



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

SOCIAL ECONOMICS, POLICY AND DEVELOPMENT

Working Paper No. 65

**Progress in Reducing the Poverty of Ethnic
Minority Groups in China**

by

**Fei Wang, Yuan Zhang,
Clem Tisdell and Hong Liu**

September 2021



THE UNIVERSITY OF QUEENSLAND

ISSN 1442-8563

**WORKING PAPERS ON
SOCIAL ECONOMICS, POLICY AND DEVELOPMENT**

Working Paper No. 65

**Progress in Reducing the Poverty of Ethnic Minority
Groups in China¹**

by

Fei Wang², Yuan Zhang³, Clem Tisdell⁴

And Hong Liu⁵

September 2021

© All rights reserved

¹ This research was supported by Minzu University of China. The project topic is 'Research on digital rural construction in ethnic areas from the perspective of Chinese national community consciousness'.

² Economics School, Minzu University of China, 27 Zhongguancun, South Avenue, Beijing, 100081, China. Email: wangfei8@muc.edu.cn

³ Economics School, Minzu University of China, 27 Zhongguancun, South Avenue, Beijing, 100081, China. Email: 20300053@muc.edu.cn

⁴ School of Economics, The University of Queensland, St. Lucia Campus, Brisbane QLD 4072, Australia Email: c.tisdell@uq.edu.au

⁵ Economics School, Minzu University of China, 27 Zhongguancun, South Avenue, Beijing, 100081, China. Email: hongliu2001@muc.edu.cn Tel: +86 135 2036 9815

WORKING PAPERS IN THE SERIES, *Social Economics, Policy and Development* are published by School of Economics, University of Queensland, 4072, Australia.

For more information write to Professor Clem Tisdell, School of Economics, University of Queensland, St. Lucia Campus, Brisbane 4072, Australia. (e-mail: c.tisdell@uq.edu.au)

Progress in Reducing the Poverty of Ethnic Minority Groups in China

ABSTRACT

Since the founding of the People's Republic of China, poverty alleviation in ethnic minority regions and groups has been an important focus of China's developmental policies. This paper reviews the progress in alleviating the poverty of China's ethnic minority populations, and analyzes China's poverty reduction policies, and challenges for the future. To end the extreme poverty of ethnic minorities, the Chinese government has designed many specific poverty alleviation policies, such as the Program to Revitalize Border Areas and Enrich Residents' Lives, the Program to Support Ethnic Minority Groups with A Small Population, preferential policies for "Three Areas and Three Prefectures", and so on. The poverty reduction achievements of minorities have been significant in relation to education, health and living standards. However, there is still a long way to go. The Chinese government needs to address the following problems for the further development of ethnic minorities: the problem of poverty returning, phasing out current poverty reduction policies and redesigning them in terms of their costs and benefits, and the low level of public services offered to the poor, and income inequality between ethnics. It is argued that China's ethnic minority groups may have gained little from the trickle-down effect (from the market system) of China's economic growth and, therefore, direct government assistance to them has been needed to reduce their incidence of poverty. It is also recommended that the macro-type findings in this paper be supplemented by case studies of different ethnic minority groups. A case study of the Kirghiz minority group highlights the value of this.

Keywords : Anti-poverty policies, Center-periphery theories, China; China's ethnic minority groups; Multidimensional poverty; National Security; Poverty alleviation; Return to poverty; Trickle-down effect.

JEL Codes: I32, I38, P2

Progress in Reducing the Poverty of Ethnic Minority Groups in China

1. Introduction

Eradicating poverty and dealing with its associated problems has always been one of the greatest challenges faced by developing countries. The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity (Fan & Cho, 2021). According to the UNDP statistics, the number of people living in extreme poverty dropped by more than half between 1990 and 2015 – from 1.9 billion to 836 million – but there are still too many struggling to meet their most basic human needs.¹

Until recently, poverty had been widespread in China, and China has always attached great importance to poverty reduction. In response to the SDGs, the Chinese government has ambitiously undertaken since 2013, a nationwide campaign called “The Targeted Poverty Alleviation” aimed at completely eliminating extreme poverty in rural China by the end of 2020 (Wang et al., 2020). In April 2021, China officially released a white paper, *Poverty Alleviation: China's Experience and Contribution*, which announced that China has completed the extreme poverty eradication task as scheduled and that rural poor people living below China's absolute poverty standard have all escaped from the poverty trap. However, low levels of absolute poverty probably still exist and the numbers of those in absolute poverty depend on the chosen poverty line and other indicators of absolute poverty (see Gill, 2021). Based on the World Bank's international poverty standards, China has lifted 70% of the world's population out of poverty and has achieved the poverty alleviation goal set by the UN 2030 Agenda for Sustainable Development 10 years ahead of schedule (SCIOPRC, 2021).

As one of the largest developing and poverty-plagued countries, the theory and practice of the poverty reduction progress in China has attracted much attention in the literature. Early research in this area has mainly focused on China's poverty reduction policies and their effects (see e.g., Selden, 1999; Swanson, 2006; Ravallion & Chen, 2007; Wang, 2007), and economic and social issues caused by poverty (Cao et al., 2009; Knight et

al., 2009). Recently, several researchers concentrated on anti-poverty measures or methods that can alleviate extreme poverty or eliminate absolute poverty in China (see e.g., Cheng et al., 2021; Wang, Zhao et al., 2020; Yang & Robert, 2021).

As is well known, ethnic minority groups are among the most poverty-stricken populations in China, however, very few articles have addressed this topic. Therefore, this paper reviews the progress of poverty alleviation amongst China's ethnic minority population, and analyzes the achievements, poverty reduction policies, and future challenges in trying to fill this gap.

2. History of the Alleviation of Poverty of Ethnic Minorities in China

2.1 Trends of China's poverty alleviation

Chinese poverty reduction data depends on the poverty lines or the standards set by the Chinese Central Government. China initially drafted its domestic poverty standard in 1978 and then raised the standard in 2008 and 2010 respectively with inflation adjustments in the following years after each standard was published (Sun & Xia, 2020). Table 1 presents China's poverty standards in current PPP. The international poverty lines recommended by the World Bank are also shown in this table for comparative purposes. To save space, we show the poverty standard for only a few years. In 1990, China's domestic poverty line (1978 standard) was less than 50 percent of the World Bank's international absolute poverty line. By 2019, China's current domestic poverty line (2010 standard) was comparable with the poverty line of the World Bank.

Table 1 China's and World Bank's poverty lines

China's poverty line ^{a,c}			World Bank's poverty lines ^{b,c}	
Year	Poverty lines (per person per day)	Standard	Absolute poverty lines (per person per day)	Relative poverty lines (per person per day)
1990	0.51	1978	1.18	
1995	0.51	1978	1.13	
2008	1.03	2008	1.35	2.16
2019	2.06	2010	2.18	3.56

Note: a. Own computation using data from *Poverty Monitoring Report of Rural China (2001-2020)*.

b. Own computation using data from World Bank Open Data, <https://data.worldbank.org>.

c. The poverty lines in the table are all expressed in current PPP (international dollars). The price deflators and PPP indexes used in the computation all come from World Bank Open Data.

The numbers of the poor and the poverty incidence rate under each standard are shown in Figure 1. By 1978, there were 250 million people living below the domestic poverty line in China. With great effort from the Chinese central and local governments, the number of poor in the population dropped to 14.79 million by 2007, and a total of 235.21 million poor people had been lifted out of poverty in 30 years. This resulted in a poverty reduction rate of 94 percent using the 1978 standard. According to the most recent domestic standard of 2010, China's poor population fell to 16.57 million by 2010. All the poor under the current standard had escaped from poverty by the end of 2020 (SCIOPRC, 2021). Therefore, China's extreme poverty problem has been historically resolved.

