Rural Industrial Development and Surplus Labour in China

Submitted in partial fulfilment
of the requirements for
the degree of
Master of Arts in International Development Studies
Saint Mary's University
Halifax, Nova Scotia
April 20,1993

Thesis Supervisor
Dr.Paul Bowles

Committee Member
Dr.Tony Charles

Committee Member
Dr. Xiao-yuan Dong

CONTENTS

Abstract

Rural Industrial Development and Surplus Labour in China
Jun Song
April 20,1993

This thesis addresses the issue of China's rural industrialization and rural employment, looking specifically at the fundamental impact of government strategies and policies on Chinese rural industrialization and absorption of rural surplus labour. Chinese rural industries refer to small-scale industries located and managed by local governments at county level. They are collectively and individualy owned, involving more than 40 varieties of productive activities in 1989.

China is a socialist country belonging to the "Third World." When China was established in 1949, the government set goals for both the development of the national economy and the improvement of the majority's living standard. Compared to other socialist or Third World countries, it has achieved a much higher growth rate.

Originally, China was an agrarian-based country with its majority population living in rural areas. This is still the main feature even in contemporary China. Because of its large population and the scarcity of arable land, it has a long history of rural unemployment and underemployment. Since the 1950s, the government adopted different strategies

to deal with this problem, such as absorbing surplus labour through improved agricultural production and through rural enterprises. In the 1950s and the 1960s, rural industry initially provided agriculture with many of the repair and maintenance facilities needed for tools and machinery, and played a less important role in providing employment. In the 1970s and the 1980s, the rapid growth of rural enterprises represented an alternative for rural labour absorption.

Through research on government strategies, statistics cases, this paper demonstrates how rural industries can act as anternative of government's strategy and played an important role in rural labour absorption.

This thesis ends with the debates surrounding local government's interference with TVEs and rural migration, concluding that Chinese rural enterprise have become one of the most important sectors in Chinese economy and represent great hope for employing rural labourers in the future.

ABBREVIATIONS

GVAIO	Gross value of agricultural and industrial output
GVAO	Gross value of agricultural output
GVIO	Gross value of industrial output
GOV	Gross output value
PRS	Production responsibility system
TEC	Township economic commission
TIC	Township industrial corporation. The township government organ that is directly responsible for supervising township enterprises.
TVE	Township and village enterprise. Excludes enterprises run by production teams.
TVP	Rural nonstate enterprise (township, village and private enterprise). Includes production team enterprises.
Y	Yuan Chinese currency unit. Recently average official exchange rates in 3.45 yuan to the U.S.dollar in 1984, 3.45 in 1986, 3.72 in 1988 (International Monetary Fund, International Financial Statistics

Preface

China is the world's third largest country and has the largest population of any nation. In 1949, it had about 541 million people. In 1989, its population reached 1,112 million, more than doubling during 40 years (at an annual growth rate of 2.6 %). [1] This fast population growth brought about a corresponding growth in the country's work force. The number of persons entering the working age range (16-59 for men, 16-54 for women) [2] increased 4 . 1 percent annually from 1952 to 1989. [3] This growth had consequently raised a vital issue of employment. China was able to maintain a growth rate of employment at 4.4 percent annually from 1952 to 1989 [4], remaining a higher small degree than the growth of the work force.

The achievement of a higher growth rate in employment attributed not onlyto China's particular employment system,[5] but also to the development of Chinese rural industries. In 1989, rural labourers represented about 74 percent of the national labour force, of which about 23 percent were

---

[1] China Statistical Yearbook (1990) p.81 "Population"

[2] CSY 1990

[3] see table III-2-a in chapter II

[4] ibid

[5] see Chapter I, Section 1

employed by township- and village-owned enterprises. [6]

The concept of "rural industry", which mainly based on the Chinese administrative system, is defined by J. Sigurdson as "all industries cooperatively owned by rural communes and brigades", as well as "state-owned enterprises under the jurisdiction of a county."[7] Sigurdson continues,

> "rural industry is not defined on the basis of size but as any local industrial unit run by county, commune, or brigade. The enterprises may be collectively owned, jointly financed by the state and collective units, or wholly owned by the state but under local management." [8]

Based on these definitions, I will assume the spectrum of Chinese rural industry to be those which are located and managed by local government or individuals at and below county level.

In the 1980s, non-agricultural economic development expanded so rapidly in rural China that Township and Village Enterprises (TVEs) became a generic term used to describe

---

[6] According to Chinese statistics, total rural workers were about 409.39 million, while TVEs shared about 94 million workers in 1989. CSY (1990), p.105 "Social Labour Force"; p.387 "Persons Employment by Townships and Village Enterprises"

[7] American Rural Industry Delegation (1977),p.9

[8] Jon Sigurdson (1977),p.1

all rural enterprises run by townships, villages and villagers' groups (former work teams), as well as jointly owned, private and individual enterprises. The term TVEs covered all rural enterprises such as manufacturing, mining, construction, trade, transport, services and so on. [9]

Chinese rural industry originated with rural craft workshops and various small factories existing as early as 1939.[10] Government development of Chinese rural industries began in the 1950s on the basis of the traditional household handicraft industry. In 1954, more than 10 million Chinese farmers were partially involved in the handicraft industry, creating a gross output value (GOV) of 2.2 billion yuan that year. In 1957, the gross output value reached 2.29 billion yuan, a slight increase over that of 1954.[11] The average annual growth rate from 1952 to 1955 was 9 percent, a moderate growth compared to the 21 percent growth rate of the large-scale modern industries during the same period.

From 1957, the state became interested in local industry, and directed this rural enterprises to produce industrial materials, fuels and agricultural equipment. In 1958, the

---

[9] R.Islam (1991)

[10] Fei Xiao-tung (1939)

[11] W.Byrd and Lin Qingsong (1990) p.8

"Great Leap Forward " strategy [12] created a sudden boom. Officials estimated that by the end of 1958, over 200,000 more rural enterprises appeared in addition to the original 30,000 units, for a total involvement of about 18 million farmers. The total output value of rural industries jumped to 6 billion yuan in 1958 and 10 billion yuan in 1959.[13]

Despite this large growth in industrial production, at the end of the 1960s, the national economic situation, particularly regarding agricultural production, deteriorated. After the government adopted the readjustment policies in the next year, many commune and brigade enterprises were shut down. The total output value of rural industry fell sharply from 10 billion yuan in 1959 to 1.98 billion yuan in 1961 and to only 410 million yuan in 1963.[14]

During the ten years from 1966 to 1976, the state policy's emphasis was on speeding up agricultural mechanization. Rural industrialization switched from heavy small industries to the production of more farm machines and means of

---

[12] In 1958, the Chinese government launched the "Great leap forward "strategy to realize a "miracle of communism " through accelerating industrialization in the rural areas.

[13] ibid

[14] ibid

transport. This was a fast but stable growth period. By 1970, the total output of rural industry climbed to 9.25 billion yuan and to 27.2 billion yuan in 1976, indicating an annual average growth rate of 25.7 percent during these seven years.[15]

Before 1978, the rural industrial development laid the foundation for its later expansion. The state's implementation of the Production Responsibility System [16] provided an even better environment for the subsequent boom of TVEs.

In 1978, there were 1.52 million rural enterprises employing over 28 million people and producing a gross output value of 49.3 billion yuan. By 1988, there were 18.9 million TVEs nationwide employing about 95 million people with the gross output value of 649.6 billion yuan.[17] Clearly TVEs grew rapidly during this period.

In the 1980s, the fast growth rate of national industry and TVEs tightened the supply of raw materials, energy, and financial resources and increased inflation. Faced with

---

[15] ibid p.10

[16] See Section 4 in Chapter 1.

[17] CSY (1990),p.386 "Township and Village enterprise";p.387 "Persons Employed by TVEs";p.388 "Gross Output Value of TVEs"

these problems, the state government had to adopt readjustment policies in 1989 to control the overheating economic development.

Between 1989 and 1990, the readjustment policies caused the number of TVEs to decrease and consequently unemployment to rise. Some the TVEs closed down, changed their products, or merged with other enterprises. Even so, there were still 18 million [18] rural enterprises employing 92 million workers, accounting for nearly a quarter of the rural labour force.[19] The GOV of TVEs continued to expand at the rapid rate of 46 percent during these three years.

Since 1990, TVEs had maintained even faster growth rate. By the end of 1992, according to current reports, TVEs achieved a total gross output value of 1,500 billion yuan, employing up to 100 million workers, a number surpassing the total numbers employed by state-owned enterprises nation-wide.[20]

Development of rural industries went through two periods: firstly, the period between 1950-1978, in which they

---

[18] R.Islam (1990), p.698 Table

[19] ibid p.688

[20] The People's Daily (Overseas Edition) Nov.11,1992; Jan. 15 1993

concentrated on providing services to agriculture production and secondly, from 1978 onward, in which the country's economy shifted to market orientated and production varied. During both periods, one of the government's strategic goal was to absorb rural surplus labour.

My research will concentrate on the development of rural industries within this context. Chapter one will provide an overview of the economic environment for rural industry, including the institutional systems, government strategies and the transformation of rural economic institutions. Chapter two will focus on the development of rural industry. Chapter three will discuss the issue of labour absorption and employment within the rural industries. The final Chapter will present my conclusions. I will also address debates surrounding the conflicts which arose during the development of rural industry.

Although my research focuses on the development of Chinese rural industry from historical and economic perspectives, it is necessary for me also to refer to the influence of the governments' (at both central and local levels) strategies and policies on the direction of such development.

CHAPTER I

AN OVERVIEW OF THE CHANGES IN RURAL ECONOMY 1949-1990

The Chinese rural economy achieved tremendous growth during the past decades. Most significant change was the structural changes in this sector's proportion to the gross output value in terms of agricultural production and rural industry. In 1949, the basic indicator of rural economic production was represented by the gross value of agriculture output (GVAO).[11] It was estimated that 82.5 percent of that proportion consisted of farming, while the proportion for rural enterprise was zero.[12] In 1980, the proportion for farming declined from 82.5 percent to 64.3 percent and that for rural enterprises increased from zero to 14.5 percent[13] Due to the fast growth of the rural economy, the Chinese government adjusted its statistics to include such categories as agriculture,[14] rural industry, construction, transportation, commerce and food services. Based on the new classification, the proportion of GOVA in 1980 consisted of

---

[11] GOVA before 1978 includes five agricultural subsections in terms of farming, forestry, animal husbandry, fishing and side-line products. The brigade and team-run industrial enterprises belong to the last category.

[12] CSY (1981),p.137 "Proportion of Farming, Forestry, Animal Husbandry, Fishing and Sideline Production to Gross Agricultural Output Value"

[13] ibid

[14] After 1978, GOVA still includes the same five subsections, except that the industrial enterprises is separate from the agricultural production as an independent classification for statistics.

68.9 percent of the total rural output value (TROV), while the proportion of gross output of rural industry consisted of 19.5 percent in TROV.[25] Until 1992, the rural enterprises comprised 60 percent of the TROV, one third of the gross value of industrial output (GVIO), and one fourth of the total gross output value (TGOV) at the national level.[26]

Specific Chinese institutions and systems, central and local government policies, and the transformation of rural economic development patterns all combined to create an environment for change in the rural economy. In this chapter, I will examined briefly at several Chinese institutional systems, particularly administration, planning, employment and wages; I will then discuss the institutional transformation in rural areas. I will conclude this chapter by describing government strategies with regard to the development of rural industry.

1. Chinese Institutions and Systems.

1). The Administrative System. [27]

Significantly, Chinese economic activities fell under the

---

[25] CSY (1990),p.316 "Rural Total Output Value of Society and Its Composition"

[26] People's Daily (Overseas Edition) March 1,1993

[27] see Appendix 2

management of different administrative levels. Moreover, the management of Chinese industrial enterprises was divided into two categories: central and local. Management of central enterprises ranged from state to ministries, and the management of the local enterprises ranged from state to the provinces and then downward. Both systems followed the same form of administrative system for management.

The hierarchy of the Chinese administrative system consisted of five levels. The highest level was the state or government. This levels also included governmental ministries, commissions, general bureaus, and special agencies. The second level included twenty-one provinces (sheng), five autonomous regions and three centrally administered cities (Beijing, Shanghai, and Tianjin). Under the provinces and autonomous regions were the several hundred prefectures (di qu) or autonomous prefectures (zi zhi qu) which composed the third level of administration. The fourth level covered the counties (xian) and cities which were further broken down into the fifth level: People's Communes (xiang), brigades (dui) and production teams.[28]

In the Chinese rural context, local government usually

---

[28] After 1978, towns and villages replaced the communes and brigades as the basic organs of administration.

refereed to level below counties. As the capitals of the counties, towns had dual positions. Together with commune, towns were geographically included within rural areas ,but administratively they were included within the urban system.[29]

2). Planning at the Macro and Micro Levels

China's hierarchical central planning system, similar to the administration system, also had a national network. At each level, government agencies and business units possessed their own staff who draw plans and collect statistical data for evaluation.

The central planning system involved three main government organizations. The State Planning Commission and the State Economic Commission had the most important functions in plan formulation and coordination, plan implementation and supervision. The State Statistical Bureau was responsible for collecting and evaluating information.[30] At the macro level, central planning included national plans such as annual plans, five-year plans and long-term plan, as well as detailed local project design. These plans aimed at a target figure for the GNP and at target figures for each of

[29] C.Y.Cheng (1982),p.45

[30] C.Y.Cheng (1982),p.167 op.cit.,

the twenty-two major national industries in charge of twenty-two ministries which were under the management of the State Economic Commission.[31]

After the central government completes its plan for the country as a whole, the twenty-two ministries set up their target figures for output for the industries under their charge, and provide them with the capital, labour and resources required to produce that output. The central government then allocates these factors to the different ministries according to their target output levels and their production functions.[32]

Before 1978, local level planning and implementation involved counties, communes and brigades. Planning consisted of detailed project designs, and implementation included the actual completion of particular projects and provision for rural economy of planned productive and social services.[33] In China's planned economy, the targets of the enterprises must be included in the year's state plans. However this could not be done at the national level when a total of half a million industrial units existed in rural areas.[34] In

---

[31] A.K.Ho (1982),p.60 op.cit.,

[32] ibid

[33] J.Sigurdson (1977),p.35 op.cit.,

[34] ibid p.4

1957, therefore, the government adopted a policy of decentralized of economic planning; both the province and county agencies were involved in planning at the same level.

Before 1978, economic planning stressed the importance of local initiative, local industries, and the systematic use of small to medium enterprises. However, this policy had only limited success because the state strictly controlled and allocated all production factors. Since 1978, local governments still determined planning for rural industries but with much more flexibility in allocation of resources.

3). Labour Recruitment and Employment System

Before discussing the labour recruitment and employment system, I would like to point out several basic concepts. Before 1978, China's ownership structure was either state or collective. After 1978, however, the structure became characterised by state ownership, collective ownership and private ownership. China's employment system and wage system basically served for the state-owned and collective-owned units and industries. Each year, the planning organizations set the different quotas for the two units allocation numbers and recruitment numbers.

China's employment system had two functions: job allocation and labour recruitment. The job allocation system mainly

channelled into state owned enterprises young people after graduation from schools, particularly in cities. Labour recruitment indicated that enterprises and units themselves are allowed to hire, within the limit of state quotas, the workers qualified certain positions, or workers they want to hire.

In rural areas, the labour force was excluded from the employment allocation system. As Eddy Lee observes, "a key feature of employment in rural China was the limited mobility of labour between communes and also between communes and the urban economy. Each commune was thus to a large extent the basic unit within which employment was generated and labour was allocated to alternative activities." He notes that the rural labour allocation was "overwhelmingly predominant of collective activities." [35]

Job transfer was strictly limited under the employment system, not only from rural to urban areas and from agricultural to industrial sectors, but also from collective-owned to state-owned units, as well as from local to central units.

Since 1978, the employment system was under change. This strategic reform was aimed at gradually abolishing labour

---

[35] Eddy Lee (1984),p.132 see K.Griffin (1984)(ed.)

allocation generated by the state, and replacing it with a contract system for labour recruitment. Unlike before, the contract system did not assure a permanent job position. The units (employers) had the freedom to hire and fire their employees, while the employees had the freedom of choosing a job. The contract system in the rural areas was represented by the Production Responsibility System which I will return in the next section.

4). Wage System

The Chinese wage system had various grading systems with differentials between and within state-owned and collective-owned enterprises, government agencies, as well as between geographical regions. For example, the wage system in state-owned industries was divided into an eight-grade system [36] with grade one as base. [37]

The wage system in rural regions differed entirely from that existing in urban areas. The "Work Points System" that characterized the rural wage system was a system based on the type of work, the number of hours put in, the quality of performance, and the farming productivity and output after

---

[36] C.Y.Cheng (1982),p.243;244 op.cit.,

[37] A newly recruited worker is expected to be qualified for grade one after working two years, and to be promoted to grade two after one more year when he can become a permanent employee of the state.

state taxes. Production teams determined the value of work points, a value which varies from place to place.[38]

The "Work Points System" determined and distributed wages in rural industry. Wages were also calculated by adding a certain percentage, usually ten or twenty percent to work points. Wages in the rural industry were relatively low compared to state wage standards before 1978.[39]

Since 1978, wages for rural industry were partially or completely separate from the work-points system. Some local enterprises still paid workers by work points, but they converted the work points to money wage based on the work-points value of the specific team, plus bonus and dividends. Some enterprises paid their workers entirely by piece wages, or set the new wage level by state-owned enterprises standards.[40]

---

[38] A.Donnithorne (1967),p.76; Hyghes and Luard (1959),p.14; Azizur Rahman Khan (1984),p.80 see K.Griffin (1984)(ed.)
The production team is the lowest level of administration and used to be "the most important of the three tiers of commune structure. As the `basic accounting unit', the team carries on independent accounting, is responsible for its own profits and losses, organizes production, and distribute income." "The team owned their own land, were entitled to dispose of their own labour forces, and had the right freely to manage production and distribute gains." K.Griffin 1984:26

[39] J. Sigurdson (1977),p.41 op.cit.,

[40] Jan Svejnar (1990),p.243 ; Wu Quhui, Wang Hansheng and Xu Xinxin (1990),p.323 see W. Byrd & Lin (1990)(ed.)

2 Agricultural Institutional Transformation

During the past decades, the most important change in the Chinese rural economy was the change in rural institutions and the pattern of agricultural production. This transformation occurred in four stages: land reform, co-operative production, the People's Commune, and the Production Responsibility System.

1). Land Reform

Land reform in China began as early as 1927 in the Communist controlled regions of China, continued through the 1930s and 1940s, and finally ended in the early 1950s. The Chinese Communist Party initiated to achieve the goals of the Chinese revolution. Such a change depended on the support of the peasant masses.

