measure which is likely to have expanded the

area of decisions-making for the peasant masses. Attempts to overcome "egalitarianism", however, seem to have resulted in a considerable weakening of the collective institutions. The peasant household is fast emerging as the basic unit of agricultural and sideline production and there is a distinct trend towards a growing privatisation of the labour process. These facts give rise to a whole range of issues concerning the future course of development in rural China. It is not possible to deal with these issues at an empirical level; the changes are too recent for that to be feasible. Some preliminary observations can nonetheless be made.

It appears that growth of agricultural production has significantly accelerated in the wake of the rural reforms. Some notes of scepticism need to be added, however, before a causal relation between the reforms and growth is automatically assumed. First, the reported growth rates of crops are very high, sometimes too high to be credible. For example, over the period 1978-81, grain output is reported to have increased by 6.6 per cent in spite of (approximately) 4.7 per cent decline in the area under grains. Growth rates for commercial crops have been reported to be much higher: 37.0 per cent for cotton, 95.6 per cent for oil-bearing crops, 45.7 per cent for silkworm cocoons, 40.5 per cent for sugarcane and 35.4 per cent for sugarbeet. These growth rates represent such a sharp break from the historical trends that it needs to be ascertained that no statistical illusions are involved. Second, all the reports suggest that it is the poorer production teams which have achieved relatively higher rates of growth in crop production. If this is accepted, then it has to be believed that teams had remained poor not so much because they lacked resources but because they had an incompetent leadership. Even if this is true, it certainly is not self-evident and needs to be established through investigations.

The observed trends in some indicators of technical change in agriculture over the period 1978-81 strengthen the scepticism regarding a causal relation between the reforms and agricultural growth. It can be seen from the table below that investment in

modern inputs was most significant during 1978-79 and has since been declining. It seems quite reasonable to suppose that the short-lived spurt in investment was due to the changes in relative prices, taxes and procurement (effected in 1978) rather than to the reforms (initiated in 1979).

Table 16: Technological change, 1978-81

	Rate of growth over the period		
	<u>1978-79</u>	<u>1979-80</u>	<u>1980-81</u>
Large and medium tractors in use	19.7	11.7	6.3
Small hand tractors in use	21.7	12.1	8.7
Chemical fertilizers used per hectare	22.5	17.2	5.2

Source: State Statistical Bureau, op.cit.

Even if it is accepted that the reported rates of growth in crop production are true and that they are primarily attributable to the structural reforms, it has to be remembered that they have been achieved at the cost of privatising labour and production processes to a significant extent. This fact, moreover, has to be viewed in conjunction with the fact that the private economy itself has been considerably expanded. These features, which have significantly increased the power of the market forces, have important implications for social inequalities and division of labour, and hence, in the long run, for accumulation, technical change and growth.

The expansion of the private economy has certainly helped increase employment and output of some basic consumer goods in the short run. But it has also created conditions for a widening of intra-regional inequalities, and these conditions are likely to be reinforced by the partial privatisation of the collective economy itself. On the other hand, it could be argued that these measures are likely to reduce inter-regional and rural-urban inequalities since they overcome to some extent the disadvantages arising from a lack of mobility of

labour. In fact, the measures can conceivably have the effect of encouraging internal migration since it is no longer necessary for every able-bodied person to participate in the collective economy. The newly created provisions for self-employment in the urban service sector and the proposals for the establishment of small urban centres throughout the country point in the same direction.

The reforms are also likely to lead to a sharper division of labour in rural areas not only because expansion of the private economy has increased the scope for specialisation in private production but also because of the growing separation of activities within the collective economy. For example, separation of commune and brigade enterprises from agricultural production and the abandonment of the Maoist idea of a "peasant-worker", contracting out collective land to households or work-groups along specialised lines, and attempts to create specialised co-operatives (such as marketing co-operatives) within the communes will all have the effect of separating the different component parts of the production and distribution processes and will correspondingly sharpen the division of labour.⁴³ These different component parts, therefore, are likely to experience different rates and types of technical change. In crop production, for example, land-augmenting technological change is likely while in processing activities labour-augmenting technologies may prove more attractive. In principle, however, a sharper division of labour should raise the productivity of labour.

