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Martin Karcher

Unemployment and Underemployment in the People's Republic of China

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MARTIN KARCHER

Unemployment and Underemployment in the People's Republic of China*

1. INTRODUCTION

The failure to improve significantly the relative economic position of the poorest income groups has become a well-recognized problem for many developing countries. Indeed, while the rich and middle-income groups may have done rather well for themselves over the past two decades, the poorest segments of the population have often stagnated and, in some cases, fallen behind even in absolute terms. How is it that instead of 'trickling down', the benefits of growth have typically been soaked up by the more privileged? As economists and planners busy themselves in search of answers, they are increasingly turning their attention to the creation of employment opportunities, since employment is frequently the only source of income for the poor. The Pearson Commission Report on International Development noted with alarm: 'In many, if not most of them [developing countries], unemployment is turning into a major social problem and obstacle to development. The failure to create meaningful employment is the most tragic failure of development. All indications are that unemployment and under-utilization of human resources have increased in the 1960's and that the problem will grow even more serious.'¹

Given the apparent inefficiency of conventional remedies in curing these ills, economists are taking a look at different solutions, which have been tried out elsewhere. In an address to the 12th World Conference of the Society for International Development held in Ottawa in May 1971, Mahbub ul Haq, a former economic planner for Pakistan, now a World Bank official, stated: '... let me invite you to study the development experience of the largest developing country in the world — that of Mainland China. I visited it twice in the last few years and I must say that I was greatly impressed by its economic performance measured against ours in Pakistan. It was not obvious to me what the real rate of growth of China was but it was obvious to me that they had looked at the problem of development from the point of view of eradication of poverty and not to reach a certain prescribed per capita income level. It appeared that within a period of less than two decades, China has eradicated the worst forms of poverty; it has full employment, universal literacy and adequate health facilities; it suffers from no obvious malnutrition or squalor. What's more, it was my impression that China had achieved this at fairly modest rates of growth, by paying more attention to the content and distribution of GNP. In fact, China has proved that it is a

* I prepared this paper in 1973 as part of the Fellows Programme of the Centre for International Affairs, Harvard University, while on sabbatical leave from the World Bank. The views expressed are my own and not necessarily those of the World Bank.

fallacy that poverty can be removed and full employment achieved only at high rates of growth and over a period of many decades...'²

Is it possible that the most populous nation on earth, the country with 800,000,000 people, has managed to do away with unemployment? On the one hand, we have Premier Chou En-lai's word for it, when he remarked to Edgar Snow in 1964 that, while 'the present standard of living in China was of course much lower than that of the United States', the Chinese 'do not have five million unemployed'. On the other hand, according to the calculations of one economist, non-agricultural unemployment among male workers alone stood between 11 and 20 million people in 1960, i.e. between 17 and 28 per cent of the labour force.³

This paper examines communist China's experience with regard to unemployment and underemployment. The focus is not so much on the actual levels of unemployment and underemployment (for which data are patchy and scant) as on the manifestations and causes of unemployment and underemployment, and on the broad range of policy solutions which the communists have brought to bear on the problem.

For its information the paper relies mainly on the work of professional 'China watchers' who painstakingly piece together a coherent picture of China's development, through Chinese newspapers, journals, other publications, and broadcasts. The period 1950-57 is the best documented; in the enthusiasm of the 1958 Great Leap Forward statistical reporting suffered greatly, as local cadres tended to exaggerate the accomplishments of the drive. Serious readjustments became necessary in 1959, and with the ensuing crisis, 'statistics disappeared almost entirely from the Mainland China scene'.⁴ In fact, very few country-wide statistics have been released by the regime since 1960.

Unemployment statistics are no exception,

but the picture that emerges from an analysis of both quantitative and qualitative information on the subject is of sufficient interest to warrant a closer look by development planners at the other side of the bamboo curtain.

II. THE CONCEPTS OF UNEMPLOYMENT AND UNDEREMPLOYMENT

Tracing the historical approaches to the problems of labour utilization in his monumental study, *Asian Drama*, Gunnar Myrdal has shown that the concern about unemployment emerged rather recently in modern economic thought, largely as a result of the rise of working class pressures through trade unionism and greater participation in the political process of Western industrial countries.⁵ Consequently, employment analysis is more apt to describe conditions prevailing in industrialized countries than in the developing world, where labour organization and political structures are vastly different. Before proceeding with an analysis of unemployment and underemployment in China, it is useful, therefore, to define briefly these concepts, as they have come to be used in the West, and as we shall apply them to conditions in China.

Schematically, a person is unemployed when he is out of a job and seeking work for which he would be as qualified as someone else actually doing it, and willing to accept the same wage (and working conditions). This is often referred to as '*open unemployment*', and occurs mostly in cities, rather than in more traditional rural economies, where members of a family tend to share the work that is available. Underemployment, on the other hand, occurs in both urban and rural areas, and describes a situation in which 'a person's employment is inadequate in quantitative or qualitative terms, in relation to specific norms... *Visible underemployment* occurs when a person is in employment of less

than normal duration and is seeking or would accept additional work. *Invisible under-employment* occurs... (i) when a person's earning from employment are abnormally low, (ii) when his job does not permit full use of his highest existing capacity or skill...', or (iii) 'when a person is employed in an establishment or economic unit whose productivity is abnormally low'.⁶

Aside from the obvious difficulties of measurement and norm-setting, Myrdal points to a number of major conceptual problems that arise when attempting to transpose these definitions and the underlying assumptions to countries of South Asia. Many of these problems naturally also apply to conditions in China with its largely underdeveloped economy. Basically, the Western approach assumes that unemployment and under-employment indicate the presence of a labour reserve, which remains *involuntarily* idle or unproductive, at least temporarily; this reserve fails to be absorbed into the active labour force, mainly because of insufficient complementary factors of production, such as land and capital. Hence the solution will generally have to be sought mainly in the provision of more capital, through internal savings and net capital inflows from abroad.

In fact, Myrdal argues, a fundamental difference exists between the industrialized world, where this approach originated, and the developing countries, which are the focus of his study. In these countries: '... the bulk of the labor force is embedded in a climatic, social, cultural, and institutional matrix that not only tends to perpetuate present low levels of labor utilization, but also resists rapid and immediate adaptation to novel and unfamiliar ways of living and working. Idleness and low labor efficiency depend upon institutions, custom and tradition, attitudes toward work and leisure — including taboos and inhibitions related to status and to the participation of women in work. Moreover, the relevant attitudes are set in a framework

of institutions, and the relationship between attitudes and institutions is mutually reinforcing.'⁷

By focusing on 'involuntary' unemployment and underemployment, Western-inspired analyses tend to camouflage the under-utilization of labour, which is the important fact of economic life in the regions, says Myrdal. While social norms in the industrialized West require able-bodied adults to engage in productive activities, this does not hold for a large section of the population in developing countries. People may stay out of the active or productive labour force for a great variety of reasons, namely, because of religious or social prejudices against work in general or certain types of work in particular; inefficiencies in the labour market such as lack of mobility or information about job opportunities; extremely low nutritional standards which incapacitate people for physical or mental exertion; institutional patterns, such as inequitable land tenure, which do not reward the labourer for his work, etc. Conversely, some of the involuntarily unemployed are not necessarily the worst off economically. In the absence of any unemployment compensation scheme, poor people, especially heads of families, cannot stay out of work for very long and must find some occupation, however unsatisfactory, to sustain themselves and their families. It should not be surprising, therefore, to find that a large proportion of unemployed in urban areas often consists of relatively well-educated job seekers, for whom it is perfectly rational to wait for a good white-collar job as long as their families can provide for them.

Hence, one cannot restrict a study of unemployment and underemployment to those who are actively seeking work or better work. It is necessary also to look at the reasons why people stay out of the active labour force or engage in very low-productivity work, and to examine the policies which are being pursued that aim at increasing the rate of

participation of the potential labour force in economic activities and improving the labour efficiency. In this paper we shall attempt to outline the magnitude of the problems facing the Chinese communist leaders and to take stock of the policies which they have pursued, and which have had an impact both on the rate of participation of the labour force in China and on its efficiency.

III. THE LIMITATIONS OF QUANTITATIVE ASSESSMENTS

Unemployment and underemployment statistics are normally based on unemployment compensation rolls and on the results of labour sample surveys. In China, however, unemployment compensation schemes hardly exist, and the limited labour surveys that were conducted focused on employment and the characteristics of the active labour force, rather than on unemployment. Therefore, if one tries to estimate unemployment levels, it becomes necessary to work with the other side of equation, namely, with the size of the labour force and the number of jobs available; the difference will indicate the number of potentially employable workers who remain without a job. Estimating levels of underemployment is obviously out of the question without a special survey.