In the 1920s, land distribution in China, as in most Third World countries, was extremely unequal. Less than 10 percent of the landlords and rich peasants[4] possessed about 70 to 80 percent of the cultivated land, while the remaining 90 percent possessed in all only about 20 to 30 percent of the

---

[4]The rural society during the land reform was classified into five categories according to Mao's ideology: landlord, rich peasant, middle peasant, poor peasant and hired labourers. Such classification was divided on the basis of the land, farm tools and cattle the peasants possessed as well as their incomes. This kind of classification represented five levels of political, social and economic status of the rural people and had great impact on the new social structure in the rural areas.

land.[42] The targets of the Chinese land reform programme were to eliminate the landlord class and to equalize land distribution to the poor. By the early 1950s, these targets had been achieved at the national level. Poor peasants and labourer classes dominated rural economy with their individual farming.

2). Co-operative Production.

The Chinese revolution's goal was to pursue and establish a socialist and communist society. From 1952 onward the state began to nationalize all land ownership for collective farm production.

In 1952, the peasants were organized as small groups with six or seven households called "Mutual Aid Teams"(MATs). They initially pooled labour and other means of production during peak seasons. Over time, this practice became yearly. The means of production within a MAT remained privately owned, and each peasant household was free to dispose of its produce.[43]

The MATs were then replaced by the Lower-lever Agricultural

---

[42] OH, Ki Song (1966),p.14

[43] J.Wong (1973),p.196
Alexander Eckstein (1977),p.68
Carl Riskin (1987),p.67

Co-operatives (LACs) which were three or four times larger than MATs. Within the group, the members contributed their land as capital shares and in return received part of the cooperative earnings. The labour share was allotted according to the amount of work each household contributed to production.[44]

LACs were further transferred into Advanced-level Agricultural Co-operatives (AACs) which were about three times larger than the LACs and were similar to a fully socialist collective farm. By this arrangement there was no return for land share, and the peasants' incomes totally depended upon labour distribution of each household. Only about 5 percent of their cultivated land area was retained as the private-owned plot. Otherwise, the peasants were exempted from land ownership because the land was transferred into the collective property.[45]

3). The People's Commune.

The commune system was established on the basis of AACs with the purpose of transferring Chinese rural society into an idealistic communist society. The terms "large", "general" and "public" reflected the characteristics of this new

---

[44] J.Wong (1973),p.196 op.cit.,

[45] ibid p.196
Carl Riskin (1987),p.68

institution. The system was "large" because all AACs of one xiang were to be united into one commune and to share administration and production. The institution was "general" in the sense that the People's Commune was not only an economic unit with all kinds of production, but also an organizational unit which united peasants, workers, traders, students as well as soldiers. Finally, this system was "public", because all property of the previous AACs, including land contributed by their members, houses, animals, forests, water resources, machines and larger tools, became the Commune's property with public (collective) ownership.[46]

However, the conflicts between private and collective interests, and the deteriorating economic situation in 1960 made the goal of communist society more idealistic than realistic. Therefore, the party adopted new policies to eliminate the People's Commune's functions. By 1961, the commune was left as a basic rural administrative unit responsible only for secondary schools, workshops, a branch of the national bank, grain management, hospitals, tax collection and public security. Large-scale water conservancy, construction and irrigation projects also fell under commune level authority. Basic accounting and directing production were now left to the institution's

---

[46] J.Domes (1980),p.20-29

lower level. [47]

4). Production Responsibility System.

In a national context, the Third Plenary Session of the 11th Central Committee of the Chinese Communist Party launched the historical economic reform in 1978. One of the important new strategies for rural economic development was the abolishment of commune system and the adoption of the Production Responsibility System (PRS).

The PRS system originated in 1962 in the commune structure, but was abolished during the radical period of the Cultural Revolution. In 1978, this system was proposed again for the purpose of raising farmers' work incentive, which was then extremely low. The new PRS contained more sophisticated versions of the principles employed in the original system.

The primary principle underlining PRS was to connect the output of agricultural production to the benefit of farmers and their households. Basically, PRS included approximately eight different contracts for the distribution of land-use rights and output. Out of these eight contracts, the most important and widely adopted were bao gan dao hu and bao chan dao hu. Riskin notes that Bao gan dao hu refereed to

---

[47] J.Wong (1973),p.5 op.cit., A.Eckstein (1977),p.70 op.cit., C. Riskin (1987),p.173 op.cit.,

"contracting everything to the household".[48] Khan observes that "land is divided equally among the individual households in equal amounts per capita." [49] Under the contract, the household choose the method of cultivation but must deliver the quota set by the contract, the taxes, the share of public welfare, and accumulation funds to the production team. As A.R.Khan states, "the team retains planning authority in setting sales quotas and tax obligations for the households". [50]

The other commonly adopted contract, bao chan dao hu meant "contracting output to the household". Khan notes "it allowed the household the use of a particular piece of land; a given amount of its output would go to the team in exchange for an agreed number of work-points." In this contract, the output quota, input target and labour (i.e. work points) were stipulated in detail, and there were also bonuses or penalties for production in excess of or below quota. "Plans for planting, irrigation, and the use of draught animals and machinery", Khan continues, " remained under team control. Also the nature of the work-point remained dependent upon total team output." [51]

---

[48] C. Riskin (1987),p.287 op.cit.,

[49] A.R.Khan (1984),p.87 see K.Griffin (1984)(ed.) op.cit.,

[50] ibid

[51] ibid

The basic distinction between these two contracts lay in the distribution of output: a household under a bao gan dao hu contract could retain all of the output after all necessary payments, while the household under a bao chan dao hu could only keep the quota's surplus, the rest was distributed by work points. Because of the different methods of distribution of output, farmers were generally more acceptive to the first type. For example, in Sichuan Province the adoption rate of the former was much higher than the latter: 64.46 percent and 17.16 percent, respectively in 1982. [52] However, considering the contracts themselves, both of them allowed for household farming production with comprehensive access to the land.

The implementation of the PRS had fundamental impacts on the rural economy and society. For example, the households had right to manage their own production and resources, and they had incentives to maximize their output. In addition, rural people did not have to depend on grain production as their only income resource. They were free to conduct any other sideline productions in order to increase their income. PRS also brought structural changes to the rural economy in terms of the fast growth of agricultural output, diversification of agricultural production, and development

[52] K.Griffin (1984),p.26-29 op.cit.,

of rural industry. At the same time, PRS negative effected in that it increased the surplus labour force by releasing farmers from agricultural activities. I will discuss this point more fully in Chapter IV.

3. Government Strategies and Policies for Rural Industrial

I Pre-1978

Prior to 1978, government strategies and policies played an important role in the development of rural industry. Sigurdson writes

> "The existence of a rapidly growing rural industrial sector which consists of a large number of small and medium-sized enterprises is one important characteristic of the present development strategy in China. The encouragement of small-scale industries in rural areas in China is an essential element of China's regional development programs which today focuses on agricultural development and diversification, local raw material utilization, resource mobilization, and long-term employment impact. The systematic and integrated development of rural industry has hardly any parallel in other developing countries, even if similarities of detail can be found in other places".[53]

The economic and ideological strategies guiding rural industrial development before 1978 involved three aspects: development through "walk on two legs", development of integrated agriculture, and decentralization and labour utilization. I will describe initiatives of these three

---

[53] J.Sigurdson (1977),p.1 op.cit.,

strategies in the sections which follow.

1). Development through "Walk on Two Legs"

The "walk on two legs" strategy had two purposes, to balance the industrial structure, and the to develop technological dualism. In the early 1950s, the core of Chinese economic development was focused on a small number of large-scale, capital-intensive industrial projects." [54] Consequently, the whole economy saw an unbalanced pattern: although output grew rapidly, open unemployment existed in the cities, and seasonal idleness characterized the countryside. [55]

The government adopted the "walk on two legs" strategy in 1959 in order to change China's industrialization from the framework of long-term priority for large-scale and capital-intensive to a primary but temporary emphasis upon small-scale labour-intensive production. [56] Riskin describes that the rationale for this strategy as

> "it is the direction we follow in development to build large-scale enterprises using modern production methods; but at a time when our capital and technical conditions are not yet adequate, the development of small-scale enterprises using native production methods is the goal of our major effort for a certain period

---

[54] ibid

[55] ibid

[56] Carl Riskin (1971) p.262

of time and in given places."[57]

The "walk on two legs" strategy balanced the relationships between five variables: Firstly, industry and agriculture, Secondly, heavy industry and light industry, thirdly, large enterprises and medium-to-small enterprises, fourthly, modern production methods and indigenous methods, and finally, enterprises run by the central government and the local government. Any imbalance in developing one end of those relationships would affect the performance of the other end. The importance of the development of rural small-scale industry was closely connected to the last three relationships. Balancing these relationships would build up a Chinese industrial structure composed of large enterprises with advanced technology; medium enterprises with intermediate technology at province level; and small enterprises with intermediate and primitive technology at county and commune level.[58]

The strategy of "walk on two legs" was also adopted for an industrial development of technological dualism: Riskin writes

> "both relatively capital-intensive, large-scale, modern production units, and relatively labour-

---

[57] ibid

[58] J.Sigurdson 1977:7 Table 1 op.cit.,

> intensive, small-scale, and technologically backward ones were to develop simultaneously. This enabled China to make productive use of all available resources, however crude, scattered or unskilled" [59]

However, since the "modern leg" or urban industry created jobs at high capital costs, [60] it was less successful in providing more employment opportunities for the increasing amount of job-seekers. The government assumed that the "native leg" or rural industry would create more jobs. Yet even when the importance of the "native leg" was proposed as the national strategy in the early 1950s, the state had little attention to its implementation because of the modern-biased industrial development activities. This strategy, therefore, had little positive effect on providing more employment for the large rural population.

During the period between 1958 and 1959, rural enterprises received an extraordinary emphasis under the strategy of the Great Leap Forward (GLF). However, because of the disastrous effect of the GLF on the national economy in the following years, the development strategy was readjusted in 1961 as "taking agriculture as the foundation, and industry an a leading sector."[61] In 1962 the government stressed that

---

[59] Carl Riskin (1987),p.117 op.cit.,

[60] T.Rawski (1979),p.52 op.cit.,

[61] C.Riskin (1987),p.149 op.cit.,

the agricultural sector should be the first to develop, followed by light industry, and finally, heavy industry. Meanwhile, rural industry functioned as the link which provided services for the agriculture sector before 1978, After 1978, rural industries development started its function of absorbing rural surplus labour.

2). Development of Integrated Agriculture

When the state of China was established in 1949, the new government inherited a structurally underdevelopment economy. Traditional agriculture was the major sector for the Gross National Product (GNP), compiling 60-65 percent of the economy, while small light industry and the handicraft sector produced only approximately 10 percent of the GNP.[62] In order to achieve industrialization in rural areas, China planned to develop an integrated agricultural production system. In 1958, Mao stressed that, "the fundamental way out of agriculture lies in mechanization". [63] Corresponding to this call, the establishment of small-scale extensively rural industry could help mobilize of both traditional inputs (labour, natural fertilizers, draft animals and traditional tools) and modern inputs (chemical fertilizers, electric motors, rice transplanters, tractors, and

[62] W.Kraus (1982),p.16

[63] Dwight Perkins (1977),p.117

trucks).[64]

3) Decentralization and Labour Utilization

To develop Chinese rural industries at the local level, the government began to control urbanization. Three arguments support this strategy. firstly, "without small industry, industry becomes concentrated in large cities, and costly to run,"[65] secondly, as early as the mid-1950s, China decided to control the growth of large cities by limiting migration from rural to urban areas. More population in the cities would create costs for city construction and facilities, affecting investment for industry,[66] thirdly, the development of modern industry could hardly absorb the increasing numbers of job seekers because, as Riskin points out, "China had been faced continuously with excess supplies of labour."[67] He continues "the modern industrial sector, with its general capital-intensive bias, will be unable to absorb this labour for a long time to come."[68] This constraint left labour absorption in the hands of the agricultural sector and rural industry. The government expected that the medium and small rural industries would

---

[64] J. Gurley (1975),p.463

[65] Dwight Perkins (1977),p.218;219 op.cit.,

[66] ibid

[67] Carl Riskin (1971),p.267 op.cit.,

[68] ibid

provide additional employment for rural labourers. In regard to this issue, I will fully discussed in Chapter III.

II Post-1978

Kumar Ghose states: "China's national development strategy from 1950 to 1970 had been remarkably successful in guaranteeing a minimum level of living for the entire population." [69] Agricultural production continued to yield surpluses, and rural industries made significant progress in mechanization. [70] The economy was also characterised by "a very high rate of accumulation and a correspondingly low growth of personal consumption." [71] Since 1978, the fundamental goals of China's national economy was to build up the four modernizations, [72] and the to raise living standards. To fulfil these tasks, the government began an economic structural adjustment.

For a number of reasons, during the implementation of the old pre-1978 strategies, the growth of rural industrialization was not significant. Firstly, as a result

---

[69] A.Kumar Ghose (1984),p.254 see K.Griffin (1984)(ed.) op.cit.,

[70] ibid p.270

[71] ibid p.254

[72] Four modernizations are the principle goals set for Chinese socialist development. They refer to modernizations of industry, agriculture, military, science and technology.

of policy orientation, the dichotomy increased between urban and rural living conditions as a result of policy orientation. Employment, wages, price of consumer goods and social welfare benefited the urban residents more than rural people. [73] Secondly, urban and rural industrial structures was similar , He Jiacheng notes that

> "the correlation coefficient for fourteen subsectors in rural industry, and in China's industry as whole is 0.721, that for eight heavy industrial trades it is 0.793, and that for six light industrial trade it is 0.923.... [74] Such great similarly in industrial structure worsens the prospects for rural industrialization, for the technological upgrading of rural industry, and for full utilization of the advantages of urban industry. Urban-rural competition remains on the same low level, making it difficult to institute effective coordination."[75]

This similarity resulted from mechanization strategies and their implementations. In response to Mao's call for mechanized farming, for example, all of the communes started to set up machinery factories. Since production of farm machinery was badly suited to the resources and the conditions of countryside production, they had to rely almost totally on state support, which was not adequate for the successful development of the farm machinery industry. Therefore, he writes "the factories that were established

---

[73] He Jiacheng (1991),p.117 see W.Byrd & Lin (1990)(ed.)

[74] ibid p.119

[75] ibid

lost money because of the severe shortage of production and management expertise and the relatively low prices of farm machinery."[16] To solve these problems, the local governments had to move form the machinery product industries towards more profit directed industries. Therefore, by 1978, the structure of rural industry had become highly similar to that of industry as a whole.[17]

Because of these such circumstances in 1978, the government decided to adopt new strategies and policies to adjust of the national economy. Development of rural industry was supplemented by new strategies of reducing the difference between factors of production in the countryside and in the cities, rationalizing the division of labour in the urban-rural industrial structure, and synchronizing the development of rural industrialization and urbanization.[18] In the new economic structure, the private sector was permitted to emerge, a sector involving primarily private or individual enterprises and industries within rural areas.

The new approaches for rural industrial development involved several factors: 1) consolidation of rural industry's political status by granting them the same treatment as

---

[16] ibid

[17] ibid

[18] ibid

state enterprises and entitling to all necessary state aid; 2) encouraging farmers to invest in or buy shares of all types in enterprises, and in activities of private or joint venture enterprises; 3) providing of a favourable environment for rural industries by allowing or tax breaks of exemptions, relaxing strict limitation to bank loans to collective and private enterprises for investment. These new strategies and policies showed tremendous influence on the structural change and growth of the rural industry.

Summary

Chapter one gives some basic background about Chinese institutions and systems, the changing pattern of the agricultural production, and the importance of the government's strategies and policies for the changes of rural economy. The context of Chinese administrative system is important to the management of a rural economy. Transformations in rural institutions occur with changes of landownership, and the transition from individual production to collective production and finally to contracted production. The government has adjusted its strategies and policies in order to direct the rural economic development. Rural industry has emerged, improved and grown within this broad context, a topic which I will focus on in the next Chapter.

CHAPTER II

RURAL INDUSTRY DEVELOPMENT

In Chapter II, my discussion will focus on the development of rural industry and rural enterprises during two periods: pre-1978 and post-1978. I will address three important issues: 1) the formation of Chinese rural industry, 2) its function in the national economy, and 3) its characteristics.

1 Formation of Chinese Rural Industries

Before 1978, Chinese rural industry included a wide range of undertakings such as handicrafts, mills, raw material based products, small-scale mines, small plants, and factories for farm machinery. Rural industries operated with labour-intensive and primitive technology at relatively low cost. To build up the millions of rural industries scattered nationwide, the key factors were capital and technological transfer.

Capital Resource

The capital input of rural industry came from three financial resources: central government allocation to local budgets, enterprises accumulation, and lower-level contributions. The proportion of allocation depended on their levels in the hierarchy structure of rural industries. Usually the regional (or provincial) enterprises had the

privilege of receiving all of their investment from national budget allocation, although their numbers were very small. County-level enterprises obtained their capital from all three resources in unspecific proportions, while in most cases, state allocation was predominant. For example, in a regional case of Hobei (Hebei) province,the investment from the three resources consisted of 58 percent, 31 percent and 11 percent respectively.[79] Capital for enterprises at commune level came from enterprises own accumulation without any formal allocation. As for those at brigade level, nearly all depended on the lower-level contribution of production teams.

In addition to direct financial allocation, the rural industry also received subsidy from the government in two ways: profits from other enterprises, such as revenue transfer from light industries covered losses in some of the enterprises -- iron, steel and chemicals, for example; a number of industries accepted lower profit margins, such as those industries with large economic scales. In this respect, nearly all local industries were initially granted this favoured treatment of receiving subsidy from the government.[80]

---

[79] J.Sigurdson (1977),p.67 Table 18 op.cit.,

[80] ibid p.68

2) Technology Transfer [81]

I have stated that rural industry had little or no access to capital allocations. Furthermore, the amount of investment resulting from self-accumulation was often small and unstable. Yet the shortage of capital was, to a certain extent, replaced by technology transfers from high level to the lower level of industrial system.

Technology transfer involved two national networks: formal institutions and informal popular participation. First, at the national level, the Institute of Agricultural Machinery was responsible for organizing agricultural machinery research and development. At the provincial level and below, there were scattered research institutes and special research groups. At the lowest level were many experimental centres and auxiliary stations which supported technology implementation.[82] Second, a "mass scientific network" was responsible for technology applications at the grassroots level. This network was an extension service functioning at the commune and brigade levels and participating with three parts of members: leadership personnel, technicians and farmers. For example, at the commune level, a Popularization

---

[81] The term "technology" used in this context refers to technology diffusion in terms of technical and management training by advanced urban industries, as well as using new techniques designed locally or transferred from modern industries.