As for accumulation, it seems plausible to suppose that labour accumulation on a significant scale will no longer be feasible, though other forms of collective accumulation will continue to exist.⁴⁴ Labour accumulation, of course, is irreplaceable. Private accumulation can now replace collective accumulation to a limited extent, but its effects are as yet uncertain. What is certain is that it cannot generate significant capital construction in rural areas. Thus while the state's capacity to invest has declined, the need for state investment in rural areas is likely to have increased.

It is clear from the above observations that the institutional reforms were intended not merely to combat "egalitarianism" but to fundamentally alter the pattern of development in rural China. For combating "egalitarianism", it was not necessary either to expand the private economy or to introduce the bao gan dao hu. It would be incorrect to view the reforms as mere responses to the problems of the old system; they have involved political choices and fundamental changes in social objectives of development.

5. Concluding observations

Maoist China developed an economic system which was geared to maximising accumulation. This tendency reflected itself not merely in the realised values of such budgetary parameters as the rates of accumulation and investment but also in the structure of production itself. Given the autarkic environment in which development took place, the differential growth rates achieved in the three major production sectors - heavy industry, light industry and agriculture - underline the fact that growth of consumption was much slower than that of national income.⁴⁵

Yet it would be absurd to suggest that growth and accumulation per se were the basic objectives of Maoist policies. In fact, Mao and his associates were always prepared to sacrifice growth for the sake of realising certain valued social objectives. The most important of these involved guaranteeing a minimum level of living to the entire population and this in a country which, by contemporary standards, was one of the poorest and most backward in the world. The institutional framework which, through a process of trial and error, developed after 1949 was clearly designed to ensure that accumulation neither involved excessive compression of consumption nor led to a widening of social inequalities. It is only in this context that the hallmarks of the Maoist system - reliance on local resources and collective efforts, emphasis on labour accumulation, localised self-sufficiency in staple foodgrains, and almost complete absence of internal migration - can be adequately appreciated. Available facts

leave no room for doubting that the Chinese masses enjoy a level of material life and a degree of social security which are unequalled in most other parts of the Third World.

As it happens, it was the concern with social objectives which produced a high rate of accumulation and hence a high rate of growth. For it made the rate of growth of agricultural production a binding constraint not on the growth of national income but on that of personal disposable incomes.⁴⁶ It is perhaps arguable that the rate of growth of agricultural production might have been higher had the institutional framework of agriculture been different. But the argument is misplaced; it amounts to proposing that the social objectives could and should have been sacrificed to some extent for the sake of faster growth of aggregate consumption.

Undoubtedly, the emphasis on social objectives extracted a price. The excessively high rate of accumulation had led to a lop-sided industrial structure and low investment efficiency; consumption of the peasant population remained low and labour productivity in agriculture stagnated; unemployment and under-employment began to plague the system; and although intra-regional inequalities were drastically reduced, inter-regional and rural-urban inequalities remained significant.⁴⁷ The current impatience and concern, both of the leadership and of the population, with these problems are wholly understandable, if not fully justified. But it is unfortunate that they have tended to obscure the real strengths of the old system. Equally, it is incorrect to overlook the fact that it is the achievements of the old system which make the contemplation of a new development strategy possible today.

State policies in a dynamic economy cannot remain unchanged over time. It has been argued in this paper that even if the social objectives of development had remained unchanged, some reforms of the Maoist economic system would have been necessary. The post-1978 reforms, however, are not of this nature. Their genesis cannot be traced to the emerging inadequacies of the old policies. They rather

point to the fact that social objectives of development have themselves been radically altered. In this sense, the reforms represent a political choice and cannot be fully comprehended in pure economic terms.

