China's economic growth and poverty reduction (1978-2002)

By Hu Angang, Hu Linlin and Chang Zhixiao¹

[Abstract] This article has summarized and evaluated the trend of China's poverty decrease in the period of 1978-2002, considering that China has obtained great achievements in the area of poverty decrease sine 1978 and made great contributions to the world; however, poverty decrease has not corresponded to the economic growth and it has slowed down the pace since the middle of 1980s; in addition, some new forms of poverty have arisen. The following part analyzes the main reasons resulting in that phenomenon, namely the quality of the economic growth has decreased and the degree of inequality has increased. The final part puts it forward that new tactics to decrease poverty (2003-2015) should be worked out, including adjusting the national poverty line, identifying three types of poverty (income poverty, humanity poverty and knowledge poverty), attaching importance to the increase of disadvantaged groups' opportunity to participate social activities and the fabrication of benefit expressing mechanism, and designing an effective and comprehensive anti-poverty strategic framework so as to make anti-poverty policies correspond with macro-economic policies and regional developing policies, etc. [key words] economic growth, poverty reduction

I. The trend and evaluation of China's poverty reduction (1978-2002)

1. 1 China has made great achievements in poverty reduction

China's economy has entered the take-off stage since 1978—the average growth rate of per capita GDP has been up to 8.1%. Just as Amartya Sen has analyzed: in the past two decades, China's economy has been developed very rapidly. The growth of China's income per capita is much faster than that of any other region in the world. Nevertheless, people have always failed to realize that it is rather terrific for such a large country as China to have so rapid growth in per capita income. It's totally different from those well-known countries or regions with rapid economic growth such as Hong Kong and Singapore. Unlike China, who has very large rural population, Hong Kong and Singapore are actually cities. It is an extraordinary achievement for such a large country with so great regional differences to obtain such a high average growth rate. ² Meanwhile, China's rural poverty population has decreased by a big margin. According to China's

¹ Hu Angang, Professor, Director of Center for China Study, Chinese Academy of Scinece, Tsinghua University; Hu Linlin, Ph. D student of School of Public Policy& Management, Tsinghua University; Chang Zhixiao, Associate Professor of School of Government, Peking University.

² Amartya Sen: "The Conceptual Challenge of Evaluating Inequality and Poverty", *Economics* (quarterly), China Center for Economic Research, Peking University Press, 2003.1, pp. 257-258.

national poverty line, rural poverty population has dropped from 250 million in 1978 to 28.2 million in 2002, decreasing by 88.7%. Poverty population has averagely decreased by 9.24 million per year (see table 1). According to the international poverty line, which is that cost of living per capita per day is below \$1, the World Bank estimates that China's rural poverty population has dropped from 280 million in 1990 to 124 million in 1997, decreasing by 55.7%. Poverty population has averagely decreased 22.29 million per year (see appendix 1). These different estimations demonstrate that China is the country with the largest population and has the largest poverty population, making unprecedented achievements in poverty reduction.

China's achievements in poverty reduction make huge contributions to the cause of poverty reduction of the world. It is estimated by the World Bank that according to the international poverty line (per capita cost of living is below \$1 per day), China's poverty population dropped from 542 million to 375 million in the 1980s (referring to the period of 1980-1990), decreasing by 167 million. In the corresponding period, the poverty population of the whole world decreased by 98.3 million. China's contributing rate to the world's cause of poverty reduction (mainly referring to the developing area; the below is the same) is 166.9%. In the 1990s, China's poverty population decreased by 115 million, and the contributing rate is 122.8%. It is also estimated by the World Bank that China's poverty population will drop to 74 million; the net decrease is 150 million, compared with that in 1999, which will account for 41.7% of the whole world's poverty reduction. In 1990, China's poverty population accounted for 29% of that of the world; the number has been down to 19.2% in 1999, decreasing by approximately 10%. It is forecast that the number will be down to 9.1% in 2015. Asia is an area with the largest and most condensed poverty population. Among the five Asian countries with the most condensed poverty population (China, India, Pakistan, Indonesia and Bangladesh), according to the international poverty line, China's current proportion of poverty population is the lowest. The ratio between China's per capita GDP (PPP) and India's per capita GDP is 1.6:1; and India's ratio of people whose cost of living per day is less than \$1 is 25.7% higher than that of China, while India's ratio of people whose cost of living per day is less than \$2 is 32.5% higher than that of China (see table 3).

The above statistics demonstrate that China has experienced a period in human history in which poverty population decreased by a largest margin in the past two decades, and reversed the trend that poverty population has been increasing in the past five decades in the world history,

causing the poverty population of the world to decrease for the first time (see table 4). That is to say, without China's efforts of poverty reduction, or excluding China's poverty population, the poverty population of the world would have increased from 848 million in 1980 to 917 million in 1990, and then to 945 million in 1999.

Table 1 The annual rural poverty reduction, the growth rate of per capita GDP and farmers' consumption level

year	The annual	The growth rate	The growth rate	The growth rate
	poverty reduction	of per capita	of farmers'	of farmers' net
	announced by the	GDP (%) b	consumption	income per
	government (10		level (%) c	capita (%) c
	thousand) a			
1978-1985	1786	8.3	10.0	15.1
1985-1990	800	6.2	2.5	3.0
1990-1997	500	9.9	8.0	5.0
1997-2002	436	7.7	3.4	3.8
1978-2002	924	8.1	5.6	7.2

Note: a: calculated according to the data of appendix 1; b and c: *China Statistical Abstract* (2002), pp. 18, pp. 32, and pp.91, all calculated by fixed price. Data sources of 2002: National Statistic Bureau: *The Communiqué of China's National Economy and Social Development*, Economy Daily, March 1, 2003.

Table 2 Number of People Living on Less Than 1\$ Per Day Estimated by World Bank (million)

region	1990年	1999 年	2015年
East Asia and the Pacific	486 (37.6%)	279(23.9%)	80(9.9%)
excluding China	110(8.5%)	57(4.9%)	7(0.9%)
Europe and middle Asia	6(0.5%)	24(2.1%)	7(0.9%)
Middle East and North Africa	48(3.7%)	57(4.9%)	47(5.8%)
Latin America and Caribbean	5(0.4%)	6(0.5%)	8(1.0%)
region			
South Asia	506(39.2%)	488(41.7%)	264(32.6%)
Sub-Sahara Africa	241(18.7%)	315(26.9%)	404(49.9%)
Total	1292(100.0%)	1169(100.0%)	809(100.0%)
excluding China	917(71.0%)	945(80.8%)	635(90.9%)
China	375 (29.0%)	224(19.2%)	74(9.1%)

Note: the data in brackets are the ratio of poverty population accounting for the total population of the world.

Source: World Bank,2003, Global Economic Prospects and the Development Countries, The World Bank, Table 1.9

Table 3 The percentage of poverty population in several Asian countries

	GDP per capita			Population's	Population's
	(PPP\$)	Population be	low national	expenditure	expenditure
		poverty line (%)		below below \$1	below below
				per day (%)	\$2 per day (%)
Bangladesh	1,423 (1998)	42.7(1991-92)	35.6(1995-96)	29.1(1996)	77.8(1996)
China	3,356 (1998)	6.0(1996)	4.6(1998)	18.5(1998)	53.7(1998)
India	2,101 (1998)	40.9(1992)	35.0(1994)	44.2(1997)	86.2(1997)
Indonesia	2,806 (1998)	15.7(1996)	27.1(1999)	7.7(1999)	55.3(1999)
Pakistan	1,794 (1998)	34.0(1991)		31.0(1996)	84.7(1996)

Note: the number in brackets is the time when the research was carried out

Source: World Bank, World Development Indicators 2001, The World Bank, pp.64

Table 4 Poverty population and the poverty rate of the world (1950-1992)

	1950	1960	1970	1980	1992	1999
Poverty population	1805.6	1946.5	2200.7	2426.6	2800	2320
(million)a						
Population in dire	1376.2	1330.1	1304.7	1390.3	1294	1169
poverty (million) b						
Poverty rate (%)	71.9	64.3	60.1	55.0	51.3	38.1
Dire poverty rate (%)	54.8	44.0	35.6	31.5	23.7	13.3

Note: a refers to people whose cost of living per day is less than \$2; b refers to people whose cost of living per day is less than \$1.

Source: the data of 1950-1992 are quoted from Francois Bourguignom and Christian Morrisso, 2002, "Inequality among World Citizens:1820-1992", The American Economic Review, September, pp.727-744; the data of 1999 are quoted from World Bank, 2003, Global Economic Prospects and the Development Countries, The World Bank, Table 1.9

1. 2 Why can China decrease poverty population by a large margin?