[82] ibid p.83

Station existed in each commune which was responsible for all kinds of technology diffusion from higher levels and also responsible for farm machinery improvements. At the brigade level, small technology groups were responsible for the implementation of those technologies from higher levels.

This "mass scientific network" involved a large number of rural people. For instance, it consisted of about 4 percent of the 60,000 people in one of the Hebei province's counties, about 2 percent of Hebei's total population of 48 million, and about 1.25 percent of the country's population in 1971.[83]

c) Approaches to Technology Transfer

Most of the small-scale production of rural industries depended on simple tools, primitive techniques and local capital. These kinds of small-scale technologies were sometimes called "appropriate technologies", technologies which were usually less efficient than those used in modern large-scale enterprises.[84]

Before 1978, technology transfer 1978 occurred in two stages: the early initiation stage of development, and the consolidation stage which, as stated by J.Sigurdson, was

---

[83] ibid p.80

[84] J.Sigurdson (1973),p.74 see Michel Oksenberg (1973)(ed.)

"necessary to develop a local technical capacity, the problem-solving capacity." [85] In order to support rural industrial development the government used different approaches for technological integration such as vertical and horizonal transfers .

Technology transfer involved vertical and horizontal transfers of material, design and capacity. Vertical transfer meant transfer from state, or provincial enterprises downwards, while horizontal transfer meant transfer between enterprises at county level or below.[86] Generally speaking, since it involved the transfer of physical capital and human resources by large urban-based industries, the vertical transfer method was more effective and powerful.

During the transfer process, modern industry could provide support to rural industry in two ways: by sending personnel and equipment to the places where the new small-scale enterprises were established and by accepting local personnel from the rural industries for training. In the first alternative, technical personnel from modern industries were transferred from old to new factories and newly graduated students were allocated to newly established

---

[85] ibid p.91

[86] J.Sigurdson (1977),p.89 op.cit.,

rural enterprises. The second alternative involved city-based old factories training workers who were recruited by the rural factories, and rural factories used their own skilled workers to train unskilled labourers.

The technology integration sometimes occurred on a large scale through organization. Technicians from different regions with the same skills were organized by the institution to establish local enterprises. In other instances personnel came from local areas for extensive training. Sometimes such training could involve more than a thousand personnel from both sides of trainers and trainees. For example, between 1971 and 1972, about 15,000 cadres, workers, and technicians from urban areas were organized. They assisted in setting up local enterprises in thirty seven counties in the Gansu province. Their main tasks were to produce and repair agricultural machinery, to build power-operated irrigation and drainage projects, and to train personnel.[87]

Chinese rural industry was built up by transferring capital and technological resources through national institutions and industrial systems. This was a very specific case in the Thirds World countries' context.

---

[87] ibid p.92-95

2 Functions of Chinese Rural Industry

Before 1978, China's rural industry was systematically set up to act as the link between agriculture and modern industry, and to provide services particularly to agricultural production. I will discuss these two basic functions in this section.

1) Linkage Function

China was an agrarian-based country with the majority of its population living in rural areas, industrial development in the 1950s used to concentrate on major cities and capital products. These were later found unable to provide either agriculture production or rural population with adequate input and consumer goods. Meanwhile, the primitive agricultural production was accompanied with low output and low productivity. Agriculture could hardly provide modern industry with the desired demand market on one hand, and with the raw material supply market for input on the other. The gap between modern industry and agriculture was supposed to be bridged by rural industry which was to facilitate the integration of urban industry and agricultural production.

Jon Sigurdson describes the linkage function of rural industry between the modern industrial sector as a three-stage model:[88] 1) At stage one, rural industry, as an

---

[88] see Appendix

intermediary, initially provides agriculture with many of the repair and maintenance facilities needed for tools and machinery. It also produces industrial inputs for agriculture and processes agricultural produce. Gradually, the link between rural industry and the agricultural sector becomes a mutual relationship with the former providing a much of the technical skill training and the latter providing a moderate amount of human resource. With increased agricultural development, more raw materials and more local capital can be generated for further development of rural industry. At this stage, the linkage between modern industry and rural industry is a one-way relationship: modern industry gives rural industry much of the required technology, such as machinery and technical training.

2) At stage two, rural industry has a partly integrated relationship with the agriculture sector, and a mutual relationship with the modern sector. Agriculture begin to supply rural industry with an increasing amount of raw materials for light industrial products. At the same time, rural industry processes an increasing amount of farm produce. From this increased productivity, the agricultural sector gains more purchasing power for farm machinery produced by modern industry. Furthermore, although a large part of the rural labour force may still be employed in agricultural production and related activities, the capacity

of rural industry to absorb more labour force would increase to a certain degree. The relationship between rural industry and modern industry now become more sophisticated. Rural industries can supply modern industry with components and products. During this period technology continues to flow from modern industry to rural industry.

3) At stage three, the link between rural industry and modern industry has become more closely integrated. The quality standards and standardization of the produce in rural industry has been improved considerably. Some of the produce have shifted from modern industry to rural industry for production, and a growing amount of export products have been manufactured by rural industry. The rural industry has developed a subcontracting system for modern industry and its economic scale also extended. Rural industry and related service development become increasingly important for labour absorption. The labour force has reduced substantially as agricultural productivity has risen from increased mechanization.

Through this three-stage process, agriculture, rural industry, and modern industry have become more closely integrated, which will create a new economic structure for China.

3) Service Function

Service function was an associated function of rural industry in mechanizing China's primitive agricultural production. In 1960, China altered its national economic strategy from an urban heavy industry focus to "taking agriculture as the foundation".[89] In building this foundation, mechanization was regarded as necessary to raise agricultural productivity as well as producing consumer goods.

Carl Riskin has described this dynamic role as possessing two functions, the "choice of techniques" function and the "sectoral allocation" function. "Choice of techniques" indicated that rural industries that adopt small-scale, relatively labour-intensive techniques can utilize production factors not used by the centrally controlled large-scale industry. "Sectoral allocation" referred to that rural industry could concentrate on "production of rural producer and consumer goods, particularly inputs needed by agriculture."[90]

Theoretically, the "Choice of techniques" function was based on the idea described Riskin that "any alternative method of

---

[89] Benjamin Schwarts (1973),p.25 see Michel Oksenberg (1973)(ed.) op.cit.,

[90] Carl Riskin 1971:248,249 op.cit.,

production depends upon the relative availabilities of the factors of production required by such alternative."[91] In China's situation during the 1960s, it was more realistic to adopt different and inferior techniques without using particular material, skill or imported components. The justification of the "sectoral allocation" was indicated by the function of concentrating production of agricultural inputs and rural consumer goods, which were traditionally manufactured by small-scale, labour-intensive methods. When modern industry concentrated on produce which supply high quality material, advanced technology and imports, the heavy task of modernizing agriculture fell upon the shoulders of rural industry. Rural industry was able to provide "the needs of agricultural production and the rural population" by producing farm implements and machinery, fertilizers, rural transport equipment, and handicraft tools, by repairing tools, processing fodder, as well as by adequate supplying building materials required rural construction projects.[92]

Although the emphasis of linkage function and service function was different, they both generalized the important role of rural industry in China's economy.

---

[91] ibid p.247

[92] ibid p.248

3 Characteristics of Chinese Rural Industry

My discussion of the main characteristics of Chinese rural industry focuses on two periods: pre-1987 and post-1978. I will discuss the common features of rural industries in the first part of this section, while focusing in the second part on the particular features of TVEs (township and village enterprises) which I have found in case studies.

I Pre-1978

Rawski notices that Chinese rural industry had advantages in the fact that

> "small plants located in county seats and rural areas are relatively easy to equip and can make use of small local resource deposits. Rural industry can reduce rural claims on overburdened national transport facilities and cater to local requirements that are often overlooked by urban industry. If properly managed small plants may have relatively low capital costs and short gestation periods. By meeting local demand, small industry can reduce the pressure on urban output, allowing advanced units to concentrate on innovation and quality control rather than on maximizing the volume of current product. Rural industry provides a constructive outlet for regional pride and allows localities to compensate for some of the errors and oversights of a centrally directed system of economic planning."[93]

Chinese rural industry before 1978 possessed by four common features:

---

[93] Thomas G. Rawski (1979),p.60

1) Large Number, Small Size and Collective Ownership

Rural industry was arranged in a pyramid structure similar to the Chinese hierarchical administration system.

At the base of this pyramid, the brigade level, there were about several hundred thousand small repair and manufacture workshops. In the middle, the commune level, there were about 160,000 enterprises including mining spots, small hydroelectric stations, small iron and steel plants, cement plants, chemical fertilizer plants, and other chemical plants. At the top of the rural industrial structure, 3,000 machinery plants had been built at county level. In addition, there was also a large number of light (consumer) enterprises at these three different levels, amounting to more than 100,000 units. Those rural industries were extended within the 50,000 communes.[94]

The size of the majority of rural enterprises was small by international standards of classifications: As Griffin observes "the typical enterprises employed just under nineteen people in 1978" [95] Usually, enterprises at brigade-level were very small, arranging from 2 to 20 workers, the smallest one had only two persons working as blacksmith, farm tool repair, flour milling, knitting and so on. A majority of the enterprises at commune and county

---

[94] J.Sigurdson (1977),p.3 op.cit.,

[95] K. Griffin (1984),p.212 op.cit.,

levels fell within small and medium categories, ranging from 10 to 150 workers.[96] The TVEs in 1992 still retained this feature." "the small-scale enterprises consisted of 97 % of the total rural industries."[97] However, the concept of small-scale in terms of workers may vary from area to area and from enterprise to enterprise. The majority of rural enterprises at brigade and commune levels also were collectively owned. The same held true with enterprises at county level.

2) Serving Agriculture and Rural Population by Using Local Resources

Importantly, rural industry serves agriculture. Consequently, the structure of Chinese rural industry was established on the principles of using local raw materials, as well as manufacturing and distributing products locally.

The components and varieties of rural industry fell into four categories. The first category included heavy small-scale industry, or the "five small industries", which dealt with production of energy, cement, chemical fertilizer, iron and steel, and machinery. Those industries were the most important elements in providing the necessities of vague input for agricultural production. The second category

---

[96] ibid p.40

[97] People's Daily (Overseas Edition) March 1,1993

included various resource-based industries, such as coal, iron ore, limestone, and other minerals which provided raw materials to the "five small industries" or to other national enterprises. The third category related to light industry in terms of processing agricultural and side-line produce and some locally needed consumer goods, such as flour milling, oil pressing, cotton ginning, as well as manufacturing textiles and shoes, household goods of porcelain and metal, canned fruit, and other goods. And final category involved farm machinery repair and manufacture network, simple farm implements, and tools.[98] Products of these five categories of rural industries not only could serve rural market, but also provide the access to the urban market.

3) Low Cost in Utilizing Factors of Local Production

Economically, production required three factors: capital, labour and resources. Rural industry had the advantage of utilizing these factors at a low cost, for most of the rural industries were established where raw materials could be easily utilized or produced from abundant natural resources. In the section of "Formation of Chinese Rural Industry" of this chapter, I attempted to show that the capital cost did not possess a great of economic meaning. With regard to labour, on one hand the abundant human resources in China's

[98] J. Sigurdson (1977),p.22-25 op.cit.,

rural areas allowed low production cost, on the other hand the rural wage system before 1978 made the labour cost even lower.

As I have argued, the rural wage system was different from the national institutional wage system. Since rural industry emerged and developed from the agricultural sector structure of collective ownership, its wages still remained within the work points system. When the wages were represented by the average income of the production team and the output in a production team was low, workers in the factories received low wages accordingly. [99]

II Post-78

Since 1978, the agricultural service-oriented rural industry shifted towards a market-oriented, diversified economy. The term rural industry was replaced by TVEs, to represent all of the non agricultural activities in a broad sense. TVEs themselves became the independent economic sector which contributing to the whole national economy. Within this new structure, rural industries still maintained the primary features of small-scale production: they continued to utilize indigenous technology and local resources, and to provide services for agriculture. But some intermediate or even large-scale TVEs began to emerge.

---

[99] Thomas G. Rawski (1979) p.67 op. cit.,

Before 1978, state allocated and controlled the material supply market at state-fixed prices. After the government relaxing the policies in the 1980s, the TVEs had greater access to supply resources and prices. TVEs' production could acquire their raw material input on from local-resources and in some cases, outside markets. For the capital input, TVEs were given access to local bank loans in addition to local government budget allocations and their self-accumulation.

Post-1978, TVEs ownership was also diversified. In addition to the state-owned and collectively owned TVEs, privately and individually owned TVEs became common. Since the 1980s, collective and private ownerships became dominated in TVEs ownership. Particularly privately owned enterprise grew so rapidly that they became competitive with other forme of ownership production. In the following discussion, I will focus on the particular characteristics of TVEs with these ownerships by examining several case studies. I will also briefly discuss a new form of rural production, the rural labour hiring industries.

1) Collectively owned TVEs

From many case study, I have found that the growth of collectively owned TVEs after 1978 depended on two factors:

local government support and the enterprise's subcontracting relationship with the urban industries.

The government encouraged and supported collective enterprises, one of the main components of socialist production. Indeed, the government granted these enterprises a formal position in the national planning of resource allocation. After 1978, however, collective TVEs faced the strong challenge presented by the competition arising from emerging private TVEs. Some collectively owned TVEs were rent or leased for the private operation, some of them were closed down because of profit loss, while others remained strong enough to continue production at a high growth rate.

The collective TVEs' survival depended largely on the local economic environment and the local government's capacity to provide such an environment. In this respect, Waits county served as one of the successful examples of collective production. [100]

Development of TVEs in Waits was very significant. In 1985,

---

[100] The case of Waits used in this part is chosen from the research on China's industrial TVP sector undertaken by Chinese institutes and World Bank between 1985 and 1987. The research involved four counties in different part of southeast China, and Waits is one of them as the collective-owned model of fast growth TVEs. TVP refers to the rural nonstate enterprise (township, village, and private enterprise) that excludes production team enterprise. W.Byrd and Lin (1990)(ed.)p.xi

the collective-owned TVEs in Waits composed of 35 percent of all its TVEs, and the enterprises proportion of GVIO (gross value of industrial output) contributed 96 percent of the total GVIO in the county. The industrial TVEs accounted for 74 percent of the total, and its heavy industrial TVEs shared 75 percent of GVIO, since they possess a high concentration of products in mining and construction materials that require higher level of skill and technology.[101] In 1985, Waits GVIO per capita was 4,246 yuan compared to the nation's average of 885 yuan.[102]

The fact growth of Wuxi"s TVEs was due to such factors as locations, heritage and township interference. Wuxi county is located in southern Jiangsu province, near Shanghai. The town had highly developed agriculture and industry. Svejnar writes,

> "Rich agricultural produce supplied the raw materials for many TVP food-processing and textile industries. An advanced industrial development in the surrounding areas provided opportunities for TVPs to engage in processing work for large state or urban collective factories or to pick up products that these factories no longer considered profitable to produce." [103]

---

[101] Jan Svejnar and Josephine Woo (1990),p.65-69, 74 see W.Byrd and Lin (1990)(ed.) op.cit.,

[102] ibid p.74

[103] ibid

Wuxi also possessed a relatively better technology and human resources, such as these skilled workers who returned to rural areain the 1960s andl970s from the urbanindustries. [104] In addition, supportive governmental policies contributed to the successful development of collective TVEs by limiting the development of private enterprises.

In the early 1980s, Wuxi government granted private enterprises as collective enterprises to the same access to production resources. However, the private enterprises increased so quickly that they started competition for resources and products with the township's enterprises. Since the township government depended on TVEs for its revenue, it deliberately controlled the growth of private enterprises through policy manipulation. Such township government's mechanism will be further discussed as one of the debates in Chapter IV.

If the Wuxi case represented a successful example of collective TVEs resulting from strong motivation by the local government, Hang county represented an example of survival through dependence on integration with large urban

---

[104] ibid p.77

industries.[103]

Hang county is located in northern Zhejiang province in the hinterland of Shanghai city. Growth of TVEs in this county resulted form the subcontracting of production to urban enterprises. In the early 1970s, two small-scale industrial enterprises, the agricultural Implements Factory and the Sock Factory, engaged in subcontracting processing production to two Shanghai factories. Shanghai factories provided equipment, raw materials and market, while the county factories provided labour and the processing site. By the early 1980s, these two factories expanded in both employment and production. The county invested the capital generated from these two factories for a new factory in 1979: the Printing Machine Factory. After contracting with the Shanghai Camera Factory, the Printing Machine factory began to produce backs for box cameras and later on the first rough grinding of camera lenses. In 1983, reinvestment from these industries provided funding for a new joint venture factory for medium-scale production, the Optical Parts Factory. By 1987, the county started to bring in

---

[103] The case of Hang is chosen from a field research carried out by Philip C.C. Huang between 1983 and 1985, as part of a larger collaborative project on Hang township funded by the National Endowment for the Humanities and sponsored by the Committee for Scholarly Communication with the PRC of the U.S. National Academy of Sciences. (Philip C.A. Huang The Peasant Family and Rural Development in the Yangzi Delta, 1350-1988 1990 Stanford University Press

foreign investment in chicken farming and garment manufacturing for exports. Huang points out that "This enterprise gave a powerful boost to the industrialization of the township. By providing an output worth in excess of 50 million yuan as year, it doubled the gross value of Hang's industrial output practically overnight." [106] In 1988, another joint enterprise was established to manufacture jackets and pants at an initial investment of 1.3 million dollars (US) from Japan.[107]

These subcontracting enterprises served two purposes: the extension of urban enterprises production scale and the growth of TVEs through cooperation with urban industries. The phenomenon of subcontracting represented a vertical integration with the urban industries, consequently, division of labour which focused on labour-intensive manufacturing.

2) Private Enterprises

Privately owned industries were abolished in 1958 but emerged again in 1978 under the PRS and new governmental policies. Since then, township and village private enterprises (TVPs) grew rapidly. Although their proportion

---

[106] P.C.C. Huang (1990),p.253-255

[107] ibid

to the national GOVI was small (only 0.8 percent in 1989),[108] they possessed great deal of potential for production, because of their comparative advantages such as efficiency of capital resource allocation, division of labour, attraction of human resource, and rural labour hiring production.[109]

a) Efficiency of Capital Resource Allocation.