Several attempts have been made to estimate quantitatively the number of unemployed in China, at least in the non-agricultural sector

of the economy, and during the relatively well-documented years in the 1950s. In order to gain an impression of the orders of magnitude involved, we will briefly review the methodology and results of a study by Chi-ming Hou, whose thorough analysis probably went as far as was possible given the available information.⁸

The starting point for estimating the labour force is, of course, the population: its size, rate of growth, age composition and sex ratio. Several demographic investigations have been conducted in China since 1949; among those whose results are available in the West, at least in a fragmentary form, the 1953 census constitutes the only national census and is generally used as a basis for population projections. The census yielded a total of 583 million people as of 30 June 1953. A check on the accuracy of the census revealed a net undercount of 0.116 per cent, which 'would have made the Chinese Communist census the most accurate large-scale head count in the history of the world. The claim was both preposterous and foolish.'⁹ Moreover, the task of foreign demographers trying to estimate China's population was made still harder by the fact that the age-sex distribution obtained during the 1953 census was not officially published. A leading authority on China's demography, John S. Aird, thus saw himself compelled to come up with a range of projections based on various assumptions:

ESTIMATED POPULATION¹⁰

(January 1 figures in millions)

	1953	1960	1965	1970	1975	1980	1985
Lowest estimate ¹¹	576	662	715	779	853	926	960
Highest estimate	679	791	875	962	1,063	1,114	1,298

The degree of uncertainty is staggering. The difference between the highest and the lowest 1970 estimates is over 180 million people, almost equivalent to the entire population of the United States! Nor does it appear that the Chinese leaders themselves have completely reliable information on the subject. In 1962, Edgar Snow put the question to Mao Tse-tung: "...I asked Chairman Mao if he could give me the results of a "sampling census" reportedly taken the year before. He replied that he really did not know -- some said that there were 680 to 690 million but he did not believe it. How could there be so many."¹² Asked by Snow in January 1971 whether China's population had reached the 800 million mark, Premier Chou En-lai 'hesitated and replied, "No, not quite yet".¹³

Given the broad range of possible population figures, it is not surprising that labour force estimates are extremely perilous to make and vary widely. On the basis of his projections just cited, Aird arrives at labour force figures of 290 to 340 million in 1953, 330 to 400 million in 1965, and 450 to 650 million in 1985.¹⁴ Notwithstanding the uncertainties involved, Chi-ming Hou selected one time-series of population figures, based on official information, and close to Aird's lower estimate. Since agricultural employment data

were not available, he decided to limit his study to non-agricultural unemployment. This required making assumptions about the proportion of the population not engaged in agricultural and subsidiary activities. Although several official estimates of agricultural population were available, Hou rejected them, because 'they appear to be on the high side', in favour of lower estimates based on surveys conducted in the 1930s.

The reliability of total non-agricultural employment figures is probably more questionable still than that of the labour force estimates. After filling in missing data, extrapolating from past trends and making various other adjustments, Hou concludes that 'our total employment estimates, at least for 1955 to 1957, are probably as accurate as the available evidence permits. For other years, there remain reservations in view of the lack of data for certain traditional sectors. Therefore, the estimates... should not be regarded as a time series in the ordinary sense, with any high degree of precision.'¹⁵

By subtracting non-agricultural employment figures from non-agricultural labour figures, Hou arrives at the following estimates of non-agricultural male unemployment, which, for comparison purposes, we contrast with those of two other China scholars:

NON-AGRICULTURAL MALE UNEMPLOYMENT¹⁶

(as percentage of labour force)

	1949	1952	1955	1956	1957	1958	1959	1960
Hou : High estimates	31.7	22.3	29.6	29.2	31.6	14.9	24.2	28.3
Low estimates	18.2	7.5	16.8	16.5	19.5	0.3	12.4	17.3
Liu and Yeh ¹⁷	na	34	39	38	38	na	na	na

'How reasonable are these estimates?' ask Chen and Galenson, two experts on China's economy: 'The Liu-Yeh figures seem impossibly high from what we know of unemployment in underdeveloped countries. It is difficult to credit some of the Hou estimates. . . . The lower of the Hou estimates approaches the bounds of credibility.'¹⁸ Hou himself feels compelled to admit that 'Obviously, when unemployment is estimated as a residual, there is an enormous risk of error. Even a small margin of error in labour force or employment data may have a substantial effect on unemployment figures.'¹⁹ Moreover, as he puts it: 'Needless to say, the unemployment figures themselves tell nothing about *the nature or causes of unemployment*....'²⁰ [Italics mine]

To illustrate this last important point, it may be well to look at how the problem of unemployment among women has been dealt with. Hou decided to restrict his analysis to the male non-agricultural labour force, arguing that 'it is not possible to determine the number of housewives who unsuccessfully seek employment',²¹ and that 'in an economy like China's housewives have to do a considerable amount of work, and hence may be regarded as self-employed'.²² Others who write on the subject either disregard female unemployment entirely as did Hou, or feel bound to make debatable assumptions about it, as, for instance Christopher Howe, who opted for the following expedient: 'It will be noted that this estimate of the natural increases of the labor force assumes that *all* young women wish to work. This may not have been strictly the case but any young women who did not wish to work would almost certainly have been at least offset by women over sixteen in 1949 who were not then in employment, but subsequently wished to be so. This is an imperfect solution to the problem of involuntary female unemployment but seems preferable to approaches that have to fall back on estimates of male labor

supply only.'²³

Not only do these formalistic approaches seem to focus on involuntary unemployment, which, as we have seen, is at best inadequate, but they forget to ask *real* questions about the participation of women in the active labour force. The changing attitudes and policies, for example, are much more interesting than quantitative estimates based on rough-and-ready assumptions. Despite its propagandistic tone, the following statement by the 'Old Secretary' of a village in Northern Shensi reveals more about the emancipation of women than all the attempts at quantifying the unknown: 'The women work well. In the old days they weren't worth anything. Women were oppressed then, and people used to say: "An incompetent man can get about in nine countries, but a competent woman can only get round her cooking stove." When we began making our revolution, thirty years ago, the emancipation of women was one of the main points in our program. We sang songs about it. I can still remember them. We had a slogan: "Free their feet!" Now their feet are free and women can work in the fields, so now, both men and women share in cultivating the land. . . . Women are hard workers. Do you see that the women down there have baskets beside them as they weed, but the men don't? That's because the women aren't only weeding, they are collecting grass for the family's pig.'²⁴

IV. VISIBLE SYMPTOMS OF UNEMPLOYMENT AND UNDEREMPLOYMENT IN COMMUNIST CHINA

Thus if we are forced to conclude that making reliable estimates of even so much as open unemployment among urban males proves impracticable, and if the Chinese themselves do not collect or publish any nation-wide statistical series on the subject of unemployment or underemployment, is it still possible

to discuss these questions in a meaningful way? Or are we left having to choose between Premier Chou's boast of no unemployment and outside calculations leading to astronomical figures?

In fact there are strong indications that unemployment and underemployment have posed a serious challenge to the Chinese communists since their accession to power in 1949. Before analysing in some detail the policies aimed at alleviating this problem, let us review the evidence that points to unemployment and underemployment in modern China. The adoption of policies to correct the condition is itself part of the evidence that the condition exists, but we will defer most of the discussion of policies until the next section. Again the period up to the Great Leap Forward is the best documented. The evidence regarding that period consists primarily of information about both the relentless flow of peasants migrating to the cities and the authorities' determined efforts to slow it down. In addition, many official statements confirm the existence of the problem, which affected various sections of the population.

The question may be asked whether unemployment and underemployment were legacies of the past. Although Hou, in the same paper to which we referred already, implies 'that the problem of (urban) unemployment was not a matter of inheritance from the past', and even finds it 'difficult to believe that it would take a number of years to find employment for the four million unemployed in 1949',²⁵ it is generally agreed that the communists were confronted with severe open unemployment problems in the cities, as a result of the chaotic conditions created by years of war against Japan and of internal strife. Nor was this just a recent development. An authority on employment problems in China, John Philipp Emerson notes: 'The supply of labor has generally exceeded the demand for labour. . . . There is

nothing new in these conditions, since widespread unemployment has always been part of life in both town and country in China.'²⁶ Is it necessary to recall that underemployment, with its attendant hardships of low productivity, low income, and food scarcities, has been a traditional feature of rural China for centuries? Witness this description of the 1920-21 famine in North China (there were 1,828 famines in China between the years 108 B.C. and A.D. 1911!):²⁷ '... according to the best obtainable information, five hundred thousand of the natives perished. . . . At the height of the distress nearly twenty million people were destitute. In some of the worst affected districts not only was the entire reserve of food consumed but also all other vegetation. . . . The sale of women and children, particularly young girls, reached such proportions that a special committee was organized for the protection of children. Prices ranged from \$3.00 to 150.00, Chinese currency (one dollar in the United States currency equals approximately two Chinese dollars), and thus the sacrifice of one or two of the younger members of the family served to provide the wherewithal to purchase food for the rest.'²⁸

The most persistent symptom of unemployment and underemployment in communist China has not been outright famine, which except perhaps for the calamitous years of 1959-61 has mostly been avoided, but the constant stream of peasants migrating to the cities, despite increasingly strict government controls impelled by the shortage of food supplies and employment opportunities in the cities. While it is not possible to determine the total number of migrants with any degree of precision, the available estimates are fairly impressive. John Aird mentions official records which show 'a total of 8 million rural migrants into urban areas during the [First Five-Year Plan, 1953-57] period, in addition to an annual increment of 2 million accruing to the urban labour force through

natural increase, for all of which employment had to be found. The task was impossible. The economic base in the cities was too weak. . . .²⁹

What then were the causes of the great influx of peasants into urban areas, a movement which the authorities soon came to label the 'blind drift'? Obviously they were manifold, some closely related to unemployment and underemployment; their intensity fluctuated over time. Although no direct references are to be found in official documents about this problem, it is likely that the speed and, at times, the violence with which land reform was carried out in the late 1940s and early 1950s, must have contributed to the rural exodus. Not only did this affect the rich peasants who were at least partly deprived of their land, draft animals and farming implements, but also the middle and smaller peasants, as well as the former landless labourers: 'Many of the holdings resulting from land reform were too small to be viable, especially as the redistribution of draught animals and farming implements was not as far-reaching as the redistribution of land. Therefore the poor peasants and former landless labourers remained short of animals and equipment. At the same time their opportunity for employment by others had diminished as the more prosperous peasants became chary of hiring labor for fear of political ostracism and possible higher reclassification in the social scale.'³⁰ Similarly, recurring underemployment, as well as the generally depressed living conditions in the countryside, played a role in setting peasants on their way to the cities. Emerson cites the results of a 1955 survey which showed that 'in selected cooperatives in four provinces the labor force was without gainful employment on 17 to 35 per cent of all workdays'.³¹ Food shortages resulting from natural calamities were also responsible for sending large contingents of peasants to the cities, particularly in 1954 and in 1956. Last but not

least, the promise of comparatively more attractive conditions and opportunities in the cities exercised a strong pull.