The main reasons are as follows:

1.2.1 The continuous high economic growth is the basis of poverty reduction. The average per capita growth rate of GDP of China is 8.1% in the period of 1978-2002 (see table 1),

which is the period lasting for the longest time with the highest growth rate of GDP per capita and the largest population who benefit from it. This corresponds to doubling per capita GDP every 8.6 years, 5.4 times of global GDP per capita growth rate in the same period (1.5%). According to the estimation made by the World Bank, it took Britain 58 years to double its per capita income (1780-1838), America 47 years (1839-1886), Japan 34 years (1885-1919), South Korea 11 years (1966-1977). In China, the annual growth rate of rural population's consumption level (the majority of China's population) is 5.6%; the annual growth rate of per capita net income of farmers is 7.2%, corresponding to doubling their per capita income every 9.7 years (see table 1), which is the major reason leading to China's great poverty reduction in rural areas. In 1978 nearly 100% peasant household whose per capita net income was below 500 yuan; in 1985 the percentage was 77.7%; in 1990 it was 35%; and in 2001 only 2.5%. In 1985 the percentage of peasant households whose per capita net income was less than 1000 yuan is 97.69%, while in 2001 the ratio has been down to only 13.22% (see table 5), which shows that the extremely poor and the poor have been sharply decreased.

Table 5 Percentage of Rural Households Grouped by Per Capita Annual Net Income unit: %

grouping by net	1978	1985	1990	1995	2001
income					
Below 100 yuan	33. 3	1.0	0.3	0.21	
100-300	64. 3	36.9	8.34	1.06	2. 51
300-500		39.8	26.41	3. 77	
More than 500	2.4	22.3	64.95	94.96	97. 49
yuan					
More than 1000		2. 31	22.78	69.77	86. 78
yuan					

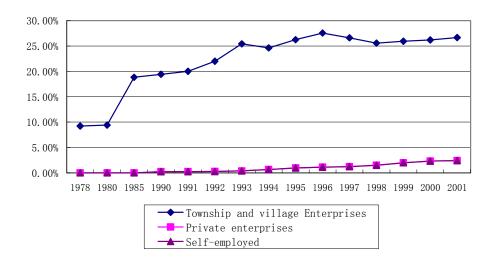
Sources: the data of 1978 and 1985 are quoted from *China's Social Statistics* (1990), pp. 68; the data of 1990 and 1995 are quoted from *China Statistical Yearbook* (2000); the data of 2001 are quoted from *China Statistical Abstract* (2002), pp. 99.

1. 2. 2 A Great deal of rural labor force transfers to non-agricultural industries. More

and more people are employed in village and township enterprises. The number has increased from 28.27 million in 1978 to 130.86 million in 2001, accounting for 26.7% of total rural work force, compared with the original ratio 9.2%. In addition, in 2001 38.16 million people work in private rural enterprises or are self-employed, accounting for 7.7% of total rural employees. The total of the above two ratios is 34.4%, exceeding 1/3 of total rural employed population (see figure 1).

Fig 1 Percentage of employed persons in Township and village Enterprises, Private

Enterprises and Self-employed individuals in rural area



Source: China statistical yearbook (2002), pp. 121

1.2.3 **speeding up urbanization.** China has experienced the largest population removing in the world since the policy of reform and open-up was carried out. This includes population transference, referring to moving from the place where one originally lives. In China's case, it refers to transferring one's household register or transforming from agricultural population to non-agricultural population, directly recruiting personnel for employment from rural areas, such as graduates of junior college, technical secondary school, demobilized servicemen, professional personnel, etc. Population flowing, refers to that the living place remains the same, but the person himself (or herself) has left the place and stridden across a given administrative region, temporarily stayed there, and engaged himself in various activities. The activity of rural labors going to cities for work belongs to the type of population flowing. In the period of 1982-2000, 206,750,000 people have moved from rural to urban areas, equal to 45.0% of total urban

population in the same period, and 84.6% of newly-increased rural population. In the same period, 109,600,000 rural labors move to cities, equal to 45.8% of total town labor force and 94.3% of newly-increased town labor force. From the above we can see that the scales of moving population and labor force are enlarging rapidly. In the 1980s, moving population is 8,140,000 and moving labor force is 4,010,000, while in the 1990s, the number is 14,140,000 and 7,750,000 respectively. Some are agricultural population who transform to non-agricultural population and majority others are rural laborers who go to cities for work. The wage income has become one of the most important sources of farmers's income. The ratio of wage income accounting for their total income has been up to 30.4% in 2001 from 13.2% in 1985 (see figure 2), which shows that peasants have partly enjoyed the benefits brought by urbanization and non-agricultural industries.

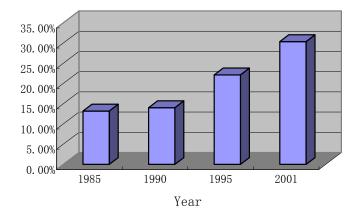
Table 6 Population and labor force moving from rural areas to urban areas (1982–2000)

unit: 10 thousand

							•		
period	The	The	number	The	number	The	average	The	average
	increased	of	moving	of	moving	mov	ing	movi	ng labor
	number of	popul	lation	labor	force	popu	ılation	force	per yea
	urban total					per y	/ear		
	population								
1982-1990	8715	6510		3208		814		401	
1990-1995	4979	3901		2020		780		404	
1996-2000	10732	1023	7	5732		2030		1146	
1990-2000	15711	1413	8	7752		1414		775	
1982 - 2000	24426	2067	5	1096	0	1149		609	

Sources: Industry and policy department of Ministry of Agriculture, quoted from *Finance and Economics*, 2003, 3rd/4th issue, pp. 95; the data of total urban population are from *China Statistical Abstract*, 2002, pp.34.

Fig 2 Percentage of wages income to total revenue



sources: China Statistical Abstract, 2002, pp. 97

1.2.4 Implementing export-oriented open-up policies. China's export volume has increased rapidly since the policy of reform and open-up has been carried out, especially the export of labor-intensive products has increased very rapidly, which plays an important role in expanding employment and poverty reduction. The export volume of 2002 is 325.6 billion dollar, increasing by 32 times than that of 1978. The proportion of export volume accounting for GDP has increased rapidly from 4.6% in 1978 to 23.0% in 2001. In addition, China draws foreign investment actively and takes an active part in economic globalization, which is also a way to large poverty reduction, especially the foreign economy in Guangdong and Zhejiang attracts large quantities of surplus agricultural labor force in different areas. The flowing labor force of Guangdong accounts for 39% of that of the whole country.

1.2.5 **Human capital has been obviously improved.** The level of people's education and health condition has been greatly improved since reform, which is useful to human capital accumulation and plays an important role on improving people's living standard and poverty reduction. As shown in table 7, average educational years of people above 15 years old has been increased to 7.11 years in 2000 from 4.64 years in 1982. The illiterate population has decreased largely, the ratio of which has decreased from 22.8% in 1982 to 6.7% in 2002; the absolutely illiterate population has decreased to 84,920,000 from 231,770,000, of which rural illiterate and semiliterate population has obviously decreased. Infant mortality rate has decreased from 37.61% in 1982 to 28.38% in 2000. The average life expectancy has increased to 71.40 years in 2000 from 67.77 years in 1981. The above demonstrates the important progress in the area of education and

medical care, and the complementary relationship between economic and social progress.

Table 7 Basic status of China's human capital (1982-2000)

	1982	1990	1995	2000
Average educational years	4.64	5.52	6.09	7.11
The percentage of illiterate	22.8	15.9	12.0	6.7
people in total population (%)				
The percentage of illiterate and	27.87(1985)	20.73	13.47	8.96(1999)
semiliterate rural people in total				
population (%)				
Infant mortality rate (‰)	37.61(1981)	32.89	33.03(1996)	28.38
Average life expectancy(year)	67.77(1981)	68.55	70.80(1996)	71.40

Sources: China Statistical Abstract, 2002, pp. 34: the estimation of average educational years is quoted from "The Research on the Gap between Human Capital and Economic Development of China's Different Regions" (2001), Master's dissertation by Li Chunbo, School of Public Policy& Management, Tsinghua University,

1.2.6 Anti-poverty actions adopted by the government. China's government made political commitment to reducing poverty in early 1980s and reflected poverty reduction goals and plans in the national economic plans. With the development of the economy ,the central government's willingness to aid the poor become stronger and stronger, the input of aiding is also increasing (see table 8). In order to protect the benefits of the farmers, the government adjusted agricultural policies—to increase and loosen the price of agricultural products step by step. As a result, the purchase prices of agricultural products have greatly increased in the 1980s and the middle of the 1990s. In 1996, the price index of agricultural products is 5.5 times as much as that in 1978. The average growth rate per year is 9.9%. In the corresponding period, the retail price index of rural industrial products are 2.9 times and 6.1 times respectively. The growth rate of farmers' actual earnings per year (the price index growth rate of agricultural products minus that of industrial products) is 3.8% (see figure 3).

Table 8 The national anti-poverty fund and the ratio of that in GDP

year	discount	Work	Developing	Total		The proportion	Per capita amount in
	loan	instead of	fund	(10	million	of that in GDP	poverty
	(10	relieve(10	(10 million	yuan)		(%)	population
	million	million	yuan)				(yuan/each person)

³ Amartyasen, 1998, *Development as Freedom*, the Preface of the Chinese version, Chinese People University Press, 2002.

	yuan)	yuan)					
1986	23	9	10	42	0. 41	32	
1990	30	6	10	46	0. 25	54	
1991	35	18	10	63	0. 29	67	
1992	41	16	10	67	0. 25	83	
1993	35	30	11	76	0. 22	101	
1994	45	40	12	97	0. 21	194	
1995	45	40	13	98	0. 17	151	
1996	55	40	13	108	0. 16	180	
1997	85	40	28	153	0. 21	306	
1998	100	50	33	183	0. 23	436	
1999	150	65	43	258	0.31	756	
2000				260	0. 29	1182	

Note: per capita amount in poverty population is calculated according to poverty population of the same year, see appendix 1.