Compared to that of collective enterprises, the investment for private enterprises originates from different origins and sources. Most private enterprises started their business by investing their savings from private plot and sideline production, or by leasing the collective enterprises which operated at low profit or in deficit. By 1984, for example, they had contracted approximately 50 percent of the total collective enterprises in the less developed provinces. [110]

The investment for private enterprises also came from other sources, such as bank loans and credit cooperation, credit

---

[108] CSY (1990) p.393 "Gross Output Value of Industry by Ownership of Enterprises"

[109] The Wenzhou case studies used in this part come from a field research on Wenzhou area undertaken by the Economics Research Institute of the Chinese Academy of Social Sciences. Wenzhou area is located in Zhejiang province in southeastern China. It is the pioneer of Chinese market economy, especially for its private and individual household industries. see Nolan and Dong Foreng

[110] Lin Qingsong (1990),p.177 see W.Byrd and Lin (1990)(ed.) op.cit.,

from local residents, or from issuing bonds. Since 1984, loans to private enterprises issued by local banks and credit cooperations increased sharply, composing a larger proportion of the total funds to the TVPs in the economically advanced areas. [111]

Compared to collectively owned TVEs, TVPs were more capable of managing and operating their business at large profit margins. In the case of the Wenzhou area, for example, C.Ruiming describes "as soon as a nearly bankrupt collective enterprise is contracted to a private employer, it immediately becomes invigorated and within a year earns a profit of over 100,000 yuan." [112]

Private enterprises were more efficient than state-owned enterprises, a point which was obvious from the following example cited by Lin Qingsong. In one of the districts of Cangnan county in Wuxi area, a private enterprise that engaged in recycling spun and woven textile products had "a ratio of investment to output of 1:10, and a ratio of fixed capital to profits of 1:8.5, while the state-owned enterprises producing the same products has a ratio of 1:2 of investment to output, and 1:2.9 of fixed capital to

---

[111] ibid

[112] Chen Ruiming (1990),p.147 see P. Nolan and Dong (1990)(ed.)

profits" [113] This case indicated that the return for investment in private enterprises was much higher than state-owned enterprises.

b) The Attraction of Human Resources

Compared to both state and rural wage systems as discussed in Chapter one, private enterprises had the ability of employing rural surplus labour from local or outside areas by setting different wage levels. They were able to hire technicians, skilled workers and managerial personnel from the collectively or even state-owned enterprises at flexible wage levels. Meng Xin argues that "most TVPs (township and village private enterprises) workers came from rural areas."[114] With this advantage, TVPs could recruit large numbers of workers from backward areas in other regions although, in some cases, the surplus labour had already been fully absorbed by the collective-owned enterprises.[115] By the end of 1985, for example, 68 percent of TVEs workers were employed by TVPs.[116] TVPs also took the advantage of wage mechanism to attract human capital from the state or collectively owned enterprises, and the ex-commune, brigade

---

[113] Lin Qingsong (1990),p.177 see W.Byrd and Lin (1990)(ed.) op.cit.,

[114] Meng Xin (1990),p.302 see W.Byrd and Lin (1990)(ed.) op.cit.,

[115] Lin Qingsong 1990:180 ed. Byrd & Lin op.cit.,

[116] ibid p.178

leaders. A sample survey of TVEs in different provinces showed that about 50 percent of the technical and managerial personnel came from collectively owned enterprises at township and village levels.[117]

c) Division of Labour

Nationally, private enterprise development covered an extremely broad area. As the pioneering region in Chinese rural enterprise development, Wenzhou area in Zhejiang province became the model of private enterprise.

Wenzhou area was characterized by a form of household handicraft production which was based on division of labour. According to statistics, there were 133,000 households and 330,000 labourers engaged in this kind of production in 1984, amounting to one-sixth of the total rural labour force and 60 percent regional GVIO. In the production process, the entire Wenzhou area operated as a systematic manufacturing factory which was based on regional division of labour and the division of labour within the production process. These two kinds of labour divisions were different in the ways as follows.

Regional division of labour refereed to that many households

---

[117] Lin Qingsong (1990),p.180 see W.Byrd and Lin (1990)(ed.) op.cit.,

produce for the same product. For example, Liushi district in Leqing county specialized in the production of 1,200 different types of low-voltage electrical appliances. In this district, about ten relatively large-scale townships and villages were involved in producing particular components for products, such as miner's lamps, low pressure alternating mutual indictors, and automatic atmospheric switches. Within a township or village, each component was assembled by specialized households. For instance, Luzhuang village had 10 large-scale households, which assembled automatic atmospheric switches while an additional 100 small-scale households produce different components for these switches.[118]

Division of labour within production process refer to that for one produce, there were many different procedures for which each household was responsible. For example, a badge production in Jinxiang township of Cangnan county was divided into more than ten different procedures and individual household enterprises produced each one of them. Each household produced intermediary goods based on its own production capability, and they transacted the partially assembled products according to the market prices.

---

[118] Zhang Lin (1990),p.101 see P. Nolan and Dong (1990)(ed.) op.cit.,

The individual household and labour-intensive production within one region led Wenzhou to a concentrated commodity markets for its main products. Zhang Lin notes that "in the past few years about 415 commodity markets of different sizes have emerged in Wenzhou's villages; each day over 400,000 `person times' of transactions are made, and more than 100,000 traders buy materials and sell products every day." [119]

d) Rural labour hiring production.

Hiring labour by private enterprises used to be a critical issue in Chinese socialist production. Because of the sense of exploitation associated with profit, labour hiring was strictly banned in 1949. After the economic reform, individuals were allowed to hire workers for specific functions including temporary ploughing or harvesting in busy seasons, housework, aquaculture work, farm help, contraction work, and household enterprises.[120]

As I mentioned in my discussion of the Wenzhou case, the number of hired labourers by each of the 13,121 household and joint household enterprises was 42,163 with an average less than four hired workers per household. Out of the household industries, there are about 120 which were called

---

[119] ibid p.97

[120] Chen Ruiming (1990),p.140 op.cit.,

big labour hiring households in the sense of employing over 30 workers.

The meaning I mentioned this specific production is that Chinese rural private enterprises contains a contradicted feature to China's socialist principles. Because this labour hiring production is still in the initial stages, this practice has not become a systematic aspect of the national economy.[121]

Summary

In Chapter two, I discussed the development of TVEs from three perspectives: their formation, their characteristics, and their functions. China built up a functioning system to support technology transfers. The initiative of rural industry has switched from agriculture service to market orientation. They had the characteristics of small-scale, semi-skilled and resource-based production. Before 1978, collective production were dominated rural industries. Since 1978, they had been challenged by private-ownership production, a form of production which had the advantages of efficiently utilizing capital with both low cost and high output.

---

[121] ibid p.147-150

CHAPTER III

RURAL SURPLUS LABOUR AND DEVELOPMENT OF RURAL ENTERPRISES

In this Chapter, I will examine the issue of rural employment during the past decades and the role of rural industries in the labour absorption. This topic will entail three perspectives: surplus labour determinants and labour utilization in agricultural sector before 1978; the factors contributing to the growth of surplus labour; and finally, increasing capacity of TVEs for labour absorption after 1978.

1. Surplus Labour Determinants

With its huge and thickly clustered population, China has had a long history of urban unemployment and rural underemployment.[122] A survey of approximately 2,866 farms demonstrated that in the early 1930s, "agricultural labour was fully employed for only about one-quarter of the year".[123] After 1949, especially in the 1950s and 1960s, "China succeeded in reducing the ranks of surplus rural workers by increasing the labour intensity of crop production and promoting non-agricultural work in the off-seasons".[124]

---

[122] T.Rawski (1979),p.6 op.cit.,

[123] J.R.Taylor (1988),p.737

[124] ibid p.736

Rural labourers were absorbed during period between 1950 and 1970 the magnificent rural construction projects and intense agricultural production absorbed many rural labourers.

1) Water Control Projects

Water control projects in China focus on flood control, irrigation, and drainage. Flooding was always one of the major natural disasters in China's history. For example, two rivers in northern China, the Yellow River and Huaihai river, caused great damage to the rural people and agricultural production throughout history. Therefore, one of the government's major projects centred on flooding control which was addressed in two ways: digging new channels in order to divert the water to the sea through unpopulated areas and building reservoirs with networks of irrigation canals. When the water level was high, water could be diverted to the reservoirs, when the water level was low, water could be pumped back into the river. In both ways, the flooding control was combined with irrigating farm land when a drought occurs. Before 1949, only 20 reservoirs existed in China. By 1973, this number increased to 2,000. These flooding control projects have involved hundreds of thousands of labourers in long term projects.

Irrigation and drainage projects also maintained water control. During the winter-spring season, many rural people

are idle in the rural areas, especially in northern China where more irrigation is needed. Each year, the irrigation projects involved more and more of the labour force. The following table exhibits the increased number of labourers involved in these projects between 1952 and 1977.

(Table III-1-a)

Water Management Statistics, 52-77

Year	Labour force(m)	Irrigated areas (m of hectares)	% Arable area
1952	n.a.	21.3	20.0
1964	15-30	33.0	31.0
1972	80-90	42.6	40.0
1975	100+	47.4	44.0
1977	100+	n.a.	50.0

(Source : T. Rawski 1979:111 selected from Table 4-9)

As shown in this table, after continued and persistent efforts during 25 years, China's achievement of rural water control was tremendous. By 1975, the input of the rural labour force into irrigation projects increased 122.5 percent from 1952, involving more than a hundred million people and covering 50 percent of the arable land in 1977. This implementation was significant because these projects reduced underemployment during winter months, when rural labour would otherwise have been idle.[125]

---

[125] T.G.Rawski (1979),p.741 op.cit.,

2). Intensification of Agriculture Production

During the 1950s, China began adopting a new method of intensifying farming in order to increase output, a method which in turn created a large demand for labour utilization. This new strategy included two basic categories: intensification of cropping practices and intensification of the cropping cycle.

"Intensification of cropping" refereed to an increase in the resources applied to each unit of sown acreage in the absence of changes in the type of crops grown or in the rotation cycle.[116] This form of production involved three processes: land preparation, "close planting," and transplanting.

In land preparation, deep ploughing increased the input of human and animal labour and therefore created a high yield production. The use of organic fertilizers, and the application of chemical fertilizers to the arable land also required more labour consumption. "Close planting" rose the crop yield by increasing the density of plants in one unit of field. Transplanting moved rice shoots, vegetables cotton, or rape from seed beds into the main field, a method which was a highly labour-intensive.[117]

---

[116] ibid p.91

[117] ibid p.96

Intensification of the cropping cycle in the Chinese agricultural context refers to an increase in the number of crops harvested per unit of cultivated land and resulting from multiple cropping and intercropping.[128] Because of the scarcity of arable land, the Chinese cropping system had been intensive for centuries. The new method of multiple cropping focused on developing new varieties of seeds. Intercropping simultaneously cultivated more than one crop in a single field. In both aspects, more labour force was required to attend to the crop.

The implementation of water control projects and the intensified agricultural production provided a positive solution to the rural underemployment problem, for they increased the number of labour work days in each year.
China commonly used the method of "average work days in a year" of the labour norm method to determine rural underemployment. During the 1950s, the Chinese economic planners set a norm of 250 for the full-employment target. Using this method, the planners estimated that the number of average peasant work days per year was 119 from 1950 to 1954, 174.6 in 1958, and 215-84 in 1975.[129] By 1975, there was apparently a "full employment" occurring in the rural areas.

---

[128] ibid 102

[129] J.R.Taylor (1988),p.744 Table 4 op.cit.,

Since 1978, however, the problem of rural underemployment became increasingly serious. For example, Chinese press reported in 1983 that about 30-40 percent of China's rural workers were redundant, amounting to about 114 million and 152 million labourers.[130] A relatively similar unemployment rate was also found through other measurements (such as the experience method, the estimation method, the marginal efficiency method, and the quantitative survey method[131]). The estimates generated from all of these measures showed that about 30 percent of the total rural work force was redundant, ranging from 70 million to 156 million during the period of 1982-86.[132] According to the estimates in a 1987

---

[130] ibid p.736

[131] Experience method. The production team head would estimate average labour requirements for the production work of their village, and simply compare these estimates with actual labour hours to derive surplus labour statistics;

Estimation method. Surplus labour is calculated by first deterging overall labour requirements for a benchmark year and then compare this with actual labour use to get the land/labour or labour/equipment ratio;

Labour norm method. The number of surplus workers is determined by first calculating overall labour requirements, obtained by dividing the sum of labour days required to grow individual crops by the average annual labour days available per worker. This quotient is then subtracted from the actual rural labour force to yield an estimate of redundant workers;

Marginal efficiency method. This method employs coefficients from a Cobb-Douglas production function to estimate agricultural labour requirements;

Quantitative survey method. This is a scientific sample research method used for a large area or research field.
bid.,p.749-753

[132] J.R.Taylor (1988),p.744 Table 4 op. cit.,

report, this figure will increase to 250 million by the year of 2000.[133]

Rural unemployment also reflected by a large degree of seasonal migration. After the government relaxed its regulations on the outflow of rural labour to the urban areas, the migration wave became a serious issue. In recent years, the average outflow of population from rural areas reached approximately 70 million.[134] Liu points out that "between 1988 and 1989, the number reached 50 million, and by 1990 increased to 80 million".[135]

2 The Factors for the Growth of Surplus Labour

Underemployment in the 1980s was not a new issue, but rather a continuity from the past decades. Although in the mid-1980s the number of average work days for a farmer reached 250 per year, disguised unemployment still existed in agricultural production - - a phenomenon of "what three persons can do is done by five."[136] But beyond this phenomenon the rapid growth of rural surplus labour was also

---

[133] ibid This estimation was done by the State Council's Rural Development Centre and the Rural Development research Institute of the Chinese Academy of Social Science in their 1987's report,

[134] People's Daily (Overseas Edition) March 10,1993

[135] Alan O.L.Liu (1991) p.393

[136] ibid p.746

due to several important factors that occurred after 1978.

1) The first and foremost cause for the growth of surplus labour was the fast growth of population and labour force resource.[137] From 1952 to 1989, China's population increased about 537 million (see Table III-3-a, first column). The proportion of working age people increased by about 417 million. During the same period, employment increased by about 346 million (see column two and three).

(Table III-2-a)

Proportion Change in Labour Structure (m)

Year	Popu.	LFR	SLF[138]
1952	574.82	267.10	207.29
1962	672.95	305.30	259.10
1982	1,015.90	566.83	452.95
1988	1,096.14	669.60	543.34
1989	1,111.91	683.64	553.29
%52-89	93.46	155.95	166.92
a.a.g.%	2.5	4.1	4.4

(Resource: CSY 1990:76,81)

---

[137] Labour Force Resource refers to all persons who are within the working age range (16-59 for men, 16-54 for women) and able bodied, excluding military personnel, prisoners and disabled. (Source: CSY 1990)

[138] SLF: Social Labour Force refers to persons being employed or involved in both industrial and agricultural production activities.

The average annual growth rate of the social labour force was 1.6 percent higher than the growth of the population. At the same time, the average annual growth of employment was only 0.3 percent higher than that of the social labour force. Thus, although China had made great efforts to control its population growth, the numbers of those entering the work force was not expected to decline in the short-term. Employment will therefore remain one of the most important requirements in China's economic development.

2) Secondly, the implementation of PRS in rural areas was another cause of rural unemployment increase. Under this new strategy, "agricultural procurement prices were raised, free markets reopened, restrictions on private plots abolished, and the commune system dismantled"[139] As a result, the average standard labour day per hectare which used to increase with virtually every crop, (particularly for grain crops which used to employed the vast majority of farmers) dropped sharply since 1978.[140] As it is, PRS raised farmers' incentives for higher productivity and released large amount of labourers from the land cultivation.

3) Declining arable land also forced farmers out of rural

---

[139] J.R.Taylor (1988),p.748 op.cit.,

[140] ibid p.749

areas and worsened unemployment. Fast economic development with over 40 years caused the sharp expansion of towns and cities and thereby created a serious decline in the amount of cultivated land. Former farm lands became sites of new homes, factories, and roads. For example, between 1957 and 1977 some 291,000 square kilometres of arable land was taken out of cultivation, mostly in densely populated areas, while only 171,000 quare kilometres of more marginal land was reclaimed for farming. As a result, the area of cultivated land declined from 1,113,000 square kilometres to 993,000 square kilometre in twenty years, a net deduction of 120,000 square kilometre and 10.78 percent of 1953's arable land.[141] In 1991, the proportion of cultivated land was only 10 percent of all of China.[142] The reduced amount of cultivated land created more surplus labour, removing these workers from their traditional farms and transferring them from rural to urban areas.

4) In order to control the growth of urban cities and secure basic necessities for the urban population, China adopted various systems to limit rural migration. Two of these were the household registration system and the urban ration

---

[141] J.Baniser (1987),p.300

[142] ASIA 1992 Yearbook "Regional Performance Figures"

system.[143] Both of them kept farmers' living on their land. In October of 1981, the Central Committee and the State Council reiterated the need to strictly "control the inflow of rural labourers into cities and township." But this policy was not entirely successful; the power of PRS to release surplus labourers was so strong that the outflow of surplus rural labour into urban areas became irresistible. In 1983, migration policies were relaxed and rural people were permitted, and indeed encouraged, to create their own enterprises in the cities, such as construction teams, small factories, shops, hotels, and so on.[144]

5) Another cause of rural unemployment was the limitation of agricultural production. Maximized labour use (through promoting multiple cropping, intercropping, deep ploughing, extensive fertilization and expanded irrigation) reached its limit and had left little place for more labourers. For example, as Taylor found that "from 1953 to 1978, the labour intensity of raising rice, millet and tobacco more than

---

[143] The household registration system limits people's citizenship to where they are born or where they have formal jobs. People can not move to other places unless they are formally transferred by the central or local labour departments. Under this system, urban people's necessities such as rice, flour, meat, clothing, daily-used fatalities are distributed by rationing coupons. Legitimate housing and employment could be obtained only with proper registration. Phillip Huang 1990:288-289

[144] Michel Bonnin and Michel Cartier (1988)p.199 see F,A.Hussain and T.Pairault (1988)(ed.)

doubled; of growing sorghum, rapeseed, cotton and hemp more than tripled, and of growing wheat, soyabeans, peanuts and sesame more than quadrupled."[145] Therefore, while the agricultural output continued to increase in the 1980s, the capacity for agricultural production to absorb more labourers was seeming quite limited.

6) State policies encouraged rural surplus labour to work in the urban areas, and the urban sector absorbed about 8 million rural labourers from 1978 to 1986.[146] Yet the employment capacity of urban enterprises was limited. In 1949, the proportion of rural and urban employment was 91.5 percent and 8.5 percent respectively (see Table III-3-b). In 1978, this composition switched to 76.1 percent for rural areas and 23.9 percent for urban regions. Since 1980, however, the proportion of these two sectors remained consistently at approximately 74 percent for rural employment and 26 percent for urban employment. This structural change of the employment trend demonstrates that there was a limit as to how much surplus labour urban enterprises can absorb.