Naturally many of the rural migrants were unable to find jobs in the cities, and, as we shall see, the government made concerted efforts to return them to the countryside. Nor did these efforts affect migrants only. Starting in 1957, two other categories of urban underemployed and potentially unemployed were being sent to the countryside, giving another measure of the problems facing the government with regard to employment. Under the cover of a 'personnel reorganization' drive, many redundant staff in party and government administration were being reassigned to rural areas. Similarly, graduates of primary and middle-schools who could not be accommodated in higher level institutions were sent to rural or frontier areas. 'By November 1957, 810,000 cadres had already been transferred to lower levels, of which 303,000 had gone into manual labor, mostly agriculture', and in September 1957, 'it was announced that more than 2,000,000 [primary and middle-school students] had recently gone to rural areas to participate in production'.³²

That the problem of labour utilization was proving intractable came into the open at the time of the 1957 campaign of 'Letting a Hundred Flowers Bloom', which encouraged public criticism of the regime's performance. Lack of adequate employment opportunities figured prominently among the reasons for dissatisfaction. In analysing the situation in Kwangtung, Tao Chu, the governor of the province, included the following three 'contradictions among the people': (i) unemployed workers wished employment; (ii) students who completed a given school were unable to find openings in more advanced institutions; (iii) veterans lacked appropriate work.³³ Although 'the publication of open criticism of the central government in an official local newspaper is a highly unusual

event', the first party secretary of Canton, Wang Te, was allowed to publish an article with the following statement: 'Twenty years ago, there was a saying in Canton that "electric lights aren't bright, telephones aren't clear, roads aren't smooth, and running water isn't pure". Now people are saying this is even more true today. "Unemployment is high, construction is low, and the subsidised food supply is tight".'³⁴

As we shall see in the next section, the government attempted in 1957-58 drastically to expand work opportunities for the masses in the drive that culminated in the Great Leap Forward. In the end, that effort proved unsuccessful, with the result that many of the symptoms of the 1950s recurred in the early 1960s. For instance, the government renewed its campaigns for arresting the migration of peasants to the cities and sending down large numbers of urban dwellers to the countryside. While even less information is available on that period than on the previous one, a notable feature of the 1960s is certainly the prominence of young people, particularly school graduates, among those affected by unemployment and underemployment.

Students (and ex-students) played a particularly conspicuous role during the 'Great Proletarian Cultural Revolution' in 1966 to 1969. Schools were closed in 1966, so that students could devote their energies to the tasks of 'consolidating the dictatorship of the proletariat, preventing capitalist restoration, and building socialism'.³⁵ But, while students became one of Mao's arms for furthering the Cultural Revolution, they also took this opportunity for venting their grievances. Basically they complained about the limited scope for advanced training, as well as about their enforced assignment to low-level jobs in the countryside, which to many of them appeared all but permanent. 'Behind the sense of deprivation loomed the contraction of economic opportunities after 1960. Although the capacity to feed the population

has roughly kept pace with population growth, economic opportunities have not kept pace with rising expectations. New and desirable opportunities, especially for young people, expanded so rapidly in the early and middle 1950's that this created unreasonably high expectations for youth who matured later. After the Great Leap Forward, not only were there no opportunities for youth, but with retrenchment some state employees were laid off.'³⁶

From the preceding description of some of the visible symptoms of unemployment and underemployment, it is clear that we would be remiss in taking Premier Chou's assessment of the employment situation entirely at face-value. Nonetheless, in studying the communist leaders' attitudes and policies toward labour utilization, it should become equally clear that their pride at their accomplishments is not wholly without foundation.

V. ATTITUDES AND POLICIES

For a proper understanding of the communist leaders' approach to labour utilization problems, it is necessary briefly to retrace the experiences that moulded their outlook before they came to power in 1949. Under the influence of Moscow and Marxist-Leninist orthodoxy, which regarded the urban proletariat as the motor of the revolution, the Chinese Communist Party first directed a great deal of its efforts toward building up a power base among the working class. Improved working conditions, higher wages, and the safeguarding of the workers' political rights were some of the main demands the communists battled for, after the foundation of the party in July 1921. In an heretical fashion, however, the Chinese communists recognized early on that the poor peasantry, and not the urban proletariat, would constitute the 'revolutionary vanguard' in China. In March

1927, on returning from an investigation of peasant conditions in Hunan province, Mao prophesied: 'For the present upsurge of the peasant movement is a colossal event. In a very short time, in China's Central, Southern, and Northern provinces, several hundred million peasants will rise like a mighty storm, like a hurricane, a force so swift and violent that no power, however great, will be able to hold it back.'³⁷

When Chiang Kai-shek all but wiped out the Communist Party's city organizations during the 1927 White Terror, the communists withdrew to the countryside, first to the mountain area of Kiangsi province in Central China, and later to Northern Shaensi province, after the now legendary Long March of 1934-35. It is from the experience gained in the base areas of Kiangsi and Northern China, including the lessons learned from mistakes, that the communist leaders evolved many of the policies which they would later apply to all of China after the victory in 1949.

1. The Yen-an Model: 'Large Feet' and 'Small Feet'

It would be preposterous, however, to expect to find a neat set of blueprints for policies directed at curing particular ills, such as employment and underemployment. Experiments in social and economic reform were not conducted in a 'test-tube' environment. In the face of repeated extermination campaigns launched by the Kuomintang against the communist base area in Kiangsi, sheer survival seemed at times an elusive objective. The Second United Front concluded in 1937 between the Kuomintang and the communists soon deteriorated and by the early 1940s, the communists were fighting both Japanese aggression and the Kuomintang blockade. In the economic sphere, increasing the production of food and manufactures thus became the central task. In the virtual absence of

capital goods and resources, this meant relying on hand labour and increasing labour productivity. It should not be surprising, therefore, to find that the labour-intensive approach adopted during that period foreshadows many of the solutions which the communists have brought to bear on unemployment and underemployment problems in the following decades.

In Section II, we concluded that in studying labour utilization we must look at the factors and policies that affect the rate of participation of the potential labour force in economic activities, as well as the labour efficiency. Many of the economic policies devised by the communist leaders in the base areas fall broadly into these two categories: (i) policies aimed at increasing the labour participation rate, and (ii) policies aimed at improving labour efficiency. In the following analysis, we will concentrate on the policies as they emerged in the communists' model area of Shensi-Kangsu-Ningsia (Shen-Kan-Ning Border area) in the early 1940s, and which Mark Selden describes as the 'Yenan Model for Economic Development'.³⁸

In their battle to increase production, the communists sought to enlist all individuals in the production process, particularly former 'non-producers', such as party and government cadres, students, women, and army personnel, as well as young people and old men. In 1941, for example, a movement to send cadres and students down 'to the village' started, ostensibly to assist peasants in the grain harvest. The movement expanded in the following years, and in addition to providing relief during peak production periods, students and cadres were also expected to serve as teachers and to strengthen local party and government organizations. While there is no gainsaying that for many this represented loss of status and even punishment, many among the young in particular felt enthusiastic about reaching out directly and helping the poor and oppressed.

Women were brought into the production process either by helping out in the fields, particularly when men were serving in the army, or by engaging in household production such as home weaving. Edgar Snow cites the following instruction 'which shows the efficiency with which the Reds went about utilizing their available materials': 'To mobilize women, boys, and old men to participate in spring planting and cultivation, each according to his ability to carry on either a principal or an auxiliary task in the labor processes or production. For example "large feet" (natural feet) and young women should be mobilized to organize production-teaching corps, with tasks varying from land-clearance up to the main tasks of agricultural production itself. Small feet (bound feet), young boys, and old men must be mobilized to help in weed pulling, collecting dung, and for other auxiliary tasks.'³⁹

Mark Selden sees the Yen-an era of wartime resistance as 'crucial in bringing Chinese women out of the home and into the mainstream of Chinese society . . . a period of major advance in the achievement of women's political, educational, and economic rights, commensurate with their positive new social contributions.'⁴⁰

As to the army, military units had not participated in production in Kiangsi as grain had been relatively easy to obtain. In the Shen-Kan-Ning Border area, however, particularly under the influence of the Kuomintang blockade, army units were increasingly called upon to meet their needs through their own efforts, thus lessening the burden on the rest of the population and 'creating a symbiotic relationship with the rural population through mutual resistance to Japanese invasion and the perpetual struggle to eke out a livelihood on the land'.⁴¹ Needless to say, this contrasted sharply with the practice of traditional armies, which had terrorized the peasants for centuries.

Enlisting all available hands in the

'production war' by itself was not sufficient to overcome shortages of food and manufactures. Turning to the other variable in the labour utilization equation, the communist leaders sought to increase the efficiency with which labour (and whatever limited capital there was) was put to use. From their experiences in land reform, they had learned that, while winning the poor peasants and landless labourers over to other side, the redistribution of land did not produce a concomitant 'economic revolution'. In fact, not only did the production patterns in the villages not change significantly, but the social upheaval created severe economic disruptions. Hence the necessity to organize the peasantry.

A 1943 editorial based on the policy suggested by the Party Central Committee explains clearly the need first to mobilize all available manpower, then to organize it efficiently: 'Production is the central task at present in the border regions, and agricultural production is even more the centre of production work as a whole. To fulfill this task, one must first of all rely on the more than 300,000-man full-time labour force and the more than 300,000-man part-time labour force of the villages in the border regions. One has only to organize these 600-700,000 people to make of them a powerful army of production, and to develop unparalleled heroic forces in them.

'But, to organize this several-hundred-thousand man labor force in the villages of the border regions even better, one must make use of a number of efficient methods, among which is to carry out labor mutual aid. . . .