The post-Mao development strategy began by attempting to raise the level of consumption in the short run. On the one hand, a significant transfer of incomes from the state to the individuals was effected through a drastic revision of wage and price policies. On the other hand, both production and imports of consumables were stepped up. The result is a sharp increase in the share of consumption in national income and a corresponding decline in the rates of accumulation and investment. The rates of growth of national income and consumption, therefore, will almost certainly be lower in the future than they had been in the past.

Even the short-run growth of consumption, however, could not be achieved without stepping up the growth of agricultural production. A recognition of this led to the implementation of important structural reforms of the commune system. The reforms, originally intended to counter "bureaucratism" and "egalitarianism", appear to have altered the rural institutions quite fundamentally; some of the Maoist social objectives are apparently being sacrificed for the sake of short-run growth. The hallmarks of the emerging system are almost polar opposites to those of the earlier system - individual initiative in place of collective effort, specialisation and exchange in place of self-sufficiency, capital-investment in place of labour-investment, mobility in place of immobility of labour, and so on. Preliminary analysis suggests that the distinguishing features of future development in rural China are likely to be increased intra-regional inequalities, reduced inter-regional and rural-urban inequalities, increased internal migration, sharper division of labour, land-augmenting technological change in crop production and labour-augmenting technological change in other activities, lower rates of internal accumulation and investment and increased need for state investment in rural capital construction.

There is considerable risk, perhaps deliberately chosen, in all this. With reduced overall capacity of the state to invest and the increased need to invest in light industry, it will not be easy to maintain an adequate rate of investment in the production of farm inputs and in rural capital construction. There may thus be a temptation to assign an increasingly bigger role to private accumulation. But unless private accumulation is properly controlled, some of the cherished socialist goals will be in jeopardy. And if agriculture fails to sustain the momentum of growth, it will be difficult to prevent the emergence of unacceptable social inequalities through an inflationary redistribution of income.

Appendix table 1: Annual average per capita disposable
money income, 1952-1981

	Total population	Peasants	Workers and staff members
<hr/>			
1952	76	62	148
1957	102	79	205
1965	125	100	237
1975	158	124	324
1978	167*	134	316
1979	197	160	406
1980	236*	191	444
1981	266*	223	463

*Author's estimates

Sources: 1. Economic adjustments and reform, op.cit..
2. Beijing Review, various issues.
3. State Statistical Bureau, op.cit.

Appendix table 2: Average distributed collective income, 1957-78

	Annual distributed collective income per capita (yuan)*
1957	40.5
1975	63.2
1977	65.0
1978	74.0

*Distributed collective income is income distributed, in cash or in kind, to production team members out of net income of the team. It excludes income earned by team members from non-collective sources - private plots and other activities - as well as income from sales of manure by households to the collective and those wages in collective enterprises that are paid directly in cash to individual workers.

Source: World Bank

Appendix table 3: Wages of staff and workers in state-owned enterprises, 1952-81

	1952	1957	1965	1978	1978	1980	1981
Average annual wage in state-owned enterprises (yuan)	446	637	652	644	705	803	812

Source: State Statistical Bureau, op.cit.

Appendix table 4: Labour force and employment, 1952-81 (millions)

	1952	1957	1965	1978	1979	1980	1981
<u>Total labour force</u> ^a	207.29	237.71	286.70	398.56	405.81	418.96	432.80
<u>Employment by institutional sector:</u>							
Workers and staff, of which	16.03	31.01	49.65	94.99	99.67	104.44	109.4
State organisations ^b	15.80	24.51	37.38	74.51	76.93	80.19	83.72
Urban collectives	0.23	6.50	12.27	20.48	22.74	24.25	25.68
Commune workers	182.43	205.66	235.34	303.42	305.82	313.71	322.27
Urban self-employed	8.83	1.04	1.71	0.15	0.32	0.81	1.13

^a Includes those awaiting permanent jobs, most of whom are in temporary jobs.

^b Includes state farms

Source: State Statistical Bureau, op.cit.

