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# China's poverty alleviation over the last 40 years: successes and challenges\*

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Over the past 40 years, China has made significant progress towards its poverty alleviation goals. The rural population under the current poverty line has decreased by 739.9 million. China has contributed to more than 70 per cent of world poverty reduction. To better promote the new anti-poverty strategy and to serve as a reference for poverty alleviation in other developing countries, this paper summarises the main experiences of China's poverty alleviation over the past 40 years and then discusses the challenges associated with implementing the targeted poverty alleviation policy in the new era. China's experience with poverty alleviation includes development-oriented poverty alleviation, improving self-development capabilities of the poor population, encouraging multiple subjects to participate in poverty alleviation and focusing on innovation and ways to improve poverty alleviation. Although China's poverty alleviation initiatives have achieved significant successes, there are still several challenges that should be of concern in the coming years, such as the diminishing marginal effect of financial inputs on poverty alleviation, the resulting negative incentives for the poor to improve their internal motivations and the insufficient participation of markets and social forces in poverty alleviation. Given these challenges, this paper provides suggestions for anti-poverty policies beyond 2020.

**Key words:** challenges, China, poverty alleviation, targeted anti-poverty strategy.

## 1. Introduction

Eliminating poverty is a challenge faced by every country in the world (Bapna 2012; Glauben *et al.* 2012; Imai and You 2014; Tollefson 2015; Liu *et al.* 2017). Among the 17 sustainable development goals of the United Nations for the period through until 2030, 'End poverty in all its forms everywhere' is the first on the list. Poverty was originally defined as an economic phenomenon, a condition in which the income of an individual household does not meet the basic standards of living (Ward 2016; Liu *et al.* 2017). With social-economic development, the definition of poverty has gradually changed from the shortage of an economic income to a multidimensional

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measurement, including the lack of access to education, medical care, housing and other social deprivation (Bossert *et al.* 2013; Alkire and Santos 2014; Fan *et al.* 2015; Liu and Xu 2016; Liu *et al.* 2017). Different countries all over the world have taken various measures to reduce poverty and have achieved remarkable results. Statistics show that the number of people living on <\$1.90 a day worldwide has decreased from 1.8 billion in 1990 to 0.776 billion in 2013 (World Bank 2017), among which China has contributed more than 70 per cent to world poverty reduction (Wang and Zeng 2018).

China's Government has carried out a series of large-scale poverty alleviation policies, especially since the opening and reform policies of the late 1970s. Over the last 40 years, China's rural poor population has dropped from 250 million in 1978 to 30.46 million in 2017. The success of China's poverty alleviation benefited from a series of policies and institutional reforms (Liu *et al.* 2017). Hence, it is important to systematically review China's anti-poverty policies, institutional reforms and mechanism innovations over the past 40 years. This will provide insights for China's anti-poverty policies in the near future and for other developing countries pursuing poverty alleviation.

The overall goal of this paper is to examine China's anti-poverty policies, experiences and mechanisms of poverty alleviation over the last 40 years and to summarise the lessons and challenges for both China and other countries. The rest of the paper is organised as follows. First, we introduce the major achievements of poverty alleviation in China over the past 40 years. Second, we examine the main practices of poverty alleviation over the past 40 years in China, especially the main measures of poverty alleviation. Third, we discuss the challenges associated with implementing the targeted poverty alleviation policy initiated in 2015. We conclude the paper by providing suggestions for further improvements to China's anti-poverty policy design in the following years and by looking ahead to the anti-poverty policy adjustments after 2020.

## **2. Achievements of poverty alleviation in China**

### **2.1 Adjustment of the official poverty line in China**

China has changed its definition of the official poverty line over the last 40 years. Table 1 lists the poverty lines that China has used and a comparison with the poverty lines suggested by the World Bank.

The official poverty line in China is calculated based on the cost of maintaining a person's basic life over a certain period of time, including the cost of food, other consumption and social services (Xian *et al.* 2016). The adjustment of China's poverty line is mainly based on social and economic development, and the improvement in living standards, which usually leads to higher costs to meet basic life needs and a higher poverty line. The poverty line in China has experienced three changes in 1978, 2008 and 2010. The official poverty line was adjusted based on the

**Table 1** Comparison between Poverty lines of China and the World Bank

| China's poverty lines                          |      |                       | World Bank's poverty lines                            |   |      |                       |
|--|------|-----------------------|---|---|------|-----------------------|
| Poverty lines<br>(yuan per person<br>per year) | Year | Price<br>base<br>year | Absolute poverty<br>lines (USD per<br>person per day) | Relative poverty<br>lines (USD<br>per person per day) | Year | Price<br>base<br>year |
| 100  | 1978 | 1978                  | 1.01  | —   | 1990 | 1985                  |
| 865  | 2008 | 2000                  | 1.08  | —   | 1994 | 1993                  |
| 2,300  | 2010 | 2010                  | 1.25  | 2.0   | 2008 | 2005                  |
| 2,536  | 2011 | 2010                  | 1.90  | 3.1   | 2015 | 2011                  |
| 2,952  | 2017 | 2010                  | 1.90  | 3.1   | 2015 | 2011                  |

Sources: World Bank (1990, 2008, 2015), Poverty Monitoring Report of Rural China (2016) and Xian *et al.* (2016).

annual inflation rates. The 1978 poverty line was 100 yuan per person per year at the 1978 constant price. This is a very low standard, which ensures that each person can intake 2,100 calories per day, and the proportion of food expenditure in this standard accounts for 85 per cent. The 2008 poverty line refers to 865 yuan per person per year based on 2000 constant price. The proportion of food expenditure accounts for 60 per cent in this standard. The 2010 poverty line has been used since 2010, which is 2,300 yuan per person per year at the 2010 constant price. This poverty line is calculated based on the basic costs of food, clothing, 9-year compulsory education, medical services and housing. The 2010 poverty line is still used today, which is 2,952 yuan in 2017, based on the 2010 price and adjusted for inflation.