Sources: data of 1986-1997 are from *The Financial Aid to the Poor by the Central Government* edited by Jiang Yonghua and Gao Hongbin, China's Financial Press, 1998. data of 1998-1999 are from Office for Anti-poverty of the State Council, quoted from "A Monitoring Report on China's Rural Poverty (2000)" by the research office of rural social economy of national statistics bureau, China's Statistics Press, 2000, pp. 53; data of 2000 are estimated by the writer.

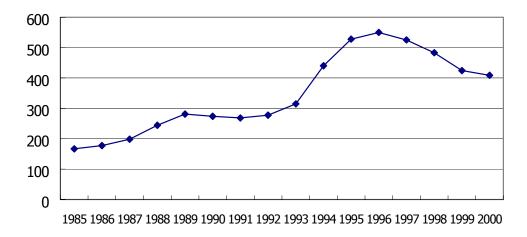


Figure 3 The purchase price index of agricultural products (taking that of 1978 as 100)

Sources: China Statistical Yearbook, 2001, pp. 282.

2 China has slowed down its pace of poverty reduction since 1990s and analysis of the reasons

2. 1 China has slowed down its pace of poverty reduction sine 1990s

China's per capita output and income have been greatly improved in the first several years of economic reform (1978-1985), and income poverty has correspondently decreased by a large

margin. According to the official poverty line, rural poverty population has totally decreased by 200 million in the period of 1978-2002, half of the decreased happened in the period of 1978-1985. In this period poverty population was annually decreased by 17.86 million per year, and the annual growth rate of per capita GDP is 8.3%. The growth rate of farmers' per capita consumption level and per capita income has been up to 10.0% and 15.1% respectively. Rural population, especially the poverty population has been the main beneficiaries of high economy growth rate in this period. However, after the second half of the 1980s (1985-1990), although China maintains a fairly high economic growth rate, there are still some indications that the pace of poverty reduction in rural areas has slowed down—the annual decease number of poverty population has reduced by half; poverty population has only decreased by 8 million annually; the average growth rate of farmers' consumption level per year is only 2.5%; the average growth rate of farmers' per capita net income is only 3.0% (see table 1).

Table 9 China's official poverty line and its relative level

	Official poverty line	The ratio of farmers' per	The ratio of official
year	(yuan, present price)	capita net income to	poverty line to per capita
		official poverty line b (%)	GDP b (%)
1978	125	93.6	33.0
1985	205	51.6	24.0
1990	300	43.7	18.4
1991	304	42.9	16.2
1992	317	40.4	13.9
1993	350	38.0	11.9
1994	440	36.0	11.2
1995	530	33.6	10.9
1996	580	30.1	10.4
1997	600	28.7	9.9
1998	625	28.9	9.9
1999	625	28.3	9.5
2000	625	27.7	9.5
2001	625	26.4	8.8
2002	625	25.3	7.9

Note: a. China's current rural poverty line is calculated and calculated based upon the investigating materials of 67,000 farmer inhabitants' income and expenditure by the Rural Research Office of National Statistics Bureau in 1986. China's rural poverty line in 1985 is that per capita net income per year is 205 yuan. The standard is adjusted year by year according to price index since then. In 1990 the standard is 300 yuan; in 1999 625 yuan. The standard, calculated by fixed price in 1990, only corresponds to 66% of international poverty standard.

b. China Statistical Abstract, 2002, pp. 15 and 91.

In the 1990s (referring to the period of 1990-1997), the highest average growth rate of China's per capita GDP is 9.9%, greatly higher than that of the early period of reform (referring to the period of 1978-1985). However, rural poverty population has anually decreased by 5 million, less than 1/3 of that in the period of 1978-1985; farmers' growth rate of consumption is far lower than economic growth rate (see table1). The growth rate of per capita GDP still remains as high as 7.7% in the period of 1997-2002, but the average decreased number of poverty population per year has continuously reduced to 4.36 million. The average growth rate of farmers' per capita net income is 3.8%, also lower than that (7.2%) in the reform period (1978-2002).

The decrease of China's rural poverty population in the 1990s has resulted from the decrease of poverty line. Compared internationally, the income poverty line prescribed by the Chinese government—per capita net income below 300 yuan(the fixed price in 1990)—is a low-standard poverty line, only corresponding to 66% of international standard. If we make a vertical comparison of data, this standard tends to decrease rapidly compared with farmers' per capita net income, reducing to 26.3% in 2002 from 43.7% in 1990, and its ratio to per capita GDP reduced to 8.2% in 2002 from 18.4% in 1990 (see table 9). Based on this standard, poverty population estimated by the government is much less than China's real poverty population, thus the anti-poverty achievement is overestimated (see box 1).

There are still 22 million people stricken by poverty in rural areas by the end of 2000. The objective of providing 80 million poor people with adequate food and clothing promised in "The Eight-Seven Anti-poverty Plan" set down in 1994 has not been met.

In China's urban areas, poverty rate has gradually increased since the 1990s, especially the extreme poverty rate and dire poverty rate are obviously increasing. According to Khan's estimation, the extreme poverty rate has increased to 4.1% from 2.2% in the period of 1988-1995; dire poverty rate has increased from original 1.3% to 2.7%. He estimates that the poorest population has exceeded 10 million in 2001. ⁴ According to our estimation, urban poverty population has been up to 24.03 million, which plus population with lowest income (per capita income every year is lower than 2497 yuan), will account for 5% of total town population. To one's fear, the number of laid-off workers and unemployed people has sharply increased, and the

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⁴ Khan, Azizur R., 1999, Poverty in China in the Period of Globalization, ILO.

release of payment of employees and retirees was generally defaulted, which leads to rapid increase of poverty population and results in the marginalization of these people. This phenomenon does not only cause serious economic problems, but also imposes grim challenges on China's society in the future.

2. 2 Analysis of characteristics of China's poverty since the 1990s

2.2.1 Distribution of poverty population in urban and rural areas

Most of the poverty population live in rural areas, the poverty degree of whom is much deeper than that of urban habitants. One of the major reasons for this disparity is that there is a great gap between per capita income of urban habitants and that of rural habitants, which surpasses that in common developing countries.⁵ In addition, poor habitants in urban areas enjoy the lowest living insurance provided by the government, while most of poverty population has no other living insurance besides their own land.

2.2.2 Regional distribution of poverty population

Since 1990s, China's rural poverty gradually demonstrates regional and marginal characteristics. The poverty rate is high in the western areas of China, where poverty population are the most concentrated and the poverty degree is the deepest across the country. According to the data given by the Rural Research Office of National Statistics Bureau in "A Monitoring Report on China's Rural Poverty (2001)", in the 592 national poverty counties prescribed in 1986, about 2/3 of total poverty population are distributed in eastern and middle provinces but poverty population of these regions has decreased rapidly since then. In 2000, 10% of poverty population is distributed in the eastern regions in a fragmentary state; 28% of that is distributed in the middle regions; poverty population in the western 12 provinces and areas has increased by 590 thousand, mainly distributing in condensed state, accounting for 62% in total poverty population of the whole country (see figure 4). According to official poverty line, poverty rate in the west is far higher than that in the east. In 2000, poverty rate in middle-west provinces such as Hei longjiang, Shanxi, Inner Mongolia, Shanxi, Gansu, Yunnan, Tibet, Guizhou, Qinghai, Ningxia is higher than 10%, while poverty rate in the 8 eastern provinces (namely Shanghai, Beijing, Tianjin and

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⁵ Khan, Azizur R., 1999, Poverty in China in the Period of Globalization, ILO.

Zhejiang and so on) has been lower than 1%. Extreme poverty has been thoroughly diminished in these regions. Per capita income of poverty farmers in the western areas is far lower than that in the east, and the rate of poverty occurrence in the west is rather high—about 30% in recent years. This rate is especially high when these regions are stricken by the impact caused by natural disasters and overall economic declination.

eastern areas
10%

central areas
62%

Fig 4 Regional distribution of China's rural poverty population (2000)

Sources: the Rural Research Office of National StatisticsBureau, "A Monitoring Report on China's Rural Poverty" (2001)

2.2.3 The multi-dimensional characteristic of poverty

In the past two decades, the strategies of poverty reduction of the Chinese government are mainly focused on eliminating income poverty, especially those in national poverty counties. It is a reasonable choice of policy, and it is very necessary, too. However, when we are entering the new century, the problems of new types poverty such as human poverty and knowledge poverty are increasingly extruding, the involved population of which is far much larger than that of income poverty. Such types of poverty have gradually become major types of poverty. Human poverty refers to the lack of basic human ability, such as illiteracy, malnutrition, short life expectancy, low level of health condition of mother and infant and the harms caused by preventable diseases, etc (UNDP, 2000). Knowledge poverty is a new form of poverty when human race enters the knowledge based society in the 21st century, which can be defined as the problems caused by people's universal lack of the abilities to obtain information, communicate with each other, utilize

and create knowledge and information, or the lack of basic rights and chances to obtain these abilities. These three types poverty are not independent of one another, but interrelated. Poverty population are not always faced with only one type of poverty, but the problems of multi-dimensional and interdependent poverty. Figure 5 is a three-dimensional coordinate map weighing poverty. It can differentiate various types of poverty. Poverty population faced with the three types of interrelated poverty is inside the cube. One of the indexes weighing status of human poverty is Human Poverty Index (HPI for short). ⁶ China's HPI is shown in figure 6. In addition, China's status of knowledge poverty is reflected by the great gap among different regions (see figure 7, table 10).