---

[145] J.R.Taylor (1988),p.741 op.cit.,

[146] ibid p.743 In addition, according to Taylor that from 1949 to 1983, the urban sector have absorbed about 70 million rural labourers. From 1984 to 1986, an additional 4 million was recruited for urban jobs.

(Table III-2-b)

Total Employment, by Urban and Rural Area, Selected Years, 1949-86

	Employment Levels (million persons)				
Year	Total	Rural	% of T	Urban	% of T
1949	181	165	91.5	15	8.5
1955	223	195	87.5	28	12.5
1965	287	235	82.1	51	17.9
1975	382	299	78.5	82	21.5
1978	399	303	76.1	95	23.9
1979	406	306	75.4	100	24.6
1980	419	314	74.9	105	25.1
1981	433	322	74.5	111	25.5
1982	447	333	74.4	114	25.6
1983	460	343	74.5	117	25.5
1984	476	354	74.3	122	25.7
1985	499	371	74.3	128	25.7
1986	513	380	74.1	133	25.9

(Source: J.R.Taylor 1988:746 Table 5)

The six factors contributing to increased rural unemployment have created a bottleneck for the direction of rural surplus labour. The rate of work force growth was much higher than that of employment growth. The PRS system and the relaxation of policy control have released more rural labourers. Previously, the agricultural sector absorbed large numbers of rural people. But because of limited production, this no longer occurred. Furthermore, since urban enterprises had the burden of providing employment for the rural work force, they were often unable to employ more surplus rural labourers. Those constraints underlined the following issues: what are the alternatives to labour absorption? How

does the development of TVEs relate to this issue? I will now discuss the important role of rural enterprises in regards to these issues.

3 The Patterns of Rural Industry in Labour Absorption

The growth of rural industries in providing employment was demonstrated in the preface. Rural industries absorbed rural labourers directly and indirectly. Direct impact referred to its own capacity in absorbing new labourers, varying in different regions and at different levels. Take several cases in Hebei province for example. In 1972 rural industry comprised only 3.5 percent of the total labour force in the county of Zunhua, 2.6 percent in the region of Tangshan, and 2.6 percent at the provincial level.[147] In the rural areas near cities, rural industries employed more labourers. For example, in Shanghai's rural areas, the total employment of enterprises at the three levels was 14 percent of the total labour force in 1971.[148]

At the national level, the role of rural industry was even more impressive. In 1975, the work force recorded under the categories of national collective and "five small industries" was about 19.4 million out of 44.1 million of the entire industrial employment. Since this figure included

---

[147] J.Sigurdson (1977),p.50 op.cit.,

[148] ibid p.53

the collective enterprises in cities, the real number employed in rural industries was estimated to be more than one-third of all industrial employment nation-wide.[149] As Taylor writes, "by the end of the 1970s, rural small-scale firms employed over 20 million workers."[150]

Before 1978, the rural industries were also active in labour absorption through mechanization of agriculture and rural construction crews. For example, rural industry provided construction with cement to be used in dams and culverts, brick, concrete beams, and light poles in buildings; and electric lines, scrap iron and steel to be used in pines and support rods.

After 1978, the overall development of TVEs saw a parallel growth in their potential capacity to provide more access to employment, and they became more and more important in directly absorbing rural labourers. Even in some of the TVEs developed areas, labour shortages occurred. For example, plastic shoe production in Xiangjiang xiang of Rui'an county absorbed not only the whole surplus labour force in its own area, but also more than 3,000 workers from other areas at peak seasons. Farming became a sideline occupation, and those people working in the factories asked for a leave in

---

[149] T.Rawski (1979),p.65 op.cit.,

[150] J.R.Taylor (1988),p.741 op.cit.,

the high season for farming or hired labourers from mountain areas to do the farming.[151]

The growth of employment accompanying an increase in TVEs brought about great changes in the structures of TVEs' sectors and production, and in different regions. I will analyze such changes as followings.

1) Employment in TVEs by Sectors

(Table III-3-a)

Persons Employed by TVEs(m)

Year	Total	A	I	C	T	C&F[152]
1978	28.27	6.08	17.34	2.36	1.04	1.44
1982	31.13	3.44	20.73	4.21	1.13	1.62
1983	32.35	3.09	21.68	4.83	1.10	1.65
1984	52.08	2.84	36.56	6.83	1.29	4.55
1985	69.79	2.52	41.37	7.90	1.14	16.86
1988	95.45	2.50	57.03	14.85	6.84	14.23
1989	93.67	2.39	56.24	14.04	6.99	14.00
%78-89	231	-61	224	496	574	870
a.a.g.	19.3	-5.1	18.7	41.3	47.8	72.5

(Source: CSY1990:387)

In 1978, all of TVEs sectors employed only approximately 28 million labourers, while by 1989 the total persons employed by all TVEs had reached about 94 million, consisting 23

---

[151] Dong Fureng (1990),p.85 see P. Nolan and Dong (1990)(ed.) op.cit.,

[152] A: agriculture; I: industry; C: construction; T: transportation; and C&F: commerce and foods

percent of the total rural labour force [153] and increasing at an annual growth rate of 19.3 percent. Among TVEs' five sectors, exception of 61 percent decline in agricultural TVEs, all contributed to substantially increase of their employment ability. In 1978, industrial TVEs employed approximately 17 million persons, and their numbers more than tripled in 1989, reaching 56 million or 60 percent of the total labour force of entire TVEs sector. The other three sectors composed relatively low proportion of the employment, such as only about 1 million in transportation and service sectors, and about 2 million in the construction sector. By 1989. however, there were 14 million persons employed in each construction and service sector, and 7 million in the transportation sector.

As apparent from the growth of employment within TVEs' sectors, they had a change structurally away from an industrial and agricultural concentration towards an industrial, construction and service direction.

2) Growth of Labour Absorption in Different Types of Rural Industries.

In 1989, the total labour force in the TVEs sector reached 94 million, of which about 60 percent or 56 million people, were engaged in the rural industrial sector. The amount of

[153] see Footnote 6 on p.2

people employed by the TVEs consisted of 57.73 percent of persons employed by nation-wide industries, and 10.13 percent of the national total labour force in 1989.[154] Industrial TVEs absorbed the labour force in different ways by different types of industries.(see Table III-3-b)

(Table III-3-b)

Rural industries employing persons over 0.5 million (1989)[155]

Subindustries	Township	% of TT	Village	% of TV
1.Coal mining&dressing	0.82	5.63	0.75	4.12
2.Food manufacturing	0.60	4.12	1.16	6.37
3.Textile Industry	1.81	12.43	1.10	6.04
4.Apparel & other Textile Industry	0.62	4.26	0.70	3.84
5.Arts & Crafts	0.59	4.05	0.7	4.06
6.Building materials& other non-metal mineral products	3.19	21.91	4.8	26.41
7.Metal products	0.82	5.63	0.99	5.44
8.Machines building	1.36	9.34	1.4	7.91
9.Building materials& other non-metal mineral mining & dressing			0.95	5.22
10.Paper making and products			0.50	2.75
11.Plastic products			0.60	3.30

(Source: CSY 1990:429)

Table III-3-b(B) listed eleven out of the forty subsections

---

[154] CSY (1990),p.106 "Social Labour Force by Sector"; p.105 "Social labour Force"

[155] Among the forty types of rural industries, these eleven subindustries are at the top place and listed here.

of rural industries that employed over 0.5 million persons. Under these eleven categories, five sectors absorbed the largest percentage of the rural labour force. Remarkably, the sector of Building Materials and other Non-metal Mineral Products (#6) alone employed 8 million rural workers, - - 22 percent of the total township workers and over 26 percent of total village workers. Textile industry (#3) composed of more than 12 percent of the total township workers and 6 percent of the village workers. Other rural industries such as Machines Building (#8) and Food Manufacturing (#2) also involved relatively large employment numbers. Individual industries also played an important role in labour absorption, for their employment of 15 million persons and more than 16 percent of the total labour forces of TVEs was substantially more than that of township industries.

Considering their proportion to the total labour force of TVEs, it is clear that collective village industries and private industries played more important role than township collective industries in rural labour employment.

3) Labour Force Absorption of TVEs by Different Regions.

Since TVEs' development varied between regions, the performance of labour absorption also varied according to

regions. The varieties among the 30 provinces[156] and cities in China can be divided into four categories according to the proportion of employment. (see Table III-3-c.)

(Table III-3-c)

Persons Employed by Regions 1989 (m)

Region	Industry[157]	Township	Village	TTV[158]	%
Jiangsu	9.75	3.87	3.04	6.91	71.87
Zhejiang	6.16	2.1	1.5	3.64	59.09
Guangdong	5.65	1.54	1.79	3.33	58.94
Sichuan	6.21	2.04	1.07	3.11	50.08
Henan	4.87	0.97	1.63	2.60	53.39
Hebei	5.21	0.99	1.44	2.43	46.64
Hunan	3.53	1.23	0.91	2.14	60.62
Hubei	4.22	1.06	1.05	2.11	50.00
Anhui	3.29	1.13	0.62	1.75	53.19
Fujian	1.98	0.67	0.73	1.40	70.71
Shanghai	3.98	0.75	0.67	1.32	33.17
Shanxi	3.10	0.43	0.83	1.26	40.65
Liaoning	6.33	0.92	1.10	1.02	16.11
Jiangxi	2.53	0.60	0.42	1.02	40.32
Shaanxi	2.29	0.43	0.54	0.97	42.36
Beijing	2.08	0.3	0.54	0.88	42.31
Tianjin	1.97	0.22	0.51	0.73	37.06
Yunnan	1.36	0.36	0.37	0.73	53.68
Guizhou	1.31	0.2	0.50	0.70	53.44
Heilongjiang	4.2	0.4	0.3	0.7	16.67
Jilin	2.7	0.3	0.3	0.6	22.22
Xingjiang	0.8	0.1	0.4	0.5	62.50
Gansu	1.3	0.3	0.2	0.5	38.46

(Source: CSY 1990)

---

[156] Out of the 30 provinces and metropolis in China, the magnificent ones of 23 are listed in Table III-3-c

[157] Industry here refers to the total labour force in national industry. This figure will be used for further interpretation in Chapter IV.

[158] TTV refers to the total persons employed by township and village enterprises.

The first category covers township and village enterprises in eight regions with a total of over 2 million employed at both township and village levels, the second category covers six regions with a total of 1 million persons employed at these two levels, while the third category covers five regions with a number of 17 million employed, and the fourth category includes four regions that employ over 0.5 million.

The early development of TVEs mainly involved the southeastern regions of China such as Zhejiang, Jiangsu, and Guangdong provinces. During the past decades, TVEs have expanded to the middle and northern parts of China. As table III-3-c demonstrates, their proportion of employment to the total nationwide industrial labour force ranges from 16 percent in Liaoning province to 71.87 percent in Jiangsu province. Even in relatively remote areas such as Yunnan, and Guizhou provinces, the total industrial labour force composed over 50 percent of TVEs' total industrial labour force.

Obviously, TVEs' influence on regional economic development cannot be overestimated. Developing TVEs to accomplish regional economic development become one of the new strategies in 1993, a strategy I will examine in my final chapter.

Summary

Before 1978, rural labour forces maximally were utilized in rural construction and intensify of cropping, and by controlling their outflow. During that period, however, underemployment and disguised unemployment were significant problems. After 1978, the rural surplus labour become an increasing important issue. By 1990, they numbered 80 million. Rural enterprises have played an important role as an alternative to this problem. During the past decades, they have expanded into various types of production and to larger areas. Furthermore, their capacity of employing rural labourers increased 19.3 percent from 1978 to 1989. Compared a national employment growth rate of 4.4 percent, their importance cannot be overestimated. The success of TVEs permits the government to depend on the TVEs sector to absorb more and more rural surplus in future economic development.

CHAPTER IV

DEBATES AND CONCLUSION

1 Debates

1) The Role of Local Government in Development of TVEs.

I mentioned Wuxi case in chapter tow as one of the successful example of collectively owed TVEs. Development of TVEs there depended on not only the better location and heritage, but also to the township's policy intervention. The motivation of township governments' management largely influenced whether TVEs were strong or weak, a point illustrated by the research of Chinese institutes and World Bank between 1985 and 1987.[159]

The study examined the role of local government in the Waits, Shangrao, Jieshou and Nanhai. For example, Wuxi represented one extreme of community government involvement. The local authorities stressed the development of TVEs and Wuxi system worked well. In Nanhai, local authorities were much more even-handed in their treatment of different forms of TVPs. In Jieshou, authorities systematically supported the development of large private enterprises, which were important not only numerically but also in employment and output. Shangrao suffered from its remote location and limited industrial base. Community governments there were often forced to use the township and village enterprises as

---

[159] See notes on p.43

source of revenue for public and social expenditures. TVEs there struggled to survive, while private enterprise assumed a large share of total TVP output and employment."[160] Since I took Wuxi as an example of a successfully developed TVEs, I will use the same case to analyze the frustration of local governments as well as the positive and negative effects of such intervention.

After the implemented PRS in the rural areas, the township governments possessed more decision-making powers in local economic activities in addition to their administration power. They then acted as both the administrator of the county and as the owner of the township enterprises.

As the owner of the township enterprises, the township government provided them with preferential treatment, such as more capital allocation (funds from both budget and bank resources), fixed assets, and better human resources, so that they would have higher productive capabilities. Township governments also gave their enterprises priority in obtaining materials that were in short supply, and provided enterprises with an intangible resource - - the use of the governments' credibility.

---

[160] Jan Svejnar and Josephine Woo (1990),p.82-83 see W.Byrd and Lin (1990)(ed.) op.cit.,

Receiving assess to bank loans, township enterprises enjoyed higher status and privilege than other types of enterprises. Banks provided more loans to the township enterprises not because of a potential higher return for the investment, but because of the profit rate for township enterprises in the four sample counties was invariably lower than that of other TVEs. For example, 11 percent of township enterprises in Wuxi were "loss-makers", with total losses amounting to 3.2 percent of the total gross profits of township enterprises, while village enterprises loss was only 0.6 percent.[161] However, even if they often had financial difficulties, they sustained the loss without bankruptcy by depending greatly on the measurements that were manipulated by the township government's assumption of losses and debts.

Township governments protected township their enterprises from bankruptcy by shifting a specific firms responsibility for repaying a debt to other profitable enterprise. As the administrator, the township government had the authority to decide the allocation of the local bank's loans. Since the local banks were the only resource to provide capital for township enterprises, the township government pressured them continued loans, often without returns.

---

[161] He Jiacheng (1990),p.124 see W.Byrd and Lin (1990)(ed.) op.cit.,

As the owner of township enterprises, township governments protected them from the competition of private enterprise. In the early 1980s, the township government began to support the growth of private enterprises and production teams' industrial activities, hoping to encourage the development of entire based on "five wheels" industry (enterprises owned by private, production team, village, township and county). However, balanced growth did not occur. Instead, the private and production team enterprises provided high wages for technical and marketing personnel and offered high prices for the raw material market. As a result, skilled personnel left the TVEs, and raw materials became short. Furthermore, the preferential treatment of exempting private enterprises from contributing any of their savings to the collective teams created serious conflicts between sectors. It also had and negatively effected economic and social life. In order to consolidate the dominant role of townships enterprise ownership, the local government took the following measures in 1985 to readjust the local industrial structure:

1) For skilled workers who transferred to private enterprises, TVEs would never again offer employment to their family; 2) The partnership and individual enterprises were required of secure permission from village officers for registration rather than from the production team. 3) TVEs'

wages were allowed to differ somewhat between firms. The average wage level was tied to the enterprises' profit and output value in the market economy.

Because of these discriminate policies, the numbers of private enterprises decreased, although the private industrial sectors still played an important role in township income. By 1983, township enterprise production surpassed that of private enterprises. In 1986, townships represented 49.5 percent of fixed assets, excluding land, TVEs possessed 39.9 percent, production teams 9 percent and private or household enterprises 2.9 percent.[162]

Township government, such as that in Wuxi, tried to protect township enterprises from private enterprises. Yet township government dependence on the unlimited financial support from township enterprises caused difficulties for the latter to control their distribution of profit and accumulation for reinvestment. Since township government had the power to plan the development of all township enterprises, to adjust the reinvestment rate, and to launch new firms, some enterprises had to wait a long time to obtain the funds needed to increase production or for other purposes. These firms witnessed further deterioration in their capabilities

---

[162] Luo Xiaopeng (1990),p.150-151 see W.Byrd and Lin (1990)(ed.) op.cit.,

for accumulation and production.

As the administrator of the county, township governments usually supervised TVEs through the Township Industrial Corporations institution (TICs)[163]. In addition to their other powers, TICs also appointed factory directors, inspected TVEs performance, negotiated purchasing input for TVEs, set annual targets for profits and the value of output, allocated labour and management wages, provided credit, and guaranteed enterprises' bank loans.

As the administrator of Wuxi, the township government had three main objectives: to provide employment opportunities for surplus rural labour in township, to raise local living standards, and to increase township governments' financial revenue. If distribution among regions was unbalanced, especially within the scope of the first two objectives, the township government redistributed the income, an interference which often caused conflicts.

Firstly, the government regarded township enterprises as the chief means of employing surplus labour from agriculture. Since the township government decided the numbers of workers to be recruited by township enterprises, township

---

[163] TIC. Township Industrial Corporation is the township government organ that is directly responsible for supervising township enterprises Byrd & Lin 1990:xi op.cit.,

enterprises' directors did not have the power to cut personnel even when overstaffing adversely affected efficiency. In some cases in Wuxi, the overstaffing was as high as 50 percent in 1986.[164] To obtain its second objective, the township government carried out a "trickle-down" policy to bridge the gaps between different production teams' income. For example, Wuxi county generated financial resources from township enterprises and redistributed these resources to subsidize high-cost grain production. These redistribution provided jobs and transferred profit to the poorer teams in order to minimize income inequalities among productive teams. To meet its last administrative objective, the township government had to generate income from its township enterprises in order to increase its revenue.[165] For example, in Wuxi county, the township government usually implemented taxes in order to collect a certain share of profits from all of the TVEs. But this channel of township income was declining --from 86 percent in 1978 to 35 percent in 1985. Even so, the structure of distributing the profit by the township government changed also (See table IV-2-a).