We compared the official poverty lines in China with the extreme poverty lines suggested by the World Bank. The absolute poverty line was originally introduced by the World Bank in 1990, referring to \$1.01 per person per day based on the price level in 1985 (World Bank 1990). Based on this standard and price changes, the extreme poverty line has been adjusted by the World Bank in 1994, 2008 and 2015 to a corresponding poverty line of \$1.08, \$1.25 and \$1.90 per person per day, respectively. This comparison shows that China's 2010 poverty line is higher than the extreme poverty line of the World Bank. For example, according to the World Bank's research, China's rural purchasing power parity (PPP) conversion factor in 2011 is \$1, equals 3.04 yuan (Ferreira *et al.* 2016). In 2011, the current standard of rural poverty in China was 2,536 yuan, which was \$2.29 per person per day based on this PPP conversion factor. This also means that China's current official poverty line is \$0.81 lower than the World Bank's relative poverty standard, which is \$3.1 per person per year. Meanwhile, we found that China's official poverty line in 2017 is \$0.76 higher than the World Bank's absolute poverty standard, but \$0.44 lower than the World Bank's relative poverty standard. It is suggested that the gap between the current poverty line of China and the World Bank under this constant PPP has been narrowing over time.

## 2.2 Changes in the rural poor population

The number of the poor and the poverty headcount ratio for each of China's three poverty lines between 1978 and 2017 are shown in Table 2.<sup>1</sup> The poverty standard in each year is adjusted for price changes. According to China's 2010 poverty line, there was 770.39 million rural poor in 1978, and the corresponding poverty headcount ratio was 97.5 per cent. By 2017, the population under the poverty line was reduced to 30.46 million, and the corresponding headcount ratio dropped to 3.1 per cent. Overall, between 1978 and 2017, China's rural poor population decreased by 739.9 million, and the poverty headcount ratio decreased by 94.4 percentage points based on the current standard of the rural poverty line.

The rural poor population is largely located in south-west China. The distribution of the rural poor population and the poverty headcount ratio in 2017 at the provincial level are shown in Figure 1.<sup>2</sup> The top five provinces with the largest rural population in poverty were Guizhou (2.95 million), Yunnan (2.79 million), Henan (2.77 million), Guangxi (2.46 million) and Hunan (2.32 million). The rural poor population in these five provinces accounted for 43.63 per cent of China's total rural poor population in 2017. Provinces with a poverty headcount ratio of >5 per cent in 2017 include Xinjiang (9.9 per cent), Gansu (9.7 per cent), Guizhou (8.5 per cent), Tibet (7.9 per cent) and Yunnan (7.5 per cent). These results show that western China, including Xinjiang, Gansu, Tibet, Guizhou and Yunnan, is still the deeply poverty-stricken areas.

## 2.3 Improvements in living conditions, infrastructure and public services in rural areas

In addition to poverty reduction there have also been significant improvements in the living conditions, infrastructure and public services in the places where poor people live. Table 3 shows the changes in infrastructure and public services in rural areas since 2013.<sup>3</sup> For example, the proportion of the rural poor population that is provided with safe drinking water has increased from 81 per cent in 2013 to 89.2 per cent in 2017. In terms of infrastructure, the proportion of poor households in villages with cable TV has increased from 79.6 per cent to 96.9 per cent between 2013 and 2017. Further, the proportion of poor people in natural villages with access to the Internet has increased from 41.5 per cent to 87.4 per cent between 2013 and

<sup>1</sup> The data for poverty line, poor population and headcount ratio are available in Poverty Monitoring Report of Rural China (2000-2018) at <http://tongji.cnki.net/kns55/navi/HomePage.aspx?xml:id=N2019030133&name=YPKJC&floor=1>.

<sup>2</sup> The data for poor population and headcount ratio are available in Poverty Monitoring Report of Rural China (2018) at <http://tongji.cnki.net/kns55/navi/HomePage.aspx?xml:id=N2019030133&name=YPKJC&floor=1>.

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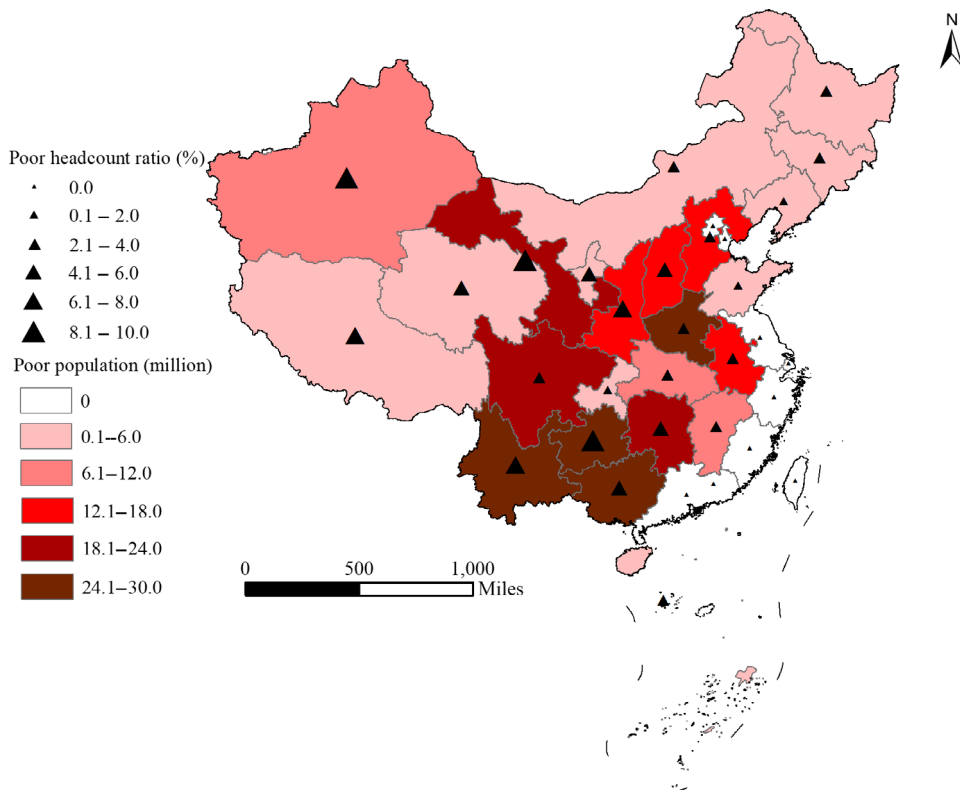
**Table 2** Rural poor population and headcount ratio in China between 1978 and 2017