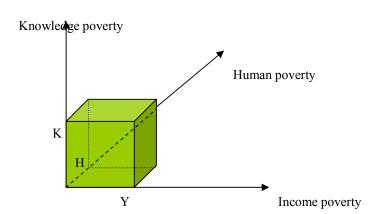


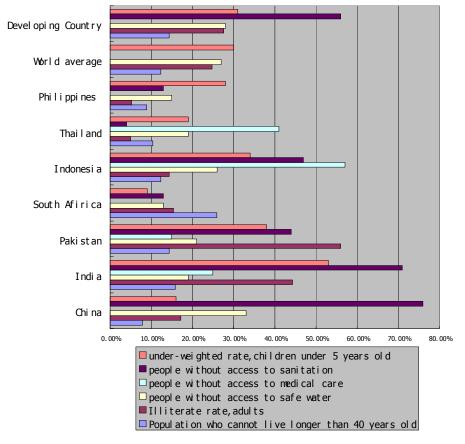
Figure 5 Multi-dimensional framework of poverty

Note: Y refers to average status of income poverty; K refers to average status of knowledge poverty; H refers to average status of health poverty.

Figure 6 Human poverty index

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⁶ Human poverty index is a new index adapted by UNDP in 1997 to measure poverty degree. This index measures three main elements in human life, such as life expectancy, shortage degree of knowledge and decent life. Among them, life expectancy is reflected by the proportion of people who cannot live longer than 40 years in total population; degree of knowledge shortage is measured by illiterate rate of adults; life standard is comprehensively tested by three variables, namely the proportion of people without access to safe water, proportion of people without access to medical care and proportion of under weighted children (below 5 years old).



Sources: UNDP, Overcoming Human Poverty, 2000, New York.

Figure 7 The proportion of illiterates and semiliterate, people above 15 years (1997) sources: China's Population Yearbook, 1998, pp. 39

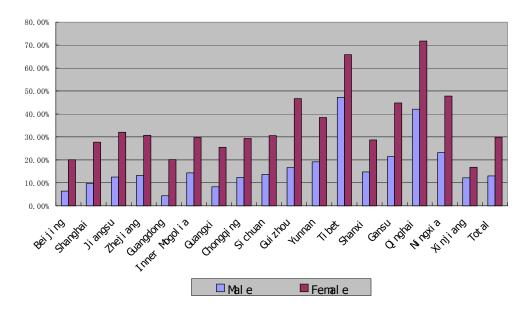


Table 10 The ranking of comprehensive knowledge developing index of different regions (1998)

	Eastern Areas	Central Ares	Western Areas
High level $(I_t \geqslant 150)$	Beijing(606.05)		
	Shanghai(529.03)		

	Tianjin(283.70)		
	Guang		
	Dong(212.74)		
	Fujian(156.48)		
	Jiangsu(154.55)		
Medium-high level (150> I_t) ≥ 100)	Hainan(127.64)		
	Liaoning(126.69)		
	Zhejiang(122.71)		
Medium-low level (100> I_t \geqslant 75)		Jilin(99.53)	
		Hubei(92.18)	Shaanxi(88.05)
	Shandong (82.05)	Heilongjiang (84.63)	
	Hebei (75.69)		
Low level ($I_t < 75$)		Hunan (69.72)	
		Shanxi (64.27)	Xinjiang (65.85)
		Henan (63.74)	Chongqing (63.71)
		Jiangxi (61.04)	
		Anhui (57.69)	Gansu (58.32)
		Inner Mongolia (56.59)	Ningxia (54.70)
	Guangxi (50.88)		Sichuan (51.49)
	-		Yunnan (48.75)
			Qinghai (44.18)
			Guizhou (38.32)
			Tibet (31.99)

sources: "Analysis of Regional Disparity of China's Knowledge Development: Characteristics, Causes and Advice", by Hu Angang and Xiong Yizhi, 2000, *Management World*, the 3rd volume in 2000.

2. 3 The factors affecting China's poverty reduction since the 1990s

The relationship between economic growth and poverty reduction is not simplistic. It is not the speed of economic growth but the quality of economic growth that actually plays an important role. Since the 1990s, the economic development of many developing countries, especially that of east Asia, demonstrates that although economic growth plays an important supporting role in social development, too rapid economic growth will still produce deconstructive effects on environment and resources. Moreover, if the economic growth is not based on good environmental system, various marketing distortions, inefficient investment and prevailing corruption will come

into being; the public, especially poverty population will be deprived of the ability and chance to participate marketing activities and political decision-making. Therefore, we must comprehensively survey the complex relationship between economic growth and poverty decrease.

Although China's economy has been increasing very rapidly since 1990s, the quality of the economic growth is inclining and income allocation is unfair, which still results in decreased proportion of benefits obtained by poverty population. This is an important reason for China's slowing down its pace of poverty reduction.

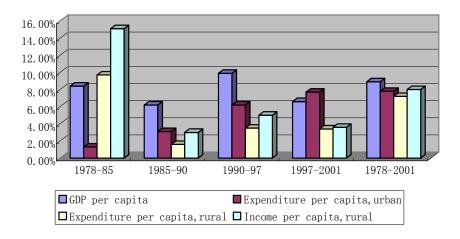
2. 3. 1 Quality of economic growth has declined: rapid economic growth has not helped to decrease poverty

China's growth rate of per capita GDP in the 1990s has created the highest record in the history, but why is the achievement of poverty reduction so limited? This is mainly because the quality of economic growth has declined, China's poverty stratum has not directly benefited from the high growth rate of gross economy, which can be shown by the following points:

2.3.1.1 The growth of per capita income and consumption lags far behind the growth of GDP per capita

In the past two decades, rather complex relationship has emerged between China's growth rate of per capita income and that of per capita GDP (see figure 8). In the period of 1978-1985, the growth rate of per capita GDP is 8.4%, which is calculated according to fixed price (the below is the same). The growth rate of per capita consumption level and per capita net income of rural residents are 9.7% and 15.1% respectively, higher than the growth rate of per capita GDP, also much higher than the growth rate of per capita consumption level of urban residents (1.3%), which demonstrates that the broad masses of farmers have directly benefited from the economic growth in early stage of reform. In the period of 1985-2001, the growth rate of per capita GDP has "separated from" that of per capita income: the growth rate of per capita consumption level of rural and urban habitants and the growth rate of per capita income of rural people are obviously lower than that of per capita GDP (except the period of 1997-2001 when the growth rate of per capita income of urban habitants is slightly higher than that of per capita GDP).

Figure8 Annual growth rate of GDP and consumption level per capita, urban and rural people



Note: this figure is calculated at comparable price

Sources of calculated data: data of per capita consumption (1978-1999) are quoted from *A Collection of Statistical Data of New China's Fifty Years* edited by the Comprehensive Statistical Department of National Economy of National Statistical Bureau; the rest data are quoted from *Chins Statistical Yearbook* (2002).

2.3.1.2 Proportion of agricultural production value in GDP has greatly declined. Ratio of agricultural labor productivity to national average labor productivity has declined. Ratio of farmers' income per capita to GDP per capita has declined. Proportion of farmers' agricultural income in their total income has continuously declined.

The proportion of agricultural production value in GDP has been decreasing all the time. Calculated at current price, the proportion of agriculture in GDP is 28.4% in 1985 and has decreased to 18.1% in 2002, declining 10.3 percentage points. The proportion of agricultural labor force in total labor force has been decreasing all the time until 1995, and since then the proportion has stopped at about 50% (see figure 9), which leads to the rapid decrease of the ratio between agricultural productivity and national average productivity after 1985, although the ratio has slightly increased in the middle of 1990s, the obvious trend of declining has arisen after that year. This reflects the decrease of relative agricultural productivity. The ratio between farmers' income per capita and GDP has also been continuously dropping. The highest ratio is 46.5% in 1985, which has rapidly decreased since then, decreasing to 31.1% in 1994, and then fluctuating around the level after that year (see figure 10). In terms of the sources of farmer's per capita annual net income, agricultural income accounted for 75% of total income in 1985, and the proportion decreased to 49.9% in 2000, decreasing 33.5 percentage points (see figure 11).

However, generally speaking, agriculture is still the main income source of farmers. This shows that the gap between per capita GDP and farmers' per capita net income and per capita real consumption level has obviously become larger, which produces great negative impact on poverty reduction. This analysis partly explains the reasons for China's slow pace of rural poverty reduction after the middle of the 1980s.