---

[164] Meng Xin (1990),p.305 Song Lina and Du He (1990),p.351 see W.Byrd and Lin (1990)(ed.) op.cit.,

[165] Wang Xiaolu (1990),p.229 see W.Byrd and Lin (1990)(ed.) op.cit.,

(Table VI-2-a)

Distribution of Profits by Township and Village Governments from Wuxi TVEs, 1977-1986 (%)

Item	1977	1978	1980	1982	1984	1986
Total profits	82	86	66	51	54	40
Subsidies to Agri.	7	27	25	36	0	12
Agri.Investment	20	12	12	21	19	0
Subsidies of Agri. Mechanization and Water Conservancy	21	5	9	8	7	7
Village and Town Construction	5	6	5	13	14	19
Culture,education & public health	3	3	3	6	8	10
Industrial invest.	38	40	44	0	24	21
Cadre salaries	0.1	0	3	9	13	12
Others	0	8	0.1	8	15	19

(Source: Byrd & Lin 1990:228 Table 10-3)

The government's use of township income to subsidize agriculture decreased sharply from 27 percent in 1978 to zero in 1985. The capital subsidies for agricultural mechanization and water conservancy also declined 50 percent from 1977 to 1985, becoming zero in 1986. Thus agricultural investment declined 67 percent during 10 years. In addition, industrial investment declined 45 percent. However, expenditure on village and town construction, public affairs and salaries increased, representing over a hundred percent growth for salaries, and over a two hundred percent increase for construction and public affairs.

The shift in the proportion of township income distribution left less or even no income for reinvestment in both

agricultural and industrial production. Consequently, the township enterprises had to provide financial support to township's management through their own profit generation.

For the critical role played by township government in Wuxi case, I would argue that its dual functions have both positive and negative effects. The government uses the administrative mechanism to trickle down income would benefit those regions which are in poorer conditions. However, this would have the negative effect on the production if township government interferes too much such as on management and labour allocation. Particularly, Wuxi government's control on private enterprises hindered the positive role that the private enterprises could play. In this way, township government's dual function is quite similar to the central government's function : balancing the unbalanced economic development pattern through the administrative mechanisms and policy intervention. The problems resulted from such a situation are not easily verbified and as long as the Chinese economy remains at this stage, such debate will continue to exist.

2.) Structural Change of Rural Labour Force

Because of the yearly tidal wave of rural migration as I mentioned in Chapter III, the rural labour forces structure has changed. The labourers moving from rural areas to the

cities have been predominantly young and educated. Survey results for 74 cities show that "the proportion of total rural-to-urban migrants ranged from ages 15 to 29 which consisted 67-69 percent for large cities, 63 percent for medium-sized cities, 57 percent for small cities and 54 percent for rural towns."[166] In addition, the 1982 population census statistics show that "only 17 percent of individuals in rural areas aged between 15 to 29 were illiterate, compared with an illiteracy rate of 54 percent for persons aged 30 and over in the countryside." [167] Those youth migrants suggest a "brain drain" from rural areas, leaving the elderly, women, and children to work on the land.

Faced with the migration and urbanization issues, China is searching for alternatives. The country must choose from the following policy options: "leave the land, but not the countryside" (li tu bu li xiang) and "leave the countryside, but not the land" (li xiang bu li tu), and "leave the land and the countryside" (li tu ye li xiang). [168] "Leave the land and the countryside" allows rural surplus labour to move freely to large cities, a policy which is quite limited.

---

[166] J.R.Taylor (1988),p.760 op.cit.,

[167] ibid

[168] ibid p.760

"Leave the countryside, but not the land" permits those rural surplus labourers in the relatively backward regions for farm work in the regions where is the development of local rural enterprises has left labour in short supply. As discussed in Chapter 3 has implemented this policy.

The last alternative encourages "part-time farming", namely the type of "peasant-workers" activities. Peasants would be encouraged to work in the cities or towns that are close to their land, so they could return home when labour is short in the busy planting and harvesting seasons. Taylor writes: "since rural underemployment in China has traditionally been a seasonal, rather than a structural problem, there is much to recommend in this approach."[169]

Between 1983 and 1985, a research group associated with Fei Xiaotong did a selected census survey in Jiangsu province's seven small towns. They divided the township people into three categories: registered town residents, unregistered town residents, and nonresidents who came to town to work during the day. The results showed that the latter category of people ranged from 13.3 percent to 43.0 percent among the seven sample counties, an average of 27.6 percent, and about half as many as legal residents in the towns. This group of "leave the land without leaving the countryside" became

---

[169] ibid p.761

"the fastest-growing occupational/social group in China. In 1986, they numbered an estimated 70 million nationwide or about 20 percent of the total rural labour force."[170]

As the "peasant workers" case study demonstrates this last approach is easily implemented, yet these last two alternatives do not often permanent solutions to the fundamental problems of migration and urbanization. According to Chinese statistics, the number of cities and towns in China have increased about 10 percent annually from 1981 to 1989, while the urban population have increased 3.4 percent between 1981 and 1984, and 6.5 percent between 1984 and 1989.[171] The fast growth of both the number of cities and towns and population occurs primarily in small cities and towns within populations of between 100,000 to 300,000. Since small towns have already had rapid increases, they may not be sustainable for further expansion in the long-term. In addition, the expansion of even small towns will cause further reductions in arable land, which in turn will release more surplus labour to find jobs in the urban areas, causing additional migration and unemployment problems.

The government can only resolve seasonal migration by changing the fragmented land holding structure in the rural

---

[170] Phillip C.C. Huang (1990),p.290 op.cit.,

[171] CSY (1990) p.91 "Number of Cities by Population Size"

areas that the PRS system created. However, laws forbidding the selling of land use rights between households makes the large farming production with mechanized techniques very difficult. If it does not change these laws, they will continue to hinder China's agricultural modernization.

2 Conclusion

Rural industries or rural enterprises have achieved great success during the past 40 years. They initially transformed from small workshop production into agricultural-service-oriented machinery and raw material based production. Today, they have developed into a nation- wide independent sector that involves various activities of agriculture, industry, construction, transportation and services. Moreover, the achievement of rural enterprises are even more meaningful, when considered in relation to China's large area and population.

The rural enterprise sector has substantially contributed to the national economy. In 1992 it possessed 20 million varieties of enterprises, employed over 100 million labourers and produced 1,650 billion yuan of gross output,[171] one third of the national total industrial gross output.

---

[171] People's Daily Overseas Edition March 1;4, 1993

Rural industrial TVEs in 1989 expand to all of the 40 branches of national industrial products. Their total GVIO reaches 743 billion yuan, 43 percent of the national GVIO. Rural industries at both township and village levels compose 70 percent of the total TVEs, amounting to 436.5 billion yuan (See table IV-1-a).

(Table IV-1-a)

Branches of Rural Industries with GVIO over 10 billion at Township and Village Levels[173] (billion yuan)

	T TVI	T National Indus.	%
Total	436.5		
1. Food Manufacturing	28.2	120.3	23
2. Textile	55.8	211.0	26
3. Building Materials & other Non-metal Mineral Products	65.0	89.1	73
4. Metal Products	25.7	49.4	52
5. Machine Building	40.6	172.7	24
6. Plastic Products	15.9	34.7	46

(Source CSY 1990:398;399;429;430)

Of the 40 branches of rural industries, seven produced over 10 million in GVIO and shares a relatively higher proportion of the total national GVIO (See table IV-1-a). Other manufactured goods contribute over 50 percent of the national GVIO, such as arts and crafts articles (50 percent); furniture manufacturing (56 percent); timber processing, bamboo, cane, palm fibre and straw products (52 percent). Given the important contribution TVEs made, they

---

[173] Excluding cooperative and private TVEs

have become one of the main factors in national industrialization.

The rapid development of Chinese rural enterprises can be attributed to the government's effective strategies and policies. Before 1978, rural industry was developed for the purpose of serving agricultural mechanization and high grain output. Since the 1970s, particularly since the national economic reform in 1978, the government has adopted special policies to improve the role of rural enterprises in their economic and social functions as well as granting them full access to the market economy. As one of the alternatives for regional development, TVEs have also become the engine of economic development of the southern and middle parts of China. In 1992, GVO in Jiangsu, Guangdong, Zhejiang, Shandong, Henan, Hebei and Sichuan exceeded 100 billion yuan. Jiangsu is one of the pioneer regions in TVE development. In 1992, it ranked first in GOV, with over 300 billion yuan. Henan and Sichuan are the traditional grain production areas with larger population. Remarkably, GVO in these two regions climbed to over 100 billion yuan in 1992.[174]

Recently, the government decides to develop TVEs in the western part of China where the economy is relatively less

---

[174] People's Daily Overseas Edition Jan.26,1993

developed.[175] Moreover, with their increasing ability in market competition, the government intended to improve TVEs' role in the international market by way of technological outflow, overseas' investment, foreign trade and export of labour force.[176]

The development of rural enterprises has had a tremendous impact on the structure of rural society and its living standards. A survey of 200 big township enterprises in 10 provinces shows that 88 percent of employees are rural people. Each of these worker's families has an average of 1.64 persons employed in rural factories and contributing 63.3 percent of their total family income. 91 percent of these workers' families still have contracted fields which supply them with their grain needs, and 71 percent of the enterprises workers go back working on the farms during the busy seasons.[177]

In conclusion, China's TVEs have already become one of the important sectors in Chinese economy and are playing a decisive role in rural industrialization and national economic modernization. The TVEs sector represents great hope for employing rural labourers in the future.

---

[175] People's Daily Overseas Edition March 1,1993

[176] ibid March 4, 1993

[177] Han Bao Cheng Beijing Review No.23 June 3, 1987:22

BIBLIOGRAPHY

Books

American Rural Industry Delegation (1977) Rural Small-scale Industry in the People's Republic of China University of California Press

Asia Yearbook (1992) Asia Development Bank

Asian Development Bank Key Indicators of Developing Countries (1991)

Axilrod Eric (1977) The Political Economy of the Chinese Revolution Union Research Institute

Banister Judith (1987) China's Changing Population Stanford University Press

Byrd A. William and Lin Qingsong (1990) (ed.) China's Rural Industry World Bank Research Publication 1990

He Jiacheng (1990) "Development Issues and Policy Choices" in W.Byrd and Lin (ed.)

Lin Qingsong (1990) "Private Enterprises: Their Emergence, Rabid Growth, and Problems" in W.Byrd and Lin (ed.)

Luo Xiaopeng (1990) "Ownership and Status Stratification" in W.Byrd and Lin (ed.)

Meng Xin (1990) "The Rural Labour Market" in W.Byrd and Lin (ed.)

Song Lina and Du He (1990) "The Role of Township Governments in Rural Industrialization" in W.Byrd and Lin (ed.)

Svejnar Jan (1990) "Productive Efficiency and employment" in W.Byrd and Lin (ed.)

Svejnar Jan and Josephine Woo (1990) "Development Patterns in Four Counties" in W.Byrd and Lin (ed.)

Wang Xiaolu (1990) "Capital Formation and Utilization" in W.Bryd and Lin (ed.)

William A.Byrd and Lin Qingsong (1990) "China's Rural Industry: An Introduction" in W.Byrd and Lin (ed.)

Wu Quhui, Wang Hansheng, and Xu Xinxin (1990) "Noneconomic Determinants of Workers' Incomes" in W.Byrd and Lin (ed.)

Cheng Chu-yuan (1982) China's Economic Development: Growth and Structural Change Westview Press

Chen Han-Seng (1936) Landlord and Peasant in China International Publishers N.Y.

Connithorne Audrey (1967) China's Economic System George Allen and Unwin Ltd.

Deleyne Jan (1973) The Chinese Economy Harper & Row

DeGregori R.Thomas (1989) Development Economics: Theory, Practice and Prospects Kluwer Academic Publishers

Dernberger F.Rober (1980)(ed.) China's Development Experience in Comparative Perspective Harvard University Press

Domes Jurgen (1980) Socialism in the Chinese Countryside: Rural Societal Policies in the People's Republic of China 1949- 1979 McGill-Queen's University Press

Dorner Peter (1972) Land Reform & Economic Development Penguin Books

Eckstein Alexander (1977) China's Economic Revolution Cambridge University Press

Gurley G.John China's Economy and Maoist Strategy Monthly Review Press 1976

Hagen E. Everett (1986) The Economics of Development Homewood, Illinois

Hinto William (1991) The Privatization of China Earthscan

Ho K.Alfred (1982) Developing the Economy of the People's Republic of China Praeger Publisher

Hoffmann Charles The Chinese Worker States University of New York Press 1974

Howe Christopher (1973) Wage Patterns and Wage Policy in Modern China 1919-1972 Cambridge University Press

Hsueh Mu-Chiao etc. (1960) The Socialist Transformation of the National Economy in China Foreign Languages Press Peking

Huang C.C. Philip (1990) The Peasant Family and Rural Development in the Yangzi Delta 1350-1988 Stanford University Press

Hughes and Luard (1959) The Economic Development of Communist China Oxford University Press

IMF (1991) China: Economic Reform and Macroeconomic Management Chinese Finance Press 1991 (Chinese Edition)

Kang Chao (1986) Man and Land in Chinese History Stanford University Press

Ki Song Oh (1966) Land Reform in Communist China and Postwar Japan University of Pennsylvania (Ph.D thesis)

Kraus Willy (1990) Economic Development and Social Change in the People's Republic of China Springer - Verlay N.Y C.

1982 Publications Ltd.

Kuznets Simon (1965) Economic Growth and Structure W.W. Norton & Company Inc.

Kuznets Simon (1966) Modern Economic Growth: Rate Structure and Spread Yale University Press

Lin Wei & Arnold Chao (1972) China's Economic Reforms University of Pennsylvania Press

Lardy Nicholas R. (1983) Agriculture in China's Modern Economic Development Cambridge University Press

Lin Sein (1970) (ed.) Readings in Land Reform Good Friend Press Ltd. Taiwan

Lippit D.Victor (1974) Land Reform and Economic Development in China: a Study of Institutional Change and Development Finance International Arts and Sciences Press Inc.

Maxwell Neville and Bruce McFarlane (1984)(ed.) China's Changed Road to Development Vol.3 No.7&8 Pergamon Press

Gurley G.John (1984) "Rural development in China 1949-72, and the Lessons to be Learned from It" p.455-471 in Neville and Bruce (ed.)

Sigurdson Jon (1984) "Rural Industrialization in China:Approaches and Results" pp.527-538 in Neville and Bruce (ed.) Vol.3

Meier M. Gerald (1964) Leading Issues in Development Economics Oxford University Press

Meier M. Gerald (1984) Leading Issues in Development Economics Oxford University Press

Nai-Ruenn Chen and Walter Galenson (1969) The Chinese

Economy under Communism Edinburgh University Press

Nolan Peter and Dong Fureng (1990) (ed.) Market Force in China : Competition and Small Business - the Wenzhou Debate Zed Books Ltd.

Chen Ruiming (1990) "A Preliminary analysis of the `Big Labour-hiring Households' in Rural Wenzhou" in P.Nolan and Dong (ed.)

Dong Fureng (1990) "The Wenzhou Model for Developing the Rural Commodity Economy" in P.Nolan and Dong (ed.)

Zhang Lin (1990) "Developing the Commodity Economy in the Rural Areas" in P.Nolan and Dong (ed.)

Oksenberg Michel (1973)(ed.) China's Development Experience Praeger Publishers 1973

Benjamin Schuartz (1973) "China's Developmental Experience, 1949-72", in M. Oksenberg (ed.)

Jon Sigurdson (1973) "Rural Economic Planning" in M.Oksenberg (ed.,)

Perkins Dwight and Shahid Yusuf (1984) Rural Development in China The Johns Hopkins University Press

Prosterman Roy L. and Jeffrey M. Riedigner (1987) Land Reform and Democratic Development The Hohns Hopkins University Press

Rabushka (1987) The New China Westview Press

Rawski Thomas G. (1979) Economic Growth and Employment in China Published for the World Bank Oxford University Press

Riskin Carl (1987) China Political Economy: The Quest for Development since 1949 Oxford University Press

Robinson John (1960) An Essay on Marxian Economics

Macmillan Co.,Ltd

Schultz T.W. (1964) Transforming Traditional Agriculture Yale University Press

Selden Mark (1988) The Political Economy of Chinese Socialism M.E.Sharpe Inc.

Senior Clarence (1958) Land Reform and Democracy Greenwood Press Publisher

Sigurdson Jon (1977) Rural Industrialization in China Harvard University

State Statistical Bureau of the People's Republic of China Bureau (1981-1990) Chinese Statistic Yearbook

The Economist Intelligence Unit (1992) Country Profile Country Report China

United Nations (1951) Land Reform Defects in Agrarian Structure as Obstacles to Economic Development New York

Veeck Gregory (1991) (ed.) The Uneven Landscape: Geographical Studies in Post-Reform China Louisiana State University

Vermeer B.E. (1988) Economic Development in Provincial China Cambridge University Press

Wang Te-Hua (1952) Land Reform in the People's Republic of China Iowa University

Warriner Doreen (1969) Land Reform in Principle and Practice Clarendon Press Oxford

Wong John (1973) Land Reform in the People's Republic of China:Institutional Transformation in Agriculture Praeger Publishers

Woo Henry K.H.(1991) Effective Reform in China: An Agenda Praeger Publishers New York

Yu Guangyuan (1982) China's Socialist Modernization Foreign Language Press Beijing

The Times Atlas of China (1974) Quadrangle /New York Times Book Co.,

Journal

Chan Kam Wing and Xuequiang Xu "Urban Population Growth and Urbanization in China since 1949: Reconstructing a Baseline" The China Quarterly No.104 Dec. 1984

Deyo Frederic, Stephan Haggard, and Hagen Koo "Labour in the Political Economy of East Asian Industrialization" Bulletin of Concerned Asian Scholars Vol.19 No.2 1987

Emerson John Philip "Urban School - Leavers and Unemployment in China" The China Quarterly No.93 March 1983

Granick David "Multiple Labour Markets in the Industrial State Enterprise Sector" The China Quarterly No.126 June 1991

Hsu Dave Y.C. "Experience and Lessons of China's Agricultural Development" Journal of Contemporary Asia Vol.20 No.2 pp.212 1990

Han Bao Cheng "Readjustment Improves Rural Enterprises" Beijing Review Vol.33, No.35, Aug.27-Sept.2, 1990

Hsu Robert C. "Agricultural Financial Policies in China" Asian Survey Vol.22,7-12 1982

Hu Teh-wei, Ming Li and Shuzhong Shi "Analysis of Wages and Bonus Payments Among Tianjin Urban Workers" The China Quarterly No.113 March 1988

Islam Rizwanul "Rural Industries in Post-reform China" Development and Change Vol.22 No.4 1991

Korzec Michel and Martin King Whyte "The Chinese Wage System" The China Quarterly No.86 June 1981

Lee Yok-shiu F. "Small Towns and China's Urbanization Level" The China Quarterly No.120 Dec.1989

Lewis W.A. "Economic Growth with Unlimited Supplies of Labour" The Manchester School Vol.22 1954

Lewis W.A. The Dual Economy Revisited" The Manchester School Vol.47 1973

Lewis W.A. "Unemployment in developing countries" The Manchester School Vol.23, no.1 1967 pp.13-22

Lewis W.A. "Reflections on unlimited labour" in International Economics and Development L.E.diMarco (ed.) New York Academic Press 1972 pp.75-96