| Year | 1978 standard       |                           |                     | 2008 standard       |                           |                     | 2010 standard       |                           |                     |
|------|---------------------|---------------------------|---------------------|---------------------|---------------------------|---------------------|---------------------|---------------------------|---------------------|
|      | Poverty line (yuan) | Poor population (million) | Headcount ratio (%) | Poverty line (yuan) | Poor population (million) | Headcount ratio (%) | Poverty line (yuan) | Poor population (million) | Headcount ratio (%) |
| 1978 | 100                 | 250                       | 30.70               | —                   | —                         | —                   | —                   | 770.39                    | 97.50               |
| 1980 | 130                 | 220                       | 26.80               | —                   | —                         | —                   | —                   | 765.42                    | 96.20               |
| 1981 | 158                 | 152                       | 18.50               | —                   | —                         | —                   | —                   | —                         | —                   |
| 1982 | —                   | 145                       | 17.50               | —                   | —                         | —                   | —                   | —                         | —                   |
| 1983 | —                   | 135                       | 16.20               | —                   | —                         | —                   | —                   | —                         | —                   |
| 1984 | 200                 | 128                       | 15.10               | —                   | —                         | —                   | —                   | —                         | —                   |
| 1985 | 206                 | 125                       | 14.80               | —                   | —                         | —                   | —                   | 661.01                    | 78.30               |
| 1986 | 213                 | 131                       | 15.50               | —                   | —                         | —                   | —                   | —                         | —                   |
| 1987 | 227                 | 122                       | 14.30               | —                   | —                         | —                   | —                   | —                         | —                   |
| 1988 | 236                 | 96                        | 11.10               | —                   | —                         | —                   | —                   | —                         | —                   |
| 1989 | 259                 | 102                       | 11.60               | —                   | —                         | —                   | —                   | —                         | —                   |
| 1990 | 300                 | 85                        | 9.40                | —                   | —                         | —                   | —                   | 658.49                    | 73.5                |
| 1991 | 304                 | 94                        | 10.40               | —                   | —                         | —                   | —                   | —                         | —                   |
| 1992 | 320                 | 80                        | 8.80                | —                   | —                         | —                   | —                   | —                         | —                   |
| 1993 | 350                 | 75                        | 8.20                | —                   | —                         | —                   | —                   | —                         | —                   |
| 1994 | 440                 | 70                        | 7.70                | —                   | —                         | —                   | —                   | —                         | —                   |
| 1995 | 530                 | 65                        | 7.10                | —                   | —                         | —                   | —                   | 554.63                    | 60.50               |
| 1996 | 580                 | 58                        | 6.30                | —                   | —                         | —                   | —                   | —                         | —                   |
| 1997 | 630                 | 50                        | 5.40                | —                   | —                         | —                   | —                   | —                         | —                   |
| 1998 | 635                 | 42                        | 4.60                | —                   | —                         | —                   | —                   | —                         | —                   |
| 1999 | 625                 | 34                        | 3.70                | —                   | —                         | —                   | —                   | —                         | —                   |
| 2000 | 625                 | 32                        | 3.50                | 865                 | 94.22                     | 10.20               | —                   | 462.24                    | 49.80               |
| 2001 | 630                 | 29                        | 3.20                | 872                 | 90.29                     | 9.80                | —                   | —                         | —                   |
| 2002 | 627                 | 28                        | 3.00                | 869                 | 86.45                     | 9.20                | —                   | —                         | —                   |
| 2003 | 637                 | 29                        | 3.10                | 882                 | 85.17                     | 9.10                | —                   | —                         | —                   |
| 2004 | 668                 | 26                        | 2.80                | 924                 | 75.87                     | 8.10                | —                   | —                         | —                   |
| 2005 | 683                 | 24                        | 2.50                | 944                 | 64.32                     | 6.80                | —                   | 286.62                    | 30.20               |

Table 2 (Continued)

| Year | 1978 standard       |                           |                     | 2008 standard       |                           |                     | 2010 standard       |                           |                     |
|------|---------------------|---------------------------|---------------------|---------------------|---------------------------|---------------------|---------------------|---------------------------|---------------------|
|      | Poverty line (yuan) | Poor population (million) | Headcount ratio (%) | Poverty line (yuan) | Poor population (million) | Headcount ratio (%) | Poverty line (yuan) | Poor population (million) | Headcount ratio (%) |
| 2006 | 693                 | 21                        | 2.30                | 958                 | 56.98                     | 6.00                | —                   | —                         | —                   |
| 2007 | 785                 | 15                        | 1.60                | 1,067               | 43.20                     | 4.60                | —                   | —                         | —                   |
| 2008 | 895                 | 10                        | 1.00                | 1,196               | 40.07                     | 4.20                | —                   | —                         | —                   |
| 2009 | —                   | —                         | —                   | 1,196               | 35.97                     | 3.80                | —                   | —                         | —                   |
| 2010 | —                   | —                         | —                   | 1,274               | 26.88                     | 2.80                | 2,300               | 165.67                    | 17.20               |
| 2011 | —                   | —                         | —                   | —                   | —                         | —                   | 2,536               | 122.38                    | 12.70               |
| 2012 | —                   | —                         | —                   | —                   | —                         | —                   | 2,625               | 98.99                     | 10.20               |
| 2013 | —                   | —                         | —                   | —                   | —                         | —                   | 2,736               | 82.49                     | 8.50                |
| 2014 | —                   | —                         | —                   | —                   | —                         | —                   | 2,800               | 70.17                     | 7.20                |
| 2015 | —                   | —                         | —                   | —                   | —                         | —                   | 2,855               | 55.75                     | 5.70                |
| 2016 | —                   | —                         | —                   | —                   | —                         | —                   | 2,952               | 43.35                     | 4.50                |
| 2017 | —                   | —                         | —                   | —                   | —                         | —                   | 2,952               | 30.46                     | 3.10                |

Source: Poverty Monitoring Report of Rural China (2000–2018).



