ABSTRACT

2020 was not an easy ride since the COVID-19 pandemic wreaked havoc on economies and dragged around 120 million people into the pit of poverty and despair. Although the pandemic posed daunting challenges to its final fight against poverty, China fulfilled its promise of eradicating extreme poverty by the end of 2020 as scheduled. This article reviews China’s achievements in poverty alleviation and examines how and why China can end extreme poverty by adopting targeted poverty alleviation. The context characterised by economic restructuring, regional disparity and income inequality calls for individualised attention to people in poverty. Thus, a targeted poverty alleviation strategy was introduced to push poverty elimination in China by reaching the poor. To roll out the strategy nationwide, China identified all the poor households by door-to-door investigation, dispatched officials to the frontline of poverty eradication, and conducted a wide-scale and multi-faceted evaluation of the poverty elimination results. In addition, multi-pronged anti-poverty measures are introduced, including infrastructure, developing local industries, relocation, eco-compensation, education, social security and special initiatives for vulnerable groups. At the end of the article, future challenges and formidable obstacles are listed. Findings suggest that China should focus on the people who may slip back into poverty, the urban poor, and regional inequality. This review and analysis have been done based on the secondary data sources collected from government publications, research articles, and international organisation statistics.

Keywords: Extreme Poverty, Targeted Poverty Alleviation, Poverty Threshold, Inequality, China.

INTRODUCTION

Poverty is a global problem that has plagued humanity for centuries. Thucydides said: “An avowal of poverty is a disgrace to no man; to make no effort to escape from it is indeed disgraceful.” (Hobbs 2009 p.9) China has waged an all-out war to defeat poverty and finally eradicated extreme poverty at the end of 2020. A
total of 98.99 million rural poor have been lifted out of poverty in China since 2013 (SCIO 2021). According to the international poverty line set by the World Bank, China accounts for 70 per cent of poverty reduction worldwide (Hughes et al. 2021). China met its poverty alleviation targets under the United Nations 2030 Agenda for Sustainable Development 2 10 years ahead of schedule. The key players for China’s success are rapid economic growth, strong political commitment, systematic institutional framework, massive social mobilisation, bold reforms, and targeted poverty alleviation (TPA). The paper's objective is to examine the background of adopting TPA and analyse why and how China can end poverty through TPA. TPA tailors relief measures for each impoverished household instead of a region or a county, creating equal opportunities and providing assistance for the rural poor to tap into their full potential. Customised measures are undertaken for different types of poverty, including upgrading the infrastructure, boosting the local economy, providing education and training, creating a social safety net. The final push to end poverty in most impoverished and lonely regions owes much of its success to the strategy. As each country is unique in its economy, political system, history and culture, it is not feasible to transplant programs from one country to another. However, the principles of TPA could be borrowed for other developing countries: identifying the poor, employing measures to fit specific circumstances, monitoring the implementation, and evaluating the results.

METHODOLOGY

This review and analysis are based on research articles, books, working papers, government publications, and international organisations' statistics. In part 3, data from books by economists were used, and words from the masterpieces of well-known ancient Chinese politicians and philosophers were cited for recalling the harsh reality of ancient China and old China before 1949. In part 4, data from Chinese government publications were analysed to illustrate China's achievements in poverty alleviation. Materials include United Nations' report, Yearbook of China's Poverty Alleviation and Development, China Statistical Yearbook. In part 5, to analyse the background of TPA, China’s economic growth was demonstrated by presenting China’s GDP and GNI per capita from 2000 to 2020. The data was collected from China Statistical Yearbook and World Bank’s Databank. Besides, three reasons that necessitated adopting TPA were indicated in research papers, books and working papers of the World Bank and Asian Development Bank. In parts 6 and 7, government documents, yearbooks, white papers, reports, and news from government websites were used to brief on how

---

2 The United Nations 2030 Agenda for Sustainable Development was adopted by 193 UN members in 2015. One of the agenda's 17 goals is to end poverty in all forms and dimensions by 2030.
TPA works. Sources include China Yearbook of Household Survey, Poverty Monitoring Report of Rural China, Report of the Seventh National Census, People’s Daily. In part 8, anti-poverty related outlines, policies, plans, research articles from renowned peer-reviewed journals, and World Bank policy research working papers were used to analyse the underlying reasons why China can eradicate extreme poverty.

**CHINA’S HARSH REALITY**

According to World Bank, “poverty is pronounced deprivation in well-being. It means low incomes and the inability to acquire the basic goods and services necessary for survival with dignity” (Haughton & Khandker 2009, p.1). It is often associated with many staggering problems, including hunger, diseases, homelessness, social conflicts, education inequality, the disparity in social status. UN Secretary-General Antonio Guterres stated on the International Day for the Eradication of Poverty last year, “around 120 million people fell into poverty as the COVID-19 pandemic wreaked havoc on economies and societies.” Meanwhile, a report of the UN Development Program estimates that more than 1 billion people around the world may fall into extreme poverty by 2030 under a High Damage scenario of the pandemic (Hughes et al. 2021). Therefore, poverty is a chronic affliction of humankind and poverty alleviation is a global challenge.

China had been one of the world’s major powers from 1 AD to the 1820s and contributed 32.9% of world GDP in its heyday in 1820 (Maddison 2007, Oxford). However, China's long history witnessed a harsh reality - people struggled to survive for thousands of years due to social institutions and unequal wealth distribution. Every facet of their hardship was recorded in various types of literature. More than two thousand years ago, Qu Yuan\(^3\) expressed his compassion and concern over the livelihood of the general public in his verses and poetry. In his work *Li Sao*, he said, "Heaving a long sigh, I brush away my tears. Sad that man's life should be so beset with hardship" (Hawkes 1985 p.70). Mencius\(^4\), mentioned in a conversation with King Hui of Liang, “when those who are seventy wear silk and eat meat and the masses are neither cold nor hungry, it is impossible for their prince not to be a true king” (Lau 1970 p.52). "Neither cold nor hungry", the subsistence level of living was not only the common aspiration of the people in the era of Mencius but also a constant and universal goal for generations of Chinese people throughout history. Even when China reached its peak of imperial power and prosperity in the Qing Dynasty, “the Kangqian Period

---

\(^3\)Qu Yuan (340-278 BC), a well-known ancient Chinese poet and minister, is listed by the World Peace Council as one of the four cultural figures in the world.