'We know that it is vital in planting "not to violate the seasons". Whether you plant early or late can make a big difference, and harvesting late or early can also result in different yields. In order not "to violate the seasons", if you simply rely on individual and scattered labor, your difficulties will be compounded. But if you make use of mutual aid labor, the situation is very different. . . .'⁴²

Noting that several forms of mutual aid labour had traditionally existed in the region, the editorial emphasized the need to encourage and broaden them. In their present form, however, cooperative efforts were usually without leadership and restricted to a simple kinship group, short-termed and dominated by rich and middle peasants, or big work bosses who took unfair advantage of the labourers. Hence, while stressing the use of existing village organizations and the need to base cooperative efforts on the 'voluntarism of the masses', it was clear that the party should intervene. 'One must use the methods of appeal and mobilization through administrative power from the top down. But one must create a degree of volition and freedom on the part of the masses. If one only uses administrative power, power which is organized from the top down, then one cannot consolidate the system. But only to emphasize volition and freedom, and not make use of appeals and mobilization through strong administration, to organize positively, means that work will degenerate into *laissez-faire*.'⁴³

In industry, the policies shifted over time and responded to a combination of objectives. Mark Selden describes the development pattern of the textile industry in the border region over the 1938-43 period, and shows how the Kuomintang blockade induced the government to switch from small-scale enterprises to large public factories, which, however, were quickly supplanted by household production. Not only did household production make use of former 'non-producers', as we have already seen; it also enabled the government to cut down on investment outlays, to reduce distribution and transportation costs, and to disseminate new skills and ideas to previously isolated villages. Moreover, the decentralization of production rendered the economic apparatus less vulnerable to enemy attacks.⁴⁴

In assessing the success of the 'Yenan Model', which contains many elements of the

policies that would be followed in all of China after 1949, the question may legitimately be asked, to what extent were they implemented and how well did they work? Obviously information is severely wanting on the subject, but according to Mark Selden, 'the transition from an individual to a cooperative economy seems to have been extraordinarily smooth', thanks 'in large measure to the communists' skill in building upon traditional cooperative practices within the familiar village context'.⁴⁵ Moreover, grain production did increase, though not spectacularly, and impressive progress was achieved in textile production toward self-sufficiency for the region.

It must not be forgotten, however, that labour mobilization and production drives took place under conditions of war, when it is usually easier to exact greater efforts from the masses and change social patterns. How then would this strategy work under more 'normal' circumstances in post-war China?

2. *Development a la Soviet: The Mirage of Industrial Employment*

With the victory in 1949, the 'production war' was not over. For the communists who had swept to power, it had just begun! By virtually any standard, China was an economically underdeveloped country. Compared to the Soviet Union on the eve of her First Five-Year Plan (1928), China in 1952 produced less than half the amount of grain per capita, and had twelve times fewer kilometers of railway per million population.⁴⁶ To the Chinese leaders, the direction was clear, and after consolidating their power and restoring some semblance of order in the economy, they promptly turned their attention to the business of development, as well as defense.

Production again became the motto. Left to be selected was the road that would lead to rapid economic expansion. Having emerged from a century of foreign humiliation if not

outright domination, the Chinese could hardly be faulted for taking the Soviet route, which promised rapid growth, as well as security, i.e. independence from international trade, at least in the medium term. What the Soviet model of economic development meant was a high rate of investment (20 to 25 per cent of GNP), with a heavy emphasis on the industrial sector. Although agriculture would only receive a minor part of the investment funds, it was expected to produce the surplus necessary to pay the industrialization effort. It was far from an easy task when, as we have just pointed out, grain production per capita was less than half that of the Soviet Union in 1928. But, not only was China embarking on a Soviet-type strategy, she was attempting to do better still. 'Almost half of the Chinese First FYP [Five-Year Plan] went to industry (which includes mining and electric power, as well as manufacturing), considerably more than the first Soviet FYP allocated to this sector'.⁴⁷ How was this to be achieved? Would not the concentration of investments in capital-intensive industries exacerbate the 'employment problem'?

The Chinese leaders' attitude toward labour may throw some light on this issue. First we must recall that, during the formative Yen-an period, labour shortages, rather than labour surplus, had haunted them as a problem. In 1945, Mao wrote: 'Wherever we happen to be, we must treasure our manpower and material resources, and must not take a short view and indulge in wastefulness and extravagance.'⁴⁸ In contrast to many a statesman and economist deploring the ills of overpopulation, Mao tse-tung basically exhibited an optimistic view toward a large manpower base: 'A large population in China is a blessing. We can manage our country well even if her population is further increased several fold. The solution lies in increasing production. The fallacy maintained by Western capitalist economists such as Malthus that the increase of food lags behind

the increase of population has not only been theoretically refuted long ago by Marxists, it has been disproved by the facts, existent after the revolution of the Soviet Union and in the liberated region of China.'⁴⁹ As we shall see, even for the communists, the focal problem was going to be the stumbling block in their industrialization drive, but their positive attitude with regard to the productive potential of labour would enable them to experiment with original solutions, not without a measure of success.

Another factor which may have contributed to the view that labour could be in short supply is the experience of the Soviet Union, which had found it necessary to draw vast numbers of people from the countryside to man the newly built industries in the 1930s.

If we are correct in our assessment of the Chinese leadership attitude toward labour, it becomes easy to understand why they considered the early symptoms of unemployment in the urban areas as a temporary phenomenon that would resorb itself,⁵⁰ a threat to public order rather than a long enduring social and economic problem.⁵¹ In fact, non-agricultural employment did increase rapidly in the first three years of the communist regime, at an average annual rate of about 12 per cent, according to Emerson's estimates, from about 26.3 million to about 36.8 million.⁵² This, however, proved insufficient to meet fully the demand for jobs; nor, as might be expected, did the decision to force the pace of (heavy) industrialization and to socialize the private sector contribute much to the solution. As we shall see, agriculture and the rural handicraft industrial sector were to be the chosen instruments for labour absorption.

Investments in industry and the expansion of the demand for industrial goods resulted in the addition of some 2.6 million jobs only during the First Five-Year Plan period (1953-57), so that by the end of the period industrial employment accounted for less than 8 million jobs, about one-fifth of the total non-

agricultural employment.⁵³ In evaluating these figures, it must be kept in mind that China's industrial base was extremely small, and corresponded more closely to that of Russia in 1900 than to the Soviet Union of 1928. As for trade, handicrafts, and transport, which together with industry are the largest generators of employment, the number of jobs they provided decreased not only in relative, but also in absolute terms between 1952 and 1957, if we are to believe Emerson's estimates.⁵⁴ Much of the decline in trade and handicrafts employment opportunities can be traced to rural tradesmen and handicraftsmen being absorbed in agricultural producer cooperatives, particularly as a result of socialization.

Before turning to the agricultural sector, a word must be said about women as a source of non-agricultural labour in the period preceding the Great Leap Forward. The share of women in the work force increased only slightly during the First Five-Year Plan period, from 11.7 to 13.4 per cent, according to Emerson, and increases in female employment coincided mainly with upswings in the economy.⁵⁵ Although 'the Party's experience of economic administration in wartime had convinced it of the potential value of women workers' and although 'we find positive efforts to encourage female participation: yet whenever the urban labor market contracted, the whole apparatus of persuasion and propaganda had to be mobilised in an effort to keep women out of the labor force. This is what happened in 1952, although it was emphasized that restriction on female participation was only a short-term measure which would be unnecessary when large-scale construction began.'⁵⁶

By the end of the First Five-Year Plan period it was becoming increasingly evident that neither industry nor other urban industries and services would be able to provide the employment opportunities to meet the increasing demand for non-agricultural jobs.

The realization of Mao's vision, expressed in a 1945 address to the Seventh Party Congress, would have to be postponed indefinitely: 'The peasants are the future industrial workers of China and tens of millions of them will go into the cities. For if China wants to construct large-scale, indigenous industry and to build a great number of large, modern cities: then she will have to undergo a long process of transformation in which the rural population becomes residents of the cities.'⁵⁷ It is fair to add, however, that the Chinese leaders did not wait for the end of the First Five-Year Plan to come to the realization that employment needed to be created in the rural areas, or at least, that underemployment needed to be cut down to provide the wherewithal for economic modernization.

3. *Rural Development: Labour Shortages amidst Underemployment*

Clearly, it was in the agricultural sector that the game would be won or lost. The task at hand was formidable. The experiences gained in the base areas pointed the way. Land reform was, of course, the first step in breaking out of what Myrdal has called the 'social, cultural, and institutional matrix', that is responsible for low labour utilization and resistance to change. While the communists had substantially moderated their programme of land reform after 1937 as part of the second United Front agreement with the Kuomintang, the movement was resumed after the Japanese defeat. As Jack Belden, an experienced correspondent in China during the civil war, described it, the land concentration had already reached high levels before the Japanese war: 'People who note the incredibly small plots of Chinese farms are apt to draw conclusion that there are no larger land-holdings in China. But small fields, far from showing no land concentration, illustrate the backward nature of an economy in which the

landlords do not manage large farms for production, but parcel out their land to tenants in order to obtain rents. In Honan, south of the Yellow River, one might ride a donkey cart past scores of villages for a whole day and still be on the same family's land.... In northern Kiansu, there was a temple that owned two hundred thousand *mow* (thirty three thousand acres) of land. The chief monks, engaged in rent collecting and the practice of usury, maintained big families, including concubines, and had dwellings far grander than even the magistrates. Utterly dependent on the monks for farm tools, the tenants were often conscripted for labour by the armed guards of these ecclesiastical land owners.⁵⁸ During the Japanese war and thereafter, Belden reported, the Kuomintang 'bureaucrats and the militarists' started amassing land for themselves on a large scale, so that: 'The number of peasants dispossessed from their land because of unpaid mortgages and unpaid debts, both in Chiang's areas and in the Japanese-occupied areas, rose by untold thousands during the Japanese war. In the famine periods in North China, peasants who had to give land as security for grain borrowed during the spring, within a space of two or three years would lose everything. It was common for three or four members of a family of seven to starve to death for these reasons. Land concentration thus meant corpses to fertilize the earth, but it also meant thousands of souls for agrarian revolution.'⁵⁹

No wonder then that land reform led to excesses and to revolutionary terror, which, once the communists had come to power, they determined to stop. A new land law was promulgated in 1950, and land redistribution from then on was to proceed in a planned and orderly manner, without interfering with the main task of production. Land reform was substantially completed early in 1953, and while it 'did not lead to an economic revolution', it 'succeeded in destroying the traditional system of social stratification in

the rural areas',⁶⁰ thus paving the way for communist administration and organization of the villages.