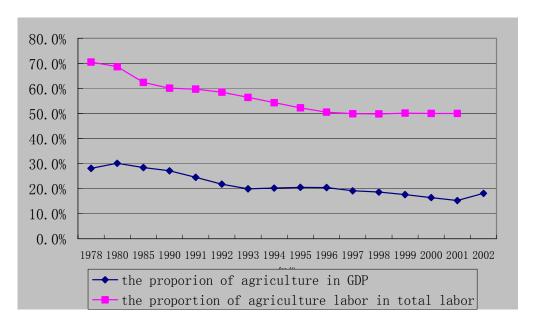


Figure 9 the status of agriculture in national economy

Sources: China Statistical Yearbook (2002)

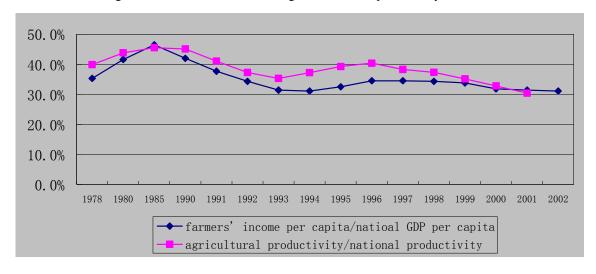


Figure 10 Farmers' income and agricultural labor productivity

Sources of calculation: the proportion between farmers' per capita income and national per capita GDP is calculated according to the data of *China Statistical Yearbook* (2002); the ratio between agricultural productivity and national productivity is calculated according to the data of figure 9.

100.00%
80.00%
60.00%
40.00%
20.00%
1985
1990
1995
2000
Primary Industry Secondary Industry Tertiary Industry

Figure 11 Proportions of various income sources in farmers' per capita net income

Sources of calculated data: China Statistical Yearbook (2002)

2.3.1.3 The opportunities of employment in rural areas are declining

Since the 1990s, opportunities of employment created in urban areas are far more than those in rural areas. In the period of 1990-2001, the growth rate of urban employment is 40.5%, while that in rural areas is only 2.9%; in the period of 1978-1985, the number of people who are employed in rural areas has increased by 21% (see figure 12); in the period of 1990-2001, rural labor force has decreased by 6.2%; the development of village and township enterprises has undergone serious setback: the number of people who are employed has decreased by a large margin, decreasing 8 million just in the period of 1996-1998; because large quantities of employees have been laid off and lost their jobs, there is a limit for rural labor to enter into cities, which produces very serious impact on rural poverty reduction. This will be reflected as follows: firstly, the pressure of employment competition will become larger; secondly, the remitting income flowing from cities to rural areas will decline. Since many cities set a limit on rural labor force flowing into cities or adopt discriminative policies (such as the requirement of formal residential identity), wage income of these workers will be directly influenced; in addition, the living cost of the children of these new migrant families in cities will increase.

-Total number of employed persons number of employed persons, urban number of employed persons, rural

Figure 12 The status of employment since reform

Sources of data: China Statistical Yearbook (2002)

2.3.1.4 Great decrease in prices of agricultural products increases the loss of exchange volume of agricultural products

In recent years, people have not only suffered from risks caused by natural disasters, but also incurred marketing risks of "price impact" caused by four years' successive great decrease in prices of agricultural products. Taking the price in 1996 as the base, the accumulated decrease rate of purchase price level of national agricultural products is 25.6% by 2000. In the period of 1997-2000, the trade volume of national agricultural products has suffered the loss of 41.1 billion yuan, 8100 billion yuan, 134.4 billion yuan and 44.8 billion yuan respectively because of the price decrease, and the accumulative total loss is 301.3 billion yuan (see figure 11). This shows that the broad masses of farmers have been the most serious victims of deflation. The price fluctuation in macro-economy directly influences farmers' income.

Table 11 the volume of national agricultural products trade and the loss caused by price decrease (1996-2000)

year	The volume of	The growth rate of	The price loss
	national	purchase price	of sold
	agricultural	index of	agricultural
	products trade a	agricultural	products

		products	(100 million
		(%) b	yuan) c
1996	7600		
1997	9136	-4.5	411
1998	10123	-8.0	810
1999	11018	-12.2	1344
2000	12443	-3.6	448
1997—2000	33620	-22.6	3013

Sources: China Statistical Yearboos (2001)

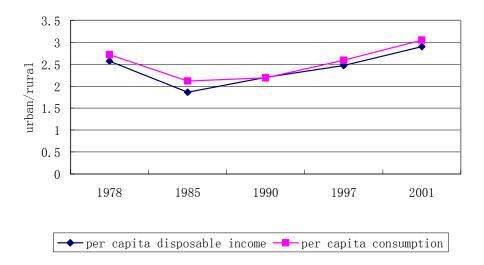
2. 3. 2 The increasing inequality in distribution

Factors affecting poverty occurrence rate include not only income growth, but also income distribution. Even though the growth rate of per capita income is lower than that of per capita GDP, if the degree of income inequality is not deteriorated, rapid economic growth can still play a positive role in poverty reduction. Since 1985, the degree of inequality between urban areas and rural areas, among different regions, even within urban areas has intensified, which produces a great negative impact on poverty reduction.

2.3.2.1 Great gap exists between urban residents and rural residents in terms of per capita income, per capita consumption, revenue, transferred payment and public service, etc.

The gap of per capita income between urban residents and rural residents has experienced process of shrinking and then enlarging since the policy of reform has been adopted. The income distribution between urban areas and rural areas deteriorates, which has directly resulted in the increase of poverty rate to great extent. What is demonstrated in figure 13 is the proportion (calculated at current price) between per capita disposable income and per capita consumption in urban areas and that in rural areas, from which we can see that there exists great gap between urban areas and rural areas. Calculated at current price the ratio of per capita disposable income of urban households to that of rural households is 2.57 times in 1978, falling down to 1.85 times in 1985, but increasing to 2.9 times in 2001, 71% higher than that in 1978; if calculated at constant price in 1978, the ratio of per capita income in urban areas to that in rural areas has declined to 1.53 times in 1985 and increased to 2.12 times in 2001.

Figure 13 the ratio of per capita disposable income and per capita consumption expenditure of urban residents to those of rural residents



Sources of data: calculated according to *Collection of Statistical Data of New China's Fifty Years* edited by the comprehensive statistical department of national economy of National Statistical Bureau (current price).

The fiscal distribution system with high inequality effects has sharpened income inequality between urban population and rural population. Per capita income of rural households is analogous to 2/5 of that of urban households, however, in rural residents' total income, the proportion of transferred income acquired from the country and the collective is far lower than that of urban residents (see table 12). Moreover, rural residents have to pay tax that is far more than fiscal transferred income. By comparison, urban households can obtain various types of fiscal allowances and become beneficiaries of net subsidies.

Table 12 Income and transferred income per capita of urban residents and rural residents

		Urban residents			Rural reside	nts
year	Per capita	Per capita	transferred	Per capita	Per capita	Transferred
	total income	transferred	income/ total	total	transferred	income/ total
	per year	income per year	income per	income	income	income per
	(yuan)	(yuan)	capita	per year	(yuan)	capita
				(yuan)		
1985	748. 92	65. 88	8.8%	547. 31	n. a	n. a
1990	1522. 79	250. 01	16. 4%	990. 38	n. a	n. a

1995	4288. 09	734. 83	17. 1%	2337. 87	65. 77	2. 8%
2000	6316. 81	1211. 86	19. 2%	3146. 21	147. 59	4. 7%
2001	6907. 08	1362. 39	19. 7%	3306. 92	162. 83	4. 9%

Note: the prices shown in this table are at current price

Sources: China's Statistical Abstract (2002)

Great gap exists between urban residents and rural residents in terms of enjoying public services. Chinese government adopts public service policies that are preferable to cities. Rural population accounts for 2/3 of total population now, but only 1/7 to 1/10 of the fiscal expenditure of the government is directly spent on rural population, which results in rural areas lagging far behind urban areas in provision of public services such as basic education, fundamental medical care, family planning and in the areas of infrastructure such as irrigation, roads and communication, etc. The low level of rural public services not only restricts the improving of rural residents' living standard, but also restricts the developing ability and opportunities of rural residents, which makes they easily affected by poverty.

2.3.2.2 The gap among per capita income of farmers in different regions is enlarging

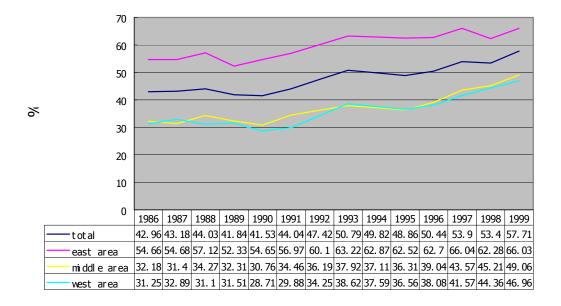
Poverty population in western areas is very large and the degree of poverty is very deep. According to the data of "A Monitoring Report on China's Rural Poverty" by the Rural Research Office of National Statistical Bureau, the ratio between per capita income of farmers in the east, in the middle and in the west is 1.27:1.05:1.00, increasing to 1.92:1.30:1.00 in 2000. Gini coefficient of farmers' per capita net income in poverty counties is 0.3274 in 2000, higher than that in 1999. The main reason is that poverty counties in the middle and west areas were badly hit by serious drought, thus most counties have negative growth of income. By comparison, per capita net income of farmers has increased again on the basis of original high level in poverty counties in the eastern provinces, such as Hai Nan and Fu Jian.