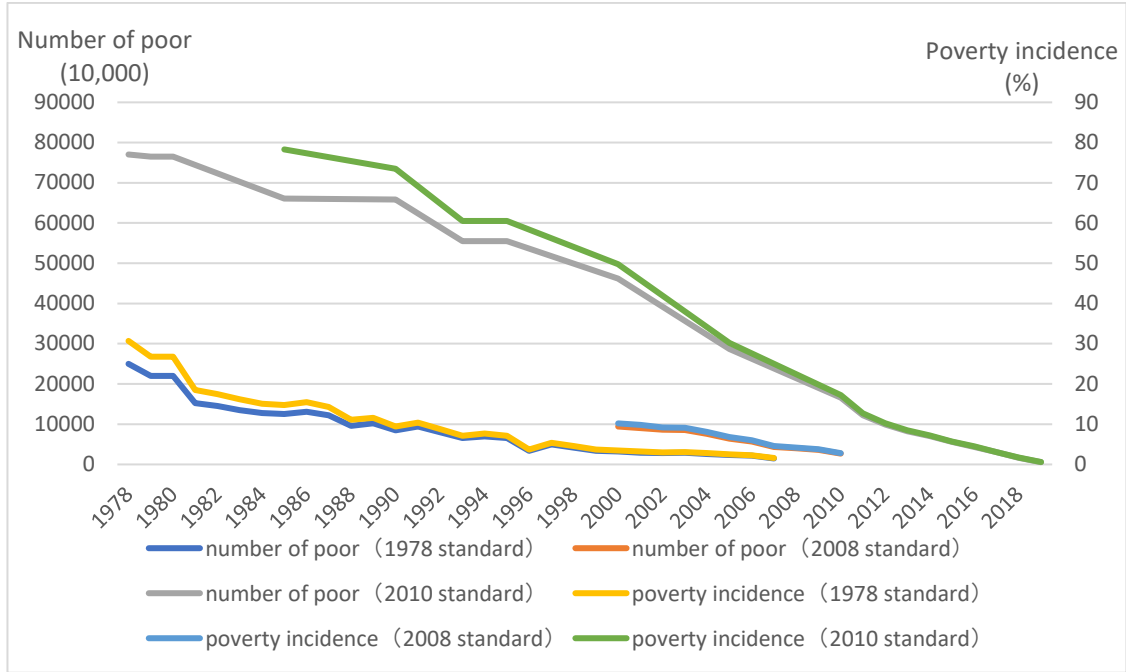


Figure1 China's poor population and poverty incidence from 1978 to 2019

Note: Data are sourced from *China Statistical Yearbook 2020*. Current rural poverty standard, 2010 poverty standard, is set at 2,300 yuan per person per year (2010 price).

2.2 Poverty alleviation progress of China's ethnic minority group

Due to their geographic location, their natural environments, development history and ethnic cultures, the occurrence of the poverty phenomenon and related problems are particularly acute in China's ethnic minority regions and ethnic minority groups (Wang, 2017). 'No ethnic minority regions and minority group is to be left behind in the developmental progress' is among the top priorities of China's poverty alleviation efforts. In 2012, China reviewed 592 key counties and designated 14 contiguous areas, which including 680 counties, as the poverty-stricken regions and thus, the focus of poverty alleviation efforts. More supports have been provided to those poverty-stricken counties since then. Of the 592 key counties, 299 are located in ethnic minority regions², accounting for 50.5 percent of the total; Of the 680 impoverished counties in 14 contiguous areas, 421 are located in ethnic minority regions, amounting to 61.9 percent of the total. Therefore, greater efforts are needed to combat poverty in China's ethnic minority regions and ethnic minority groups.

The poor population and poverty headcount ratio of Chinese ethnic minorities are approximated in this paper. Figures from China's official statistics do not give the annual statistics of the minority population living below the domestic poverty standard, although the total number of poor people in each year is available. The yearly ratio of ethnic minority to total population in each of China's provincial regions is used to estimate the poor minority population per province per year. It was assumed that the ratio of ethnic minority to total population was similar to that of poor ethnic minorities to total poor population. The number of poor ethnic minorities nationwide can be obtained by summing up the poor ethnic minorities of each province. We admit that these estimated figures are conservative, as ethnic minority groups generally face more severe poverty problems in China (Wang, 2017). However, these are the best estimates we can obtain because provincial and county data on poor ethnic minorities and for the total of the poor population are not available.

According to the domestic poverty standard set in 2008, the number of poor minorities in China in 2000 was 7.924 million, accounting for 10.83 percent of the total ethnic minority population living in rural areas. As a result of substantial assistance from the Chinese government and developed provinces, the number of the poor among minorities fell to 3.1 million by 2009, decreasing by 60.88 percent in nine years (see Figure 2). China dramatically raised its poverty standard in 2010, resulting in a substantial increase in the number of impoverished among minority groups. Under the new standard, 24.26 million minority population were living below the poverty line in 2010. By the end of 2019, the number had been reduced to 0.93 million, indicating a remarkable achievement.

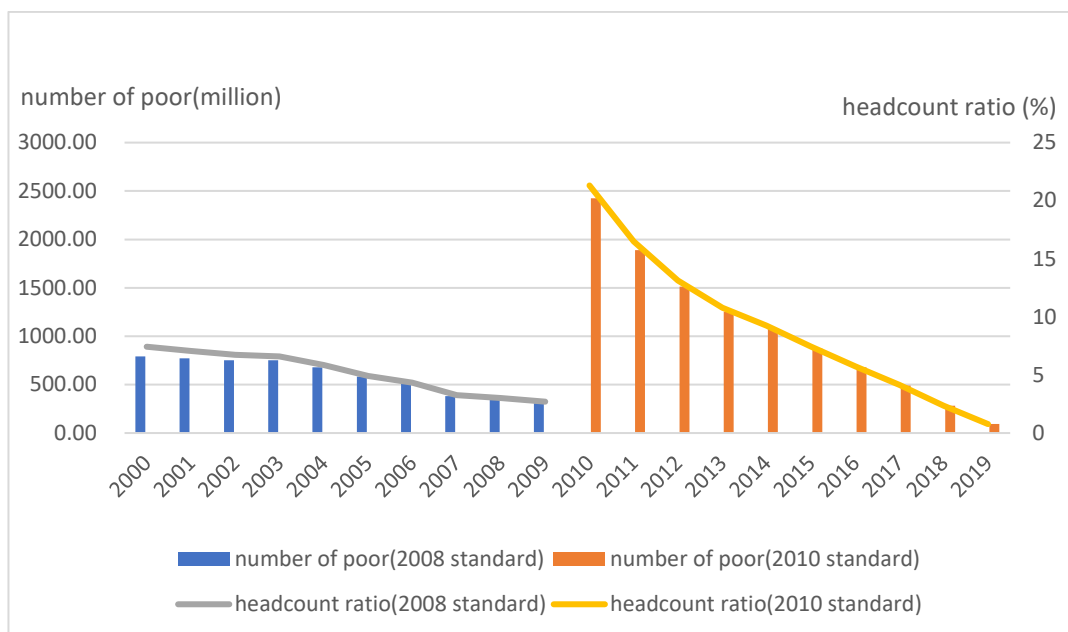


Figure 2 Poor population and poverty headcount ratio of Chinese ethnic minorities

Note: Own computation using data from *Poverty Monitoring Reports of Rural China(2001-2020)*, and *China Statistical Yearbook(2001-2020)*. All the figures are estimated with the method described in the preceding text.

Along with the decline in the number of poor people, the per capita income and consumption levels of minority groups have experienced a steady increase (see Table 2). The per capita disposable income of minority groups continued to grow from 2013 to 2019, and its annual growth rate (at constant price) was 6.34%. This was higher than the national average growth rate by 0.47 of a percentage point. Similarly, per capita consumption expenditure of minority groups has also reached a high annual growth rate of 5.91%; higher than the national average growth rate by 0.48%.

Table 2 Per capita income and expenditure of Chinese ethnic minorities and whole population

Indicator Year	Disposable income per capita (\$)			Consumption expenditure per capita (\$)		
	Ethnic minorities	Whole population	Relative difference	Ethnic minorities	Whole population	Relative difference
2013	1980.23	2437.77	23.11%	1467.62	1760.07	19.93%
2014	2142.33	2632.25	22.87%	1572.57	1891.44	20.28%
2015	2335.58	2827.45	21.06%	1710.49	2022.48	18.24%
2016	2495.01	3006.10	20.48%	1837.69	2159.29	17.50%
2017	2685.39	3226.36	20.14%	1943.88	2275.90	17.08%
2018	2866.41	3434.18	19.81%	2075.66	2415.30	16.36%
2019	3044.48	3633.41	19.34%	2193.48	2548.82	16.20%
Average annual growth rate	6.34%	5.87%		5.91%	5.43%	

Note: Own computation using data from *China Statistical Yearbook (2014-2020)*. Per capita disposable income and consumption level of Chinese ethnic minorities are estimated at 2010 US dollar based on the estimation method very similar to that used in Figure 2.

