Children in China:
An Atlas of Social Indicators 2018

NWCCW
国务院妇女儿童
工作委员会办公室

NBS
国家统计局社会科技
和文化产业统计司

unicef
联合国儿童基金会

Contact:
UNICEF China
12 Sanlitun Lu
Chaoyang District
Beijing, 100600, P.R. CHINA
Email: beijing@unicef.org
www.unicef.cn

NWCCW, NBS, UNICEF, *Children in China: An Atlas of Social Indicators*, 2018

Scan to download Chinese version

Scan to download English version

Note: The boundaries and the names shown and the designations used on the maps do not necessarily imply official endorsement or acceptance by the United Nations.

PHOTOGRAPHY CREDIT

Cover: © UNICEF/China/2017/ Zeng Huang

Page 13: © UNICEF/China/2017/ Li Manwei

Page 27: © UNICEF/China/2018/ Li Manwei

Page 45: © UNICEF/China/2017/ Li Manwei

Page 69: © UNICEF/China/2017/ Li Manwei

Page 77: © UNICEF/China/2011/ Liu Zhe

Page 85: © UNICEF/China/2018/ Li Bin

Page 93: © UNICEF/China/2015/ Xia Yong

Page 107: © UNICEF/China/2015/ Wu Kaixiang

Page 129: © UNICEF/China/2016/ Liu Yuyang

Page 135: © UNICEF/China/2016/ Chen Junsheng

Page 143: © UNICEF/China/2016/ Xia Yong

Children in China:

An Atlas of Social Indicators

2018

FOREWORD

The 2018 *Atlas of Social Indicators of Children in China* is the culmination of the joint efforts and collaboration between the National Working Committee on Children and Women (NWCCW) under the State Council, the National Bureau of Statistics, and UNICEF. Initiated in 2010, this third edition of the *Atlas* provides a comprehensive overview of the development status of children in China.

China has always placed the work for children high on its strategic agenda. Since the 18th National Congress of the Communist Party of China, a series of approaches have been taken to integrate and synchronize the work for children into the overall planning and implementation of economic and social development plans. The implementation of the *National Programme of Action for Children 2011–2020* has been vigorously promoted; and the mechanisms for delivering services to and for children constantly improved. Under the overall leadership of the Government, with NWCCW playing a coordinating role, multiple sectors have and continue to collaborate on policy development, system building, facilitating social participation, and addressing identified barriers – so as to take prioritized actions for the development of children's education, the provision of child health services, and guaranteeing child welfare.

As China makes impressive investments and gains in promoting socio-economic development and enters a new era of socialism with Chinese characteristics, it is also committed to upholding the rights of every child, to promote their healthy development and cultivate future talents for the development of the country. This means putting children first in our strategic planning, programming, policy development and legislation, while taking concrete actions to provide a strong guarantee for the all-round and healthy development of children, through better implementation of policies and improved social governance.

Bringing together the latest data on the main indicators of child survival, development and protection, the 2018 *Atlas of Social Indicators of Children in China* has faithfully reflected the achievements, as well as issues and challenges of children's development in China. It has provided a statistical reference for government agencies, development partners, frontline workers and other stakeholders to better understand the current status of children's development in China. We believe that this *Atlas* will positively contribute to the promotion of NPA implementation in China, sharing China's experience and achievements on child development, and creating an enabling environment, where every child is respected and cared for.

We would like to express our gratitude to the National Bureau of Statistics and relevant government departments for providing data and reviewing the *Atlas*, and to UNICEF, a partner of the Government of China, for its contribution in promoting children's development in China over the decades.

National Working Committee on Children and Women
State Council, People's Republic of China

FOREWORD

It is an honor for UNICEF China to have worked on, and to release, in collaboration with the National Working Committee on Children and Women and the National Bureau of Statistics, the 2018 edition of the *Children in China: An Atlas of Social Indicators.* An authoritative source of data on the status of children in China, the Atlas contains a wealth of information presented in a visual and appealing manner, bringing to life and guiding our understanding of *which* children, *where*, are facing *what* challenges. With this clarity of information and on the basis of these evidence-based insights – policy and investment decisions for children can be more effectively and efficiently made.

Since its inaugural and second editions in 2010 and 2014 respectively, the bilingual Atlas has documented China's path to socio-economic development, demographic transition and policy reform. With each edition, we have strived to make the Atlas even more representative of the breadth and diversity that characterizes this country, highlighting the remarkable achievements, opportunities as well as the remaining challenges in improving the survival, development and protection of *all* children, equitably.