\(^4\)Mencius (372-289 BC), a famous ancient Chinese philosopher, is regarded as the second sage after Confucius.
of Harmony" was highly bleak in the eyes of foreign envoys. In 1793, the King of Great Britain dispatched the first delegation to China. John Barrow, an ambassador from the delegation, described in his book “Everything, in fact, that we had hitherto seen wore an air of poverty and meanness” (Barrow 1804 p.69). Their detailed descriptions conclude that people in China lived under challenging conditions for thousands of years. Old China was a rich country with poor people.

At the PRC’s founding in 1949, China was the world’s largest developing country with a backward economy, falling behind Africa and India (Brooks 2017). Thanks to the economic reforms in 1978, China had the most rapid and lengthy period of economic growth in history and became the world's second-largest economy in 2010. However, it was afflicted with imbalanced regional development. In 2013, 98.99 million poor people were scattered in 832 severely impoverished counties in central and western China (SCIO 2021), meaning almost one poor county in every three counties. People there still struggled for daily necessities. They needed to work hard to make ends meet. Many seniors had no basic allowances or healthcare and suffered from severe or chronic illnesses. Local labour was forced to migrate from rural to urban areas to earn bread and butter, leaving their children behind. Many school-age children dropped out of school due to poverty. That was the cold hard truth of China. The harsh reality called for a strong commitment and dedication to overcome the insurmountable.

CHINA’S EXPERIENCE IN POVERTY ALLEVIATION

Since its founding, the PRC has spared no effort in poverty reduction. At last, China lifted 98.99 million rural poor out of poverty and declared a complete victory in eradicating extreme poverty nationwide by the end of 2020 (Figure 1). Altogether, over 770 million people have shaken off poverty over the past 40-plus years since China’s unprecedented economic reforms in 1978 (LGPAD 2020, p. 1,005).
Besides, there has been a substantial rise in the incomes of the impoverished. The annual per capita disposable income of the rural poor has doubled, from RMB$^5$ 6,079 in 2013 to RMB12,588 in 2020 (Figure 2).

---

$^5$RMB is Chinese currency that equals 0.157 US dollars.
What does China mean by “eradicating extreme poverty”?

The United Nations defines extreme poverty or absolute poverty as "a condition characterised by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not only on income but also on access to services." (UN 1995 p.38) Based on the definition, extreme poverty is multi-dimensional, involving incomes and the satisfaction of necessities.

China set its extreme poverty line accordingly. In terms of income, China first set its poverty line at a per-capita annual income of RMB 206 in 1986. When the Outline of Poverty Reduction and Development in Rural Areas was issued in 2001, the poverty line was increased to RMB865 (SCIO 2021). In 2011, it was adjusted to RMB2,300 based on the 2010 price index (Table 1). Considering inflation factors, China raised the line to RMB4,000 in 2020 (Figure 3). The national benchmark is now slightly higher than the $1.90 per day international poverty line set by the World Bank when the two lines are compared by adjusting for differences in the currency's purchasing power. Besides the indicator of income, China has another metric when setting its extreme poverty line, known as the “two assurances and three guarantees”. It requires ensuring adequate food and clothing and access to compulsory education, basic medical care, and safe housing. In summary, China’s extreme poverty line is multi-dimensional: RMB4,000 annual income per person, plus the metric of “two assurances and three guarantees”.

Table 1: China’s Poverty Line Based on the 2010 Price Index (2010-2020)

| Year | Poverty line |
|------|--------------|
| 2010 | 2,300        |
| 2011 | 2,536        |
| 2012 | 2,625        |
| 2013 | 2,736        |
| 2014 | 2,800        |
| 2015 | 2,855        |
| 2017 | 2,952        |
| 2018 | 2,995        |
| 2019 | 3,218        |
| 2020 | 4,000        |
BACKGROUND OF ADOPTING TPA

Since China’s entry into the WTO, China’s GDP grew more than ten-fold from RMB10 trillion in 2000 to RMB101.6 trillion in 2020, placing China among the fastest growing economies in the world (Figure 4). This growth has subsequently led to a substantial increase in people’s income and a marked decline in poverty, which is in line with the Trickle Down Effect. Over the past two decades, China’s Gross National Income per capita grew more than ten-fold from US$940 in 2000 to US$10,610 in 2019, making China the fastest growing BRICS economy (Figure 5).
Since the turn of the second decade in the 21\textsuperscript{st} century, there was still about 100 million poor in China. Due to various reasons such as geographic isolation, lack of education, joblessness or old age, no matter how much China’s GDP would rocket, these poor would remain intractably poor. They were the poorest of
the poor. The trickle-down effect considerably shrunk due to the following three reasons.

Economic Restructuring

From an economic perspective, economic growth could reduce poverty depending on the economic structure. In imperial China, agriculture was the most significant contributor to the economy. "In 1890, it represented over 68 per cent of gross domestic product and four-fifths of the labour force." (Maddison 2007 OECD, p.31). In the early days of economic reforms in 1978, 82.1% of the population in China resided in rural areas, relying on agriculture for livelihoods (Li et al. 2018). In that same period, the backbone of China’s economy was agriculture and labour-intensive manufacturing, which was conducive to increasing the income of the poor. Ravallion and Chen from the World Bank (2007, p.16), after careful calculations arrive at a solid conclusion: “The primary sector has a far higher impact (by a factor of about four) on poverty reduction than either the secondary or tertiary sectors over 1981-2001.” As the primary sector with agriculture as its core had the most dramatic effects on poverty reduction, poverty incidence dropped from 30.7% in 1978 to 3.7% in 1999(DHS 2020).

Since the 21st century, globalisation has witnessed tremendous transformations in China’s social and economic fabric. Although economic restructuring has significantly increased the GDP and GNI per capita, it does not mean that everyone can reap the benefits. The contribution of agriculture to China’s GDP is declining year by year from 27.9% in 1978 to only 9.6% in 2010 (NBS 2021). Meanwhile, the service sector, with high-tech and financial industries as its pillar, accounted for 44.2% of China’s economy in 2010(NBS 2021). However, these industries cannot directly increase the income of the rural poor. There is a widening income gap between rural and urban areas (figure 6). Therefore, firing up the economic engine could no longer reduce poverty in rural areas.
In 1935, Hu Huanyong, a Chinese demographer, drew a line across the map of China. East of the line accounted for 36% of China’s territory, while the west represented 64%. The population in the east comprises 96% of the total while those living in the west only 4%. The ‘Hu Line’ illustrated a great divide in China's population distribution and economic imbalance. The imbalance was intensified by the economic reforms in 1978 when China began to transition from a planned economy to a socialist market economy. The central government prioritised the development of eastern coastal provinces with domestic and foreign capital rapidly concentrated in the areas. In contrast, multiple factors, such as resources, topography and climate, slowed the development of western China. Thus, the people there were left behind and cannot benefit from the economic growth as those in eastern China. The annual per capita disposable incomes of eastern, central and western China in 2010 averaged RMB23,272, RMB15,962 and RMB15,806, respectively (NBS 2021).