**Figure 1** Distribution of the rural poor population and the poverty headcount ratio of China's 31 provinces in 2017.

Source: Poverty Monitoring Report of Rural China (2018). [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

2017. In relation to public services, the proportion of the poor population in villages with access to a public bus service has increased from 56.1 per cent to 67.5 per cent between 2013 and 2017; the proportion of rural people in natural villages with a primary school has increased from 79.8 per cent in 2013 to 88 per cent in 2017; and the proportion of the rural poor population in villages with a village-level clinic has increased from 84.4 per cent in 2013 to 92.2 per cent in 2017 (NBS 2018).

### 3. China's poverty alleviation practices over the past 40 years

Past studies have highlighted that China's success in poverty reduction is not only the result of sustaining a rapid economic growth but also the result of the implementation of large-scale, long-lasting, Government-led poverty alleviation strategies over the past 40 years (Wang 2008; Montalvo and Ravallion 2010; Liu *et al.* 2017). We analyse China's poverty alleviation practices since 1978 from two perspectives: economic growth; and strategies of poverty alleviation.



**Table 3** Living conditions, infrastructure and public services in rural areas between 2013 and 2017

| Index (Proportion of poor households under the rural poverty line) | 2013 | 2014 | 2015 | 2016 | 2017 |
|--|------|------|------|------|------|
| Lives in an adobe house (%)  | 7.0  | 6.6  | 5.7  | 4.5  | 4.1  |
| Uses electric power (%)  | 99.3 | 99.5 | 99.8 | 99.3 | 98.8 |
| Provided with safe drinking water (%)                              | 81.0 | 82.3 | 85.3 | 87.9 | 89.2 |
| Lives in a natural village with cable TV (%)                       | 79.6 | 88.7 | 92.2 | 94.2 | 96.9 |
| Lives in a natural village with a public bus (%)                   | 56.1 | 58.5 | 60.9 | 63.9 | 67.5 |
| Lives in a natural village with access to the Internet (%)         | 41.5 | —    | 71.8 | 79.8 | 87.4 |
| Lives in a natural village with a village-level clinic (%)         | 84.4 | 86.8 | 90.4 | 91.4 | 92.2 |
| Lives in a natural village with kindergarten (%)                   | 71.4 | 74.5 | 76.1 | 79.7 | 84.7 |
| Lives in a natural village with a primary school (%)               | 79.8 | 81.2 | 81.7 | 84.9 | 88.0 |

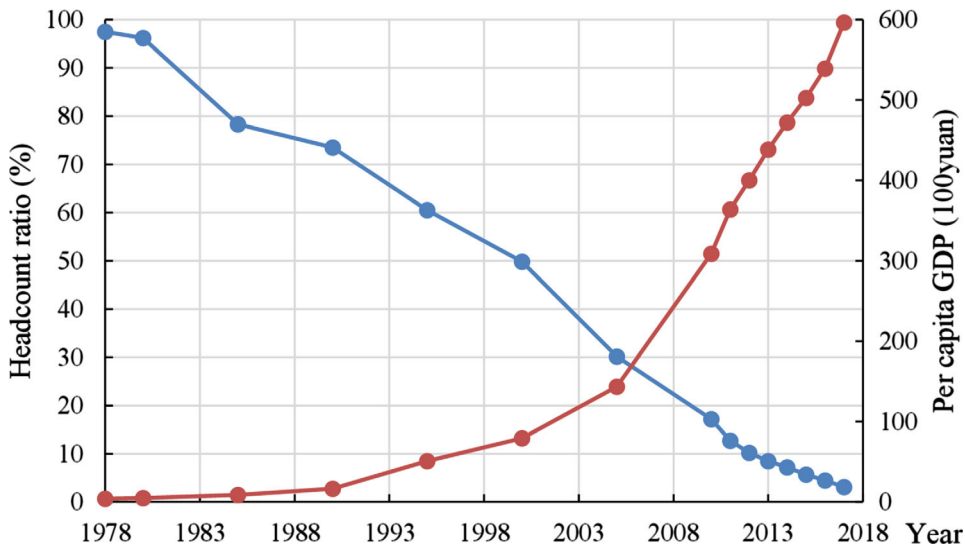
Note: '—' means data are not available.

Sources: Poverty Monitoring Report of Rural China (2014–2018).

### 3.1 Economic development and poverty alleviation

The sustenance of rapid economic growth is the foundation and driving force behind China's massive poverty alleviation over the past 40 years (Huang *et al.* 2008; Wang 2008; Montalvo and Ravallion 2010). The relationship between economic growth and poverty headcount ratio over the past 40 years is shown in Figure 2.<sup>4</sup> Clearly, there is a negative relationship between economic growth and the poverty headcount ratio, and the correlation ratio also indicates this ( $r = -0.9278$ ), which is consistent with Wang (2008). Over the past four decades, the role of China's economic growth in poverty reduction has mainly manifested in two ways (Wang 2008). First, the introduction of the Household Contract Responsibility System in late 1970s promoted developments in agriculture that increased farm incomes of the rural poor, and later, this was promoted mainly by science and technology developments in the agricultural sector (Zhu and Chen 2016). On the other hand, economic development directly provides more opportunities for the rural population working in nonagricultural sectors and urban areas, which largely increase nonfarm income for the poor population (Wang 2008; Montalvo and Ravallion 2010). Second, the economic growth caused by market reforms, infrastructure investments, etc., increased the fiscal revenue of the Government and made the Government more capable to implement poverty reduction policies to help the rural poor population, which is called an indirect effect of economic growth in poverty alleviation (Wang 2008).