As during the Yenan period, the communists turned to the establishment of mutual-aid teams, first on a temporary basis for the peak activity seasons, and later on a permanent basis. As previously, mutual-aid teams were to permit the pooling of labour, draft animals, and farming equipment, in order to promote a more efficient use of these factors. It appears that the success of these efforts was limited, as many of the teams only existed pro-forma, and did not function well in practice.⁶¹

Confronted with the resurgence of rich peasants and a growing gap between agricultural production and industrial needs, Mao tse-tung called for a speeding up of the pace of 'cooperativization' in a July 1955 speech. Agricultural producer cooperatives (APC's), some of which had already been set up in 1954, involved the pooling of land, in addition to labour, draft animals, and equipment. Besides preventing the 'bipolar differentiation in the countryside to get worse day by day', the objective of cooperativization was to increase production, as well as to improve employment conditions for the poorer peasants, for as Mao observed in that speech: 'Everyone has noticed in recent years that new rich peasants have sprung up everywhere, and that many well-to-do middle peasants are striving to become rich peasants. On the other hand, many poor peasants, lacking sufficient means of production, are still living in poverty: some are in debt, others are selling or renting their land.'⁶²

Having decided to pour the bulk of investment funds into industry, the leaders had considerably narrowed their choice of techniques for increasing agricultural output. To complete the technological revolution in agriculture on a nationwide basis would take twenty to twenty-five years, Mao reckoned. In the meantime, labour would have to carry the main burden, and labour-

intensive techniques and technical innovations requiring little investment would have to be used. The successful application of improved techniques, it was argued, depended 'upon the prior cooperativization and collectivization of agriculture; small-scale private agriculture could not supply the necessary conditions, such as savings, management or farm layout'.⁶³

Once the 1955 Fall harvest was in, cooperativization proceeded with great haste. The regulations had stipulated that collectivization should go forward on the basis of 'voluntariness' on the part of the peasants, so that it may seem startling that, by the end of 1956, almost 90 per cent of all the farm families had formed 'higher stage' cooperatives, also called collectives, in which all the land, except small private plots, was collectively owned. In contrast to 'early stage, semi-socialist' cooperatives, land rent was abolished, and personal income was derived entirely from labour, according to the number of days worked and the type of work performed.

Although these collectives were soon to give way to an even more radical form of organization, the 'people's communes', it is interesting to examine their effect on the problem of underemployment, which they had partly been designed to mitigate. On the one hand, collectives appear to have succeeded in increasing rural employment. The picture regarding labour efficiency, on the other hand, is much less impressive.

Was the degree of underemployment such that additional manpower could be readily mobilized to meet the ambitious production targets that accompanied collectivization? As it turned out, it seems that the planners misjudged both the potential labour that could be activated, and the incentives required to do so, with the result that whatever toil was expended did not produce commensurate accomplishments. In a fascinating study of agricultural organization during the 1956-1964 period, Kenneth Walker shows how

shortages of labour (and of draft animals), among other factors, played a crucial role in thwarting the efforts of the newly created collectives.⁶⁴ According to the Twelve-Year Plan for agricultural development published in 1956, the increase in agricultural output was to be obtained mostly by increasing yields on the already cultivated land, through change in cropping patterns, close planting, deep plowing and the more intensive use of traditional farming implements, all of which required greater manpower. Based on admittedly fragmentary evidence related mainly to the extension of double rice cropping in Kwangtung province, Walker reaches the conclusion that: '...in planning the extension of double cropping in 1956, the collectives should have been concerned primarily with the labor gap. Without a remarkable rise in labor productivity it was bound to be difficult and, in some cases impossible to increase the double cropped area, because of the shortage of labour alone. It should also have been obvious that in some areas it would be difficult to maintain traditional standards of cultivation on the existing area and quite impossible to raise standards where this involved (as it usually did) applying more labor. Attempts to increase the double-cropped area or the standard of cultivation were likely to destroy the delicate sequence of agricultural work.'⁶⁵

The problem was most serious in the summer when the time for harvesting the first crop and preparing the land for the second crop is very limited: about 25 to 30 days in Kwangtung province, which has the most favourable climatic conditions for double cropping in China. Thus very good organization and a timely supply of other inputs (draft animals, water, fertilizer, and good seed) were required to permit double cropping. As there was a shortage of draft animals over a wide area of south and central China, according to Walker, many collectives had to substitute human labour for draft animals: 'In the

Hwangpu district of Kwangtung, the *hsiang*⁶⁶ Party branch organized fifty-one labour teams as substitutes for animals, consisting of 5 men per plow and 2 men per harrow.⁶⁷

Not only were peasants being worked very hard during the harvest and sowing periods, but during the slack periods as well. One of the objectives of collectivization had been to eliminate 'most of the difficulties in the way of effective utilization of seasonally unemployed labor for road and irrigation-works construction. . . since the benefits would accrue to the whole village and could, if necessary, be prorated to benefit most those who had done the work'.⁶⁸ Many collectives did, in fact, undertake construction works which, often because of their long-term unproductive (and sometimes counter-productive) nature, resulted in a dilution of the value of the labour day payable to the peasants.

That such an intensive effort could not be sustained for long was demonstrated in 1957, when, following a decision to decentralize agricultural planning and to provide more material incentives to the peasants, collectives could not be persuaded to set high targets for grain production and, in fact, transferred part of the land from grain to more valuable economic crops or to private plots. Absenteeism from collective work became a problem, as peasants were devoting more time and fertilizer to their private plots and to cash crops, thus contributing to the grain shortage which bad weather conditions further exacerbated. As Walker put it: '...it is clear that from the government's point of view the experiment in liberalization misfired. . . . Now the government had to regain control and consolidate collective agriculture, without reverting to the excesses of 1956.'⁶⁹

As might be expected, the disappointing results in agriculture could not help but have repercussions in the urban areas. First, they fed the continuous flow of peasants migrating to the cities in search of better living conditions, although it must be said that the

government's 'minimum wage policy prior to 1958 [also] tended to aggravate the problem. These wages were generally much higher than those received by farmers doing comparable work.'⁷⁰ Not only did the heavy migration to the cities leave some of the collectives 'with insufficient labor for the peak periods of agricultural activity'⁷¹ it also 'increased urban unemployment and necessitated heavier grain extractions from the countryside'.⁷² Secondly, it disrupted the urban economy in still another way, by reducing the supply of raw materials to a considerable section of industry. Ezra Vogel describes the situation in 1957 in Canton: 'Because of grain shortages, the area devoted to industrial crops, which had expanded in early 1957 by some 4,000,000 *mou* (when only 18,500,000 *mou* in Kwangtung was then in cultivation) was reduced in late 1957. Because over 70 per cent of the value of the provincial industrial output depended on raw materials produced from agriculture, this cut back seriously affected industrial production.'⁷³

From the collectivization experience of 1956 and 1957, one is tempted to conclude that, while it is possible to expand employment opportunities in the short run, the supply of labour quickly dries out in the absence of productive work and real material incentives. Disregarding this logic, in late 1957 and 1958 the communists redoubled their efforts and launched a campaign to achieve in one 'Great Leap Forward' what had eluded even the most dedicated planners elsewhere.

4. *The Great Leap: Sub-zero Unemployment?*

The facts are familiar: 'What had started as a movement aimed at "overtaking England in fifteen years in industrial production" quickly became a gigantic nation-wide mass movement which affected city and country alike. . . . On September 24, 1957, a joint resolution of the Central Committee and the State Council

announced a new movement to build and improve water works. By the end of the year, the movement had become a 'high tide' with 'six hundred million people throughout the country hauling themselves into a campaign to build water works'.⁷⁴ With the assignment of labour to construction works and the renewed migration to the cities in response to the promise of expanding opportunities there, a severe labour shortage developed in mid-1958, which led to the enlistment of women for agricultural work, a rearrangement of the family life of the peasants, the amalgamation of the collectives into larger units permitting the creation of 'specialized brigades', and finally the emergence of 'people's communes', which were officially launched in August 1958.

In an atmosphere of general mass mobilization, peasants were driven to work longer and longer hours, to the point where the party had to remind cadres at the end of 1958, that they should be given eight hours of sleep and four hours for meals and rest every day (except during the peak agricultural seasons)! The same frenzy soon engulfed the cities. To talk of unemployment under such extraordinary circumstances (even for China) becomes meaningless: even Chi-ming Hou derives a low estimate of non-agricultural urban male unemployment of only 0.3 per cent in 1958⁷⁵—and a slight change in but one of his assumptions might easily have yielded a negative unemployment rate!

The Great Leap Forward was truly an experiment in full employment conducted on the largest scale ever. Kenneth Walker argues that the decision to push ahead with the Great Leap Forward was really taken against the backdrop of the poor performance of agriculture in 1957, which had created a serious economic and political situation for the government. Left to themselves, the collectives were again setting overly modest targets of production for 1958, which further threatened to aggravate the problems in the cities and to

reduce the pace of industrialization.⁷⁶ The radicals in the party, who 'demanded that the revolution be consummated at "high speed", and that social mobilization be used to bring about a technological revolution in agriculture', evidently carried the day.⁷⁷

Again the leaders were able — probably not without some encouragement 'from the top down' — to expand greatly both the participation rate and the duration of work. 'The amount of work done in rural China during 1958, measured in man hours of physical labor, was truly remarkable, quite apart from the result of the work. More women were induced to join the labor force and all peasants worked longer hours than before.'⁷⁸ Again the flaw in the strategy would come from the inability to control that other variable in the labour utilization equation, labour efficiency. The belief that a massive application of manpower would add substantially to China's economic production would founder largely on this problem. A new category of labourer was being created: that of the overworked underemployed.