**Figure 6:** Annual Per Capita Disposable Incomes of Rural and Urban Areas in China (1978-2018) (Source: DHS 2020)

**Regional Disparity**

In 1935, Hu Huanyong, a Chinese demographer, drew a line across the map of China. East of the line accounted for 36% of China’s territory, while the west represented 64%. The population in the east comprises 96% of the total while those living in the west only 4%. The ‘Hu Line’ illustrated a great divide in China's population distribution and economic imbalance. The imbalance was intensified by the economic reforms in 1978 when China began to transition from a planned economy to a socialist market economy. The central government prioritised the development of eastern coastal provinces with domestic and foreign capital rapidly concentrated in the areas. In contrast, multiple factors, such as resources, topography and climate, slowed the development of western China. Thus, the people there were left behind and cannot benefit from the economic growth as those in eastern China. The annual per capita disposable incomes of eastern, central and western China in 2010 averaged RMB23,272, RMB15,962 and RMB15,806, respectively (NBS 2021).

**Income Inequality**

Income inequality was not apparent in the early days of reform and opening up. Rural and urban residents could equally benefit from the low-hanging fruits of economic growth. In other words, the economic growth at this stage had the most
remarkable effects on poverty reduction. As the economy grew faster, the issue of income inequality began to surface. The Gini index rose sharply from 28.8 in 1978 to 47.9 in 2003 and peaked at 49.1 in 2008 (Figure 7). The trend of the Gini index indicates the inequality in income distribution, which means that the poor population who are dangling at the bottom of the income distribution could not effectively benefit from the economic growth as the rich do. Kakwani and Pernia (2000, p.6) point out that “poverty reduction depends on the rate of economic growth as well as on changes in income distribution,” after analysing and comparing the nature of economic growth in Lao PDR, Thailand and Korea. The conclusion is echoed by Ravallion and Chen, economists from the World Bank. Based on calculations of the vital summary statistics from China's National Bureau of Statistics, they find that “with the same growth rate and no rise in inequality, the number of poor in China would have fallen to less than one-quarter of its actual value.”(Ravallion& Chen 2007, p.3) Their research also quantifies the impact of income inequality on the incidence of poverty by finding that “the elasticity of poverty to inequality was virtually zero around 1980, but the elasticity rose to 3.7 in 2001 for the headcount index and 5-6 for the poverty gap measures.” (Ravallion& Chen 2007, p.14) Therefore, the rising inequality at the turn of the century gradually dampened economic growth's effect on poverty reduction.

![Figure 7: Gini Index: Inequality of Income Distribution in China (2003-2019)
(Source: DHS 2020)](image)

At that crucial juncture, these outstanding problems call for individualised attention to people in poverty. Thus, the strategy of Targeted Poverty Alleviation was introduced to push forward poverty elimination in China by reaching the
poor. This means a standardised definition of poverty, identifying poor people, and customised plans to bring each out of poverty.

**HOW DOES TPA WORK?**

China's President Xi Jinping first proposed targeted Poverty Alleviation (TPA) during an inspection visit to Shibadong Village, Hunan province in central China in 2013. In the same year, the central authorities issued the *Guidelines on Innovating Mechanism to Solidly Promote Rural Poverty Alleviation and Development*, which marked the official adoption of TPA as the primary strategy to combat poverty by the Chinese government. Subsequently, the Office of Poverty Alleviation and Development of the State Council formulated an implementation plan to roll out TPA nationwide.

TPA calls for the implementation of tailor-made measures targeting households and individuals rather than the whole village. Precision is the key to TPA, represented in six areas: precise identification of the poor, assignment of the proper poverty-relief officials to each village, accurate project arrangement, house-targeted measures, effective use of funds, and measurable effects of poverty relief. To implement TPA, four steps are followed.

**First step: identify who needs help**

The first step of TPA is to identify the actually impoverished people and the factors that caused their poverty. China had a large rural population in poverty scattered in hundreds of thousands of remote villages across central and western China. The first challenge was differentiating better-off families in poverty-stricken counties and deprived households in rich villages.

China established a national poverty alleviation information system in 2014. The database registered information on 29.48 million poor households, totalling 89.62 million poor people, from 128,000 poor villages (NCR 2021). Every low-income family in China has its file containing about ten entries, such as the number of family members, reasons for their poverty, housing condition, and the official designated to help the family. For the first time in history, the Chinese government identified the poor people and kept track of them with the database. More importantly, it presented an overall picture of the reasons that led to their poverty.

The data of the system were collected from on-the-spot investigations. In 2014, over 800,000 officials went door-to-door with surveys to screen poor households. They estimated each household's annual income and considered other markers, known as the “four checks” – examining housing condition, food stock, labour capacity, and whether the family had any children in school. At the end of the first-round investigation, 89.62 million cases of poverty were registered. In 2015,
two million officials were dispatched to conduct follow-up investigations to verify the data's accuracy and authenticity. As a result, 9.29 million wrongly identified people were removed from the poverty list, while 8.07 million new cases were added (NCR 2021).

Once poverty is identified, officials set up files for the households and log their information onto the national database. In this way, the government could identify the impoverished people, analyse the reasons behind their poverty and provide bespoke plans to lift them out of poverty. The national database shows that in 2013, 85.8% of the total rural poor resided in central and western China, with the poor population in eastern, central and western China reaching 11.71 million, 28.69 million, and 42.09 million, respectively (DHS 2019). The top 10 most impoverished areas, such as Guizhou, Yunnan and Henan, are central and western China (Figure 8). Besides, the root causes of poverty were explored. Based on the data analysis, the most common factor that caused poverty in China was illness, covering 42% of poor households (CGW 2015).