2.3 Multidimensionality of poverty reduction of Chinese ethnic minorities

Poverty is multidimensional, and a common approach to measuring poverty is to use multiple indicators of the various dimensions of poverty, invariably including an index of command over market goods, but also including indicators for health, educational attainments and access to public services (Ravallion, 2011). The Sustainable Development Goals outlined by the UN General Assembly emphasizes that, in addition to achieving the goal of no one living below the international extreme poverty standard, it is also necessary to achieve widespread access to education, basic social public services, and equal enjoyment for the poor and disadvantaged groups using the social security system.

To better align with the SDGs, Alkire and Kanagaratnam (2021) proposed modified global Multidimensional Poverty Index indicators. In line with their study, we investigate the poverty reduction of Chinese ethnic minorities in terms of three dimensions, namely, health, education and living standards. However, household or individual survey dataset on China's ethnic minorities are rare, thus, in this paper, aggregated data on the minority groups are estimated and used to measure the

multidimensionality of the poverty of these groups. The average years of schooling and illiteracy rate are chosen to reflect the educational attainment; only average life expectancy is used to represent the health status due to a lack of data availability; the Engel coefficient; the proportion of farmers living in bamboo, grass or clay houses, and the proportion of farmers not using purified tap water are considered as appropriate indicators of living standards. These indicators are essentially in accordance with China's current official multidimensional poverty standard, which is known as "Two Assurances and Three Guarantees" (*Liang buo Chou san bao zhang*).³

Table 3 presents the estimated multidimensionality of poverty of Chinese ethnic minorities in various years, and the estimation method is very similar to that used in Figure 2 and Table 2. The same indicators used for the Chinese whole population are also listed for comparison purposes. Obviously, poverty reduction achievements of minorities are very significant for all dimensions of poverty indicated. In terms of educational attainment, the average years of schooling of minorities followed a clear upward trend with a net increase of 1.23 years from 2000 to 2015, 0.28 year higher than the net national average increase at the same period. The illiteracy rate of ethnic minorities saw a steady increase over the same 15 years, although there were slight rebounds in 2005 and 2015. As for the educational attainment, the 2005 and 2015 estimates use 1% sample survey data while the 2000 and 2010 estimates use census data. Hence, the rebounds in 2005 and 2015 may partly reflect the sampling differences in the two datasets.

Table 3 Multidimensional poverty indicators for Chinese ethnic minorities

Education	Years of schooling ^{a,b}		Illiteracy rate ^{a,b}			
Year	Ethnic minorities	Whole population	Ethnic minorities	Whole population		
2000	6.07	7.07	9.08%	10.68%		
2005	6.23	7.29	11.04%	13.59%		
2010	7.12	8.17	4.88%	6.11%		
2015	7.3	8.02	5.42%	7.39%		
Health	Life expectancy ^{a,b}					
Year	Ethnic minorities		Whole population			
2000	68.3		71.4			
2010	72.35		74.83			
Living standards	Engel coefficient ^{a,c}		Proportion of farmers living in bamboo, grass or clay house ^{a,d}		Proportion of farmers not using purified tap water ^{a,d}	
Year	Ethnic minorities	Whole population	Ethnic minorities	Whole population	Ethnic minorities	Whole population
2000	47.08%	42.87%				
2005	41.54%	39.32%				
2010	38.95%	36.99%				
2015	31.83%	30.64%	3.74%	5.70%	73.33%	63.60%
2019	28.90%	28.22%	0.63%	1.20%	58.32%	39.10%

Note: a. All the entries in the table are approximated by a similar estimation method to that used in Figure 2 and Table 2.

b. Own computation using data from *Tabulation on The Population Census Of The People's Republic Of China (2000,2010)*, And *Tabulation on The 1% Population Sample Survey Of People's Republic Of China (2005,2015)*.

c. Own computation using data from *China Statistical Yearbook (2001-2020)*.

d. Own computation using data from *Poverty Monitoring Reports of Rural China (2001-2020)*. The proportions reflect the housing and drinking water conditions of the minority population living in poverty-stricken regions (592 key counties and 680 counties in 14 contiguous areas described in the preceding section), rather than the whole minority population.

In terms of health status, the life expectancy of Chinese minorities increased from 68.3 years in 2000 to 72.35 years in 2010, with a higher net increase than that of the whole population. In terms of expenditure level, the Engel coefficient of ethnic minorities follows a significant downward trend from 2000 to 2019 and has fallen by 18.18 percentage points in 19 years, higher than the net drop of the whole population at the same period. As for housing conditions among minority populations in China's poverty-stricken regions, only 0.63% farmers lived in bamboo, grass, or clay houses in 2019, indicating that poor housing is much reduced. To 2019, 58.32% farmers of minority in the poverty-stricken regions could not use purified tap water. Although this proportion is still high, this figure fell by 15 percentage points in only 4 years.⁴

3. Anti-Poverty Policies for Ethnic Minorities

There are many different reasons for China's progress in poverty reduction. Early studies considered that China's economic growth was an essential and necessary condition for nationwide poverty reduction (see e.g. Yao, 2000; Ravallion & Chen, 2007; Huang et al., 2008). China's development-oriented poverty reduction programs are believed to be another important driving factor for China's success in poverty reduction (see e.g. Rozelle et al., 1998; Park et al., 2002; Meng, 2013; Sun & Xia, 2020). To conquer poverty, the Chinese government launched a series of poverty reduction programs that covered broad areas, ranging from physical infrastructure, to social development and industrial development (Li et al., 2021). This section mainly focuses on China's poverty reduction programs to reduce the poverty of ethnic minorities.

3.1 China's poverty reduction strategies in various periods

Many works have discussed the policies released by the Chinese government over the past decades, and this section gives a short review of these policies from the perspective of the targeting strategies of these policies. China's poverty reduction progress can be divided into five stages based on the focused areas of poverty alleviation efforts in each stage, namely the preliminary social security stage (1949 – 1977), regional targeting (1978 – 1985), county targeting (1980 – 2000), village targeting (2001 – 2010), and the targeting of households and persons (2011 – present).

Preliminary social security stage (1949-1977). When the People's Republic of China was founded, most of the Chinese population were extremely poor. By 1950, China's per capita GDP (in international dollar) was only 21% of the world average (Maddison, 2001). During this period, the Chinese government established a preliminary social security system in rural areas based on the rural collective economy and a “five guarantees” system, i.e., proper food and clothing, housing, funeral expenses subsidy, basic healthcare, education (for children and teenagers) (Huang et al., 2020; SCIOPRC, 2021).

Regional targeting (1978-1985). Along with China's economic reform and opening up

policies, China's poverty alleviation efforts started gradually to target its special impoverished regions. In 1982, the central government initiated China's first regional poverty alleviation and development experiment, and invested 2 billion *yuan* to implement an agricultural construction plan in the Three Western Regions, Gansu Dingxi, Hexi Region, and Ningxia Xihai Region (Kun, 2016). With annual precipitation of less than 300 mm, the Three Western Regions suffered from drought and were among the most impoverished areas in China (Wang & Zhang, 2020).

County targeting (1986-2000) In 1986, the Chinese government set up an inter-departmental coordinating agency responsible for poverty alleviation, which was renamed the State Council Leading Group of Poverty Alleviation and Development in 1993. Also in 1986, 331 key counties were identified for poverty alleviation for the first time, and a series of poverty reduction programs, such as work relief, discounted interest loans, help from public sectors and well-developed provinces, were launched (Fang & Zhang, 2021). In 1994, the Chinese government launched the Priority Poverty Alleviation Program (1994-2000). This was China's first national poverty alleviation program with definite goals, targets, measures and deadlines (SCIOPRC, 2021). The Chinese government selected 592 key counties as the focus of this poverty alleviation program. By 2000, the problem of inadequate food and clothing had been overcome for more than 200 million poor rural residents (SCIOPRC, 2001).