<sup>4</sup> The data for per capita GDP are available in China Statistical Yearbook (1981–2018) at <http://tongji.cnki.net/kns55/navi/HomePage.aspx?xml:id=N2018110025&name=YINFN&floor=1>, and the data for the poverty headcount ratio are available in Poverty Monitoring Report of Rural China (2000–2018) at <http://tongji.cnki.net/kns55/navi/HomePage.aspx?xml:id=N2019030133&name=YPKJC&floor=1>.



**Figure 2** Economic growth and poverty headcount ratio since 1978.

Sources: China Statistical Yearbook (1981–2018) and Poverty Monitoring Report of Rural China (2000–2018). [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

### 3.2 The main strategies of poverty alleviation adopted by China's Government

Although the rapid growth of China's economy helped reduce rural poverty significantly, it also resulted in a disequilibrium in rural development between the midwestern and eastern areas. China's Government recognised that poverty reduction could not rely entirely on general economic development, and began to implement poverty reduction strategies since the mid-1980s, which played an important role in promoting large-scale poverty reduction. Making use of its institutional advantages, China launched several Government-led poverty alleviation programs over the last 40 years. Reviewing China's anti-poverty strategies over the past 40 years, we find that poverty alleviation strategies went through four stages according to the differences of anti-poverty strategies and measures: relief-type poverty alleviation (1978–1985); development-oriented poverty alleviation (1986–2006); development-oriented poverty alleviation and social security system (2007–2012); and targeted poverty alleviation (since 2013) (Table 4). The following paragraphs focus on the evolution of these poverty alleviation strategies.

In the early stage of reform and opening-up policies (1978–1985), China's economy was backward, and the Government's financial capacity was weak. Most of the rural poor people did not have enough food and clothing. In this period, relief-type poverty alleviation measures were mainly adopted to solve the problem of insufficient food and clothing supply, including food and clothing relief for rural poor people. From 1980 to 1984, the Chinese central Government allocated more than 30 billion yuan for relief-type poverty alleviation through various channels (Wang and Zeng 2018). The number of

**Table 4** Main poverty alleviation measures over the past 40 years

| Anti-poverty strategies                           | Relief-type poverty alleviation (1978–1985) | Development-oriented poverty alleviation with small-scale temporary living aid  |   | Development-oriented and relief-type poverty alleviation combined with a social security system (2007–2012)   | Targeted poverty alleviation (since 2013)  |
|---|---|---|---|---|--|
|   |   | 1986–2000   | 2001–2006   |   |  |
| Relief-type poverty alleviation measures          | Food and clothing relief                    | Small-scale temporary living aid  | Small-scale temporary living aid  | A minimum basic living guarantee system for the rural poor population   | Helping physical disability and social groups with special difficulties out of poverty by guaranteeing social security   |
| Development-oriented poverty alleviation measures | —   | Provision of credit funds to poor households, agricultural construction in the three western regions (Gansu Dingxi, Hexi Region and the Ningxia Xihaiigu region), Food for Work, construction of infrastructure, development of basic farmland, promotion of practical agricultural technology, expansion of employment opportunities, etc. | Promoting improvements in production and living conditions in poor villages, transferring, training of the labour force in poor areas and agricultural industrial development by leading enterprises. | Promoting improvements in production and living conditions in poor villages, transferring, training of labour force in poor areas and agricultural industrial development by leading enterprises. | Supporting poor households that have the ability to work to develop their industries, relocating tens of millions of poor people in remote areas with harsh living condition to more hospitable villages or towns, implementing ecological compensation policies to lift those people who live in ecological reserves out of poverty, preventing intergenerational transmission of poverty by strengthening education. |

poor people in rural China decreased from 250 million in 1978 to 125 million in 1985, with an annual decrease rate of 9 per cent (Table 2). Because of the decentralisation and low intensity of relief-type poverty alleviation, these measures faced difficulties in solving the important problems that hindered regional development.

To better solve the problem of poverty, especially in less developed areas, China's Government has been adopting a development-oriented poverty alleviation strategy since 1984. Between 1986 and 2000, China's poverty alleviation strategy changed from the previous relief-type poverty alleviation to development-oriented poverty alleviation. To better promote this poverty alleviation policy, the Chinese Government established a special anti-poverty organisation in 1986, that is, the Leading Committee on Economic Development in Poor Areas under State Council (renamed As China's Leading Committee on Poverty Alleviation and Development in 1993). Its basic responsibilities included the formulation of guidelines and policies and plans for national poverty alleviation work (Yan 2016; He 2018; Wang and Zeng 2018). Consequently, the relevant provincial prefectural and county Governments also established corresponding organisations for poverty alleviation (Yan 2016). During this period, the Chinese Government focused on poverty-stricken counties. Poverty alleviation measures during this period mainly included providing credit funding to poor households, agriculture construction in the three most poverty-stricken areas in west China (Dingxi and Hexi regions in Gansu province, and Xihai Region in Ningxia province), Food for Work and promoting the construction of agricultural infrastructure and the extension of agricultural technologies (Wang and Zeng 2018). Between 1986 and 1990, China's Government spent approximately 4 billion yuan annually on poverty alleviation. After that period, China increased investment in poverty alleviation each year, from 9.79 billion yuan in 1994 to 24.81 billion yuan in 2000 (Yan 2016; Wang and Zeng 2018). Thanks to the efforts made by the national and local Governments, the number of rural poor people dropped from 125 million in 1986 to 32 million in 2000, with an average annual decrease of 9 per cent.