![Figure 8: Top ten provinces with the most rural poor population in China (2013)](source: LGPAD 2020, p.1,003-1,004)
Second step: decide who provides help

Chinese officials of all five administrative levels\(^6\) spearhead China’s poverty alleviation efforts. At the central level, poverty alleviation is carried out by the State Council’s Leading Group for Poverty Alleviation and Development. Its members come from major institutional bodies\(^7\) in China. The leading group has counterparts at all administrative levels down to the township level. As of the end of 2020, it had selected and dispatched three million officials to the frontline of poverty eradication on a two-year term as special commissioners for poverty relief. They worked with millions of local officials in impoverished areas. Every household had a helper, and every village had a resident working team for poverty reduction.

These officials who were sent on frontline poverty-relief missions shouldered significant responsibilities. They implemented poverty-relief policies, searched for resources, supervised the implementation of poverty-relief programs, went door-to-door looking for children who dropped out of school and coordinated the relationship between the local government and villagers. No official could be promoted until each met specific, numeric poverty-eradication objectives.

Third step: figure out how to help

County-level governments are entrusted with setting poverty relief objectives, tasks, projects and funds. Moreover, the central government has delegated the approval of poverty reduction projects to county governments. The bottom-up approach empowers the grassroots governments and unleashes waves of passion and innovation. Several anti-poverty projects have been introduced to suit different local conditions and individual needs, ranging from renovation of dilapidated housing to educational grants, medical insurance, and subsistence allowance.

In the past, all the poverty alleviation projects and funds were assigned from the central government to the provincial government. It was up to the provincial government to choose a poor village to implement the projects. Under the top-down model, some projects were not practical or suitable for the local condition. China is a vast country with a diversified environment, climate, stage of development, and culture. Nowadays, grassroots governments can choose viable projects based on their condition and can decide the use of poverty alleviation funds totalling RMB 360 million (SCIO 2020). Backed by sufficient funding earmarked for poverty relief and favourable policies that guarantee their power,

\(^{6}\) China’s five administrative levels are province, city, county, township and village.
\(^{7}\) The major institutional bodies include the Organization Department of the CPC Central Committee, Ministry of Agriculture and Rural Affairs, National Development and Reform Commission, Ministry of Civil Affairs, Ministry of Finance
counties take proactive and entrepreneurial approaches and rise to the challenges in battling poverty.

With such large flows of funds, there is a risk of misuse of funds or corruption. China set up a supervision mechanism to mitigate fraud and irregularities. The CPC Central Commission for Discipline Inspection and the National Supervisory Commission have dispatched supervisors to the counties to oversee the implementation of poverty relief projects. Besides, the National Audit Office has audited the use of funds, covering all impoverished counties. The hotline 12317 is launched for public supervision.

**Fourth step: evaluate the poverty relief results**

With officials' careers on the line, there is a risk of officials manipulating or manufacturing the poverty alleviation statistics to gain bonuses or promotions. Meanwhile, there is the possibility that people who have climbed out of poverty refuse to be deregistered from the poverty list in order to keep accessing preferential treatment. A strict evaluation mechanism has been established to prevent the problems, and wide-scale evaluation is undertaken. Four types of evaluations are conducted simultaneously, including third-party assessment, random spot check, interprovincial examination, and the media's undercover investigation.

Universities and research institutes regularly and randomly carry out on-site investigations and independent analysis for the third-party assessment. To prevent the local officials from presenting a false image, the evaluation teams decide their destination only at the last minute, often on the morning of departure. For the interprovincial examination, one province evaluates the poverty reduction results of another province by drawing straws. For instance, Jilin province evaluated the performance of Hunan province, and Hunan province evaluated that of Guizhou province. The evaluation mainly involves several dimensions: the completion of annual poverty alleviation goals and tasks; update of the national poverty alleviation information system; implementation of anti-poverty projects; the use and management of poverty alleviation funds; the performance of village-based working teams. For the random spot checks, 12 national government agencies, such as the Office of Poverty Alleviation under the State Council and the Organization Department of CPC central committee, carry out random spot checks on poverty eradication. The media are also encouraged to conduct an undercover investigation without advance notice or warning. The multi-faceted evaluation has assured the accuracy and authenticity of the poverty elimination results.
MULTI-PRONGED MEASURES OF TPA

Based on the data analysis of the national poverty alleviation information system, China has adopted customised measures for different types of poverty. The development-oriented poverty relief measures include upgrading the infrastructure, boosting the local economy, providing education and training, etc. Other measures have been undertaken to create a social safety net, such as relocating the poor from inhospitable areas and providing subsistence allowance, health insurance, pension scheme.

Infrastructure

China has turbocharged its rural economy by building roads, highways, railways and bridges. Modern transportation unblocks the flow of people and goods between remote areas and the outside world. It has enabled the underdeveloped regions to integrate into the large domestic market, underpinning the development of the poverty-stricken areas. A typical example is a transformation in Guizhou province, where 92 per cent of land sits on steep hills. The karst landform is breathtaking, but it was difficult for the locals to reach out to the outside world. Therefore, over 20,000 bridges have been built among its mountains, including half of the world’s 100 highest bridges (Sohu 2019).

By the end of 2019, all townships and villages had paved roads; by the end of 2020, 1.1 million kilometres of highways had been renovated in poverty-stricken areas, and 35,000 kilometres of new railways had been built; by 2015, all residents had access to electricity; by 2020, tap water had reached 83% of the rural residents; by 2020, China had expanded optical fibre communications (OFC) and 4G signal coverage to over 98% of poor villages, giving a boost to e-commerce, telemedicine and distance learning (SCIO 2021).

Developing local industries

Creating jobs is a sustainable measure to reduce poverty and drive overall socio-economic development. China has helped poor areas develop local industries geared to their available resources, such as farming, planting, breeding, and handicraft. Food processing, clothes manufacturing, and other labour-intensive industries are transferred from eastern coastal areas to inland areas. All 832 poor counties have formulated industrial plans; more than 300,000 agricultural and industrial bases have been built; 719,000 rural enterprises have been formed (SCIO 2021).

Besides the traditional industries, some newly developed industries are emerging in the countryside. Some villages have developed eco-tourism to attract tourists from cities with their unique landscape and ethnic culture. Besides, photovoltaic (PV) power generation is welcomed in areas with abundant sunshine
and vast land. Local governments fund the construction of the PV power stations, with their yields used for poverty relief purposes. As of 2020, over 100,000 villages had built PV power stations, with the annual income for each village averaging RMB200,000 (SCIO 2021).