Appendix table 5: Increase in national income for each 100 yuan of investment (yuan)

1953-57	35
1958-62	1
1963-65	57
1966-70	26
1971-75	16
1976	-10
1977	26
1978	34
1979	29
1980	23

Source: Dong Fureng, op.cit.

Appendix table 6: Relative rates of growth of light and heavy industries

	Average annual rate of growth	
	Light industry	Heavy industry
1950-52	29.0	48.9
1953-57	12.9	25.4
1958-62	1.1	6.6
1963-65	21.2	14.9
1966-78	8.3	11.8
1952-78	9.1	13.6
1979	9.6	7.7
1980	18.4	1.4
1981	14.1	-4.7

Source: State Statistical Bureau, op.cit.

Notes

¹ For evidence and discussion, see Feng Lanrin and Zhao Lükuan, "Urban unemployment in China", in Social Sciences in China, No. 1, 1982.

² That significant disguised unemployment exists in the communes is indicated by the following facts. Cultivated land area per agricultural worker declined from 9.35 mu in 1952 to 5.07 mu in 1978 (see Zhan Shuguang, "Reform the economic structure and increase the macro-economic results", in Social Sciences in China, No. 1, 1982). Mechanisation, as we shall see later, had progressed significantly over this period. The proportion of commune workers engaged in collective industrial activities was only 9 per cent in 1978. Labour productivity in agriculture was no higher in 1978 than during the First Five-Year Plan period. (See Yang Jianbai and Li Xuezheng, "The relations between agriculture, light industry and heavy industry in China", in Social Sciences in China, No. 2, 1980).

³ Policies in this respect in fact moved from one extreme to another, but viewed over the whole period 1952-78 there was very little net migration from rural to urban areas. For evidence and discussions, see Zhang Zhehou and Chen Yuguang, "On the relationship between the population structure and national economic development in China", in Social Sciences in China, No. 4, 1981, and Feng Lanrin and Zhao Lükuan, op.cit.

⁴ Indeed, plans for building settlements in sparsely populated areas and developing small urban centres throughout the country are currently being considered.

⁵ This study relies on data acquired either from official publications or directly from Chinese officials and academics in the course of a research trip undertaken in July-August 1982. As is well known, there are some unresolved problems of using these data, especially for purposes of international comparisons. While an awareness of these problems underlies the judgments made in this study, no attempt has been made to discuss the problems themselves. A discussion of some of them is available in D.H. Perkins: "Research on the economy of the People's Republic of China: a survey of the field", The Journal of Asian Studies, Vol. 42, No.2, February 1983.

⁶ In this respect, China differs radically from countries such as South Korea or Brazil, which also achieved high growth but relied on massive inflows of foreign resources.

⁷ Accumulation refers to that portion of the net income of the material production departments which is used to expand reproduction, to develop non-productive capital construction and to build up stocks of materials. Investment refers to funds allocated for new productive capital construction; it excludes funds used for non-productive capital construction, funds used as circulating capital, funds used for replacement purposes and funds used for

technical innovations. Estimates of accumulation and investment, as reported by the State Statistical Bureau, exclude those undertaken by the collective units out of their own resources.

⁸ For some evidence on profitability in light industries see Hi Jianzhang, Kuang Rilan and Zhang Zhouyuan, "Reform of the economic structure requires industrial pricing based on production price", in Social Sciences in China, No. 1, 1981.

⁹ The percentage distribution of gross income of the communes for China as a whole in the year 1978 was reported to be as follows:

Production and management costs	34.88
Taxes	3.35
Collective reserve	9.30
of which:	
accumulation fund	6.76
welfare fund	1.63
Distributed collective income	52.59

The share of production and management costs tends to vary directly and that of taxes tends to vary inversely with the level of gross income. The share of distributed collective income, however, shows a remarkable stability over time.

¹⁰ See Daily Report: China, (US Department of Commerce, Foreign Broadcast Information Services), 22 March 1982.

¹¹ The problem is underlined by the fact that the average per capita grain ration was actually below the level of 1957 during most years of the period 1958-78. See Yang Jianbai and Li Xuezheng, op.cit.