Village targeting (2001-2010). A new 10-year poverty alleviation program began in 2001, giving the priority of poverty alleviation support to the revolutionary base areas, ethnic minority areas, border areas, and destitute areas with a high density of poor people (Zhang, 2019). Meanwhile, the focus of poverty alleviation shifted to the lowest level of public administration, making poor villages the basic target (Fang & Zhang, 2021). The central government designated 148,000 villages throughout the country as impoverished in 2001. It formulated the Integrated Village Development Program (*Zheng cun tui jin*) for each pilot village. Attention was given to basic farmland, drinking water, roads, income and employment, public service and other areas (SCIOPRC, 2011).

Households and persons targeting (2011-present) To achieve the goal of building a well-off society in an all-round way by 2020, the Chinese government formulated another 10-year poverty alleviation program in 2011, with the aim of combatting

unbalanced regional development, extreme poverty, and intergenerational poverty (Fang & Zhang, 2021). In 2013, China's president Xi Jinping put forward targeted strategies to lift poor people out of poverty. A campaign called The Targeted Poverty Alleviation kicked off, and the basic targeted units shifted further, from poor villages to poor households and persons. China released its 13th Five-year Plan for Poverty Alleviation in 2016. It aimed to ensure that the rural poor have enough food and clothing given the current standards, and that compulsory education, basic medical care, and housing are secured (Dai et al., 2020). The Chinese government has launched a series of measures to increase the efficiency of targeting poor households and persons, including that of identifying the poor more accurately, arranging targeted programs, taking household-based measures, improving education and health services, and enhancing social security (SCIOPRC, 2021). By the end of 2020, China completed the difficult task of eliminating extreme poverty.

3.2 Poverty alleviation policies with Chinese characteristics

To end extreme poverty in China, the Chinese government has implemented a range of policies since its foundation. In this section, we will mainly focus on the policies with Chinese characteristics, which include pairing assistance, east-west cooperation in poverty alleviation and measures targeted to different poor groups.

Pairing assistance was proposed in the late 1970s and early 1980s in order to promote economic and social development in the lagging western provinces and ethnic autonomous regions, and to reduce the divide between those and eastern developed provinces. The pairing assistance pattern was determined as follows: Beijing would support Inner Mongolia, Hebei would support Guizhou, Jiangsu would support Guangxi and Xinjiang, Shandong would support Qinghai, Tianjin would support Gansu, Shanghai would support Yunnan and Ningxia, and the whole country would support Tibet (Wang, 2017). In 2010, to speed up the development of Xinjiang, the central government decided to launch a nationwide pairing of 19 developed provinces and cities providing assistance to Xinjiang (Wei et al., 2012). As donors, the developed eastern regions have implemented various forms of aid to meet the needs of these lagging regions, such as providing financial aid, sending medical teams, teachers, and other professional and

technical personnel, providing humanitarian aid.

The east-west collaboration in poverty alleviation, officially launched in the 1990s, originated from the policy arrangement to mobilize cities in the developed eastern regions, to support the development of impoverished western regions (Wang & Zhang, 2020). The poverty alleviation cooperation mechanism has now formed a working pattern whereby 9 developed provinces and 9 large cities in the eastern region are paired with 10 western provinces. Pairing collaboration extends beyond the provincial level, and 260 counties in the eastern region have paired with 287 counties in the western region (Wang, 2017). The early east-west collaboration mechanism was originally embodied in the form of support rather than cooperation, such as assisting with the construction of rural infrastructures, schools and clinics, and providing financial aid to poor students. In recent years, the collaboration work has placed more emphasis on the role of market mechanisms, e.g. arranging training programs, and providing job vacancies for poor people in the paired western regions.

In the campaign of Targeted Poverty Alleviation which commenced in 2013, the Chinese governments at all levels developed an anti-poverty policy system for poor households and persons. This campaign involved accurately identifying the poor population, establishing a management network to include all levels of government and their top officials, and implementing various measures targeted to different poor groups (SCIOPRC, 2021). At present, the targeted measures are intended to ensure that the rural poor have guaranteed access to food, clothing, compulsory education, basic medical care and housing security. Policies include: (i) boosting the local economy geared to available resources and thus providing more job opportunities; (ii) relocating the poor living in inhospitable mountainous areas with little resources to more hospitable areas; (iii) implementing ecological compensation policies to help those poor people living in ecological preservation areas; (iv) improving educational conditions in impoverished regions and providing financial support to poor students to break the intergenerational poverty transmission; and (v) offering physically disabled people special social security support (Zhou et al., 2018; Liu et al., 2020).

3.3 *Specially formulated poverty alleviation policies for ethnic minorities*

In addition to the general anti-poverty policies, the Chinese government has designed many specific poverty alleviation policies for ethnic minorities. Along with the Developing West China strategy which commenced in 2000, the Program to Revitalize Border Areas and Enrich Residents' Lives (*Xing Bian Fu Min*) has been implemented since then, which aims to promote the development of border areas and improve the living conditions of the people in these areas. In China's border areas, more than 50% of local residents are ethnic minorities; roughly a population of 12 million ethnic minorities (Wang, 2016). From 2000 to the present, the Chinese government has released 3 five-year plans to implement the program, with the main measures being as follows: (i) improving the physical infrastructures of towns and villages in border counties; (ii) increasing the income of border residents and reducing the poverty incidence rate; (iii) enhancing public services for education, health, culture, etc.; (iv) promoting ethnic unity in border areas and encouraging people to people trade with neighboring foreign countries; and (v) boosting the opening up of border areas and developing local industries based on their distinctive resources (Wang, 2016).

Another important measure is the 'Program to Support Ethnic Minority Groups with A Small Population'. In 2001, when the policy was formulated, the first ethnic minority groups to be supported were 22 ethnic minority groups with a population of less than 100,000, – a total population of about 630,000. In 2011, the Chinese government updated the list of supported ethnic minorities, and the program was extended to 28 ethnic minority groups with a population of less than 300,000. The total population of the 28 ethnic minority groups is about 1.7 million (Wang, 2017). The preferential policies to support the development of the 28 ethnic minority groups mainly include: improving the physical infrastructures of the towns and counties where these minority groups are concentrated, boosting the development of local industries with distinctive local features, providing more support for poverty alleviation, assigning more projects to protect and develop local ethnic culture, and improving the quality and quantity of the local human resources.

Severely impoverished areas are the top priority in China's battle against poverty. In

2018, the Chinese government proposed a Three-Year Action Plan for winning the war against poverty, which put great emphasis on 6 severely poverty-stricken regions, "Three areas and three prefectures". The "three areas" refers to Tibet, southern Xinjiang, and prefectures and counties with large Tibetan populations in the provinces of Sichuan, Yunnan, Gansu and Qinghai. The "three prefectures" refers to the Liangshan Autonomous Prefecture in Sichuan Province, the Nujiang Autonomous Prefecture in Yunnan Province, and the Linxia Autonomous Prefecture in Gansu Province. All these 6 severely poverty-stricken regions are highly populated by ethnic minorities. For example, in southern Xinjiang, more than 95 percent of the local residents are ethnic minorities. The Chinese government decided to provide more support to ensure the eradication of extreme poverty in these regions by the end of 2020, including a further increase of transfer payments to strengthen poverty alleviation, improve education and medical services, and to establish key ecological function zones.

4. Challenges in the Future

Fighting against poverty is a long-term and arduous task. China's great achievement of lifting all extremely poor people out of poverty does not mean that the poverty alleviation and development tasks are completely accomplished. The future developmental policies for Chinese ethnic minority groups need to pay more attention to the following challenges.

4.1 Risks of poverty returning

Through years of vigorous support, the poverty phenomenon and its related problems in ethnic minority groups have been greatly relieved. Preventing poverty recurrence has gradually become the focus of the development efforts for minorities. Although most poor people have moved out of poverty, they are 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 (Liu et al., 2020). This is especially true for poor minorities, for they are among the most vulnerable to external shocks.