**Relocation**

Relocation is the key to tackling the root cause of poverty, as 80% of China's poverty-stricken counties are located in ecologically fragile areas in central and western China. Steep mountains and poorly maintained roads block the locals' reach to the outside world. Frequent disasters and dilapidated mud-and-straw cottages threatened their safety. Locals were cut off from high-quality public amenities. Plus, their businesses were confined. Local authorities encourage these rural residents to relocate to areas closer to the cities to access convenient transportation to address the problems. Industrial bases and support facilities have been constructed in the resettlement areas to provide the relocated population with stable incomes and essential public services, such as education and medical care.

By the end of 2020, 96 million people had moved into 2.66 million newly constructed modern houses/apartments (SCIO 2021), all equipped with water, electricity, gas and the Internet. The migrations have increased China's urbanisation rate from 17.9% in 1978 to 63.89% in 2021 (LGSNC 2021).

**Eco-compensation**

In 2020, the World Bank listed climate change, pandemic and armed conflict as the three significant variables of global poverty alleviation (World Bank Group 2021). The World Bank’s *Shock Waves* report estimated that, if unaddressed, climate change could push an additional 100 million people into extreme poverty by 2030 (Hallegatte et al. 2016). Striking a balance between environmental protection and economic growth will be vital to achieving sustainable development goals. In China, over 1.1 million villagers have been employed as forest rangers; 4.97 million ha of farmland has been restored to forest and grassland since 2013 (SCIO 2021). This is a win-win situation of poverty reduction and ecological conservation.

**Education and training**

In the past, children in poor villages who dropped out of school due to financial difficulties missed out on the opportunity to pursue further studies, thus following the same paths of their parents to become low skilled workers. Education is instrumental in breaking the vicious cycle of poverty. Keeping this in mind, since 2013, China has renovated 108,000 schools in the countryside (SCIO 2021). All
middle schools and elementary schools in China have access to the Internet, which delivers high-quality online educational resources.

Nine-year compulsory education (primary school to junior high school) is now available to all children from poor rural households. Two hundred thousand school-age students who dropped out of school due to poverty have returned to school (SCIO 2021). The completion rate of nine-year compulsory education in 2020 reached 94.8% (MoE 2020). Besides, over 8 million students from low-income families who failed to complete their studies or became unemployed after finishing high school have received free vocational training by the end of 2020 (SCIO 2021).

Social security

Since the root of 42% of poverty is illness (CGW 2015), the central government has ramped up financial support to make medical services available and affordable for the poor people in the countryside. On the one hand, China has strengthened its healthcare services. 98% of the poverty-stricken counties now have at least one grade-two hospital (SCIO 2021). On the other hand, universal healthcare insurance is in place. The rural poor now have basic medical insurance, critical illness insurance, and medical assistance, covering major illnesses, critical illnesses and chronic illnesses. Since 2016, 19.36 million people have been granted subsistence allowances; 60.98 million poor people have been covered by basic pension schemes, reaching approximately 100% coverage (SCIO 2021).

Special initiatives for vulnerable groups

For women in need, China has provided skills training for 10.21 million women, granted microcredit amounting to RMB450 billion to 8.7 million women to start their businesses (SCIO 2021), and launched a unique program of free cervical and breast cancer check-ups for all poor women. China has launched nutritional improvement projects for deprived children, increased allowance for orphans and disabled children, and provided psychological counselling for left-behind children. For people with disabilities, China has offered living allowances and nursing care subsidies and provided them with dilapidated house renovation and barrier-free facilities.

UNDERLYING REASONS WHY CHINA CAN ERADICATE EXTREME POVERTY

China's efforts towards eliminating extreme poverty have yielded tremendous success. Critical players for success are rapid economic growth, strong political commitment, systematic institutional framework, massive social mobilisation, bold reforms and TPA, an effective strategy to reach the poor.
Rapid economic growth and sufficient funding

Rapid economic growth is the leading force fuelling poverty elimination in China. As presented before, rapid economic growth has led to a substantial increase in income. A cross-country research shows that growth in average incomes contributed 50% of short-run changes in poverty changes and 66%-90% of medium-to-long-run changes in poverty. (Kraay 2004) To be more specific, Wang (2008) found that when the average income of residents increases by 1%, the incidence of poverty in China decreases by 2.7%. Therefore, economic growth plays an essential role in poverty reduction.

Besides, a high GDP enables China to pool a significant amount of financial resources in the fight against poverty: nearly RMB1.6 trillion of fiscal funds has been devoted to poverty relief efforts in China over the past eight years, of which RMB660 billion was allocated from the central government (SCIO 2021). The statistics below (Figure 9) show that the Chinese government has considerably scaled up financial support with year-on-year increases.

![Figure 9: Government Funding for Poverty Alleviation (2013-2020) (Source: SCIO 2021, p.51)](image)

Strong political commitment

Poverty alleviation has been one of China’s priorities since the PRC’s founding in 1949. The central authorities have always highlighted poverty alleviation when formulating national plans for long- and medium-term development. In the Twelfth Five-Year Plan for National Economic and Social Development, the year 2020 was set as the deadline for China to wipe out extreme poverty. It was regarded as the index of the realisation of China's first centenary goal, which was
“becoming a moderately prosperous society in all respects”. The goal steered the whole society towards the right paths.

China has put poverty alleviation at the top of its political agenda to fulfil its political commitment. The National Conference on Poverty Alleviation and Development has been convened annually for two decades. More than 100 anti-poverty related outlines, policies, regulations, and implementation plans were formulated to guide the anti-poverty campaign, covering the aspects of industrial development, relocation, labour export, education, healthcare (Hou 2019).

**Systematic institutional framework**

A systematic institutional framework has been put in place to advance the TPA campaign, covering accountabilities, policies, organisation, funds, mobilisation, supervision and evaluation.

China mobilises the whole government system into anti-poverty efforts with an effective organisational system. Governments at different levels play different roles. The central government charts the course, makes a blueprint and coordinates the resources between different regions and sectors. Each provincial government assumes overall responsibility for ensuring all poor villages shake off poverty on schedule. Municipal and grassroots governments issue directives and implement specific poverty relief programs. All levels of governments keep poverty eradication in a prominent position, and their collective work articulate together.