¹² Chinese sources claim, however, that many light industrial products including bicycles and sewing machines were in short supply. See, for example, Yang Jianbai and Li Xuezheng, ibid.

¹³ Cf. The World Bank, World Development Report, 1980 (Washington, D.C. 1980). It is particularly interesting to note that in India, a country comparable to China in many respects, the rate of growth of per capita private consumption over 1964/65 - 1977/78 was only 0.56 per cent in real terms. See Centre for Monitoring Indian Economy, Macro framework of Indian economy (Bombay, 1979).

¹⁴ This is only another way of saying that the rate of accumulation was higher in China than in most developing countries. Again a comparison with India is interesting. The ratio of consumption to national income in China and India was as follows:

China - 1952: 0.79, 1957: 0.75, 1965: 0.73, 1978: 0.63

India - 1964/65: 0.88, 1977/78: 0.78.

15 This means that the national rate of accumulation was a politically-determined parameter. This is indeed the view held by a majority of Chinese economists today. See, for example, Xue Muqiao, Chinese socialist economy (Beijing, Foreign Languages Press, 1981), and Xu Dixin, et. al., China's search for economic growth (Beijing, New World Press, 1982). It has been argued that over-accumulation is a common characteristic of all centrally planned economies and its explanation is to be sought in the institutional and political superstructure of these economies. Cf. Mario Nuti, "Socialism on earth", in Cambridge Journal of Economics, Vol. 5, No. 4, December 1981.

16 The average annual rate of growth of gross output (at constant prices) over the period 1952-78 was 9.1 per cent in light industry and 13.6 per cent in heavy industry (see Appendix table 6). Two points are immediately clear. First, the rate of growth of light industry in China compared favourably with that in most countries in the world. Second, the investment-output ratio was much lower in light industry than in heavy industry. In fact, the very high investment-output ratio in heavy industry was probably responsible for the very high investment-output ratio in the economy as a whole (see Appendix table 5).

17 A good example is urban housing. A recent survey of 182 major cities shows a decline in average per capita floor space over the period 1952-1978. See Liang Wensen and Tian Jianghai, "Final products: a new point of departure", in Social Sciences in China, No. 4, 1980.

18 Cf. Liang Wensen, "Balanced development of industry and agriculture", in Xu Dixin, et. al., China's search for economic growth (Beijing, New World Press, 1982).

19 Cf. State Statistical Bureau, op.cit. Significant amounts of oil-bearing crops and cotton had to be imported in order to maintain a modest growth in the production of edible oil and cotton cloth over the period.

20 A vigorous family planning programme is also being implemented, but its impact will be felt only in the long run.

21 The 18 major farm products include grains, oil-bearing crops, cotton, livestock, eggs, aquatic products, sugarbeet, sugarcane, hemp, ramie, silkworm cocoons, timber, bamboo and hides and skins. For each of these products, there is a state purchase quota fixed at the beginning of the year. For grains, cotton and oil-bearing crops, there is a second purchase quota for which prices paid are 30 - 50 per cent higher. Purchase prices refer to these two types of prices. All above-quota purchases by the state are at negotiated prices. Private sale of cotton is forbidden. Grains and oil-bearing crops can be sold in rural fairs or urban "free" markets only after state purchases have been completed, i.e. after the expiry of the date by which state purchases have to be completed.

22 Cf. State Statistical Bureau, op.cit.

23 See Beijing Review, 25 October 1982.

24 See Daily Report: China, 4 January 1983. Reportedly, imports of other farm products such as cotton, soyabeans, etc. have declined.

25 The rate of growth of production of selected items of farm inputs since 1978 has been as follows:

	<u>1978-79</u>	<u>1979-80</u>	<u>1980-81</u>
Chemical fertilizers	22.6	15.6	0.6
Large and medium tractors	10.7	-22.2	-46.0
Small tractors	-2.1	-32.4	-8.7

Source: State Statistical Bureau, op.cit.