By the beginning of the 21<sup>st</sup> century, although the phenomenon of widespread absolute poverty was significantly relieved, there are still a large number of poor people living in western areas of China (Wang and Zeng 2018). Facing this new situation of poverty alleviation, China's Central Committee launched a new program, entitled the China Rural Poverty Alleviation and Development Program (2001–2010), in April 2001. This new program clearly proposed that the targets of poverty alleviation be shifted from poor counties to poor villages, and 148,000 poor villages were identified by the central Government. The main poverty alleviation measures during this period included improvements in production and living conditions in poor villages, training and transferring of the rural labour force from poor areas to nonagricultural sectors. These measures helped in reducing the poverty level of the rural poor population by improving the level of infrastructure in villages,

and increasing nonagricultural employment and agricultural production. In addition, small-scale temporary living aid was implemented as a supplementary measure for poverty alleviation between 2000 and 2006.

Since 2007, China's poverty alleviation measures have begun to integrate development-oriented poverty alleviation with a social security system. With the continuous implementation of development-oriented poverty alleviation policies between 1986 and 2006, most of the rural poor population who have the ability to work have been removed poverty through agricultural development and nonfarm employment. However, small-scale temporary living aid has difficulties in meeting the basic living needs of the old or the poor population who are no longer able to work, resulting in prolonged poverty among them. Subsequently, the minimum basic living guarantee system for the rural poor population was proposed by the Government as one policy for society security as a strong supplement to the development-oriented poverty alleviation measures in 2007. This policy helps the poor population, who are not able to work, to meet their basic needs through Government subsidies. Under the joint development-oriented poverty alleviation measures and the social security system, China's rural poor population has fallen from 90.29 million in 2001 to 26.88 million in 2010, and the poverty headcount ratio has decreased to 7 per cent based on the 2008 national poverty standard (Table 2).

In the period of targeted poverty alleviation that started in 2013, a series of anti-poverty measures for the poor population were implemented in combination with integrated strategies of development-oriented poverty alleviation and a social security system. A targeted poverty alleviation strategy requires local Governments to identify poor areas and poor households to ensure effective support for the poor (Zhou *et al.* 2018). At this stage, the targets were to ensure the rural poor have guaranteed access to food, clothing, compulsory education, basic medical care and housing security. The targeted anti-poverty policies mainly include: (i) lifting the poor households who have the ability to manage poverty through involvement in industry development; (ii) relocating the poor who live in mountainous areas with limited resources to more hospitable areas, such as nearby plain areas or towns; (iii) implementing ecological compensation policies to help those poor people living in ecological preservation areas; (iv) preventing intergenerational poverty transmission by strengthening educational aid; and (v) helping physically disabled people with special social security measures (Wang and Zeng 2018; Zhou *et al.* 2018). These targeted poverty alleviation measures help the rural poor population get rid of poverty by promoting industrial development, changing their living conditions, improving their access to public services and their self-development ability, and ensuring basic living conditions through Government aid. This new anti-poverty program started in 2003 and will be fully implemented from 2016 to 2020. From 2013 to 2017, the number of rural poor has dropped from 82.49 million to 30.46 million, and the corresponding poverty headcount ratio has decreased from 8.5 per cent to 3.1 per cent (Table 2).

#### **4. Lessons from China's poverty alleviation**

##### **4.1 Persisting in reforms and opening-up policies and reducing poverty through economic development**

The implementation of reforms and opening-up policies, and reducing poverty through sustained economic growth are the main driving forces behind China's poverty alleviation over the last 40 years (Li *et al.* 2016; Huang 2016). In the early stages of reforms and opening-up, economic reforms that included the rural household responsibility system and the marketisation of agricultural products played a vital role in poverty reduction (Li and Wei 2016). This series of reforms, coupled with the development and extension of agricultural technology, greatly promoted the living conditions of China's large-scale poor people (Wang 2008; Yan 2016). With the rapid rise of the township enterprises in rural areas in the 1990s, a large number of the rural labour force were attracted to nonagricultural sectors and other diversified sources of farming income, which became a new driving force in poverty reduction. After the mid-1990s, industrialisation and urbanisation continued to be a driving force in poverty reduction (Li *et al.* 2016).

##### **4.2 Maintaining Government leadership in poverty reduction and involving multiple social forces**

China has established specialised poverty alleviation agencies, which enhanced the organisational management of poverty alleviation through well defined tasks and strengthened responsibilities. The establishment of specialised Government agencies ensured the development of plans, policies and the implementation of poverty alleviation that enhanced the coordination and efficiency of poverty alleviation (Yan 2016). Under the guidance of the central Government's anti-poverty agency, China formulated formal documents for poverty alleviation. After completion of the 'China 8-7 National Poverty Alleviation Plan (1994–2000)', China formulated and implemented the 'China Rural Poverty Alleviation and Development Program (2001–2010)' and the 'China Rural Poverty Alleviation and Development Program (2011–2020)', clarifying the strategic tasks, strategic focus, steps and measures for Government departments at different levels and provided detailed guidance for effective implementation of poverty alleviation activities (Yan 2016). To maximise its anti-poverty capability, China also mobilised other social forces to participate in poverty alleviation (Huang 2016). The private sector played an important role in the process of reducing the rural poor population by creating jobs, paying taxes and providing direct assistance. At the same time, social organisations also played an active role in poverty alleviation. For example, various foundations such as the China Women Foundation and the China Red Cross launched poverty alleviation projects to help poverty-stricken areas alleviate poverty (Li and Wei 2016).



### **4.3 Improving the self-development ability of the poor population and decreasing the generational poverty transmission**

Development-oriented poverty alleviation policies are an important part of China's anti-poverty strategies. China improved the living conditions of poor areas by implementing preferential policies. Those different preferential policies have enabled these areas to obtain special development opportunities and to partially offset the constraints associated with poor natural conditions. Development program in infrastructure and public services was offered to poor areas which helped them improve the development environment of poor areas (Yan 2016). Furthermore, China has taken various poverty alleviation measures to improve the self-development ability of the poor people, by means of measures such as subsidised rural credits, service in agricultural technology, labour force training and support of agricultural policies (Li *et al.* 2016).