A stringent evaluation system contributes to the effectiveness of the TPA campaign. For the local governments, the effectiveness of poverty alleviation was incorporated in their annual assessments. The leading local officials are not permitted to get promoted to a higher position until their counties shake off poverty. The excellent performance of the resident working team members is rewarded with promotions and bonuses. Therefore, this strict evaluation system drives local officials and resident working team members to help their assigned households shake off poverty with optimal approaches.

**Wide participation**

The Chinese government mobilises forces from all quarters, including government agencies, public institutions, state-owned enterprises (SOE), the private sector, NGOs, the military and individuals, to participate in poverty reduction and development in China.

To narrow the gap caused by imbalanced regional development, China employs a cooperation mechanism called “East-West Paired-up Assistance”, in which nine rich eastern provinces each assist at least one designated less-developed western province by industrial cooperation and providing technological and financial assistance. Under this mechanism, Beijing has lifted 73 poor
counties from Hebei province, Qinghai Province, Inner Mongolia, Xinjiang and Tibet, totalling 2 million people, out of poverty. (Beijing Daily 2021)

The “10,000 Enterprises Help 10,000 Villages” project exemplifies the private sector’s contribution to fighting poverty. 127,000 private enterprises engaged in the infrastructural, industrial, medical, and educational development of 139,100 poor villages (SCIO 2021). Besides, some ambitious local private enterprises have stepped up to take the initiative in the poverty elimination campaign. Among them, Elion, an ecological restoration company, is the epitome. The company is located in the Kubuqi Desert, the seventh-largest desert in China, spanning over 18,000 square kilometres. The company has lifted over 10,000 locals out of poverty by hiring them to grow drought-resistant medicinal plants and restored more than a third of the desert. Because of the success of the greening project, Elion's CEO was given the United Nations Environment and Development Award in 2012 and the Global Desert Control Leader Award in 2013. Poverty alleviation and ecological protection are achieved simultaneously.

In addition, a total of 307 government agencies have lifted 592 poor counties out of poverty; 4,100 poor villages have risen out of poverty with the support of the military (SCIO 2021). In a nutshell, multiple players from different regions, sectors, and government agencies have contributed to poverty elimination. China has also set up the National Poverty Alleviation Day, on which role models in the cause are commended.

**Self-motivation**

It is not sustainable to escape poverty by relying only on external factors. TPA won the final battle against poverty by motivating the poor villages and poor people to shake off poverty on their initiative and creativity.

Since China has strengthened its frontline poverty alleviation efforts by leveraging relevant resources, funds, and projects directly to the poor villages, grassroots-level governments have become proactive to defeat poverty. Furthermore, many poor people have escaped poverty with financial support by running microbusinesses. They are provided with small loans at low interest, and no guarantees are required. As of the end of 2020, China had issued small loans worth RMB710 billion to support the businesses or projects of 15 million poor households (SCIO 2021).

With access to fibre-optic Internet and 4G signal, people in rural areas have started selling their farm produce and specialities on e-commerce platforms or via live streaming. The concept of Taobao Village was created by the Chinese Internet giant Alibaba. Annual online shopping transactions of over RMB 10 million and over 100 online stores qualify a village for the title Taobao village. Alibaba has transformed remote villages into e-commerce hubs. As of June 2020, 5,425 villages and 1,756 towns had been turned into Taobao Villages and
Taobao Towns, creating 8.28 million jobs and their total annual transaction volume exceeding RMB1 trillion (AliResearch 2020). The total online retail sales of 832 poverty-stricken counties in China reached RMB301.45 billion in 2020, a year-on-year increase of 26.0% (People’s Daily 2021). Thanks to the "Internet Plus" strategy, the rural economy did not plunge during the lockdown following the COVID-19 pandemic.

TPA empowers the poor by promoting their capacities, creating an equal platform, and engaging them in anti-poverty efforts.

**Bold reforms**

Regarding reform as a significant driving force for poverty reduction, China has launched manifold reforms at different stages of development to benefit the rural poor. When the PRC was founded in 1949, landlords who represented 10% of the rural population owned most farmland. Meanwhile, poor peasants and sharecroppers who accounted for over 70% of the rural population had no land. (Xue 1980 p.20) Thus the first land reform was launched to allocate 43% of the available arable land nationwide to poor peasants (Li et al. 2020). The second land reform followed it in 1953 to adopt public ownership. During the period, people’s communes were established, and large-scale infrastructure, such as water conservancy facilities, were built, thus increasing agricultural productivity.

After reform and opening-up was launched in 1978, China introduced the household responsibility system with remuneration linked to output, which propelled a sharp rise in agricultural output. The per capita disposable incomes of the rural population tripled from 1978 to 1985 (DHS 2020). Ravallion and Chen (2007) conclude that the reform in 1978 “accounted for roughly three-quarters of the total decline in the national poverty rate over 1981-2001.” The reforms nurtured the domestic economy. However, the disparity between the rural and urban areas was widening. To standardise and institutionalise poverty alleviation, the State Council Leading Group Office for Poverty Alleviation and Development was established in 1986, tasked with the overall fight against poverty. The development-oriented poverty alleviation strategy was adopted to promote the economic growth of the poverty-stricken areas and capacity building of the poor.

In 1994, the *Priority Poverty Alleviation Program (1994-2000)* was formulated to meet the basic needs (adequate food and clothing) of 80 million impoverished rural residents who were the poorest of the poor. The central authorities entrusted provincial administration with setting poverty relief objectives, tasks, funds and accountability. Meanwhile, the cooperation mechanism “East-West paired-up assistance” was set up to stimulate the flow of talent, projects and resources from eastern to western parts of the country.

The 21st century witnessed a fundamental transformation in China’s economy and society driven by globalisation. In 2006, the agricultural tax collected for over
two millennia was abolished nationwide, significantly easing the burden on the rural poor. Meanwhile, a series of rural social security systems, such as the subsistence allowances system and new cooperative medical care system, were set up to create a social safety net. In 2011, the Outline of Poverty Reduction and Development in Rural Areas (2011-2020) was issued to improve the eco-environment, bridge the development gap between the rich and the poor, and provide a decent life to the people.

Over the past seven decades, China has launched far-reaching reforms to wrestle with poverty, transitioning from ensuring subsistence to building a moderately prosperous society.