Lili " Envolment and Job Assignment" Beijing Review Vol. 31 No.32 Aug. 8-14 1988

Li Ping "The Labour Service Market in China" Beijing Review Vol.33, No.27 July 2-8,1990

Liu Alan P.L."Economic reform, mobility strategies, and national integration in China" Asian Survey Vol.31, no.5, 1991

Lou Xinyue "Rural Enterprises Flouring" Beijing Review Vol. 32 No.2 Jan.9-15 1989

Ni Songxin "Urban Employment Situation" Beijing Review Vol. 33, No.27 July 2-8 1990

Orleans Leo A. & Ly Burnham "The Enigma of China's Urban Population" Asian Survey Vol.24 7-12, 1984

Perkins Dwight H. "Can a Bid Dragon Follow in the Wake of Little Ones? Two Treaties on the Post-Reform Chinese Economy; China: Asia's Next Economic Giant" Bulletin of Concerned Asian Scholars Vol 22 July-Sept.pp. 1990

Prybyla Jan S. "A note on Incomes and Prices in China" Asian Survey Vol.15,1975

Prybyla Jan S. "Key Issues in the Chinese Economy" Asian Survey Vol.21 7- 12 1981

Riskin Carl "Small Industry and the Chinese Model of Development" The China Quarterly (April-June) 1971:245-273

Shutian Guo and Liu Chunbin Beijing Review Vol.32 No.21 May 22-28 1989

Taylor Jeffery R. "Rural Employment Trends and the Legacy of Surplus Labour, 1978-1986" The China Quarterly No.116 Dec.1988

Tregear T.R. An Economic Geography of China Butterworths London 1970

Wei Jing "Wuxi: Combining Agriculture and Industry" Beijing Review Vol.31 No.30 July 25-31 1988

Walder Andrew G. "Wage Reform and the Web of Factory Interests" The China Quarterly No.109 March 1987

Walker Kenneth R. "40 Years On: Provincial Contrasts in China's Rural Economic Development" The China Quarterly No.119 Sept. 1989

_____ "Chinese Agriculture during the Period of the Readjustment" The China Quarterly No.100 Dec. 1984

Wang Juyi "An Analysis of the Three Economic Rims" Beijing Review Vol.32, No.12 March 20-26 1989

White Gorden "The Politics of Economic Reform in Chinese Industry: The Introduction of the Labour Contract System" The China Quarterly No.111 Sept.1987

Zweig David "Opposition to Change in Rural China: The System of Responsibility and People's Commune" Asian Survey Vol.23 7-12 pp.879 1983

Newspaper

People's Daily (Overseas Edition)
1992-1993


PEOPLE'S REPUBLIC OF
CHINA
SOVIET UNION
MONGOLIA
HEILONGJIANG
Harbin
JILIN
Changchun
NEI MONGOL
Urumqi
Shenyang
LIAONING
NORTH KOREA
AFGHANISTAN
XINJIANG
GANSU
Huang He (Yellow River)
Hohhot
BEIJING
TIANJIN
PAKISTAN
Yinchuan
Taiyuan
Shijiazhuang
QINGHAI
NINGXIA
SHANXI
HEBEI
Jinan
YELLOW SEA
Xining
Lanzhou
SHANDONG
XIZANG
(TIBET)
Xian
Zhengzhou
JIANGSU
SHAANXI
HENAN
ANHUI
Nanjing
SHANGHAI
Hefei
HUBEI
Lhasa
Chengdu
Changjiang (Yangzi River)
Wuhan
Hangzhou
NEPAL
SICHUAN
ZHEJIANG
Nanchang
Changsha
BHUTAN
JIANGXI
HUNAN
Guiyang
Fuzhou
FUJIAN
GUIZHOU
Kunming
BANGLADESH
INDIA
TAIWAN
GUANGDONG
YUNNAN
GUANGXI
Guangzhou
BURMA
Nanning
HONG KONG
VIETNAM
LAOS
BAY OF BENGAL
SOUTH CHINA SEA
THAILAND
Hainan

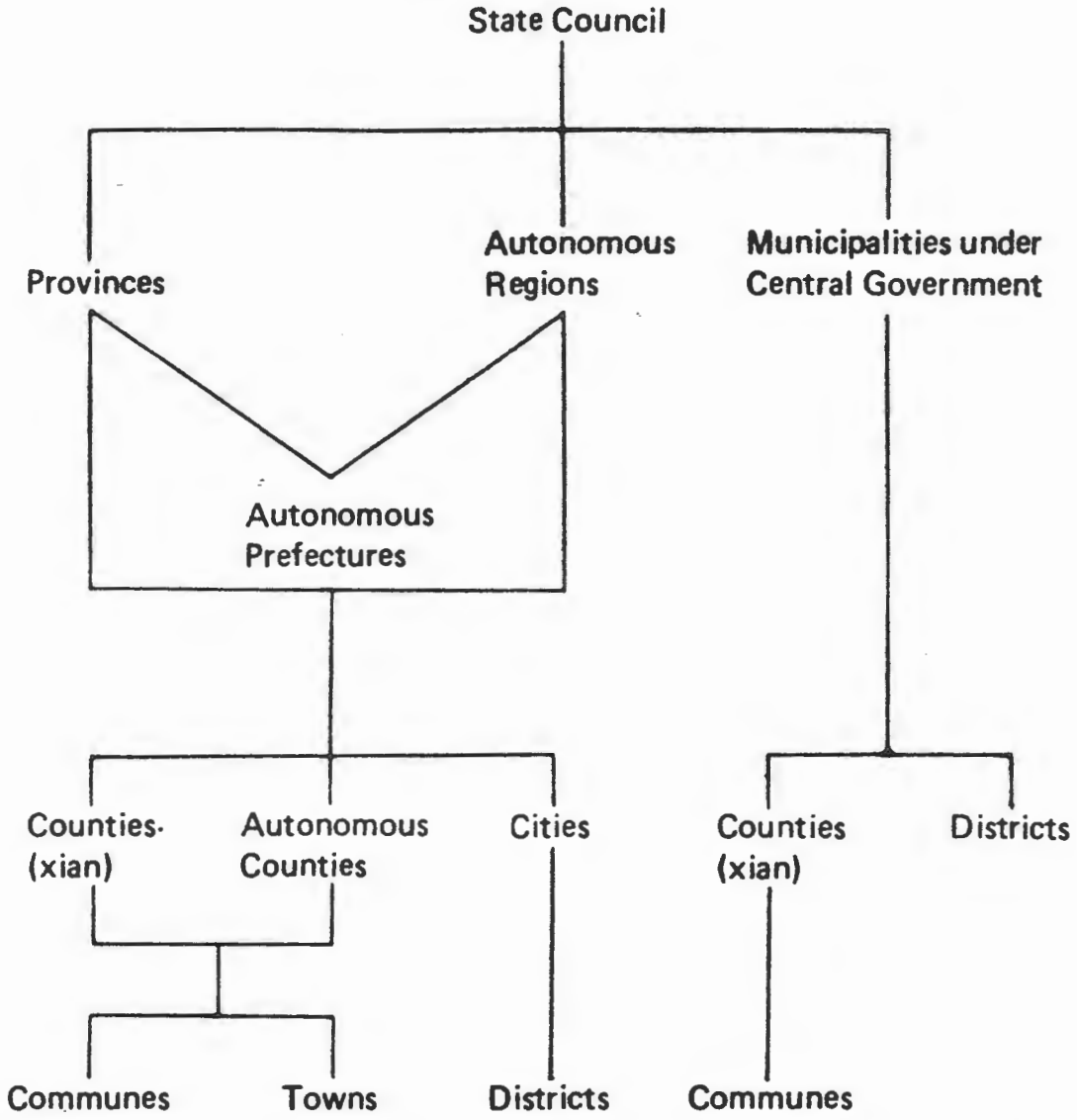

Figure 6.1 Levels of government under the State Council

Source: Beijing Review, no. 20 (1979) p. 21.

Population by Province, End-1981

10 thousand

OVINCE	Total population	BY SEX		BY RESIDENCE		Density (person/km²)
		Male	Female	Urban	Rural	
.....	99,622	51,081	48,541	13,870	85,752	104
.....	902	457	445	500	402	537
.....	763	388	375	394	369	675
.....	5,256	2,691	2,565	490	4,766	281
.....	2,509	1,311	1,198	349	2,160	161
Mongolia....	1,903	995	908	445	1,458	16
ng.....	3,535	1,803	1,732	1,185	2,350	243
.....	2,231	1,142	1,089	661	1,570	119
gjiang	3,239	1,660	1,579	1,029	2,210	69
hai	1,163	579	584	671	492	1,880
u.....	6,010	3,048	2,962	739	5,271	586
ng.....	3,871	2,007	1,864	418	3,453	389
.....	4,956	2,565	2,391	474	4,482	356
.....	2,557	1,319	1,238	312	2,245	213
i	3,304	1,703	1,601	397	2,907	198
long.....	7,395	3,750	3,645	573	6,822	493
.....	7,397	3,768	3,629	581	6,816	443
.....	4,740	2,431	2,309	633	4,107	253
.....	5,360	2,783	2,577	521	4,839	255
gdong	5,884	3,010	2,874	748	5,136	278
gxi	3,613	1,862	1,751	296	3,317	157
an	9,924	5,104	4,820	919	9,005	175
ou	2,827	1,440	1,387	254	2,573	160
an.....	3,223	1,622	1,601	267	2,956	82
.....	186	91	95	16	170	1.5
nxi.....	2,865	1,486	1,379	361	2,504	139
u.....	1,941	1,004	937	222	1,719	43
hai.....	382	197	185	65	317	5
xia.....	383	198	185	58	325	58
ang	1,303	667	636	292	1,011	8

Number of Cities by Population Size

(End-1981)

ITEM	BY SIZE OF TOTAL POPULATION ①			BY SIZE OF URBAN POPULATION ②		
	Number of cities	Population (10 thousand)	%	Number of cities	Popualtion (10 thousand)	%
Total	229③	13,881.9	100.0	229	9,378.2	100.0
Less than 100,000 ..	15	109.2	0.8	49	332.0	3.5
100,000-300,000....	86	1,654.9	11.9	103	1,905.6	20.3
300,000-500,000....	50	1,955.1	14.1	31	1,199.5	12.8
500,000-1,000,000 ..	41	2,935.3	21.1	28	2,037.6	21.7
1,000,000-2,000,000.	24	2,956.7	21.3	11	1,442.4	15.4
2,000,000 and more .	13	4,270.7	30.8	7	2,461.1	26.3

Note: ① *Excludes population in counties under cities' administration.*
② *Excludes agricultural population residing in urban areas.*
③ *The total should be two hundred and thirty-three cities (including municipalities under the jurisdiction of the State Council), among which 4 cities are omitted because of their new establishment.*

Number of Counties by Population Size

(End-1981)

ITEM	Number of counties	Population (10 thousand)	%
Total.....	2,130①	85,740.3	100.0
Less than 150,000 ...	430	3,345.1	3.9
150,000-300,000	525	11,984.9	14.0
300,000-500,000	531	20,699.8	24.1
500,000-800,000	393	24,543.1	28.6
800,000-1,000,000...	152	13,559.6	15.8
1,000,000 and more..	99	11,607.8	13.6

Note: ① *The total should be two thousand one hundred and thirty-six counties, data for 6 counties are omitted because of their new establishment.*

POPULATION

(year-end) (1,000,000)

Year	Total Population	Gender				Residence			
		Male		Female		Urban**		Rural	
		Population	*Proportion (%)*	*Population*	*Proportion (%)*	*Population*	*Proportion (%)*	*Population*	*Proporation (%)*
1949	541.67	281.45	51.96	260.22	48.04	57.65	10.6	484.02	89.4
1950	551.96	286.69	51.94	265.27	48.06	61.69	11.2	490.27	88.8
1951	563.00	292.31	51.92	270.69	48.08	66.32	11.8	496.68	88.2
1952	574.82	298.33	51.90	276.49	48.10	71.63	12.5	503.19	87.5
1953	587.96	304.68	51.82	283.28	48.18	78.26	13.3	509.70	86.7
1954	602.66	312.42	51.84	290.24	48.16	82.49	13.7	520.17	86.3
1955	614.65	318.09	51.75	296.56	48.25	82.85	13.5	531.80	86.5
1956	628.28	325.36	51.79	302.92	48.21	91.85	14.6	536.43	85.4
1957	646.53	334.69	51.77	311.64	48.23	99.49	15.4	547.04	84.6
1958	659.94	341.95	51.82	317.99	48.18	107.21	16.2	552.73	83.8
1959	672.07	348.90	51.91	323.17	48.09	123.71	18.4	548.36	81.6
1960	662.07	342.83	51.78	319 24	48.22	130.73	19.7	531.34	80.3
1961	658.59	338.80	51.44	319.79	48.56	127.07	19.3	531.52	80.7
1962	672.95	345.17	51.29	327.78	48.71	116.59	17.3	556.36	82.7
1963	691.72	355.33	51.37	336.39	48.63	116.46	16.8	575.26	83.2
1964	704.99	361.42	51.27	343.57	48.73	129.50	18.4	575.49	81.6
1965	725.38	371.28	51.18	354.10	48.82	130.45	18.0	594.93	82.0
1966	745.42	381.89	51.23	363.53	48.77	133.13	17.9	612.29	82.1
1967	763.68	391.15	51.22	372.53	48.78	135.48	17.7	628.20	82.3
1968	785.34	402.26	51.22	383.08	48.78	138.38	17.6	646.96	82.4
1969	806.71	412.89	51.18	393.82	48.82	141.17	17.5	665.54	82.5
1970	829.92	426.86	51.43	403.06	48.57	144.24	17.4	685.68	82.6
1971	852.29	438.19	51.41	414.10	48.59	147.11	17.3	705.18	82.7
1972	871.77	448.13	51.40	423.64	48.60	149.35	17.1	722.42	82.9
1973	892.11	458.76	51.42	433.35	48.58	153.45	17.2	738.66	82.8
1974	908.59	467.27	51.43	441.32	48.57	155.95	17.2	752.64	82.8
1975	924.20	475.64	51.47	448.56	48.53	160.30	17.3	763.90	82.7
1976	937.17	482.57	51.49	454.60	48.51	163.41	17.4	773.76	82.6
1977	949.74	489.08	51.50	460.66	48.50	166.69	17.6	783.05	82.4
1978	962.59	495.67	51.49	466.92	48.51	172.45	17.9	790.14	82.1
1979	975.42	501.92	51.46	473.50	48.54	184.95	19.0	790.47	81.0
1980	987.05	507.85	51.45	479.20	48.55	191.40	19.4	795.65	80.6
1981	1000.72	515.19	51.48	485.53	48.52	201.71	20.2	799.01	79.8
1982	1015.90	523.19	51.50	492.71	48.50	211.31	20.8	804.59	79.2
1983	1027.64	530.26	51.60	497.38	48.40	241.50	23.5	786.14	76.5
1984	1038.76	536.00	51.60	502.76	48.40	331.36	31.9	707.40	68.1
1985	1050.44	543.08	51.70	507.36	48.30	384.46	36.6	665.98	63.4
1986	1065.29	550.75	51.70	514.54	48.30	441.03	41.4	624.26	58.6
1987	1080.73	556.58	51.50	524.15	48.50	503.62	46.6	577.11	53.4
1988	1096.14	564.73	51.52	531.41	48.48	543.69	49.6	552.45	50.4
1989	1111.91	573.14	51.55	538.77	48.45	574.94	51.7	536.97	48.2

Note:

*** Figures in this table refer to population of 30 provinces, autonomous regions and municipalities on the mainland, including military personnel. ** Urban population refers to the population living in areas under the administration of city and towns. Rural population refers to population of counties but excluding those living in towns of a county. The sharp increase in urban population since 1984 is due to the increase in the number of newly established towns. *** Figures for years since 1982 were estimated based on the Third (1982) National Population Census and Population Sample Surveys.**

T 4.1

SOCIAL LABOR FORCE

(year-end) (1,000,000)

Year	Total	Staff and Workers				Urban Individual Laborers	Rural Laborers
		Subtotal	State-Owned Units	Urban Collective-Owned Units	Other Ownership Units*		
1952	207.29	16.03	15.80	0.23		8.83	182.43
1953	213.64	18.56	18.26	0.30		8.98	186.10
1954	218.32	20.02	18.81	1.21		7.42	190.88
1955	223.28	21.62	19.08	2.54		6.40	195.26
1956	230.18	29.77	24.23	5.54		0.16	200.25
1957	237.71	31.01	24.51	6.50		1.04	205.66
1958	266.00	51.94	45.32	6.62		1.06	213.00
1959	261.73	52.75	45.61	7.14		1.14	207.84
1960	258.80	59.69	50.44	9.25		1.50	197.61
1961	255.90	51.71	41.71	10.00		1.65	202.54
1962	259.10	43.21	33.09	10.12		2.16	213.73
1963	266.40	43.72	32.93	10.79		2.31	220.37
1964	277.36	46.01	34.65	11.36		2.27	229.08
1965	286.70	49.65	37.38	12.27		1.71	235.34
1966	298.05	51.98	39.34	12.64		1.56	244.51
1967	308.14	53.05	40.06	12.99		1.41	253.68
1968	319.15	55.04	41.70	13.34		1.26	262.85
1969	332.25	57.14	43.35	13.79		1.11	274.00
1970	344.32	62.16	47.92	14.24		0.96	281.20
1971	356.20	67.87	53.18	14.69		0.81	287.52
1972	358.54	71.34	56.10	15.24		0.66	286.54
1973	366.52	73.37	57.58	15.79		0.51	292.64
1974	373.69	76.51	60.07	16.44		0.36	296.82
1975	381.68	81.98	64.26	17.72		0.24	299.46
1976	388.34	86.73	68.60	18.13		0.19	301.42
1977	393.77	91.12	71.96	19.16		0.15	302.50
1978	401.52	94.99	74 51	20.48		0.15	306.38
1979	410.24	99.67	76.93	22.74		0.32	310.25
1980	423.61	104.44	80.19	24.25		0.81	318.36
1981	437.25	109.40	83.72	25.68		1.13	326.72
1982	452.95	112.81	86.30	26.51		1.47	338.67
1983	464.36	115.15	87.71	27.44		2.31	346.90
1984	481.97	118.90	86.37	32.16	0.37	3.39	359.68
1985	498.73	123.58	89.90	33.24	0.44	4.50	370.65
1986	512.82	128.09	93.33	34.21	0.55	4.83	379.90
1987	527.83	132.14	96.54	34.88	0.72	5.69	390.00
1988	543.34	136.08	99.84	35.27	0.97	6.59	400.67
1989	553.29	137.42	101.08	35.02	1.32	6.48	409.39

Note:

* Before 1984 Other Ownership Units are included in State-Owned Units.