The 2018 Atlas seeks a higher level of disaggregation and data interpretation than the previous editions, drawing on the most recent data from new surveys, and data from the *Statistical Yearbooks* published by the National Bureau of Statistics and line ministries. It reflects relevant government plans and policies such as the *Thirteenth Five-Year Plan (2016–2020),* sectoral and cross-sectoral plans, and revised targets and actions proposed by the Government of China in the process of implementing the *National Programme of Action on Children and Women (2011–2020)* and the *Rural Poverty Reduction Strategy (2011–2020)* - all of which have significant implications for children in poverty, children left-behind and vulnerable children. Through key references to the *2030 Agenda for Sustainable Development,* and linking indicators to the Sustainable Development Goals (SDGs) and Targets for the first time; this publication also provides a basis for understanding the implementation, progress and major challenges faced in achieving the SDGs in China.

One area that the 2018 Atlas does not cover is the protection of children from all forms of violence, abuse and neglect – an important right enshrined in the Convention on the Rights of the Child and the SDGs. With new data expected in 2019, UNICEF looks forward to providing a status update on this critical dimension to the wellbeing of children in China, which we cannot and must not lose sight of.

Our hope and expectation is that the 2018 Atlas lays a strong foundation for further analysis, learning and evidence-based action. That it inspires not just thought, but policy change and implementation that changes the lives of children for the better. In fact, the impact of the Atlas will be measured in the degree to which it is used to identify the most vulnerable children and their families; to understand their challenges; and to actively address these – through Government priorities, targeted funding, increased access and quality of services for children and their families. For UNICEF it informs our work and advocacy in championing the rights of all children in China. Because behind every data point and statistic in this publication, is a story of a child, a family and community whose needs and rights deserve recognition and fulfilment.

China's leadership and success in improving the lives of its children and women and lifting millions out of poverty is globally recognized. The same holds true for the fact that the progress China makes in achieving the SDGs, will impact the progress the world makes. Now is the time to also inspire such change in other countries. The 2018 Atlas showcases those areas where great changes have been achieved with a view to ongoing work together with the Government of China to bring these to the benefit of children along the Belt and Road including through South-South and Triangular Cooperation.

In all of this, UNICEF remains a proud partner to the Government of China, united by a common vision where persistent in-country disparities and vulnerabilities faced by children are addressed, ensuring that all children survive, thrive and develop to their fullest potential.

Rana Flowers
UNICEF Representative to China

ACKNOWLEDGEMENTS

The 2018 update of the *Atlas of Social Indicators for Children in China* was developed by UNICEF China, in close cooperation with the National Working Committee for Children and Women (NWCCW), and the Department of Social, Science, Technology and Cultural Statistics under the National Bureau of Statistics (NBS).

Xiao Li, Xu Jianlin and Zhao Lijing from the Department of Social, Science, Technology and Cultural Statistics of NBS, Li Rui from the Department of Population and Employment Statistics of NBS, Zhang Yaoguang from the Statistical Information Center of the National Health Commission, Zhu Jun, Wang Yanping and He Chunhua from the National Office for Maternal and Child Health Surveillance, Yang Zhenyu from the Nutrition and Health Institute of the Chinese Center for Disease Control and Prevention (China CDC), Ma Chao and Zhang Guomin from the National Immunization Programme of China CDC, Deng Xiao from the National Center for Chronic and Noncommunicable Disease Control and Prevention of China CDC, Hao Gang from the Department of Development Planning of the Ministry of Education, Zhang Jun from the Information Center of the China Disabled Persons' Federation and many others contributed to the compilation of the Atlas, providing relevant data and valuable guidance.

The following UNICEF staff provided technical inputs, and data analysis and interpretation for the Atlas: Lin Yan, Shi Weilin, Huang Xiaona, Yang Yuning, Chang Suying, Zhu Xu, Yang Zhenbo, Tom Slaymaker, Li Tao, Chen Xuefeng, Chen Xuemei, Ron Pouwels, Malti Gandhi and Douglas Noble.

Yan Fang and Chu Yaozhu of UNICEF China were responsible for drafting and reviewing the Atlas throughout. Astha Dalakoti, Li Lengni, Huang Qiliang and Chen Boyuan contributed to the translation. Astha Dalakoti also edited and polished the English version of the Atlas. Li Ying, Zhou Xiaomeng and Shen Bingjie helped with proofreading. The UNICEF China Communication team contributed photographs and enabled public access to the Atlas on UNICEF China's official website (www.unicef.cn).