26 For detailed and competent discussions, see Jürgen Domes, Socialism in the Chinese countryside (London, C. Hurst and Co., 1980) and the World Bank Report, China, Annex A, Washington D.C., 1981. For some interesting insights with regard to the collectivisation process, see Yan Lin, "The necessity, possibility and realisation of socialist transformation of China's agriculture", in Social Sciences in China, No. 1, 1982.

27 The nationwide average per capita grain ration declined quite sharply; it was 203 kg. in 1957, 198 kg. in 1958, 186.5 kg. in 1959 and 163.5 kg. in 1960. See Yang Jianbai and Li Xuezeng, op.cit. It is now known that famine conditions prevailed in some parts of China over the period 1959-61.

28 The basic document which outlined the methods of reorganisation is called "Regulations on the work of the rural people's communes, revised draft, September 1962", popularly known as "60 Regulations".

29 By 1978, commune and brigade-run enterprises accounted for about 27 per cent of the total income of the communes. Cf. State Statistical Bureau, op.cit.

30 See "The decision on some questions concerning the acceleration of agricultural development" published in Beijing Review, 24 March 1980.

31 See Beijing Review, 19 July 1982.

32 Similar efforts by the "Gang of Four" were largely unsuccessful.

33 Originally, this measure was intended to be applicable only to those teams which had not adopted the "household responsibility system". In practice, however, most production teams have expanded the share of area under private plots.

34 The norm varied across teams. In general, adult women were required to perform 200 days of collective labour. For adult men, the general norm was more than 200 days, but it varied depending upon the physical abilities and health conditions of the labourers.

35 At present, there are about 30,000 rural fairs and about 2,300 peasant markets in urban areas throughout China.

36 It will be argued in the following sub-section that in many areas the collective economy itself has been privatised to a great extent.

37 This is why private sideline activities tended to have an equalising influence on the distribution of income among peasant households.

38 See "60 Regulations", op.cit.

39 Within each grade, women workers were usually allotted less work-points per day than men.

40 For examples of other variants, see Jürgen Domes, "New policies in the communes: notes on rural societal structures in China, 1976-1981", in The Journal of Asian Studies, Vol XLI, No. 2, February 1982, and G.E. Johnson, "The production responsibility system in Chinese agriculture: some examples from Guangdong" in Pacific Affairs, Vol. 55, No. 2, 1982.

41 Efforts are reportedly being made to promote "mutual aid teams", but these may act as camouflage for labour hiring. Conditions of Chinese peasants today are far less precarious than they were in the 1950s. And even under the old commune system, households often made informal arrangements for transfer of work-points.

42 Cf. James E. Nickum, "Labour accumulation in rural China and its role since the Cultural Revolution", in Cambridge Journal of Economics, 1978, Vol. 2, pp. 273-286.

43 According to a recent report, peasant households who switched from crop production to specialised activities numbered about 70 million at the end of 1982. This excludes those households (about 30 million) whose working members are employed in commune and brigade-run enterprises. Of the 70 million, about 17.6 million engaged in animal husbandry, flower growing, fish breeding, etc., about 1.27 million engaged in private commerce and the rest engaged in service trades such as supplying seeds and fodder, providing agrotechnical services, servicing farm implements and transportation. See Beijing Review, March 18, 1983.

44 Since 1979, annual contribution to accumulation funds maintained by the communes has in fact declined in both absolute and relative terms. This is rather worrying though it is too soon to say if it represents a long-term trend.

⁴⁵ In principle, consumption could have been increased faster by exporting heavy industrial products and by importing consumables.

⁴⁶ A comparison with India helps to keep things in perspective. Since, in India, there was no attempt to guarantee a minimum level of living to the entire population, the level of consumption was not determined by the level of agricultural production to the same extent as in China. Consequently, India had a lower rate of accumulation and hence a lower rate of growth.

⁴⁷ Again it should be borne in mind that many of these problems exist in a large number of Third World countries which had traversed a totally different growth path.

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