**Reaching the poor**

China's anti-poverty strategies gradually reach the poor, evolving from regional development to individualised TPA. In the early days of the PRC, poverty was a widespread problem as China was a populous developing country. China launched three land reforms to benefit the poor nationwide. The pro-market reform in 1978 opened some coastal cities to foreign investment and permitted entrepreneurs to start businesses, inevitably increasing income inequality and uneven regional development. Kakwani and Pernia (2000, p.3) argue that “The growth process that results from market forces generally benefits the rich proportionally more than the poor. This is because the rich have inherent advantages (e.g., human and material capital) in a market economy.” China thus began to target its poverty alleviation campaign in particular poor regions. In 1980, the Fund for Underdeveloped Regions was set up to support the economic growth in old revolutionary base areas, ethnic autonomous areas, border areas and underdeveloped regions. In 1984, the target areas were narrowed down to 18 contiguous areas of extreme poverty. In 1986, China’s targets for poverty alleviation were 592 key poor counties identified by the state. In 2001, China pressed ahead with its poverty alleviation campaign targeting 148,000 impoverished villages. The legitimacy of the region-targeted poverty alleviation strategy, targeting regions, counties and villages, lies in the truth that a significant proportion of China's rural areas were poor. For regional development, the Chinese government committed itself to improving local infrastructure and public services.

At the turn of the 21st century, the rural poor could not benefit from the economic transformation or the poverty alleviation efforts. Many comparative studies have proved that affluent households in poor villages could benefit more from the poverty-relief projects than the ultra-poor households, as many poor households had no productive labour. (Park 2006; Li 2013; Wang 2020) China’s former approach of “one size fits all” was not feasible anymore. Therefore, China narrowed its poverty relief targets to specific households and individuals. Two
rounds of door-to-door investigation were carried out in the remote, impoverished areas, followed by a poverty registration system to identify the poor and causes of their poverty. Tailor-made poverty relief measures are provided for each household and individual. Efforts were concentrated on improving the capacities of the poor and providing a social safety net as well.

**FUTURE CHALLENGES**

After eradicating absolute poverty, China will not rest on its laurels. China is a vast country with some ingrained problems and unreformed corners. Some of the most pressing problems are listed below.

**People may slip back into poverty.**

Some people argue that since the political goal necessitated realising extreme poverty eradication in 2020, some poor villages adopted quick fixes rather than sustainable strategies. For the countryside, seniors and the next generation of the rural migrant workers left behind at home may easily slide back into poverty. For the cities, Zhu (2019) measured the vulnerability to poverty of urban households through CFPS data and found that almost half of urban households were vulnerable to poverty, with educational background, living expenditure, family assets, and employment status as its major causes.

China has set up a five-year transitional period to prevent people from slipping back into poverty. The preferential policies, assistance, and supervision are retained to guard the past achievement. Besides, a monitoring mechanism has been put in place to track and update the condition of critical groups, such as those on the verge of extreme poverty and those who may slide back into poverty due to illness, disaster or accident. Once the trend is spotted, supportive measures will be followed.

**Urban poor has been underestimated.**

There has been a massive migration of rural residents to work in urban factories since the early 1990s when food surplus released labour from the countryside. Rural migrant workers reached 29.77 million in 2019, accounting for about 37% of the total workforce (DHS 2020). The lack of training or educational background forced them to be employed in labour-intensive industries, such as manufacturing and construction. However, migrant workers are often not covered by social security nor allowed access to basic public services in the cities, such as education, health insurance, and subsistence allowances due to the household registration system. Besides, their legitimate rights and interests have been violated. Only 35.1% of employed rural migrant workers had employment contracts; the per capita wage arrears of the migrant workers were RMB11,433,
accounting for 26.7% of their average monthly income. (Wang 2019) With low, unreliable incomes and few assets, they are potentially becoming the majority of the urban poor.

China has turned its attention to rural migrant workers. The 2021 Government Work Report states that the government will ensure that rural migrant workers receive their pay on time and in full. Furthermore, cities have gradually opened schools to migrant children. Equal access to other public services is expected in the future.

**Regional inequality exists.**

Given the vast disparities in the development between rural and urban areas and between east and west, people cannot access the same income distribution and public services. To bridge the gap, China is shifting from traditional poverty alleviation to rural vitalisation to ensure that rural residents become well-off. The National Administration for Rural Revitalization was inaugurated at the former State Council Leading Group Office of Poverty Alleviation and Development headquarters, which ushered in a new stage of rural development. A series of government documents have outlined the roadmap for rural revitalisation. The 2021 Government Work Report states that China will “strengthen basic public services and infrastructure construction in rural areas and promote integrated urban-rural development in counties” (SC 2021, p.15). According to the Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and Vision 2035 of the PRC, China is committed to achieving agricultural modernisation by 2035. China will focus on rural revitalisation for the years ahead so that rural residents will live decent life.

**CONCLUSION**

China has accomplished the most remarkable feat in history by eliminating extreme poverty in rural China. The success was attributed to rapid economic growth, strong political commitment, systematic institutional framework, massive mobilisation and bold reforms. The central government places poverty alleviation at the centre of the overall picture of national development. China’s anti-poverty campaign flourished in a favourable macro environment composed of a set of directives, institutional frameworks, resources regulation, and policy incentives. Most importantly, the TPA strategy has been adopted to directly reach the poor and adapt poverty-relief plans to each household. Although TPA worked for China, other counties must follow their path according to their unique challenges and environment.

Muhammad Yunus, a Nobel Peace Prize winner, said, "poverty does not belong in civilised human society. Its proper place is in a museum. That's where it
will be.” (Yunus 2003 p.248) China is poised to make more contributions to global poverty reduction. There will be rocky patches ahead. Whether China can cope with the challenges and mark more milestones remains to be seen.

CONFLICT OF INTEREST

The author declares that there is no conflict of interest.

REFERENCES

Ali Research 2020, ‘China Taobao Village Research Report (2020)’,<http://www.aliresearch.com/EN/index> Accessed 15 November 2021

Barrow, J 1804, Travels in China, Containing Descriptions, Observations, and Comparisons, Made and Collected in the Course of a Short Residence, Project Gutenberg EBook, Available at: http://www.gutenberg.net

Beijing Daily 2021, Beijing lifted 73 poverty-stricken counties out of poverty, <http://www.moa.gov.cn/xw/qg/202103/t20210317_6363909.htm> Accessed 8 December 2021

Brooks, A 2017, The End of Development: A Global History of Poverty and Prosperity, London: Zed Books.