Poor minority households have limited ability to respond well to natural disasters, health

risks, market fluctuations, economic depression and other risks. Due to the harsh natural environment, natural disasters occur frequently in poverty-stricken areas populated by ethnic minorities. In Guizhou province, for example, 70% of the annual rainfall is concentrated in the flood season, which makes it extremely susceptible to flood disasters and geological disasters (Wang, 2017). The high incidence of local endemic diseases, say echinococcosis, kashin-beck, and tuberculosis, in ethnic minority areas is mainly due to the inclement environment surrounding minority groups. The small-scale economy makes ethnic minority areas more vulnerable to external market shocks. Since 2015, China's economic growth rate has slowed down, and the economic growth of ethnic minority regions has also experienced a sharp decrease. The worldwide outbreak of the COVID-19 endemic has exerted a negative shock to the opening up of minority regions to neighboring foreign countries and has further exacerbated the difficulties of economic growth in minority regions. Further weak growth over the next few years in minority regions will increase the risk of poverty returning.

The risk of poverty returning to minority groups also comes from the increasingly stringent regulations for environmental protection in China. The ecological environment in many ethnic minority regions is fragile, and there are many key ecological function areas in minority regions where traditional industrial sectors or resource-intensive sectors are unable to be developed. However, at present, economic growth of many poverty-stricken minority counties still depend on these “old” industries due to their poor infrastructure and low level of market economy. Therefore, to a certain extent, poverty-stricken minority counties still face the contradiction between economic growth and ecological conservation, further increasing the risk of poverty returning.

4.2 Sustainability of anti-poverty policies

Ironically, success generates its own set of problems. Poverty alleviation policies have undoubtedly contributed greatly to the success of poverty reduction, but large-scale poverty reduction policies and preferential support to ethnic minority regions and groups are unsustainable in the long term, especially given the lasting impacts of the COVID-19 pandemic which started in 2020. What is more, the substantial supportive policies have also resulted in some claimants becoming dependent on policy handouts.

Therefore, the more effective poverty alleviation policies are, the greater the difficulties of policy withdrawal will be, especially in ethnic minority regions, where the harsh environment and small-scale economy make the local minority people more dependent on the government-led supports.

The Chinese Central Government is worried about possible decreased popularity of its poverty reduction policies when its preliminary anti-poverty goal is met and it reduces its role in poverty alleviation. To consolidate the achievements and prevent any potential poverty returning after 2020, local governments are required to continue implementing targeted poverty alleviation policies for the poor who are temporarily lifted out of poverty but have a high risk of poverty returning. This ‘no withdrawal’ policy will add to the fiscal burden of local governments in impoverished minority counties, given the huge expenditure needed to support poverty alleviation and the low tax revenue of these counties. Nor has it been clear when and which of the policies will be phased out. All these policy uncertainties together will result in the formation of unstable expectations for local firms and for poor households. These unstable expectations will negatively affect the willingness of firms to continue employing poor people and the willingness of the poor households to continue engaging in agricultural production.

On the other hand, when the phenomenon of extreme poverty is basically eradicated, the declining threats from poverty and related social problems will certainly reduce public interest in its future control. Inevitably, the redirection of public funds and supportive policies to more urgent economic and developmental concerns, say technological innovation, will shift the focus of anti-poverty efforts to the phasing out of some poverty reduction policies and result in greater attention to the costs and efficiency of the remaining policies. China has kept increasing its government-led investment in poverty alleviation, but the marginal effect of investment in poverty alleviation has been declining (Liu et al., 2020). Thus, the shifting focus on the cost and efficiency of government-led poverty alleviation support will put more pressure on the sustainability of anti-poverty policies.

4.3 Relatively poor developmental conditions in minority regions

Most of the poverty-stricken areas populated by ethnic minority groups in China are located in mountainous areas with poor transportation and infrastructure (e.g. the western Yunnan mountainous areas), plateau areas (e.g. Tibet and Qinghai), desertification areas (e.g. southern Xinjiang), rocky desertification areas (e.g. junction areas of Yunnan, Guizhou and Guangxi), where modern agricultural and manufacturing sectors are very difficult to develop. Taking the rocky desertification area in the junction of Yunnan, Guangxi and Guizhou as an example, the karst area accounts for 48.7% of the total, and the per capita cultivated area is only 667 square meters (Wang, 2017).

In addition, health, education and other public services are relatively poor in ethnic minority regions compared with their counterparts in developed eastern regions, despite their rapid development in last decades. In Table 3, the gaps in educational attainment, health status and availability of water between minority groups and the whole country is striking. These gaps are, to some extent, related to the differences between minority regions and the national average regarding investment in public services. This is reflected in Table 5. In terms of quantity and condition of health services, the number of medical and health institutions and the number of medical beds in ethnic minority regions are significantly lower than the national average. As for the quantity and condition of the education service, despite the compulsory education service in ethnic minority regions being comparable to the national average (not listed in the Table 5 for saving space), the gap in the higher education service between these regions and the national average is evident. What makes the situation worse is the gap in the quality of health and education services. Although official data about the quality of public service are not available, our own fieldwork experiences show that the gap in teaching ability and healthcare ability is more striking.

Table 5 Health and Education Services in Chinese Ethnic Minority Regions

Health				
	Number of medical and health institutions(per 10,000 persons)		Number of beds in medical and health institutions(per 10,000 persons)	
Year	Minority regions	National average	Minority regions	National average
1990	0.69	8.86	21.71	25.59
2000	0.75	8.16	21.65	25.06
2010	0.65	6.99	30.11	35.70
2019	2.88	7.20	57.13	62.90
Higher education				
	Full-time teachers (per 100 students)		Number of students in colleges and universities (per 10,000 persons)	
Year	Minority regions	National average	Minority regions	National average
1990	20.59	19.15	8.89	18.04
2000	10.53	8.33	20.51	43.88
2010	5.87	6.02	87.54	166.44
2019	4.98	5.74	131.59	216.53

Note: Data are sourced from *China Statistical Yearbook* (2020). The ethnic minority regions refer to the five autonomous provincial regions, ethnic autonomous prefectures and autonomous counties.

4.4 Income inequality between ethnics

Another issue that cannot be ignored in the future is the income inequality between Chinese ethnic groups. Table 6 compares per capita disposable income and per capita consumption expenditure of ethnic minorities with the Han nationality based on the real values in price as at 2010. From 2013 to 2019, although the average annual growth rate of per capita disposable income and per capita consumption expenditure of ethnic minorities was higher than that of the Han, the absolute difference between the two groups has been consistently increasing. According to the average growth rates, it will take about 50 years for ethnic minorities to catch up with the Han in per capita disposable income levels! There is no doubt that income inequality between ethnic groups is one of the challenges that China needs to address to promote further development of ethnic minorities and to strengthen unity between ethnic groups.

Table 6 Per Capita Income and Expenditure of Chinese Ethnic Minorities and Han

Year	Disposable income per capita (2010 <i>yuan</i>)			Consumption expenditure per capita (2010 <i>yuan</i>)		
	Ethnic minorities	Han	Difference	Ethnic minorities	Han	Difference
2013	13406.13	16733.42	3327.29	9935.81	12056.61	2120.80
2015	15811.87	19384.94	3573.07	11580.03	13843.28	2263.25
2017	18180.10	22144.58	3964.48	13160.10	15595.55	2435.45
2019	20611.10	25045.90	4434.80	14849.84	17538.18	2688.34
Average annual growth rate	6.34%	5.93%	0.41%	5.91%	5.50%	0.41%

Note: Own computation using data from *China Statistical Yearbooks (2020)*. All the entries in the table are approximated with estimation method very similar to that used in Figure 2 and Table 2.

5. Discussion

China's poverty alleviation policies (especially those relating to its ethnic minority groups) need to be considered in the context of its policies for achieving and sustaining economic growth. As is well known, its market reforms and opening up of trade to the outside world instigated by Deng Xiaoping and continued by his successors, has made an amazing contribution to China's economic growth (Tisdell, 2009). It was intended that economic growth be the initial focus of policy with the redistribution of income to be undertaken later (Tisdell, 1993).

Initial economic growth was concentrated in China's eastern provinces and those nearby. These acted as economic growth poles (Honjo, 1978; Richardson, 1976; Wen & Tisdell, 2001, Ch. 9) – in other words, centers for China's economic growth. Economic growth lagged in its peripheral areas where most of its minority groups resided. As mentioned above, China's substantial economic growth in recent decades has provided it with the means to reduce its incidence of poverty substantially. This has been achieved partly by the 'trickle-down' effect and partly by direct measures to assist the poor. Direct measures (including income subsidies) appear to have played a greater role in reducing the incidence of poverty among China's ethnic minorities than the trickle-down effect. The latter may have been more beneficial to the eastern and central provinces where the Han majority dominates. It is possible that the market reforms and the economic growth

driven by China's growth poles had a retarding effect on economic growth in China's periphery and might have added to the incidence of poverty there. This would accord with the center-periphery theory of Frank (1978). See also Tisdell (1993, Ch. 5). Hence, the need arose for direct government intervention to remedy this situation.