The gap of per capita net income in rural areas among different provinces presents a trend of enlarging. According to the research made by Zhang Ping (1999), Gini coefficient in 1988 is 0.19, increasing to 0.23 in 1995.

Furthermore, in terms of income structure, the proportion of non-agricultural income in total income of farmers in the east is much higher than that in the middle and the west (see figure 14), which shows that the farmers in the east area able to get more benefits from non-agricultural

industries.

Fig14 The proportion of income from non-agricultural industries of rural residents (1986-1999)



2.3.2.3 Inequality of income distribution within rural regions is enlarging.

Income inequality within China's rural areas is not large before the reform. According to the estimation of sample investigation made by National Statistical Bureau (2001), Gini coefficient of rural residents' income in 1978 is 0.21 to 0.22. Gini coefficient in 1978 estimated by Adelman and Sunding (1987) is 0.22. Gini coefficient in 1978 estimated by Mark Selden (1985) is about 0.28. The income gap between rural residents has been shrinking in the period of 1978-1982. Gini coefficient of this period has decreased to 0.22 from 0.32, according to the estimation by Ahmad and Wang (1991).

The income gap within China's rural areas has enlarged since the middle of the 1980s. According to the estimation made by National Statistical Bureau, Gini coefficient of per capita income of rural households has increased to 0.34 in 1995 from 0.23 in 1985, and it was 0.35 in 2000. Khan and Riskin estimated that Gini coefficient increased to 0.42 in 1995 from 0.34 in 1988. When grouping people according to their income, we find that the relative gap between the group with the highest income and the group with the lowest income has increased to 14.7 times from 13 times (see table 13).

The fiscal distribution system with high inequality effect not only intensifies income

inequality between urban population and rural population, but also intensifies income inequality between poor people and non-poor people in rural areas. In rural areas, the tax paid by the group of people with the lowest average income accounts for the highest proportion, 3.4 times as much as that of the group of people with the highest income (see table 14).

Table 13 Gini coefficient of income distribution in China's rural areas

year	National	Adelman and	World	Selden	Ahmad and	Khan and	Gustafsson
	Statistical	Sunding	Bank b	(1985)	Wang	Riskin	and Li
	Bureau a	(1987)			(1991)	(1997)	(1999) c
1978	0.21	0.22	0.32	0.28			
1981	0.24		0.23	0.23	0.26		
1983	0.25	0.26	0.25	0.22			
1985	0.23		0.30				
1986	0.30		0.31		0.29		
1988	0.31					0.34	0.32
1990	0.31						
1991	0.31						
1992	0.31						
1993	0.33						
1994	0.32						
1995	0.34					0.42	0.42
1997	0.33						
2000	0.35						

Note: a. as for the estimated value of Gini coefficient made by national statistical bureau, you can refer to the research office of rural social economy of national statistical bureau (2001, pp. 29); the data of towns before 1995 are in Ren Caifang and Cheng Xuebin (1996); the data after 1995 are offered by the research office of social economy in towns of national statistical bureau. B is indirectly quoted from Ahmad and Wang (1991). C. Gustafsson and Li (1999) used the same data as Khan and Riskin (1997), but they conversed disposable income into equivalent income. D. Adelman and Sunding (1987) made two groups of estimated values of national Gini coefficient, in which the data in brackets are the estimated values obtained after counting substantial allowance of urban residents. E. is from the estimated result of the World Band (1997).

quoted from "Retrospections and Expectation on Research of China's income distribution" by Li Shi, *Economics* (Quarterly), China's Economic Research Center of Peking University, Peking University Press, 2003. 1, pp. 390.

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"Is China Become More Unequal?" by Gustafsson and Li Shi, in *Further Research of China's Residents' Income Distribution* edited by Zhao Renwei, Li Shi and Li Siqin, Beijing, Chinese Fiscal and Economic Press, 1999.

Table 14 Tax proportion of farmers by different income groups (1999)

14515 11	Tax proper crem	or rarmore by ar	Trofolic Income gi	- Cap C (1000)
Income of group	Average income	Income	Tax/fee ratio 3	Tax/fee ratio 4
	(yuan) 1	Components 2		
< 800	522. 40	86. 52	17. 53	11.51
800-1600	1204. 91	82. 22	10. 35	6. 75
1600-2400	1970. 35	72. 98	6.71	4. 12
2400-3200	2766.30	60. 18	5. 22	2. 90
3200-4000	3570.66	46. 41	4. 27	2. 18
4000-6000	4804.11	41.83	3. 42	1. 44
6000-8000	6868.57	30. 51	3.89	1. 16
8000-12000	9532.26	22. 32	2.91	0. 32
> 12000	23594.92	6.89	5. 14	0. 30

Sources: "Issue of Chinese Farmers' Tax Burden", by Lin Yifu and Ren Tao, etc. China Center for Economic Research, Peking University, 2002.6.

Note: 1 Average income indicates that of different groups' net income per capita

- 2 Income components is the proportion of agriculture income in net income per capita
- 3 Tax/fee ratio indicates the proportion of national tax and local charges in average income
- 4 Tax/fee ratio indicates the ratio of local charges to average income

The above analysis shows that only high economy growth cannot automatically solve the problem of income inequality and poverty; the fruits brought by economic growth and open-up policy cannot be automatically shared by all the people; on the contrary, unequal economic growth with low quality restricts people's opportunity to share the fruits. The distribution policy of the government intensifies this unequal phenomenon. The fiscal expenditure and public service policies of the government are seriously preferable to cities and beneficial to urban residents. Urban residents and rural residents have different chances to obtain education, medical care.

Economic policies are preferable to coastal areas, which is not beneficial to the development of inland areas. Tax policies are preferable to the rich, which intensifies the income gap. Only if economic growth with high-quality is maintained, investing distortion can be avoided, full exploitation and utilization of human capital can be realized, thus all the social members can get benefits from economic growth so as to prevent poverty.

3 To construct new strategies of poverty reduction(2002-2015)

The United Nations and the World Bank have publicly promised that poverty population of the whole world is to decrease by half by 2015. China's success or failure in poverty reduction is directly related to the realization of the world's objective. To sum up, although China has made huge achievements in poverty reduction, the economic growth since the middle of the 1980s has not led to corresponding poverty reduction; the pace of poverty reduction has slowed down and some new types of poverty have arisen. Moreover, China's national poverty line is relatively low, far lower than the international poverty line prescribed by the World Bank, the ratio of which to per capita GDP has continuously declining. This means that the gap between this part of poverty population and the social collectivity is enlarging—their relative situation is deteriorating. Recently China's new Premier Wen Jiabao mentioned on press conference that China's poverty line is in low level and classified the issues of employment and poverty issue as one of the top 3 tough tasks. However, after the "87 Anti-poverty plan" ended in 2000, the central government has not put forward new plans on poverty reduction. The 16th National Congress of the Communist Party of China (CPC) points out that for the first two decades of the 21st century, the most important goal of our country is that to concentrate on building a well-off society of a higher standard in an all—round way to the benefit of well over one billion people in this period and further develop the economy, improve democracy, advance science and education, enrich culture, foster social harmony and upgrade the texture of life for the people. Poverty is an opposite of being well-off. Therefore, poverty reduction should be a priority in the comprehensive construction of the well-off society.

By the year 2020, the total population of China will probably reach 1.44 billion, the gross economic value will be quadrupling the one of 2000, the finance income will increase enormously China's overall national strength and international competitiveness will increase

markedly, the income of residents will improve markedly, the people will lead a more affluent life, the country and society will be more capable for further reduction of poverty population in cities and rural areas, eliminate varied phenomena of poverty. China's development objective of building a well—off society in an all—round way conform to Millennium Development Goals (MDGs). According to UNDP's statistics the chief development index of China by the year 2001 has reached or approached the main targets of Millennium Development Goals (see table 15). If China continues it's high developing speed of economic, keep stability of society and promote social development, not only the goal of building a well—off society in an all—round way will come true by 2015, but also Millennium Development Goals will gain great benefits from China's efforts at the same time.

Table 15 To achieve Millennium Development Goals

			1990	2001	2015
	GDP per capita	China	1603	4020	
Poverty	(PPP USS)	East Asia and the Pacific	2346	4233	
	2001				
Famine	Undernourished	China	16	9	8
	people (%)	East Asia and the Pacific	16	10	
	Net primary	China	97	93	100
Education	enrolment ratio	East Asia and the Pacific	96	93	
	(%)				
	Ratio of boys to	China	81	98	100
Gender	girls in primary and	East Asia and the Pacific	84	89	
equality	secondary education				
	(%)				
	Under-five	China	49	39	16
Health	mortality rate	East Asia and the Pacific	58	43	
	(per 1,000 live				
	births)				
	Population with	China	71	75	86
	sustainable access to	East Asia and the Pacific	71	76	
	an improved water				
Water	source (%)				
	Population with	China	29	38	65
	access to improved	East Asia and the Pacific	35	46	
Sanitation	sanitation				
	(%)				
Human	Human	China	0.624	0. 721	0.85
developme	development	East Asia		0.722	
nt	index value	and the			

Source: UNDP, 2003. Human Development Report 2003.