### **4.4 Innovating new ways of poverty alleviation at different stages of poverty alleviation**

With the onset of poverty reduction, China adjusted its anti-poverty strategies and policies in a timely way to increase the effectiveness of its poverty alleviation activities. China's anti-poverty strategies, generally, have shifted from poverty reduction through economic growth to more targeted poverty alleviation. From 1978 to 1985, rural poverty alleviation took place mainly through the 'trickle-down effect' of economic growth, with limited specific goals and measures of poverty alleviation. At this stage, poverty alleviation mainly focused on providing urgent relief to rural poor groups. After 1986, poverty alleviation was mainly based on development-oriented poverty alleviation, supplemented by temporary relief. In 1986, China launched a planned rural poverty alleviation strategy, but it was targeted at regional-level development, not at specific poor households. By 2007, this anti-poverty strategy was replaced by development-oriented and relief-type poverty alleviation combined with an institutionalised social security system. During this stage, the focus shifted from regions and poverty-stricken provinces to poverty-stricken counties, and then to poverty-stricken villages. By 2013, China started the targeted anti-poverty program, which is mainly focused on the household level. To that effect, China's Government has established a poor household list where all poor households whose annual income is under the official poverty line are included. Since then, China's anti-poverty policy has largely focused on poor households.

## **5. Future challenges for China's poverty alleviation and policy suggestions**

Over the past 40 years, China's poverty alleviation has made remarkable achievements; however, there are still significant challenges that should be of concern for poverty alleviation in the near future.

**Table 5** Special fund for poverty alleviation from the central Government and the poor population (2010–2017)

| Year | Special fund for poverty alleviation from the central Government (billion) | Poor population (million) | Headcount ratio (%) | The marginal effect of funding on poverty alleviation (million people/1 billion) |
|------|--|---------------------------|---------------------|--|
| 2010 | 22.27  | 165.67                    | 17.20               | —  |
| 2011 | 27.20  | 122.38                    | 12.70               | 8.78   |
| 2012 | 33.21  | 98.99                     | 10.20               | 3.90   |
| 2013 | 39.40  | 82.49                     | 8.50                | 2.66   |
| 2014 | 43.29  | 70.17                     | 7.20                | 3.17   |
| 2015 | 46.75  | 55.75                     | 5.70                | 4.17   |
| 2016 | 67.00  | 43.35                     | 4.50                | 0.61   |
| 2017 | 86.10  | 30.46                     | 3.10                | 0.68   |

Source: Poverty Monitoring Report of Rural China (2011–2018).

### 5.1 Future challenges

First, the effect of input on poverty alleviation is diminishing. China has kept increasing its investment in poverty alleviation, but the marginal effect of investment in poverty alleviation has been declining. The special investment in poverty alleviation by China's central Government has increased from 22.27 billion RMB to 86.10 billion RMB between 2010 and 2017.<sup>5</sup> Table 5 shows that although during this period the volume of special funds invested in poverty alleviation has been increasing, the marginal effect of this money on poverty reduction has been declining, which is consistent with the findings by Zhu and He (2018). For example, in 2011, per billion RMB of investment in poverty alleviation led to a reduction of 8.78 million poor people, but this number has been steadily declining and even decreased to <1 million in 2016 and 2017. It is possible that with progress in poverty alleviation, only very poor people are still left living under the poverty line, which largely increases the difficulty of poverty reduction. The clear diminishing marginal effect of investment on poverty alleviation presents more challenges for China's future poverty reduction.

Second, massive investment in anti-poverty policies leads to negative social incentives. Large investments and aid to poor households in the targeted poverty reduction program result in few incentives for poor families for self-development and exiting the poverty list. To achieve the poverty reduction goal required by the central Government on time, local Governments directly paid large lump-sum transfers and temporary relief payments to the specified poor households, which promoted the poor people's desire to obtain the money without working and inhibited the poor people's enthusiasm for lifting themselves out of poverty. Current poverty alleviation policies may also lead

<sup>5</sup> The data are available in Poverty Monitoring Report of Rural China (2011–2018) at <http://tongji.cnki.net/kns55/navi/HomePage.aspx?xml:id=N2019030133&name=YPKJC&floor=1>.



to conflicts between poor villages and nonpoor villages, poor households and nonpoor households (Liu *et al.* 2017). Poor villages are those whose per capita net income falls below the national poverty line according to China's rural poverty monitoring report. The current anti-poverty funds, projects and other resources mainly target poor villages, while nonpoor villages enjoy few anti-poverty resources. There are greater contradictions between the poor and nonpoor households. The income of poor households has clearly increased because of various anti-poverty measures, such as credit, education and medical access. However, the income of nonpoor families can hardly benefit from poverty alleviation policies, which leads to their dissatisfaction with anti-poverty policies. With increasing investment in poverty alleviation, rural households are willing to be defined as poor households, and conflicts between poor and nonpoor households occur in some places.

Third, there is insufficient participation in the market and social forces in poverty alleviation. Compared with the Government, the market and social forces are not fully participating in poverty alleviation. The market has failed to play a decisive role in the allocation of some anti-poverty resources. For example, Government-led agricultural industrial projects in poverty alleviation overly depend on administrative forces, increasing the risk of industrial development (Zhang and Wang 2013). Social forces participating in poverty alleviation remain weak. The ability of social forces to promote poverty alleviation is insufficient. The type of social forces participating in poverty alleviation is still in their initial stage and lacks high-level professional groups with financing capacity, communication capacity and organisational capacity. Many social units regard poverty-relief work as a political task only, without specific rules and targets, relevant norms and guarantees, and even quantitative assessment indicators (Li and Wei 2016).