As pointed out by Liu et al. (2019, p.2), the Chinese Government has been motivated to reduce poverty in its border regions for several reasons. This is not only to improve the economic lot of minority groups living in these regions, but also to enhance China's image and its national security. Economic assistance to these regions is also based on the belief that it will (1) help to retain the populations in these regions, and (2) entice emigrants to return to these areas. China is probably more concerned about the security of its border regions than most countries. However, even Australia has taken steps to help secure its northern areas.

The results reported in this study are of a macro-nature. There are strong arguments in favor of case studies to provide more information about the occurrence of poverty among minority ethnic groups in China and the effects of policies to alleviate this poverty. In fact, Liu et al. (2019), reported the results of a poverty case study in two Kirghiz villages in Xinjiang Autonomous Region. The results support several of the macro-type findings reported above. For example, in these villages, the poor have a much smaller amount of housing space per family member than the non-poor. They also spend much less on food, education and health than the non-poor. Hence, they are more likely to be malnourished and suffer from illness. Liu et al. (2019, p.12) found that "while government subsidies for Kirghiz households in [their] sample alleviated poverty and reduced income inequality, on average, they resulted in a greater absolute increase in income for non-poor households than poor ones. [Furthermore,] on average, poor households were found to have smaller social networks than non-poor ones and their networks displayed less depth than those of non-poor households."

While there are similarities between the economic situation of China's minority ethnic groups, differences also exist. This is why case studies of different ethnic groups are valuable in providing improved knowledge about the economic situations of ethnic minorities and the poverty prospects faced by them.

6. Conclusion

China was once one of the poorest countries in the world in terms of the scale, depth and multidimensionality of poverty. Due to their geographic location, natural environment, development history and presence of ethnic cultures incompatible with the market system. Chinese ethnic minority regions and ethnic minority groups faced more severe poverty and disadvantages compared with other domestic regions and groups. Since the foundation of the People's Republic of China, the CPC and the Central Government have always placed poverty alleviation in ethnic minority regions and groups as an important aim of their development efforts and poverty reduction policies. Thanks to continuous poverty reduction policies suitable for China's national conditions and specially formulated poverty alleviation measures targeted for the needs of ethnic minority regions and households, Chinese ethnic minority groups have accomplished the seemingly insurmountable task of eradicating extreme poverty.

Nevertheless, there is still a long way to go for Chinese ethnic minority regions to realize economic development that is comprehensive and balanced and for ethnic minority groups to become middle-income cohorts. In the near future, to achieve further development in ethnic minority groups, the Chinese government has to address the problems of the risk of poverty returning, the phasing out of current poverty reduction policies and redesigning these policies in terms of costs and benefits, the relatively poor developmental conditions. It must also address the low level of public services in minority areas and income inequality between ethnic minorities and the majority.^{5,6}

7. Notes

1. United Nations Development Programme Goal 1: No poverty. Available from: https://www1.undp.org/content/seoul_policy_center/en/home/sustainable-development-goals/goal-1-no-poverty.html.
2. Traditionally, ethnic minority regions usually refer to 8 provincial regions in which the minorities are concentrated (namely Inner Mongolia, Guangxi, Yunnan, Guizhou, Tibet, Qinghai, Ningxia, Xinjiang), and ethnic autonomous prefectures and autonomous counties inside provinces other than these 8 provincial regions.

3. “Two Assurances and Three Guarantees” refers to assurances of adequate food and clothing, and guarantees of access to compulsory education, basic medical services and safe housing for impoverished rural residents (SCIOPRC, 2021).
4. Given that many ethnic minority groups in poverty-stricken regions live in mountainous or pastoral areas, where it is not feasible to install water pipes due to high cost and low efficiency, this low figure is not surprising.
5. Readers will find two chapters in Tisdell (1993) relevant to the above discussion. These are Chapter 5, Regional and urban development: Government intervention; and Chapter 6, Poverty, income inequality and development.
6. An aspect not covered in this paper is the type of mechanisms minority groups use to cope with poverty. In some circumstances, individuals returning to poverty lose these mechanisms and may suffer greater ill effects from the recurrence of poverty than prior to being lifted out of it. Aspects of this matter are discussed in Tisdell (2013). Scope exists for considering these aspects for minority ethnic groups in China.

References

- Alkire, S. & Kanagaratnam, U. (2021). Revisions of the global multidimensional poverty index: indicator options and their empirical assessment. *Oxford Development Studies*, 49(2): 169-183
<https://doi.org/10.1080/13600818.2020.1854209>
- Cao, S., Wang, X., Wang, G. (2009). Lessons learned from China's fall into the poverty trap. *Journal of Policy Modeling*, 31(2): 298-307.
<https://doi.org/10.1016/j.jpolmod.2008.09.004>
- Cheng, X., Wang J., Kevin, Z. (2021). Elite capture, the “follow-up checks” policy, and the targeted poverty alleviation program: Evidence from rural western China. *Journal of Integrative Agriculture*, 20(4): 880-890.
[https://doi.org/10.1016/S2095-3119\(20\)63444-X](https://doi.org/10.1016/S2095-3119(20)63444-X)
- Dai, X., Wang, L., Ren, Y. (2020). The effects of China’s targeted poverty alleviation policy on the health and health equity of rural poor residents: Evidence from

- Shaanxi Province. *Healthcare*, 8,256, doi:10.3390/healthcare8030256
- Fan, SG. & Cho, E.E.Y. (2021). Paths out of poverty: International experience. *Journal of Integrative Agriculture*, 20(4): 857-867.
[http://www.chinaagrisci.com/Jwk_zgnykx/en/EN/10.1016/S2095-3119\(20\)63295-6](http://www.chinaagrisci.com/Jwk_zgnykx/en/EN/10.1016/S2095-3119(20)63295-6)
- Fang, Y. & Zhang, F. (2021). The future path to China's poverty reduction—dynamic decomposition analysis with the evolution of China's poverty reduction policies. *Social Indicators Research*, <https://doi.org/10.1007/s11205-021-02716-5>.
- Frank, A.G. (1978) *Dependent Accumulation and Underemployment*. London: Macmillan.
- Gill, I. (2021) Deep-sixing poverty in China, *Future Development*, Brookings.
 Accessed: 20 September, 2021. Available at :
<https://www.brookings.edu/blog/future-development/2021/01/25/deep-sixing-poverty-in-china/>
- Honjo, M. (1978) Trends in development planning in Japan. In Fu-Chen Lo and Kamal Salih (Eds.) *Growth Pole Strategy and Regional Development Policy: Asian Experiences and Alternative Approaches*, New York: Pergamon Press, p. 3-24
- Huang, J., Zhang, Q., Scott, R. (2008) Economic growth, the nature of growth and poverty reduction in rural China. *China Economic Journal*, 1(1): 107-122.
<https://doi.org/10.1080/17538960701770547>
- Huang, Z., Gao, G., Teng, F., Pan, B., Song, J., Lin, A. (2020) Long-term poverty reduction strategies in China post-2020. *China Economist*, 15(3): 50-60. Doi: 10.19602/j.chinaeconomist.2020.05.04
- Knight, J., Li, S., Deng, Q. (2009). Education and the poverty trap in rural China: Setting the trap. *Oxford Development Studies*, 37(4): 311-332.
<https://doi.org/10.1080/13600810903305232>
- Kun, Y., (2016). *Poverty Alleviation in China: A Theoretical and Empirical Study*.

Springer-Verlag.