China's five targets of anti-poverty in future: further increase average income of poor peasants by 60-65% by the year 2010, eradicate poverty population under national poverty line--abject poverty population, make great strides to eradicate poverty population under international poverty line, at least reduce by 2/3; ensure poor peasants' normal meals and basic food needs; create more opportunities of employment for poverty population, break barriers of systems against labor floating; enhance investment of human capital for poor population, offer basic public service, provide conditions for learning, absorbing and applying knowledge, extend development scopes, promote the development ability of poor people radically; realize the objective of environment protection and infrastructural construction.

To this end, a new anti-poverty plan in a larger scale (2003-2015) should be set down. Aiming at the current problems, anti-poverty strategic direction should be adjusted: to re-confirm the poverty standard close to the international poverty line; to identify the three types of poverty: income poverty, human poverty and knowledge poverty; Pay great attention to increasing the chances of the vulnerable to participate in social activities and constructing the system of benefit expression; to design an effective comprehensive anti-poverty strategic framework so as to keep anti-poverty policies in accordance with appropriate macroeconomic policies and regional developing policies, etc. The suggestions in detail are as follows:

Firstly, to adjust the national poverty line, to identify rural poverty population over again, and to establish anti-poverty strategic steps according to the new poverty line. Box 1 lists the three schemes to estimate rural poverty population. Scheme A is the current national poverty line; scheme B set poverty line on per capita income of 1,000 yuan; in scheme C the line is per capita income of 1,500 yuan. When scheme B is adopted, the estimated rural poverty population is 100 million, between the estimation of the World Bank and the national poverty line; when scheme C is adopted, the estimated rural poverty population is 240 million, very close to the estimation made by the World Bank. We suggest that scheme B is currently adopted, and then transiting from scheme B to scheme C gradually. According to scheme B, current rural poverty population of China is about 100 million. Effective measures should be taken to decrease this part

of poverty population in ten years, namely by the year of 2015. Scheme C is to be taken into consideration by 2015 and then new plans should be carried out to poverty reduction in the framework of scheme C.

Secondly, to practice macroeconomic policies and regional development policies which benefit poverty reduction. Anti-poverty experience of East Asia and China in early 1980s shows that if policies which can effectively promote macroeconomic growth can combine with poverty reduction policies aiming at benefiting the poor, the number of poverty population will be greatly decreased and the burden on poverty population will be lightened. It includes:

a) Various macroeconomic policies aiming at increasing domestic demands should be connected to poverty reduction. Policies of increasing domestic demands should benefit peasants especially rural poverty population firstly, which can reduce the gap between urban and rural areas, alleviate living pressure of poverty population, promote the adjustment of rural structure and increase the ability of peasants to develop themselves so as to ease poverty. It is suggested that policies of increasing domestic demands adopt directing adjustment to provide basic facilities to rural poverty population and realized the objective of "seven provisions", namely water provision (gap water, clean drinking-water, necessary water supply for living and producing), electricity and electric net provision, post provision, road provision (country roads or simply roads), cable provision (broadcasting and TV), telephone provision (telephone especially public telephone), and network provision (internet especially public internet in county and village); to help farmers accelerate adjusting agricultural structure and provide support in terms of technology, fund, information, qualified personnel and policies to adjustment of agricultural structure; to help farmers develop commodity base of agricultural products with high quality and encourage to develop the export of green food with high added-value; to encourage large-scale agricultural enterprises to establish contractual relationship with poor farmer families and provide technical guide and planting information to them; to help farmers and communities to establish markets of agricultural products and transporting and selling system; to encourage and support farmers to store, process, transport and sell agricultural products; to increase employment opportunities of farmers and promote regional labor force flowing or migrating; to increase the input of rural basic education and basic public health, etc.

b) To practice fiscal policies that are helpful to benefiting poverty population and

increase the inputting proportion of anti-poverty fund. New resources of revenue can be adopted by means of increasing individual income tax, imposing inheritance tax, and imposing social security tax, which can also increased the progressive degree of revenue. This will be used in aid-poor fund, making the proportion of aid-poor fund in GDP to 1.5% from current 0.27%; the government will not give allowances to enterprises that suffer from loss and business (including state-owned food supplies enterprises) any more, instead, the government will directly give allowances to poverty population. Aid-poor fund should be used to assist poverty-stricken villages or poor farmer families instead of poverty-stricken areas, the proportion of which is no less than 60%. The proportion of investment in poverty population's human capital should be increased by a large margin; it should increase to more than 20% from current 2-3%.

- c) To practice monetary policies that are helpful to benefit the broad masses of poverty population. To maintain macroeconomic stability, especially to maintain the general level of price of agricultural products has direct bearing on farmers' income; on the contrary, if macro economy is not prosperous and the price of agricultural products is continuously falling, the agricultural income of rural poverty population will be directly influenced. The government should help the poor to obtain credit loan, discount given by the government. The credit loan should be directly used to assist poverty-stricken women or families, providing necessary subsidies to poor farmers families.
- d) To get adjusted to trade policies after entering into WTO and to aid farmers families produce labor-intensive agricultural products. This includes vegetables, fruits, fresh flowers, tea, medicinal materials, forestry products and livestock products; to help them enhance the quality of agricultural products and increase the proportion of increment of agricultural products; the input of the government in agricultural RND should be increased by a large margin; the government should also provide market information, products information and technical service to farmers.
- e) To practice regional policies that are beneficial to reduce regional developing gap. This includes establishing normative and fair system of fiscal transfer payment, realizing the objective of basically equalizing regional average resource, enhancing the ability of poverty-stricken counties and villages to provide fundamental public service; reducing in deed the tax and charge burden of poor farmer families; setting down national basic standard of public

service and expenditure; adjusting the pivotal investment of the government in poverty-stricken areas; increasing investment in human capital; reducing disparity of public service level of different regions. Aiding-poor office of the State Council notifies the standing committee of NPC at least one time per year of the distribution scheme of investment in aiding the poor, the coursing index of investment, especially the effect index of investment such as per capita net income of poor farmers, per capita living cost and expenditure, illiterate rate of adults, enrollment rate of children, infants mortality and maternal mortality, etc; the office will also announce the above information and the evaluation advice given by the standing committee of NPC to the whole country. National Auditing Office will audit various expenditures of the aiding-fund given by the central government regularly, and publicize the auditing results showing irregularity; evaluating groups made up of experts of home and abroad are established and will give their evaluation as the third party; regular monitoring reports of regional poverty will also be announced by the National Statistical Bureau.

Thirdly, to adopt the developing strategies of taking employment as priority to create more employment chances to poor people. First, various levels of governments should take creating employment as the one of the most important developing objectives. Creating employment is a conscious activity. The increase of employment will not automatically realize, so government should take creating employment as a prior objective, realize employment-oriented strategies and actively develop labor-intensive industries. Compared with other types of groups, the main property of urban or rural poverty population or low-income population is labor ability, while to be engaged in formal or informal employment is their main source of obtaining income or increasing income. To increase their employment opportunities means to increase their opportunities of increasing income. Therefore, the gist of practicing employment-oriented polices is to give them priority of obtaining employment opportunities, including temporary, short-term, and flexible informal employment. Secondly, the transference of agricultural labor force should be actively promoted. The most outstanding problem of developing in China is that almost one half of labor force is concentrated in agricultural departments and labor productivity of agricultural departments is very low. The transference of surplus agricultural labor force in large scale is both the core content of China's economic developing strategies and an important measure of China's anti-poverty strategies. Looking into

the future, with the supply of agricultural exceeding demand and China's entry into WTO, the ability to increase farmers' per capita income becomes smaller and smaller, therefore, farmers' labor service income and non-agricultural income should be increased and the proportion of that in farmers' per capita net income should also be increased. In the long-term, the fundamental method to solve China's rural problems is to transfer farmers and decrease the number of farmers. As a result, every region should actively encourage farmers to do manual works in cities and towns, give the go-ahead to them and improve concerning regulations and ensuring measures. The central government should proclaim limitations on unbending actions of discriminating against rural labor force of governments of different regions in writing, set down employment policies allowing farmer workers to compete justly and encourage the orderly flow and transference of rural labor force.

Fourthly, to create opportunities of democratic participation and advice expression for poor population. One of the fundamental reasons of the gap between urban and rural areas and rural poverty is the broad masses of peasants in China have neither their own benefit representatives nor the system of expressing their opinions. According to statistics, workers and farmers account for only 18.46% of total delegates of the 10th NPC. This proportion is obviously too low because rural population accounts for 64% of total national population. If the most fundamental and major group of peasants are neglected in terms of representative structure, the immediate interests of peasants cannot be protected. As a result, the reform of selection system of NPC delegates should be undertaken to absorb more benefit representatives of peasants into the range of delegates. Furthermore, poverty population should take part in the events that can influence their life through various channels, for example, to have them participate the design of poverty reduction projects and perform supervision and evaluation publicly. The government should transform from exclusive management and control to social governance and public management; encourage and support privately-run departments, social groups, NGO organizations and international organizations to take part in China's cause of aiding the poor.