T 4.2

*SOCIAL LABOR FORCE BY SECTOR**

(1,000,000)

Year	Total	Farming, Forestry, Animal Husbandry, Fishery, and Water Conservancy	Industry**	Geological Survey and Prospecting	Construction	Transportation, Postal and Telecommunication Services	Commerce, Food Service, Material Supply and Marketing, and Storage
1978	401.52	283.73	60.91	0.97	8.79	7.35	11.55
1979	410.24	286.92	62.98	0.99	9.43	7.65	12.48
1980	423.61	291.81	67.14	1.00	10.22	7.87	13.81
1981	437.25	298.36	69.75	0.99	10.58	8.24	15.11
1982	452.95	309.17	72.04	1.02	11.73	8.50	16.04
1983	464.36	312.09	73.97	1.03	13.14	9.07	17.62
1984	481.97	309.27	79.30	1.06	16.92	10.81	20.36
1985	498.73	311.87	83.49	1.06	20.69	12.22	23.63
1986	512.82	313.11	89.80	1.05	22.71	13.05	24.85
1987	527.83	317.20	93.43	1.07	24.19	13.73	26.55
1988	543.34	323.08	96.61	1.07	25.27	14.34	28.29
1989	553.29	332.84	95.68	1.04	24.44	14.32	28.60

SOCIAL LABOR FORCE BY SECTOR

(1,000,000) (continued)

Year	Real Estate Management, Public, Residential and Consultancy Services	Health Care, Sports and Social Welfare	Education, Culture, Art, Radio and Television Broadcasting	Scientific Research and Polytechnical Services	Banking and Insurance	Government Agencies, Parties and Social Organizations	Others
1978	2.10	3.63	10.93	0.92	0.76	4.67	5.21
1979	2.44	3.86	11.31	1.00	0.86	5.05	5.27
1980	3.13	3.89	11.47	1.13	0.99	5.27	5.88
1981	3.43	3.75	10.95	1.27	1.07	5.56	8.19
1982	3.60	3.99	11.28	1.32	1.13	6.11	7.02
1983	4.03	4.15	11.51	1.33	1.17	6.46	8.79
1984	4.74	4.35	12.04	1.37	1.27	7.43	13.05
1985	4.37	4.67	12.73	1.44	1.38	7.99	13.19
1986	5.04	4.82	13.24	1.52	1.52	8.73	13.38
1987	5.40	4.96	13.75	1.58	1.70	9.25	15.02
1988	5.77	5.08	14.03	1.61	1.93	9.71	16.55
1989	5.92	5.18	14.26	1.65	2.05	10.22	17.09

Note:

* Since 1985 a new sector classification standard has been used. The 1978-1984 data have been adjusted according to the new standard.

** Since 1978 industry labor force also includes those working in enterprises run by village and lower level units.

T 4.3

*LABOR FORCE RESOURCE**

(year-end) (1,000,000)

Year	Labor Force Sources	Social Labor Force	Proportion of Labor Force Sources to Population (%)	Proportion of Social Labor Force to Labor Force Sources (%)
1952	267.10	207.29	46.5	77.6
1957	290.00	237.71	44.9	82.0
1962	305.30	259.10	45.4	84.9
1982	566.83	452.95	55.8	79.9
1983	583.37	464.36	56.8	79.6
1984	601.57	481.97	57.9	80.1
1985	621.14	498.73	59.1	80.3
1986	640.66	512.82	60.1	80.0
1987	656.07	527.83	60.7	80.5
1988	669.60	543.34	61.1	81.1
1989	683.64	553.29	61.5	80.9

T 4.4

SOCIAL LABOR FORCE BY SECTOR AND OWNERSHIP

(end of 1989) (1,000,000)

Sector	Total	Staff and Workers in State-Owned Units	Staff and Workers in Urban Collective-Owned Units	Staff and Workers in Other Ownership Units	Urban Individual Laborers	Rural Collective and Individual Laborers
National Total	**553.29**	**101.08**	**35.02**	**1.32**	**6.48**	**409.39**
Sector**						
Farming, Forestry, Animal Husbandry, Fishery and Water Conservancy	332.84	7.94	0.45	0.01	0.03	324.41
Industry***	95.68	42.73	18.45	1.10	0.84	32.56
Geological Survey and Prospecting	1.04	1.04				
Construction	24.44	5.78	3.57	0.02	0.05	15.02
Transportation, Postal and Telecommunication Services	14.32	5.90	1.92	0.02	0.34	6.14
Commerce, Food Service, Material Supply and Marketing, and Storage	28.60	9.72	7.88	0.05	4.43	6.52
Real Estate Management, Public Services, Residential and Consultancy Services	5.92	2.59	0.98	0.12	0.72	1.51
Health Care, Sports and Social Welfare	5.18	3.14	0.68		0.04	1.32
Education, Culture, Art, Radio and Television Broadcasting	14.26	10.85	0.32		0.03	3.06
Scientific Research and Polytechnical Services	1.65	1.44	0.03			0.18
Banking and Insurance	2.05	1.36	0.48			0.21
Government Agencies, Parties and Social Organizations	10.22	8.59	0.26			1.37
Others	17.09					17.09
Type of Industry						
Primary Industry	332.84	7.94	0.45	0.01	0.03	324.41
Secondary Industry	121.16	49.55	22.02	1.12	0.89	47.58
Tertiary Industry	99.29	43.59	12.55	0.19	5.56	37.40

Note:

* Labor force resource refers to all persons who are within the working age range (16-59 for men, 16-54 for women) and able bodied, excluding military personnel, prisoners and disabled. ** Since 1985 a new sector classification standard has been used. The 1978-1984 data have been adjusted according to the new standard. *** Since 1978 industry labor force also includes those working in enterprises run by village and lower level units.

T 9.4

RURAL TOTAL OUTPUT VALUE OF SOCIETY AND ITS COMPOSITION

(at current prices)

Year	Rural Total Output Value of Society (1,000,000 yuan)					
	Total	Gross Output Value of Agriculture	Gross Output Value of Industry	Gross Output Value of Construction	Gross Output Value of Transportation	Gross Output Value of Commerce and Food Services
1980	279212	192260	54396	17997	4714	9845
1983	412378	275000	82649	32088	8263	14378
1984	506755	321413	116131	37058	13255	18898
1985	634004	361949	175008	51049	19042	26956
1986	755423	401301	238079	59193	24540	32310
1987	943161	467570	328486	72331	33447	41327
1988	1253469	586527	478116	89533	43444	55849
1989	1448017	653473	588602	91917	51550	62475

RURAL TOTAL OUTPUT VALUE OF SOCIETY AND ITS COMPOSITION

(at current prices) (rural total output value of society = 100) (continued)

Year	Percentage of Rural Total Output Value of Society					
	Total	Gross Output Value of Agriculture	Gross Output Value of Industry	Gross Output Value of Construction	Gross Output Value of Transportation	Gross Output Value of Commerce and Food Services
1980	100	68.9	19.5	6.4	1.7	3.5
1983	100	66.7	20.0	7.8	2.0	3.5
1984	100	63.5	22.9	7.3	2.6	3.7
1985	100	57.1	27.6	8.1	3.0	4.2
1986	100	53.1	31.5	7.8	3.3	4.3
1987	100	49.6	34.8	7.7	3.5	4.4
1988	100	46.8	38.1	7.1	3.5	4.5
1989	100	45.1	40.7	6.3	3.6	4.3

T 9.58

*TOWNSHIP AND VILLAGE ENTERPRISES**

Year	Total	Agriculture	Industry	Construc-tion	Trans-portation	Commerce and Food Service
Number (1,000)						
1978	1524.2	494.6	794.0	46.7	65.1	123.8
1979	1480.4	443.9	767.1	49.7	82.1	137.6
1980	1424.6	378.3	757.8	50.8	89.4	148.3
1981	1337.5	319.0	725.4	48.3	88.9	155.9
1982	1361.7	292.8	749.2	53.8	95.8	170.1
1983	1346.4	269.8	744.0	57.0	91.6	184.0
1984	6065.2	248.4	4812.2	80.4	129.6	794.6
1985	12224.5	224.2	4930.3	82.6	106.1	6881.3
1986	15153.1	239.7	6355.0	892.5	2619.8	5046.0
1987	17446.4	231.2	7082.5	901.3	3237.8	5993.6
1988	18881.6	232.8	7735.2	955.8	3725.5	6232.3
1989	18686.3	226.8	7364.7	925.5	3798.8	6370.5
Percentage (total = 100)						
1978	100.0	32.5	52.1	3.0	4.3	8.1
1979	100.0	30.0	51.8	3.3	5.6	9.3
1980	100.0	26.6	53.2	3.6	6.3	10.4
1981	100.0	23.9	54.2	3.6	6.6	11.7
1982	100.0	21.5	55.0	4.0	7.0	12.5
1983	100.0	20.0	55.3	4.2	6.8	13.7
1984	100.0	4.1	79.3	1.3	2.4	13.1
1985	100.0	1.8	40.3	0.7	0.9	56.3
1986	100.0	1.6	41.9	5.9	17.3	33.3
1987	100.0	1.3	40.6	5.2	18.6	34.3
1988	100.0	1.2	41.0	5.1	19.7	33.0
1989	100.0	1.2	39.4	5.0	20.3	34.1

Note:
* Figures for 1978-1983 include only township and village level enterprises, since 1984, the figures cover all kinds of township and village enterprises.

T 9.59

PERSONS EMPLOYED BY TOWNSHIPS AND VILLAGE ENTERPRISES*

Year	Total	Agriculture	Industry	Construction	Transportation	Commerce and Food Service
Number (1,000)						
1978	28265.6	6084.2	17343.6	2356.2	1038.3	1443.3
1979	29089.4	5330.2	18143.8	2984.5	1169.0	1466.1
1980	29986.7	4550.7	19423.0	3346.7	1135.6	1530.7
1981	29695.5	3788.4	19808.0	3488.3	1073.8	1526.1
1982	31125.1	3442.0	20728.1	4212.9	1129.4	1618.7
1983	32346.4	3092.2	21681.4	4827.2	1097.1	1648.5
1984	52081.1	2835.3	36560.7	6834.9	1293.0	4553.2
1985	69790.3	2523.8	41367.0	7899.5	1141.8	16858.2
1986	79371.4	2408.0	47819.6	12703.7	5412.6	11227.5
1987	87764.0	2441.1	52553.7	13640.0	6153.5	12875.7
1988	95454.5	2486.9	57033.9	14848.1	6841.6	14231.0
1989	93667.9	2393.0	56241.0	14037.3	6993.7	14002.8
Percentage (total = 100)						
1978	100.0	21.5	61.4	8.3	3.7	5.1
1979	100.0	18.3	62.4	10.3	4.0	5.0
1980	100.0	15.2	64.8	11.1	3.8	5.1
1981	100.0	12.8	66.7	11.8	3.6	5.1
1982	100.0	11.1	66.6	13.5	3.6	5.2
1983	100.0	9.6	67.0	14.9	3.4	5.1
1984	100.0	5.5	70.2	13.1	2.5	8.7
1985	100.0	3.6	59.3	11.3	1.6	24.2
1986	100.0	3.0	60.2	16.0	6.8	14.2
1987	100.0	2.8	60.0	15.5	7.0	14.7
1988	100.0	2.6	59.7	15.6	7.2	14.9
1989	100.0	2.6	60.0	15.0	7.5	14.9

Note:
* Figures for 1978-1983 include only township and village level enterprises, since 1984, the figures cover all kinds of township and village enterprises.

T 9.60

GROSS OUTPUT VALUE OF TOWNSHIPS AND VILLAGE ENTERPRISES*

Year	Total	Agriculture	Industry	Construction	Transportation	Commerce and Food Service
Value (1,000,000 yuan)						
1978	49307	3619	38526	3480	1677	1805
1979	54841	3846	42352	4677	2306	1660
1980	65690	3938	50941	6005	2452	2344
1981	74530	3897	57934	7028	2506	3166
1982	85308	4006	64602	10038	2927	3735
1983	101683	4372	75709	13629	3273	4709
1984	170989	5291	124535	21654	4731	14778
1985	272839	5870	182719	31000	4099	48251
1986	354087	6887	241340	52273	25593	27994
1987	474310	8870	324349	64188	25785	41114
1988	649566	11527	452938	82770	47346	54985
1989	742838	12603	524411	88646	57882	59296
Percentage (total = 100)						
1978	100.0	7.3	78.1	7.1	3.8	3.7
1979	100.0	7.0	77.2	8.5	4.2	3.1
1980	100.0	6.0	77.6	9.1	3.7	3.6
1981	100.0	5.2	77.7	9.4	3.4	4.3
1982	100.0	4.7	75.5	11.8	3.4	4.4
1983	100.0	4.3	74.5	13.4	3.2	4.6
1984	100.0	3.1	72.8	12.7	2.8	8.6
1985	100.0	2.2	67.0	11.4	1.8	17.6
1986	100.0	1.9	68.2	14.8	7.2	7.9
1987	100.0	1.9	68.4	13.5	7.5	8.7
1988	100.0	1.8	69.7	12.7	7.3	10.7
1989	100.0	1.7	70.6	11.9	7.8	8.0

Note:
* Figures for 1978-1983 include only township and village level enterprises, since 1984, the figures cover all kinds of township and village enterprises.

T 10.4

GROSS OUTPUT VALUE OF INDUSTRY BY OWNERSHIP OF ENTERPRISES

(1,000) (at current prices)

Item	1985	1988	1989	1989 as Percentage of 1988 (at comparable prices)
Total	**971.647**	**1822.458**	**2201.706**	**108.5**
Large and Medium Enterprises	410.996	742.251	929.069	109.6
State-Owned Enterprises	630.212	1035.128	1234.291	103.9
Collective-Owned Enterprises	311.719	658.749	785.805	110.5
Township Enterprises	76.055	184.669	219.384	110.2
Village Enterprises	66.272	170.363	211.768	117.9
Joint Urban-Rural Enterprises	15.175	43.938	49.630	102.4
Joint City-Town Enterprises	0.000	3.927	5.003	119.8
Joint Rural Enterprises	15.175	40.011	44.627	100.7
Individual-Owned Enterprises in Urban and Rural Areas	17.975	79.049	105.766	123.8
Urban Areas	3.339	6.848	8.970	122.4
Rural Areas	14.636	72.200	96.796	123.9
Enterprises of Other Economic Forms	11.741	49.532	75.844	142.7
Light Industry	457.531	897.924	1076.060	108.2
State-Owned Enterprises**	247.279	418.961	489.457	101.5
Collective-Owned Enterprises**	126.236	243.232	283.226	106.8
Township Enterprises**	34.761	96.946	117.227	111.5
Village Enterprises	32.355	84.923	105.484	118.2
Joint Urban-Rural Enterprises	9.539	26.989	30.492	102.6
Joint City-Town Enterprises	0.000	3.074	3.898	119.5
Joint Rural Enterprises	9.539	23.915	26.594	100.4
Individual-Owned Enterprises in Urban and Rural Areas	13.115	53.050	69.924	122.0
Urban Areas	2.793	5.326	7.086	124.6
Rural Areas	10.322	47.724	62.838	121.7
Enterprises of Other Economic Forms**	6.282	25.999	42.247	147.6
Heavy Industry	514.116	924.534	1125.647	108.9
State-Owned Enterprises**	364.215	575.709	697.839	105.4
Collective-Owned Enterprises**	90.859	178.726	211.307	108.4
Township Enterprises**	38.312	90.232	107.506	110.7
Village Enterprises	33.917	85.440	106.284	117.6
Joint Urban-Rural Enterprises	5.636	16.949	19.138	102.1
Joint City-Town Enterprises		0.853	1.105	120.4
Joint Rural Enterprises	5.636	16.096	18.033	101.1
Individual-Owned Enterprises in Urban and Rural Areas	4.860	25.998	35.842	127.4
Urban Areas	0.546	1.522	1.884	114.3
Rural Areas	4.314	24.476	33.958	128.2
Enterprises of Other Economic Forms**	4.436	16.018	23.313	136.7

Note:

* Figures in this table, unless otherwise specified, include all enterprises with or without independent accounting systems.

** Include only the enterprises with independent accounting systems.

T 10.5

GROSS OUTPUT VALUE OF INDUSTRY

(1,000,000,000 yuan) (at current prices)

Year	Total	State Owned	Collective Owned	Individual Owned	Other Ownership
1949	14.000	10.714	0.070	3.216	
1950	19.100	13.926	0.149	5.025	
1951	26.400	20.038	0.341	6.022	
1952	34.900	26.583	1.138	7.179	
1953	45.000	34.592	1.742	8.667	
1954	51.500	39.547	2.745	9.208	
1955	53.400	41.460	4.048	7.893	
1956	64.200	52.484	10.959	0.758	
1957	70.400	56.419	13.397	0.584	
1958	108.300	96.571	11.729		
1959	148.300	131.320	16.980		
1960	163.700	148.312	15.388		
1961	106.200	93.998	12.202		
1962	92.000	80.776	11.224		
1963	99.300	88.705	10.595		
1964	116.400	104.225	12.175		
1965	140.200	126.278	13.922		
1966	162.400	146.452	15.948		
1967	138.200	122.252	15.948		
1968	128.500	113.620	14.880		
1969	166.500	147.702	18.798		
1970	211.700	185.470	26.230		
1971	241.400	207.387	34.013		
1972	256.500	217.717	38.783		
1973	279.400	234.752	44.648		
1974	279.200	230.089	49.111		
1975	320.700	260.056	60.644		
1976	327.800	256.766	71.034		
1977	372.500	286.937	85.563		
1978	423.700	328.918	94.782		
1979	468.130	367.360	100.770		
1980	515.426	391.560	121.336	0.081	2.449
1981	539.978	403.710	132.938	0.190	3.140
1982	581.122	432.600	144.242	0.340	3.940
1983	646.044	473.940	166.314	0.750	5.040
1984	761.730	526.270	226.309	1.481	7.670
1985	971.647	630.212	311.719	17.975	11.741
1986	1119.426	697.112	375.154	30.854	16.306
1987	1381.299	825.009	478.174	50.239	27.877
1988	1822.458	1035.128	658.749	79.049	49.532
1989	2201.706	1234.291	785.805	105.766	75.844

T 10.6

INDEXES OF GROS

(preceding year = 100) (

Year	
1950	
1951	
1952	
1953	
1954	
1955	
1956	
1957	
1958	
1959	
1960	
1961	
1962	
1963	
1964	
1965	
1966	
1967	
1968	
1969	
1970	
1971	
1972	
1973	
1974	
1975	
1976	
1977	
1978	
1979	
1980	
1981	
1982	
1983	
1984	
1985	
1986	
1987	
1988	
1989	