- Li, S., Dong, Y., Zhang, L., Liu, C. (2021) Off-farm employment and poverty alleviation in rural China. *Journal of Integrative Agriculture*, 20(4): 943-952. [https://doi.org/10.1016/S2095-3119\(21\)63616-X](https://doi.org/10.1016/S2095-3119(21)63616-X)
- Liu, H., Tisdell, C.A. and Wang, F. (2019) Poverty and its reduction in Chinese border regions: Is social capital important? *Journal of the Asia Pacific Economy*, 24, 1-23. Doi: 10.1080/13547860.2019.1591743.
- Liu, M., Feng, X., Wang, S. and Qiu, H. (2020), China's poverty alleviation over the last 40 years: successes and challenges. *Australian Journal of Agricultural and Resource Economics*, 64(1): 209-228. <https://doi.org/10.1111/1467-8489.12353>
- Maddison, A. (2001). *The World Economy: A Millennial Perspective*. OECD.
- Meng, L. (2013). Evaluating China's poverty alleviation program: A regression discontinuity approach. *Journal of Public Economics*, 101(May): 1–11. <https://doi.org/10.1016/j.jpubeco.2013.02.004>
- Park, A., Wang, S., Wu, G. (2002). Regional poverty targeting in China. *Journal of Public Economics*, 86(1): 123–153. [https://doi.org/10.1016/S0047-2727\(01\)00108-6](https://doi.org/10.1016/S0047-2727(01)00108-6)
- Ravallion, M. & Chen, S. (2007). China's (uneven) progress against poverty. *Journal of Development Economics*, 82(1): P1-42. <https://doi.org/10.1016/j.jdeveco.2005.07.003>
- Ravallion, M. (2011). On multidimensional indices of poverty. *Journal of Economic Inequality*, 9(2), 235-248. <https://doi.org/10.1007/s10888-011-9173-4>
- Richardson, H.W. (1976). Growth pole spillovers: The dynamics of backwash and spread, *Regional Studies*, 10, 1-9 <https://doi.org/10.1080/09595237600185011>
- Rozelle, S., Park, A., Benziger, V., and Ren, C. (1998). Targeted poverty investments and economic growth in China. *World Development*, 26(12): 2137–2151.

- SCIOPRC (The State Council Information Office of the People's Republic of China). (2021). *Poverty Alleviation: China's Experience and Contribution*. http://english.scio.gov.cn/node_8023479.html
- SCIOPRC (The State Council Information Office of the People's Republic of China). (2001). *The Development-oriented Poverty Reduction Program for Rural China (2001)*. http://english1.english.gov.cn/official/2005-07/27/content_17712.htm
- SCIOPRC (The State Council Information Office of the People's Republic of China). (2011). *New Progress in Development-oriented Poverty Reduction Program for Rural China*. http://www.scio.gov.cn/zfbps/ndhf/2011/Document/1048758/1048758_3.htm
- Selden, M. (1999). Poverty Alleviation, Inequality and Welfare in Rural China. *Economic and Political Weekly*, 34(45): 3183-3190. <https://www.jstor.org/stable/4408598>
- Sun, J. & Xia, T. (2020). China's Anti-Poverty Strategy and Post-2020 Relative Poverty Line. *China Economist*, 15(3): 62-75. Doi: 10.19602/j.chinaeconomist.2020.05.05
- Swanson, B. (2006). Extension strategies for poverty alleviation: Lessons from China and India. *The Journal of Agricultural Education and Extension*, 12(4):285-299. <https://doi.org/10.1080/13892240601062488>
- Tisdell, C.A. (1993). *Economic Development in the Context of China: Policy Issues and Analysis*. London: Palgrave Macmillan.
- Tisdell, C.A. (2009). Economic reform and openness in the last 30 years, *Economic Analysis and Policy*, 39, 271-294. Doi: [https://doi.org/10.1016/S0313-5926\(09\)50021-5](https://doi.org/10.1016/S0313-5926(09)50021-5).
- Tisdell, C.A. (2013). Poverty dynamics and sustainability perspectives: implications for welfare and policy. In R.K. Sen (Ed.) *Nexus Between Poverty and Sustainable Development*. New Delhi: Regal Publications, p. 3-25

- Wang, F. (2016). *Performance Evaluation of the Program to Revitalize Border Areas and Enrich Residents' Lives*. Beijing: China Economic Publishing House. (In Chinese)
- Wang, F. (2017). General report on poverty alleviation in China's ethnic minority areas. In Zhang, L., Wu, B., Wang, R., Wang, F. et al. (Ed.) *Progress Report on Poverty Alleviation in China's Ethnic Minority Areas*. Beijing: China Economic Publishing House. (In Chinese).
- Wang, H., Zhao, Q., Bai, Y., Zhang, L., Yu, X. (2020). Poverty and subjective poverty in rural China. *Social Indicators Research*, 150(2): 219-242.
<https://doi.org/10.1007/s11205-020-02303-0>
- Wang, M. (2007). Emerging urban poverty and effects of the "Dibao" program on alleviating poverty in China. *China and World Economy*, 15(2): 74-88.
- Wang, X. & Zhang, X. (2020). *Towards 2030 – China's Poverty Alleviation and Global Poverty Governance*. Springer.
- Wei, H., Cheng, A., and Zhang, D. (2012). Research on the policy of the central government supporting the development of ethnic minority regions. *Journal of South-Central University for Nationalities (Humanities and Social Sciences Edition)*, 32(01):103-110. (In Chinese).
- Wen J.J. and Tisdell, C.A. (2001). *Tourism and China's Development: Policies Regional Economic Growth and Ecotourism*. Singapore, New Jersey and London: World Scientific.
- Yang, L. & Robert, W. (2020). Poverty, shame and ethics in contemporary China. *Journal of Social Policy*, 49(3): 564-581.
<https://doi.org/10.1017/S0047279419000667>
- Yao, S. (2000). Economic development and poverty reduction in China over 20 years of reforms. *Economic Development and Cultural Change*, 48(3): 447–474.
<https://doi.org/10.1086/452606>

- Zhang, D. (2019). Formulation and implementation of “China Rural Poverty Alleviation and Development Program (2001–2010)” In Zuo, C. (Ed.) *The Evolution of China’s Poverty Alleviation and Development Policy* (2001–2015). Springer Nature Singapore.
- Zhou, Y., Guo, Y., Liu, Y., Wu, W. and Li, Y. (2018). Targeted poverty alleviation and land policy innovation: some practice and policy implications from China, *Land Use Policy*, 74: 53–65. <https://doi.org/10.1016/j.landusepol.2017.04.037>

PREVIOUS WORKING PAPERS IN THE SERIES

SOCIAL ECONOMICS, POLICY AND DEVELOPMENT

1. Poverty and Economically Deprived Women and Children: Theories, Emerging Policy Issues and Development”, Clem Tisdell, September 1999.
2. Sen’s Theory of Entitlement and the Deprivation of Females: An assessment with Indian Illustrations by Clem Tisdell, Kartik Roy and Ananda Ghose, September 1999.
3. Gender Inequality, Development and UNDP’s Social Valuation Indices: HDI, GDI and GEM with Particular Reference to India by Clem Tisdell, Kartik Roy and Anand Ghose, September 1999.
4. Asset-Poor Women in India and the Relevance of Amartya Sen’s Analysis by Clem Tisdell, February 2000.
5. Institutional Impediments, Entitlement Exchange and Women’s Empowerment in Rural India: The Case of Access to Education by K. C. Roy, Clem Tisdell and A. Ghose, February 2000.
6. The Socio-Economics of Gender Issues in Rural India: Results of Interviews in Three Villages and a Forest Meeting in Eastern India by Clem Tisdell and Kartik C. Roy, May 2000.
7. The Development of Kiribati: An Analysis of Trends, Issues and Policies by Clem Tisdell, May 2000.
8. The Development of Samoa: An Analysis of Trends, Issues and Policies by Clem Tisdell, May 2000.
9. The Development of the Solomon Islands: An Analysis of Trends, Issues and Policies by Clem Tisdell, May 2000.
10. The Development of Tuvalu: An Analysis of Trends, Issues and Policies by Clem Tisdell, May 2000.
11. The Development of Vanuatu: An Analysis of Trends, Issues and Policies by Clem Tisdell, May 2000.
12. Sustainable Development and Human Resource Capital by Clem Tisdell, May 2000.
13. Gender Inequality in India: Evidence from a Rural Survey in West Bengal by Clem Tisdell, July 2000.
14. Property Rights in Women’s Empowerment in Rural India: A Review by K. C. Roy and C. A. Tisdell, July 2000.
15. Push-and-Pull Migration and Satisficing versus Optimising Migratory Behaviour: A Review and Nepalese Evidence by Clem Tisdell and Gopal Regmi, October 2000.
16. Socioeconomic Determinants of the Intra-family Status of Wives in Rural India: Analysis and Empirical Evidence by Clem Tisdell, Kartik Roy and Gopal Regmi, December 2000.
17. Villagers and the Use and Conservation of Indian Forests: The Role of Joint Forest Management by Clem Tisdell, Kartik Roy and Ananda Ghose, May 2001.
18. Globalisation, Development and Poverty in the Pacific Islands: The Situation of the Least Developed Pacific Island Nations by Clem Tisdell, June 2001.
19. Globalisation, Institutions and Empowerment of Women in Africa: Kenya’s Experience by Tabitha Kiriti, Clem Tisdell and Kartik Roy, June 2001.
20. Female Participation in Decision-Making in Agricultural Households in Kenya: Empirical Findings by Tabitha Kiriti, Clem Tisdell and Kartik Roy, September 2001.
21. Migration of Husbands, Remittances and Agricultural Production: Impacts when Wives Head Households in Rural Kenya by Tabitha Kiriti and Clem Tisdell, November 2001.
22. Summaries of Survey Responses of Household Heads in Three Forest Villages in the