Finally, the ultimate way to poverty reduction is to invest in people and to promote the ability of poverty population. Firstly, the educational investment in poverty population should be increased by a large margin; various rural educations should be accelerate to develop and 9 years of compulsory education should be taken as a prior objective to be

realized. National educational fund should be directly used to assist poverty population, such as the tuition fee of children, the cost of books, living subsidy of country teachers, the input fund of constructing schoolhouse and buying equipments. The government should assist poverty-stricken areas to set up semi-lodging schools, classes of little girls, and class of minorities in primary school and secondary school. The project of educational migrants will be vigorously carried out in poverty-stricken areas in the 21st century. The government provides funds to subsidize the children of poor families who are willing to study (or after mobilization) in other places to accomplish 9 years of compulsory education or 12 years of education, enabling them to permanently emigrate from poverty-stricken areas, which make them able to obtain education with the same high quality as those children in cities by means of "educational migrant" and get rid of poverty completely. The governments of those major cities in the east should provide funds to local primary schools and secondary schools to make them accept "educational migrant" in poverty-stricken areas. Secondly, to directly provide basic public health service to poverty population, to invest in people's health and to diminish health poverty should be one of the important contents of anti-poverty. What the government should do is changed from helping poverty-stricken rural areas to reestablish cooperative medical care system to directly establishing medical treatment salvation fund, assisting sick people and poverty population, giving subsidy to clinical service expenditure, family planning expenditure and women's childbearing expenditure of poverty population, and adopting assisting projects with low cost, high income, high social benefits and wide coverage; the government should also widely spread knowledge of public health care, meal and nutrition, enhance the ability of poverty population to get population health capital and prevent diseases, advocate that the doctors of hospital in cites should go to poverty-stricken areas irregularly or for a short term and provide medical service to poor people. The government provides funds to undergraduates and postgraduates of medical colleges and advocate that they should go to poor rural areas to undergo medical practice and provide medical service. Only when the government invests in people's health and education, reduces birthrate of population and enhances developing abilities of poverty population to support themselves, knowledge poverty and human poverty can be alleviated and income poverty can be eliminated fundamentally.

Appendix table 1 The Poverty Population in Rural China and the rate of Poverty

Year	Rural	Official	Poverty	The rate of	The rate of

	population (ten thousand	poverty population	population estimated by	poverty (%) Official data	poverty (%) The World
	person)a	(ten thousand	the World	b	Bank data
	personju	person)b	Bank	Ü	Dunk dutu
		personje	(Ten		
			thousand		
			person)d		
1978	79014	25000		33.1	
1984	80340	12800		15.9	
1985	80757	12500		15.5	
1986	81141	13100		16.1	
1987	81626	12200		14.9	
1988	82365	9600		11.7	
1989	83164	10600		12.7	
1990	84142	8500	28000	10.1	33.3
1991	85280	9400	28700	11.0	33.6
1992	84799	8000	27400	9.4	32.3
1993	85166	8000	26600	9.3	31.2
1994	85549	7000	23700	8.2	27.7
1995	85947	6500	20000	7.6	23.3
1996	86439	6000	13800	6.9	16.0
1997	86637	5000	12400	5.8	14.3
1998	86868	4200		4.8	
1999	87012	3412		3.7	
2000	80837	2200			
2001	79563	2713c			
2002		2820c			

Sources: a: <China Statistical Abstract>, 2002; b: "A Monitoring Report of China's Rural Poverty in 2000" by the research office of rural social economy of national statistics bureau, China's Statistical Press, 2000, pp. 7; c: "Statistical Communiqué of China's Economy and Society" by national statistical bureau, quoted from Economic Daily, March 1,2003;d: World Bank, 1999.

Appendix table 2 policies evolvement of employment and transference of rural labor force

year	The	institution	the	publicized	Main c	ontents	of	the
	publicizing	the	document	•	docume	ent		
	document							
1984	The	Central	Document	No. 1	Allowing	farmers	to r	aise
	Committee	of the			funds	s independ	dently	and
	Communist	Party of			provi	ide	housel	hold
	China				regis	ter for t	hemse	lves
					to do	o manual	work	s in
					town	s and citie	es	
1993	The Third	l Plenary	The Reso	lution about	Encouragi	ing and	Stee	ring
	Session	of the	Some	Issues of	Surplus R	ural Labo	r Forc	e to
	Fourteenth	Central	Establis	hing	Orderly	Flow		into

	Committee of the Chinese Communist	Socialistic Marketing	Non-agricultural Industries in Different Regions Step by
	Party	Economic System	Step
1994	Labor Department	Interim Regulations of Rural Labor Force Flowing across Provinces	To adopting Management of Employment Card or Certificate
1995	The General Office of Central Committee	Suggestions about Strengthening Management of Flowing Population	To adopt the system of unified Employment Card of Flowing Population and Card of Temporarily Staying
2001	The National Planning Committee	Specific Programming of Pivot Development of Urbanization in The Tenth Five-Year Plan	To reform the employment system dividing up urban and rural areas except in very few especially large cities, to eliminate those restrictive employment policies aiming at farmers and population from other places
2001	The Ministry of Public Security	Suggestions about Promoting Management System of Household Register in Small Cities and Towns	Perpetual township household register can be conducted for migrant workers and their direct relatives who live with them as long as they have legal and fixed habitation, stable jobs and sources of living
2002	The Central Committee of the Communist Party of China	Document No. 2	Migrant farmers should be treated fairly, guided rationally, managed perfectly and served excellently. Unreasonable restrictions on farmers entering cities and illegal charges should be cleaned up
2003	The General Office of the State Council	Document No. 1 The Notice of Performing Good Jobs of Employment Management and Services to Farmers	Farmers should be treated fairly and the guide, service and management to them should be strengthened. Migrant workers' legal rights and benefits should be

	Who Enter Cities and	protected and they should be
	Do Manual Works	involved in insurance of
		industrial injuries. The right
		to accept compulsory
		education of migrant
		workers' children should be
		guaranteed.

"The Breakthrough of Policies towards Farmer Workers" by Ren Bo, *Finance and Economics*, 2003, issue 3/4, pp. 95-97.

Box 1

China's poverty line and discussion

China is such a country that the broadest gap exists between its poverty line and international poverty line. Poverty population in 1998 estimated according to China's national poverty line (per capita annual income is less than 650 yuan) accounts for 4.6 of its total population, while poverty-stricken population in the same year estimated according to the international poverty line (per capita everyday living cost is less that \$ 1) accounts for 18.5% in total population, differing by about 14%. In Brazil, poverty population accounts for 22% of its total population according to its national poverty line, and accounts for 9.0% of its total population according to the international poverty line; in Bengal, the two proportions are 35.6% and 29.1% respectively; in Indonesia, the two proportions are 27.1% and 7.7% respectively. This demonstrates that the national poverty lines of the three countries are higher or slightly lower than the international poverty line. China's national poverty line is much lower than the international poverty line, which leads to the underestimation of poverty-stricken population and low-income population, at least 100 million less than the real number.

The following is China's rural poverty-stricken population estimated according to different schemes. Scheme A is the current national poverty line; per capita income is 1,000 yuan, which is the poverty line set by scheme B; 1,500 yuan is the poverty line set by scheme C. The result is that if scheme C is adopted, the estimated result is closer to the estimation made by the World Bank; if scheme B is adopted, the estimated result is between that of the World Bank and that of the national poverty line.

the national	Poverty line/per	The estimated rural	Rural	Rural
poverty line	capita GDP(%)	povertystricken	poverty-stricken	poverty-stricken
		population	population/total rural	population/total
		(10,000)	population (%)	population (%)
Scheme A:	8.6	2713	3.4	2.1
650 yuan				
Scheme B:	13.2	10518	13.22	8.2
1,000 yuan				
Scheme C:	19.9	24044	30.22	18.8
1500 yuan				

The estimating method of scheme B and C: rural poverty population under various poverty lines is estimated according to the proportion that poverty households account for in total households.

According to *Annals of China's Statistics of 2002*, the households with per capita income below 1,000 yuan account for 13.3% of investigated households. Rural total population is 79,563 according to the new statistics of population. The estimated population with income below 1,000 yuan is calculated by performing multiplication of the two numbers. The estimated population with income below 1,500 yuan can be got in the same way.

2001			
per capita income (yuan)	Accounting for per capita GDP (%)	Proportion of poverty population (%)	Total poverty population(10,000)
100-600	1. 3-8. 0	3. 87	3078
600-800	8. 0-10. 6	3. 88	3087
800-1000	10.6-13.3	5. 47	4352
subtotal		13. 22	10518
1000-1200	13. 3-15. 9	6. 3	5012
1200-1300	15. 9–17. 2	3. 45	2745
1300-1500	17. 2–19. 9	7. 25	5786
Total sum		30. 22	24044