Finally, the risks associated with a return-to-poverty problem for those recently relieved from poverty are rather prominent in China. Over the past 40 years, those households with better conditions enable them to move away from poverty and have been lifted out of poverty. The rest who remain stuck in poverty usually lack the capacity for self-development (Zhou *et al.* 2018). Although these people have moved out of poverty under the anti-poverty policies, they are also vulnerable to being pushed back into poverty again, due to suffering from natural disasters, market risks in agriculture, illness or issues involving education, marriage and housing (The State Council Information Office 2016). During the 11<sup>th</sup> Five-Year Plan (2006–2010) period, the return-to-poverty rate in north-west China reached 15–25 per cent, which was mainly caused by diseases (Yao and Xu 2012). In addition, the income growth of those in low-income groups is rather low, increasing the pressure on them to return to poverty. According to statistical data, farmers' disposable income in China has been growing at an average annual rate of 7.7 per cent, but the per capita income of rural households in low-income groups has declined by 0.2 per cent on average since 2013. In 2014 and 2016, the per capita disposable income of rural households in the low-income groups

decreased by 5.5 per cent and 4.4 per cent, respectively (Li and Wei 2016). This means that low-income farmers are at a great risk of returning to poverty in China, so it is necessary to take effective measures to prevent this problem in the future.

## 5.2 Policy suggestions

The fifth Plenary Session of the 18<sup>th</sup> CPC Central Committee set out the goal of eliminating poverty in counties and solving regional poverty by 2020 (Li *et al.* 2018). To achieve this goal, Governments at all levels, from the central Government to the local Government, have made a significant investment and done a great amount of work. As a result, China's rural poor population decreased from 165.67 million in 2010 to 35.66 million in 2017 based on the current standard of the rural poverty line. However, in the short term, the current anti-poverty policies still face several challenges, including the diminishing effect of inputs on poverty alleviation, negative social incentives resulting from heavy investment in anti-poverty policies, insufficient participation of the market and social forces in poverty alleviation and the high risks of the return-to-poverty problem faced by the people recently relieved from poverty. To promote the work of poverty alleviation in China, the Government needs to adjust its poverty alleviation strategy to accomplish the goal of poverty alleviation in the following years.

First, the Government should improve the management mechanisms of poverty alleviation funds by increasing the effectiveness of the integrated use of poverty alleviation funds, strengthening the supervision of poverty alleviation funds and severely punishing those who embezzle anti-poverty funds in accordance with the law. Next, the Government should improve the mechanism for selecting poverty alleviation programs, which would reduce the misallocation and loss of poverty alleviation funds, and allocate poverty alleviation funds to places where they are most needed, in order to improve the efficiency of the use of these funds. In addition, the Government should innovate in its anti-poverty plans by encouraging various social forces to take part in poverty alleviation, which would expand sources of funds for poverty alleviation, in order to fully take advantage of the market and social forces in poverty alleviation.

Second, it is necessary to take targeted measures to deal with the negative social incentives of anti-poverty policies. On the one hand, investment in human capital, including training and education, should stimulate the self-development of poor households and encourage them to participate in the agricultural industry and to seek employment opportunities in nonfarm activities to increase their household incomes and achieve the goal of getting out of poverty. On the other hand, during the process of targeted poverty alleviation, investment in infrastructure, such as roads and drinking water facilities, and public service facilities, such as education and medical care, should be enhanced in non-poverty-stricken villages to narrow the gap

between poverty-stricken and non-poverty-stricken villages and to improve the quality of life and satisfaction with anti-poverty policies for non-poverty-stricken households.

Third, China's anti-poverty work should rely more on the market and social forces and enable them to play a positive role in poverty alleviation. The Government should provide supporting policies and improve incentive mechanisms to attract more enterprises, cooperatives and other social forces to participate in poverty alleviation. However, the Government should also set up various platforms with social forces for poverty alleviation, such as organisation platforms, network platforms and funding platforms, which would be conducive to optimising the allocation of social resources for poverty alleviation. In addition, the Government should vigorously carry forward the best of traditional Chinese culture and should be innovative in its publicity methods to appropriately guide the public and create a positive atmosphere for poverty alleviation.

Finally, there are several actions that should be taken to solve the high-risk return-to-poverty problem over the next few years. It is necessary to establish a mechanism of dynamic supervision for the poor who have exited poverty, by using an information management system with big data technology. With this mechanism, the population that escaped poverty with a high risk of returning to poverty can be identified, and they can benefit from targeted policies to stabilise their household income. In addition, the Government should establish a series of supporting policies, such as credit and tax incentives, to promote the development of farmers' cooperatives and agricultural enterprises, and to help more poor households get out of poverty steadily.

To achieve the goal that all poor people get rid of poverty by 2020 under the current poverty standard does not mean the end of rural poverty. With the elimination of absolute poverty in rural China, rural poverty will enter a new stage that is characterised by relative poverty. A relative poverty standard should first be specified based on the new characteristics of poverty, to guide the next stage of poverty alleviation in China. In addition, the central and local Government should pay more attention to the integration of anti-poverty policies and rural revitalisation strategy. On the basis of carrying out targeted poverty alleviation, the capacity of long-term self-development for poor households should be continuously concerned and improved through human capital investment in education, training and other mechanisms. Meanwhile, it should be emphasised that the processes of urbanisation and industrialisation should promote the integration of rural and urban poverty reduction and allow poor people in both rural and urban areas to have equal access to anti-poverty policies in terms of content, quantity and quality beyond 2020. These measures can not only consolidate the effects of poverty alleviation, but also provide a good foundation for implementing rural revitalisation strategy.

### Data Availability Statement

The data for poor population, headcount ratio, and poverty line that support the findings of this study are available in Poverty Monitoring Report of Rural China (2000–2018) at <http://tongji.cnki.net/kns55/navi/HomePage.aspx?xml:id=N2019030133&name=YPKJC&floor=1>.

The data for per capita GDP in Figure 2 that support the findings of this study are available in China Statistical Yearbook (1981–2018) at <http://tongji.cnki.net/kns55/navi/HomePage.aspx?xml:id=N2018110025&name=YINFN&floor=1>.

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