Chinese Government Website (CGW) 2015, President Xi will attend the 2015 Global Poverty Reduction and Development Forum, <http://www.gov.cn/guowuyuan/vom/2015-10/13/content_2946059.htm> Accessed 1 December 2021

Chinese Government Website 2020, The State Council Information Office (SCIO) held a press conference to introduce how to provide fiscal and tax policy support for poverty alleviation, <http://www.gov.cn/xinwen/2020-12/02/content_5566482.htm> Accessed 10 December 2021

DataBank World Development Indicators, <https://databank.worldbank.org/source/world-development-indicators#> Accessed 20 November 2021

Department of Household Surveys (DHS) 2019, China Yearbook of Household Survey 2019, Beijing: China Statistics Press.

Department of Household Surveys (DHS) 2020, China Yearbook of Household Survey 2020, Beijing: China Statistics Press.
Department of Household Surveys (DHS) 2020, *Poverty Monitoring Report of Rural China 2020*, Beijing: China Statistics Press.

Hallegatte, S, Bangalore, M, Bonzanigo, L, Fay, M, Kane, T, Narloch, U, Rozenberg, J, Treguer, D & Vogt-Schilb A 2016, *Shock Waves: Managing the Impacts of Climate Change on Poverty*, Climate Change and Development Series, Washington, DC: World Bank Group

Haughton, J & Khandker, SR 2009, *Handbook on Poverty and Inequality*, Washington, DC: World Bank.

Hawkes, D 1985, *The Songs of the South*, Great Britain: Penguin books.

Hobbs, F 2009, *The Secret of Wealth*, New Zealand: The Floating Press.

Hou, B 2019, ‘70 years of poverty alleviation in China: historical review, basic experience and international contribution’, *Review of Economic Research*, vol.2929, pp.5-13.

Hughes, B, Hanna, T, McNeil, K, Bohl, DK & Moyer, JD 2021, *Pursuing the Sustainable Development Goals in a World Reshaped by COVID-19*. New York, NY and Denver, CO: Frederick S. Pardee Centre for International Futures and United Nations Development Programme

Kakwani, N & Pernia, EM 2000, ‘What is pro-poor-growth?’, *Asian Development Review*, vol.18, no.1, pp.1-16.

Kraay, A 2004. ‘When is Growth Pro-Poor? Cross-County Evidence’, World Bank Policy Research Working Paper 3225

Lau, DC 1970, *Mencius*, Great Britain: Penguin books.

Leading Group for Poverty Alleviation and Development (LGPAD) 2020, *Yearbook of China’s Poverty Alleviation and Development 2020*, Beijing: Intellectual Property Publishing House.

Leading Group for the Seventh National Census (LGSNC) 2021, Report of the Seventh National Census, <http://www.gov.cn/xinwen/2021-05/11/content_5605791.htm> Accessed 11 December 2021

Li, X 2013, ‘Governance problems in the implementation of poverty alleviation in rural China’, *Guizhou Social Sciences*, vol.283, no.7, pp.101-106.

Li, X, Wu Y & Wu J 2020, ‘Targeted poverty alleviation -- a new practice of China's governance and poverty alleviation’, *Yearbook of China’s Poverty Alleviation and Development 2020*, Beijing: Intellectual Property Publishing House, pp.881-911.
Li, X, Xu, J & Yu, L 2018, ‘China’s 40 years of poverty reduction: an exploratory account from historical and sociological perspectives,’ SociologicalStudies, Vol.33, pp.35-61.

Maddison, A 2007, Chinese Economic Performance in the Long Run (Second Edition, revised and updated 960-2030 AD), Paris: OECD.

Maddison, A 2007, Contours of The World Economy, 1-2030 AD: Essays in Marco-Economic History, United States: Oxford University Press.

Ministry of Education (MoE) 2020, The completion rate of nine-year compulsory education reached 94.8%, <http://www.moe.gov.cn/fbh/live/2020/52763/mtbd/202012/t20201211_504942.html> Accessed 10 December 2021

National Bureau of Statistics (NBS) 2021, China Statistical Yearbook 2021, <http://www.stats.gov.cn/tjsj/ndsj/2021/indexch.htm> Accessed 11 November 2021.

New China Research (NCR) 2021, Chinese Poverty Alleviation Studies: A Political Economy Perspective, Beijing: Xinhua News Agency.

Park, A & Wang, S 2006, ‘Are China's Poors able to Work?’, Mimeo

People’s Daily 2021, The online retail sales of poverty-stricken counties exceeded RMB300 billion in 2020, <http://qh.people.com.cn/n2/2021/0131/c182754-34556941.html> Accessed 15 November 2021

Ravallion, M & Chen, S 2007, ‘China’s (Uneven) Progress Against Poverty,’ Journal of Development Economics, vol.82, no.1, pp.1-42.

Sohu 2019, Bridges in Guizhou province account for half of the world’s 100 highest bridges, <https://www.sohu.com/a/301622352_100020010> Accessed 10 December 2021

The State Council Information Office (SCIO) 2021, Poverty Alleviation: China’s Experience and Contribution, Beijing: People's Publishing House.

The State Council of China (SC) 2021, The 2021 Government Work Report, <http://www.gov.cn/zhuanti/2021qglh/2021zfgzbgdzs/2021zfgzbgdzs.html> Accessed 10 December 2021

United Nations (UN) 1995, ‘Report of the World Summit for Social Development’, <https://undocs.org/A/CONF.166/9> Accessed 10 December 2021

Wang, C 2019, ‘The application of sustainable livelihood theory to rural migrant workers’ asset poverty’, Theory Monthly, 2019 June, pp.123-130.
Wang, S 2008, ‘Overcoming poverty through development: summary and evaluation of China's experience in large-scale poverty reduction in the past 30 years’, Management World, 2008 vol.11, pp.78-88.

Wang, S 2020, ‘China's poverty alleviation performance and targeted poverty alleviation’, China Review of Political Economy, vol.11, no.1, pp.130-148.

World Bank Group 2021, Poverty and Shared Prosperity 2020: Reversals of Fortune, Washington, DC: World Bank Group

Xue, M 1980, Rural Economy in Old China, Beijing: China Agriculture Press

Yunus M 2003, Banker to the Poor: Micro-Lending and the Battle Against World Poverty, New York: PublicAffairs

Zhu, J 2019. ‘Measurement, factor identification and reduction strategy of the vulnerability to poverty of urban households’, Journal of Hebei University (Philosophy and Social Science), vol.44, no.3, pp.129-138.