While tilling the land, sowing, and harvesting should most certainly have received first priority, indications are that other activities at times competed for the available manpower. One observer, for instance, mentions that the mobilization of 'tens of millions of peasants' to repair irrigation works and to collect organic fertilizers throughout the countryside lasted from November 1957 well into the spring of 1958, and that 'when the time for spring planting arrived, a labor shortage began to be felt'.⁷⁹ Similarly, Franz Schurmann writes: 'As the Great Leap Forward imposed new tasks on the APCs [collectives], such as the setting up of small industries . . . it was necessary to draw labor from several villages or APCs to operate them. When the summer harvest came and the crop was good, the labor shortage became apparent. It was even more necessary to shift work teams from village to village and

throw them into the production front as the needs arose.' This gave rise to 'specialized brigades', which became the short-lived forerunners of the 'communes'; already by September 1958, 98 per cent of the peasant population had been organized into communes. Nor did the formation of communes do much to improve the situation: 'It was hoped that by mechanizing agriculture, large numbers of workers could be released for other tasks. Indeed even without waiting for mechanization, many communes in the autumn of 1958 switched 30-50 per cent of their labor to mining and the making of coke, charcoal, and the smelting of iron and steel in small primitive furnaces. "If the commune movement had not occurred", wrote the Minister of Agriculture, "it would have been impossible to withdraw such a large amount of manpower from the agricultural front, during the tense, brisk autumn season." The failure to gather in much of the 1958 harvest which resulted from this over assurance, led to a reversal in policy.'⁸¹

Not only was the autumn harvest not entirely gathered, but with the production war having escalated into a statistical overkill, many of the communes distributed an excessive amount of food for consumption, and even reduced the area sown in grain for the following year.

The disappointing results in agriculture were matched by those of the attempts at rural industrialization: 'In the meanwhile, a large majority of the so-called furnaces were not able to produce, and most of those that could, came up with products so poor in quality that for modern mills raw materials were of more use. Both manpower and materials were misused. The project was finally abandoned in the spring of 1959 as a movement, although industrial production by indigenous methods was allowed to continue to grow in localities where limited success with good prospects had obtained.'⁸²

How did the cities fare during this period

of intense activity in the countryside? Despite strongly worded directives and energetic measures against the flow of rural migrants to the cities, the urban population kept increasing at a rapid pace. Twenty million people were added to the cities and mining areas over the 1958-60 period, according to a Chinese source.⁸³ In view of the persistence of unemployment in the cities, it was only natural that communization should spread to the cities during the Great Leap Forward. Production, here also, 'was the main obsession of the cadres who organized the communes': 'Despite the ideal of making the commune into an integrated unit of administration, living, and production, it was the latter which was the basic aim of urban communization. The Chinese Communists wanted to take an underemployed population and put it to good use in production. Setting up communes of the Chengchow type was feasible because it was centred around a major factory nucleus. But the real challenge came in trying to impose a common production focus on purely residential areas. This was particularly difficult in many of the smaller, non-industrial cities. There, too, large numbers of underemployed people existed. The cadres felt that labor was the energy, and organization was the magic key, that could make any residential area into a unit of production. Labor and organization would replace capital. All that was needed were waste materials, idle hands, and organization; thereupon street industries would come into being, which could then become producers of capital and ultimately a part of an expanding industrial network.'⁸⁴ Street industries did in fact become the dominant mode of communization, as large-scale urban communes proved to be too much of an administrative headache. Street industries were producing a great variety of goods, ranging from shoes, hats, paper, specialized handicrafts, to manufactured goods for large factories.

The main source of labour force came from

women, many of whom were working outside the household for the first time. Here was an opportunity to put into practice the communists' long proclaimed aim of equality between men and women. While the more traditional ("bourgeois") women resisted being drawn into the new way of life, many showed great enthusiasm; witness this local newspaper report about the Kweiyang commune, where some women 'got so excited in working that they forgot to eat, forgot to sleep, forgot to return home... Housewives who earlier simply took care of their own homes now cared about each other and helped each other.'⁸⁵

As in the case of rural communes, the results of urban communes and street industries did not measure up to the efforts that were deployed. When severe shortages of materials and other inputs occurred, commune work had to be discontinued or stopped entirely. Many street industries, however, survived in the form of small-scale private enterprises which the regime allowed to resurface after 1961.

The Great Leap Forward has been blazoned abroad as a resounding failure, and while it is true that the Chinese economy suffered greatly and, according to some, verged on collapse, it is fair to point out that it coincided with particularly bad weather conditions, as well as with the Sino-Soviet rift. Moreover, even if it failed as an experiment in social and economic management, it provided useful lessons for the future. As Chou En-lai put it to Edgar Snow in 1964: '... frankly speaking, as the Premier I have not fully mastered China's economic construction which has been carried on for fifteen years. I have learned something, but not very well. We are all learning. The laws governing economic development are extremely complicated. We have gained some experience, but we have to acquire much more experience.... One must acquire both positive and negative experience.... In our view, only when we

dare to face up to difficulties can we overcome them, and only when we dare to admit our shortcomings and mistakes can we rectify them.'⁸⁶

5. *Agricultural Mechanization: A Solution to Underemployment*

Hard as they are to get under way, all-out mobilization and mass enthusiasm are even more difficult to sustain in the face of disappointing results. Although efforts to revitalize the Great Leap were still being made in 1959, by 1960 it was beyond doubt that it had run its course, and that the direction had been mostly backward rather than forward. In its wake the leaders faced their most serious economic and political situation since coming to power.

As the attempts to 'Take the Whole Country as a Coordinated Chess Game' and to inject some order into an economy in disarray proved belated and futile, a severe depression and vast urban unemployment ensued. The transportation system broke down; for lack of raw materials and energy, industrial plants either curtailed production or ceased producing entirely. Many new projects that were in the process of being set up had to be abandoned. Unemployment shot up, particularly since, as we have seen, vast numbers of people had migrated to the cities during the Great Leap period.

When the government announced its decision to give first priority to agriculture in March 1960, a significant number of cadres were dispatched to the countryside 'to firm up the rural leadership and to increase the food supply'.⁸⁷ Moreover, students, army personnel, factory and school cadres, and unemployed workers were 'sent down', mainly to aid agriculture at least during the busy harvesting and transplanting seasons, but also to reduce the demand on scarce food supplies in the cities. Once it became clear

that the crisis in agriculture could not be solved in short order, the government launched a forceful campaign to return excess population from the cities to the rural areas, as part of a 10-point economic readjustment programme adopted by the National People's Congress in April 1962. In contrast to the previous campaigns, which were more of a temporary nature, the 1962 campaign sought to return people to their native villages more or less for good. Precise figures are lacking as to the number of people who were actually transferred back to the rural areas, but it must have been quite large. As one official interviewed in 1964 by Anna Louise Strong put it: '...We have drawn too much manpower from the rural areas to the cities. ...Natural calamities show that our urban population is greater than what our countryside can supply. While our industry has been modernized, agriculture has not yet been mechanized. And until the mechanization of agriculture takes place, our urban population must be reduced from 130 million persons to 110 million.'⁸⁸

The government thus recognized that the urban industrial base was too vulnerable to the vagaries of agriculture to provide steady employment opportunities to an expanding urban population. Was it fair, however, to blame the failures of agricultural production entirely on 'natural calamities'? In reviewing the developments in agriculture which followed the Great Leap, we find that the government recognized that something more than natural calamities was involved in thwarting the Great Leap efforts in agriculture, and that mechanization, rather than aggravating the employment situation, was a necessary condition for its improvement.

Indeed, among the lessons learned during the tumultuous years of the latter 1950s, one was that the sheer application of seemingly unlimited manpower to agriculture and subsidiary activities would not engender success for Mao tse-tung's 'Walking on Two Legs' policy,

i.e. for the simultaneous development of a modern industrial sector and of a traditional but expanding rural economy. True, the communes had been hastily organized in the summer of 1958, and many of the cadres were not sufficiently familiar with the local conditions. True also, by taking away the peasants' private plots and paying wages 'to each according to his needs', communization substantially reduced the peasants' incentive to work hard. Nevertheless, even after some of the worst mistakes had been corrected and some incentives restored, labour shortages kept occurring. Kenneth Walker writes: 'No detailed official figures of sown areas or agricultural production were published for 1959 or 1960, but there is enough evidence that the shortage of farm labor was acute and must have impeded production.... In 1960, as a result of government efforts and the high level of urban unemployment (due to shortage of food and raw materials), the population drift to the towns was reversed. Nevertheless, in Kwangtung, where one million workers returned to agricultural work, there were reports throughout the summer that an acute labor shortage was impeding agricultural work connected with the second rice crop.'⁸⁹ Thus, despite the government's singular ability to mobilize the masses through a powerful party and campaign apparatus, it was becoming clear that labour, by itself, could not shoulder the burden of agricultural development.

The solution lay in increasing the productivity of labour. And how was that to be done? A 1959 editorial in the *People's Daily* discussed the alternatives: 'One way is by increasing the enthusiasm of man for labor. This requires... the development of the spirit that leads man to exert his utmost. ...There is, however, a limit to this way of increasing the rate of productivity of agricultural labor. . . . The only fundamental way to increase the rate of productivity of agri-

cultural labor is by the gradual realization of mechanization and electrification.⁹⁰ The limit of physical exertion through mass-induced enthusiasm had no doubt been reached, when the peasants, after a decade of continuous reorganization, balked at meeting ever-increasing production targets. However, more than general exhaustion may have been at play. In his comprehensive study of *Agricultural Development in China: 1368-1968*, Dwight Perkins carries Kenneth Walker's argument about the labour gap a step further by suggesting that '... in the twentieth century and particularly in the 1950's and 1960's changes occurred that made it impossible for the "traditional" system to feed China without outside help.'⁹¹ These changes were the accelerated population growth rate — some 2 per cent after 1950, compared to less than 1 per cent in even the highest years prior to the twentieth century — the filling up of Manchuria, and the limited opportunities for the extension of irrigation by means of traditional water-control works. Moreover, land reclamation was costly, and would have required considerable investment allocations by the state.⁹²

According to Perkins, therefore, 'although the Chinese government was able to promote several "one-shot" increases in grain output in the 1950's by essentially "traditional" means (e.g., water-control construction in the southwest and the expansion of the double-cropped area of rice), opportunities of this type were quickly exhausted'.⁹³ Hence, it became indispensable to promote the modernization of agriculture through technological means which, while remaining labour-intensive, would increase labour productivity. Three such main areas of technological advance were (i) mechanized and semi-mechanized farm implements, (ii) improved water control, and (iii) chemical fertilizers.