- Midnapore District of West Bengal, India: Use of Forest Resources by Villagers, Forest Sustainability and Management by Clem Tisdell, Kartik Roy and Ananda Ghose, November 2001.
23. A Report on Socioeconomic Attributes and Gender Inequality in Kondh-Dominated Villages: A Comparative Analysis of Tribals and Non-Tribals in the Phulbani District, Orissa, India, by Clem Tisdell, Kartik Roy and Ananda Ghose, March 2002.
 24. Economic Theories of the Family and Discrimination in a Social Context: Entitlements of Kondh Tribal Females in India by Clem Tisdell, Kartik Roy and Ananda Ghose, March 2002.
 25. Children and Economic Development: Family Size, Gender Preferences and Human Capital Formation – Theory and Indian Cases by Clem Tisdell, May 2002.
 26. Gender, Martial Status, Farm Size and other Factors Influencing the Extent of Cash Cropping in Kenya: A Case Study by Tabitha Kiriti and Clem Tisdell, May 2002.
 27. Commercialisation of Agriculture in Kenya: Case Study of Urban Bias on Food Availability in Farm Households by Tabitha Kiriti and Clem Tisdell, June 2002.
 28. Prejudice against Female Children: Economics and Cultural Explanations, and India Evidence by Clem Tisdell and Gopal Regmi, September 2002.
 29. Economic Globalisation, Liberalisation and Bangladesh: Poverty, Labour Norms and the Environment by Clem Tisdell, November 2002.
 30. Rural Poverty and China's Entry to the WTO: Present Knowledge, Unresolved Issues and China's Policy Options by Clem Tisdell, November 2002.
 31. Family Size, Economics and Child Gender Preference: A Case Study in the Nyeri District of Kenya by Tabitha Kiriti and Clem Tisdell, June 2003.
 32. Commercialisation of Agriculture in Kenya: Case Study of Policy Bias and Food Purchases by Farm Households by Tabitha Kiriti and Clem Tisdell, June 2003.
 33. The Relationship Between Commercial Agriculture and Food Availability to Kenyan Farm Families: A Case Study by Tabitha Kiriti and Clem Tisdell, June 2003.
 34. Marital Status, Farm Size and other Influences on the Extent of Cash Cropping in Kenya: A Household Case Study by Tabitha Kiriti and Clem Tisdell, June 2003.
 35. Gender Inequality, Poverty and Human Development in Kenya: Main Indicators, Trends and Limitations by Tabitha Kiriti and Clem Tisdell, June 2003.
 36. Fertility and Female Work Force Participation in Bangladesh: Causality and Cointegration by Mohammad Hossain and Clem Tisdell, September 2003.
 37. Closing the Gender Gap in Bangladesh: Inequality in Education, Employment and Earnings, by Mohammad Hossain and Clem Tisdell, October 2003.
 38. Poverty – Dynamic and Sustainability Perspectives: Implications for Welfare and Policy with Reference to India, by Clem Tisdell, October 2003.
 39. Major Demographic Changes in Bangladesh and Their Socio-Economic Correlates: Analysis of Trends, by Mohammad Hossain and Clem Tisdell, December 2003.
 40. Economic, Social and Cultural Influences on the Status and Wellbeing of Indian Rural Wives, Clem Tisdell and Gopal Regmi, January 2004.
 41. Does Workforce Participation Empower Women? Micro-Level Evidence from Urban Bangladesh by Mohammad Hossain and Clem Tisdell, February 2005.
 42. Education's Role in Economic Development and in Assisting the Poor by Clem Tisdell, May 2005.
 43. An Assessment of the UN's Millennium Development Goals and its Millennium Declaration by Clem Tisdell, November 2006
 44. Bangladesh's Performance and the Millennium Development Goals: A Sketch of Progress by Clem Tisdell, November 2006
 45. Poverty and Social Deprivation in Botswana: A Rural Case Study by Pelotshweu T. Moepeng and Clem Tisdell, November 2006.
 46. Education, Employment and Social Inclusion within the European Union by Laurence Lasselle and Clem Tisdell, November 2006.

47. Effects of Markets on Poverty and Economic Inequality: Evolutionary and Ethical Perspectives by Clem Tisdell, November 2006.
48. The Socio-Economic Situation of Female Heads and Poor Heads of Households in Rural Botswana: A Village Case Study by Pelotshweu T Moepeng and Clem Tisdell, February, 2008.
49. Botswana's Development: Its Economic Structure and Rural Poverty by Pelotshweu T Moepeng and Clem Tisdell, February, 2008.
50. Associations between Poverty and Socio-economic Variables in a Typical Tswana Rural Village: New Insights by Pelotshweu T Moepeng and Clem Tisdell, March 2008.
51. Can Subjective Measures for Rapid Assessment of Rural Poverty and Inequality be Useful in Botswana? By Pelotshweu T Moepeng and Clem Tisdell, June 2008.
52. The Pattern of Livelihoods in a Typical Rural Village Provide New Perspectives on Botswana's Development by Pelotshweu T Moepeng and Clem Tisdell, August 2008.
53. Gender Issues in Rural Eastern India revealed by Field Interviews: Tribal and Non-Tribal Responses by Clem Tisdell and Kartik Roy. June 2009.
54. China's Goal of Combining Economic Self-Reliance with its Development: Changing Perspectives and Challenges by Clem Tisdell. January 2013.
55. Core Economic Issues in the Horticulture Sector of Botswana by Pelotshweu Moepeng. May 2013.
56. Rural Development in Botswana: Experiences from Elsewhere and Emerging Issues by Pelotshweu Moepeng, June 2013.
57. The MIRAB Model of Small Island Economics in the Pacific and their Security Issues: A Draft by Clem Tisdell, January 2014.
58. The MIRAB Model of Small Island Economics in the Pacific and their Security Issues: Revised Version by Clem Tisdell, March 2014.
59. The Malthusian Trap and Development in Pre-Industrial Societies: A View Differing from the Standard One by Clem Tisdell and Serge Svizzero, January 2015.
60. An Assessment of the Post 2015 Global Development Agenda by Serge Svizzero and Clem Tisdell, February 2015.
61. A Review of Anne-Katrin Eckermann and Lynette Nixon (2015), *A Place Called Home – The Gunggari Struggle for Land: A Native Title Case Study*, Brisbane: Cross Cultural Consultants Pty. Ltd. Paperback, Pp. x +109. ISBN: 978 0 99429 730 3 by Clem Tisdell, February 2016.
62. Loans, Wealth Creation and the Socioeconomic Situation of Women in the Taluka Area of the Khairpur District, Sindh, Pakistan: A Study Based on Interviews with Female Focal Groups by Clem Tisdell, Shabbir Ahmad, Agha Nadia, John Steen and Martie-Louise Verreynne, July 2017.
63. Social Capital, Poverty and its Alleviation in a Chinese Border Region: A Case Study in the Kirghiz Prefecture, Xinjiang by Liu Hong, Clem Tisdell and Wang Fei, August, 2017.
64. Microfinancing in developing countries: an assessment taking particular account of the views of Becker and Posner by Clem Tisdell and Shabbir Ahmad. (Pp. 15)