At first, farm mechanization was largely conceived as the extensive use of big tractors. Chen and Galenson list a number of compell-

ing reasons why the use of tractors did not spread quickly; among them, the lack of investment resources and technology, the shortage of materials and fuel, the lack of effective demand due to the peasants' low purchasing power, the small size of farms and the presence of irrigation canals, trees, ditches and ponds, and 'last but not least, the relative abundance of rural labor and the extreme scarcity of capital', which 'makes the large-scale use of tractors uneconomical'.⁹⁴ Instead, given the labour shortage which occurred during the harvest and transplanting season, attention was turned to finding implements that would save labour during that period or prolong the period by increasing the availability of water. As a result, the Chinese have greatly expanded the supply of mechanized or electrical irrigation and drainage equipment, whose motors may also be used to power other machinery, as for instance threshers at harvest time. Mechanical irrigation, moreover, saves land and is more efficient than irrigation by human and animal power, especially in the event of heavy rains or floods.⁹⁵

Obviously mechanization spread unevenly, resulting in wide regional differences. Speaking of the 'dramatic contrasts in the economy', Chou En-lai cited the following example during his 1964 interview with Edgar Snow: 'For instance, in Chitung county along the coast, which is situated to the southeast of Nantung, where practically all the lands are irrigated fields, there are not even any oxen, let alone agricultural machines. Why? There is no need. Each peasant has only a *mou* or more of land. And the yield is high Practically all the lands are water-soaked and can be worked by manual labour There is a dense network of rivers and canals in the area where the manure is carried in very small boats or by people with shoulder poles. But the yield is high and the people there are rather well off. How will mechaniza-

tion be realized in those places? This remains a subject for further study.⁹⁶ Ross Terrill, a recent visitor to China, remarks about the 'enormous variation' that marks rural conditions: 'In ten hours' driving through the wheatlands of north Shensi, I saw only two tractors. In Hunan, by contrast, the nippy two-wheeled tractor, now made in many Chinese cities, was everywhere, and here and there four-wheelers also.

'Along the unpaved roads of north Shensi you do not see much sign of "modernity". Carts inch by, with rocks for the building of the Sian-Yenan railroad — they are pulled by a man or a woman . . . By the roadside, scores of people of both sexes and all ages squat, breaking up big rocks into smaller by hand for railroad construction. Mostly the wheat is harvested with a rude scythe — often a piece of metal tied to a handle with a string. As for threshing, I learned a new method on the rolling plains of Shensi — and promised the laughing peasants I'd transmit it back to Australia. These brown, wily types — who look quite dramatic in their headdress of toweling, a provincial feature — take the wheat, after they have cut it, and spread it on the road. On the paved part of the journey north from Sian we drove over frequent stretches of it. The vehicle is the thresher. When enough trucks or wagons have passed over the wheat, boys take away the husks, and the grain is swept up by grateful farmers and put into bags. . . .'⁹⁷

In addition to mechanization and semi-mechanization, improved water-control and chemical fertilizers represent, as we have noted, important avenues for increasing labour productivity. With regard to irrigation works, a number of large-scale projects were started in the 1950s, but most have not been completed due to scarce funds. During the Great Leap period, many small projects were undertaken, but for lack of sound preparation and management, a considerable number of these were not completed successfully. 'Since

1961.. emphasis has been placed on improving and repairing the reservoirs already built, linking up existing irrigation systems, and strengthening the management of irrigation work. . . . This does not mean that the state will not invest in large projects. . . . But the main effort will apparently be concentrated on small local works because 'such construction requires much less outlay in investment than the construction of large or medium-sized engineering work, and shows quicker results'.⁹⁸

Once the availability of water is assured, the use of chemical fertilizers (with improved seeds) is perhaps the most rewarding path to higher productivity of land and labour. In addition to some large fertilizer plants, a great number of small plants have been built throughout China, which have the advantage of minimizing storage and transportation costs. According to recent information (January 1972), the local plants now account for as much as 60 per cent of the total production of chemical fertilizer.⁹⁹

6. *Self-Reliance and Self-Sufficiency: 'Do-It-Yourself' Emphasis*

It is interesting to note here the great emphasis in the agricultural development programme placed on modest and relatively unsophisticated projects and equipment, adaptable to local conditions, and within the capability of local management and resources. This may well be the result of another important lesson brought home by the Great Leap's near-failure: the need to decentralize the economy. The policy to 'Take the Whole Country as a Coordinated Chess Game' simply could not be made to work; the board was too big and the pawns too many. This became particularly apparent with the creation of the communes in 1958. Even at that level, centralization and the implementation of 'universalistic' work methods reduced

productivity. 'So did shifting labor about like military platoons within the commune. China's intensive hand-gardening agriculture could not be organized on the big scale of the Russian kolkhoz, especially in the absence of mechanization.'¹⁰⁰ Similarly, as we have seen, the attempts at industrialization floundered during the Great Leap when centralized planning was impotent in delivering the raw materials, energy, and food supplies. The reason for recalling these facts is that the resultant policy of economic decentralization, which was strengthened by the organizational shake-up of the Cultural Revolution, has important bearings on the question of unemployment and underemployment.

While some sectors of the economy remain under strict central government control, such as the 'industrial-military complex', there has been a tendency toward what Audrey Donnithorne calls 'a cellular economy',¹⁰¹ i.e. the fragmentation of the economy into large numbers of local enterprises and communities operating on the twin principles of self-reliance and self-sufficiency. 'Self-reliance implies the ability to improvise out of one's own resources, rather than rely on planned coordination and state investment grants.'¹⁰² Self-sufficiency, which is its corollary, seeks to increase the proportion of the demand of intermediate and consumer goods that is met from within an enterprise or a local community, or even a province, thus reducing the dependence on outside sources of supply. While savings in transportation costs and investments resulting from this policy may represent a significant benefit for China today, the costs of self-sufficiency are not negligible either; they comprise the potential waste arising from the loss of specialization and economies of scale. On the other hand, employment generation may be enhanced in the short run, even at the cost of a reduction in labour productivity.

Contrasting with conventional economic development analysis that emphasizes invest-

ment resource gaps and, almost in the same breath, the benefits of external assistance as key elements of economic growth, 'self-reliance' may have a lot to recommend itself, by placing the responsibility for development squarely and realistically on the production team or on the community who must assume it. Psychologically, it is probably more effective in mobilizing human energies and inventiveness than an attitude of dependency fostered by the hope of outside assistance.

A priori the merits of 'self-sufficiency' are a good deal less obvious. Why should half of China's countries have established a full set of the 'Five Small Industries', producing pig iron and steel, cement, chemical fertilizers, energy (coal and/or electricity), and machinery? While it is easier to see the rationale for the two other categories of local industry that are also being set up throughout China's countries, namely, the 'three-level agricultural machinery repair and manufacturing network', and the agricultural and side-line products processing plants, the question remains: is self-sufficiency a means to provide work to members of an enterprise or community who would otherwise remain unemployed or underemployed?

Jon Sigurdson, who recently visited some 20 small industrial enterprises in two Chinese countries, offers the following answer: 'Western economists have argued that the Chinese emphasis on small and medium local industries in rural areas has been motivated by a need to create employment to absorb manpower outside the established industrial centers. This may be so, in the long run, but there is little to support the view that this is a short-term objective. The view that mechanization was not needed since China had plenty of manpower but little land was refuted in 1971. The requirements for manpower in agriculture, it was stated, had increased considerably as a result of more transplanting, improvement in farming standards and the expansion of arable land. Consequently the discrepancy between

agricultural development and insufficiency of manpower was becoming increasingly prominent.¹⁰³ Relying on locally manufactured machinery, moreover, has the advantage that it will be better adapted to the particular conditions of the region, and production can be promptly adjusted to meet changing needs. In addition: 'It is likely that the gradual approach of local industrialization leads to the development of technologies which are less dependent on highly qualified technicians than would otherwise have been the case. At the same time, a problem-solving capacity, in finding the most appropriate machinery and other needed equipment, is gradually built up. People also acquire the know-how for setting up new enterprises and expanding existing ones without having to rely on outside capital, skills and equipment.'¹⁰⁴

Finally, as Sigurdson points out, 'the building of widely dispersed small and medium enterprises will . . . help integrate industry with agriculture and town and countryside, thereby creating conditions for eliminating the "three great differences", between workers and peasants, town and countryside and mental and physical labor'.¹⁰⁵ Thus, while rural industrialization may not be aimed primarily at reducing unemployment or underemployment, it may, if successful, help prevent a recurrence of large-scale migration to the cities, with its attendant social and economic problems.

VI. CONCLUSION

From what we have seen, the 'production war' has been the communists' overriding economic objective from the 1930s up to the present. In seeking to expand production and to narrow the gap between China and the industrialized countries, the communist leaders looked upon the masses and 'their

boundless creative powers' as a reservoir of untapped energy from which the country's economic transformation would spring forth. Underemployment among the peasants, so the communists at first thought, could be converted into productive activity through social reform and political control. As the evidence presented in this paper suggests, this proved impossible within the existing technological framework of Chinese agriculture. It became necessary, therefore, to modernize agriculture, relegating the industrialization drive to second place, temporarily. City unemployment, on the other hand, was first regarded as a passing phenomenon resulting from years of war and economic mismanagement by the Kuomintang. When it persisted well after the initial recovery and even increased, the Chinese leaders tried to reduce it by stemming the tide of rural migration, and attempted to harness the unemployed workers' energy into labour-intensive handicraft and industrial production; with the aborted Great Leap, however, there was no choice but to 'send down' excess labour to the villages, in order to assist in the reconstruction and modernization of agriculture.

Overall it may be said that the Chinese leaders have viewed the underutilization of labour from a positive angle, seeking actively to mobilize all idle manpower for productive purposes — rather than regretting its existence and merely wishing that it would disappear in the process of economic development. It is true that the communists have had at their disposal political means that few other leaders either possess or are willing to employ. However, one should not minimize the amount of genuine discussion and persuasion that goes on in China, and as the economic decentralization confirms, local initiative has an important role to play, if not at the individual level, at the level of the various production units.

NOTES

1. Commission on International Development, *Partners in Development* (New York: Praeger, 1969), p. 58.
2. Transcript of the address.
3. Chi-ming Hou, 'Manpower, Employment, and Unemployment' in Alexander Eckstein, Walter Galenson and Ta-chung Liu (eds.), *Economic Trends in Communist China* (Chicago: Aldine, 1968), p. 369.
4. John Philip Emerson, 'Employment in Mainland China: Problems and Prospects', in Joint Economic Committee of the U.S. Congress study, *An Economic Profile of Mainland China* (New York: Praeger, 1968), p. 416. For a discussion of the reliability of Chinese statistics, see Dwight H. Perkins, *Market Control and Planning in Communist China* (Cambridge, Mass.: Harvard, 1966), Appendix A.
5. Gunnar Myrdal, *Asian Drama: An Inquiry into the Poverty of Nations* (New York: Pantheon, 1968), vol. II, chap. 21.
6. 'Draft Resolution Concerning Measurement and Analysis of Underemployment' in *Measurement of Underemployment: Concepts and Methods*, International Labour Office, 11th International Conference of Labour Statisticians, Report IV, Geneva, 1966.
7. Myrdal, *op.cit.*, pp. 999-1000.
8. Hou in Eckstein *et al*, *Economic Trends in Communist China, op. cit.*, pp. 329-96.
9. John S. Aird, 'Population Growth and Distribution in Mainland China' in *Economic Profile, op. cit.*, p. 349.
10. *Ibid.*, p. 363.
11. Aird makes a still lower estimate for 1975-85 based on the possibility of a catastrophic famine around 1970-73, which did not materialize.
12. Edgar Snow, *The Long Revolution* (New York: Random House, 1971), p. 48.
13. *Ibid.*, p. 49.
14. Aird in *Economic Profile, op. cit.*, pp. 367-68.
15. Hou in *Economic Trends, op. cit.*, p. 360.
16. *Ibid.*, p. 369.
17. Cited in Nai-Ruenn Chen and Walter Galenson, *The Chinese Economy under Communism* (Chicago: Aldine, 1969), p. 136.
18. Chen and Galenson, *op. cit.*, pp. 136-37.
19. Hou in *Economic Trends*, p. 372.
20. *Ibid.*, p. 370.
21. *Ibid.*, p. 347.
22. *Ibid.*, p. 370.
23. Christopher Howe, *Employment and Economic Growth in Urban China: 1949-1957* (Cambridge University Press, 1971), p. 35.
24. Jan Myrdal, *Report from a Chinese Village* (New York: Vintage Books, 1965), p. 10.
25. Hou in *Economic Trends*, p. 372.
26. Emerson in *Economic Profile*, p. 408.
27. Walter H. Mallory, *China Land of Famine* (New York, American Geographical Society, 1926), cited in Franz Schurmann and Orville Schell, *Imperial China* (New York: Vintage, 1967), p. 263.
28. *Ibid.*, pp. 263-64.
29. Aird in *Economic Profile*, pp. 385-96.
30. Audrey Dennithorne, *China's Economic System* (New York: Praeger, 1967), p. 37.
31. Emerson in *Economic Profile*, p. 420.
32. Aird in *Economic Profile*, p. 387.
33. Vogel, *op. cit.*, p. 187.
34. Vogel, *op. cit.*, p. 213.
35. John King Fairbank, *The United States and China* (Cambridge, Mass.: Harvard, 1971), p. 400.
36. Vogel, *op. cit.*, p. 344.
37. Mao tse-tung, 'The Peasant Movement in Hunan', March 1927, cited in Franz Schurmann and Orville Schell, *Republican China* (New York: Vintage, 1967), p. 125.
38. The model is named after Yen-an, the communists' command post in the Shensi-Kansu-Ningshia Border Region, one of their 19 wartime bases. See Mark Selden, *The Yen-an Way in Revolutionary China* (Cambridge, Mass.; Harvard, 1971), p. 264.

39. Edgar Snow, *Red Star Over China* (New York: Grove Press, 1938), p. 237.
40. Selden, *op. cit.*, p. 260.
41. *Ibid.*, p. 252.
42. 'Let's Organize the Labor Force' in *Chiehfang jihpao*, 25 January 1943, cited in Franz Schurmann, *Ideology and Organization in Communist China* (Berkeley: University of California, 1968), pp. 419-20.
43. *Ibid.*, p. 424.
44. Selden, *op. cit.*, pp. 254-62.
45. *Ibid.*, p. 266.
46. Chen and Galenson, *op. cit.*, p. 38.
47. *Ibid.*, p. 39.
48. Mao tse-tung, 'We must Learn to Do Economic Work' (10 January 1945), *Selected Works*, vol. III, cited in *Quotations from Chairman Mao Tse-tung* (Peking: Foreign Language Press, 1967), pp. 187-88.
49. Cited in Chen and Galenson, p. 130.
50. According to Howe, the government took several measures to relieve unemployment, e.g. by slackening the budgetary squeeze, maintaining public administration employment levels, etc.: "Underlying these measures was the confidence that unemployment difficulties were a short-term phenomenon that would disappear under the impact of general economic advance, and we find that theorists at this time (1950) were still arguing that one of the main purposes of the Land Reform (which was then taking place) was to release rural labor for the towns' (*Employment and Economic Growth*, p. 93).
51. In a major address in early 1950, Chu Kung, the Mayor of Canton proposed economic assistance to vagrants and the needy and declared: 'The handling of these cases is essential to the establishment of public order.' Cited in Ezra Vogel, *Canton Under Communism: Programs and Politics in a Provincial Capital, 1949-1968* (New York: Harper and Row, 1969), p. 66.
52. Emerson, in *Economic Profile*, p. 460.
53. *Ibid.*, pp. 443 and 460.
54. *Ibid.*, p. 460.
55. *Ibid.*, p. 433.
56. Howe, *op. cit.*, p. 97.
57. From an address by Mao tse-tung on the question of 'Coalition Government'. Cited in Howe, p. 88.
58. Jack Belden, *China Shakes the World* (New York: Harper and Brothers, 1949), cited in Schurmann and Schell, *Republican China*, pp. 311-12.
59. *Ibid.*, pp. 313-14.
60. Schurmann in *Ideology and Organization*, p. 437.
61. *Ibid.*, p. 439.
62. Donnithorne in *Economic System*, p. 41.
63. Kenneth R. Walker, 'Organization of Agricultural Production' in Eckstein *et al*, *Economic Trends in Communist China*, p. 399.
64. Walker in *Economic Trends*, pp. 405-17.
65. *Ibid.*, pp. 412-13.
66. Administrative village.
67. Walker, *op. cit.*, p. 420.
68. Dwight H. Perkins, *Market Control and Planning in Communist China* (Cambridge Mass.: Harvard, 1966) pp. 57-58.
69. Walker in *Economic Trends*, p. 439.
70. Perkins, *op. cit.*, p. 145.
71. Aird in *Economic Profile*, p. 385.
72. Vogel, *op. cit.*, p. 220.
73. Vogel, *op. cit.*, p. 220.
74. Schurmann in *Ideology and Organization*, p. 466.
75. See Table on page 26.
76. Walker, in *Economic Trends*, p. 440.
77. Schurmann in *Ideology and Organization*, p. 465.
78. Walker in *Economic Trends*, p. 441.
79. Choh-ming Li, 'Economic Development', *China Quarterly*, 1 January-March 1960, cited in Franz Schurmann and Orville Schell, *Communist China* (New York: Vintage, 1967), p. 205.

80. Franz Schurmann, 'Peasants' in Schurmann and Schell, *op. cit.*, p. 183.
81. Donnithorne in *Economic System*, p. 59.
82. Choh-ming Li in *Communist China*, p. 207.
83. Cited by Aird in *Economic Profile*, p. 388.
84. Schurmann in *Ideology and Organization*, p. 393.
85. *Kweichow jihpao*, August 31 1958, cited in Schurmann, *Ideology and Organization*, p. 397.
86. Snow, *op. cit.*, pp. 236-37.
87. Vogel, *op. cit.*, p. 274.
88. Statement attributed to Po I-po by Anna Louise Strong, cited in Aird, *Economic Profile*, p. 388.
89. Walker in *Economic Trends*, pp. 445-46.
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91. Dwight H. Perkins, *Agricultural Development in China: 1368-1968* (Chicago: Aldine, 1969), p. 78.
92. Chen and Galenson, *op. cit.*, p. 106.
93. Perkins in *Agricultural Development*, p. 78.
94. Chen and Galenson, *op. cit.*, pp. 119-21.
95. *Ibid.*, p. 122.
96. Snow in *The Long Revolution*, p. 236.
97. Ross Terrill, *800,000,000: The Real China* (New York: Dell, 1971), p. 102.
98. Chen and Galenson, *op. cit.*, p. 112.
99. Jon Sigurdson, 'Rural Industry : A Traveller's View', *China Quarterly*, 50 (April-June 1972), p. 317.
100. Fairbank, *op. cit.*, p. 373.
101. Audrey Donnithorne, 'China's Cellular Economy: Some Economic Trends Since the Cultural Revolution,' *China Quarterly*, 52 (October-December 1972), p. 605.
102. *Ibid.*, p. 607.
103. Sigurdson in 'Rural Industry', pp. 320-21.
104. *Ibid.*, pp. 323-24.
105. *Ibid.*, pp. 331-32.

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