We would like to express sincere gratitude to the ministry experts, scholars and UNICEF staff who participated in the review of the first draft of the Atlas and provided valuable suggestions for revision. The Atlas is developed using data and evidence from a large number of existing studies, including those previously supported by UNICEF. The relevant sources have been cited throughout the publication, and thus we would like to take this opportunity to thank the research teams and citation authors.

Overall guidance and strategic directions for developing this publication were provided by Rana Flowers, UNICEF Representative to China; Wang Weiguo, Executive Deputy Director General of the Office of NWCCW; and Wan Donghua, Director General of the Department of Social, Science, Technology and Cultural Statistics of NBS.

CONTENTS

1

POPULATION DEMOGRAPHICS

OVERVIEW

China's population has more than doubled during the last six decades, from 583 million in 1953 to 1.39 billion people in 2017.[1] Today, China is home to about 20 per cent of the world's population, and it is the most populous country in the world.

China is a multi-ethnic country comprising 56 ethnic groups. The Han ethnic group represents 91.5 per cent of the population, while the 55 ethnic minority groups[2] accounting for the remaining 8.5 per cent.[3]

In 2015, China had the world's second-largest child population (aged 0–17 years), with an estimated 271 million children, including 147 million boys and 124 million girls. Child population accounts for 20 per cent of the country's total population or 13 per cent of the world's children. The number of children in China has declined considerably in the past decades, decreasing by a third between 1982 and 2015. However, during the 2010–2015 period, the child population remained relatively stable, decreasing only slightly.[4]

The long-term population trend of children in China is, to some extent, aligned with the transition of its family planning policy. China began to implement its family planning policy in the 1970s, and the Government toughened family planning regulations in 1980 with the promotion of the one-child policy. In just 10 years, the total fertility rate (TFR)[5] among women of childbearing age dropped from 4.8 during the 1970–1975 period to 2.6 during the 1980–1985 period. Between 1990 and 1995, the TFR had fallen below the replacement level of 2.1 and has remained at a low level since then. The TFR is currently estimated at 1.6 for the 2010–2015 period, making China one of the world's low-fertility countries.[6] In order to promote the long-term balanced development of the population, China began to implement a new population policy in 2014, allowing couples to have a second child if one or both parents are the only child of their respective families. At the end of 2015, the policy was further liberalized to become the universal second-child policy, allowing couples across China to have two children.

In 2017, the birth rate in China was 12.4 per thousand,[7] 32 per cent lower than in 1980. The rate of natural increase[8] in 2017 dropped to 5.3 per thousand, less than half of that in 1980.[9]

The sex ratio at birth (SRB) is skewed, a trend that has kept increasing since the 1980s. Rising from 108.5 in 1982, it reached a peak of 118.6 males for 100 females around 2005. Although the SRB dropped to 113.5 in 2015 and declined further to 111.9 in 2017 due to gradual relaxation of the family planning policy in recent years, China still has one of severely imbalanced SRBs in the world.[10] Globally, the SRB generally ranges between 103 and 107 male births to every 100 female births in the absence of an intervention.[11]

Due to the long-term SRB imbalance, there were 33 million[12] fewer females in China in 2017. This imbalance has implications for China's future social and economic development, changing gender relations and triggering various social issues, including a 'marriage squeeze' due to the imbalance between the number of men and women available to marry. This will have a far-reaching impact on future population development.

Currently, China's population is ageing due to its long-term low TFR and prolonged life expectancy at birth. While the population aged 0–14 years represented 33.6 per cent of the total population in 1982, that same age group constituted 16.8 per cent of China's population in 2017. In contrast, the percentage of people aged 65 years and above increased from 4.9 per cent of the total population in 1982 to 11.4 per cent in 2017.[13] Globally, a population is defined as 'aged' if people aged 60 years and above account for more than 10 per cent of the total population, or people aged 65 years and above account for more than 7 per cent. According to this standard, China became an ageing society in 2000. The significantly increased proportion of people over 65 years and the expected continued increase in the future will have implications for the nature and scope of social protection and public services that are needed, and the enormous pressure experienced by younger generations to care for and support elderly parents and grandparents.

China has experienced rapid urbanization, with the proportion of urban residents increasing from 21.1 per cent in 1982 to 58.5 per cent in 2017.[14] Along with urbanization, there has been large-scale population migration since the 1980s. By 2017, China's migrant population reached 244 million, accounting for 17.6 per cent of the total population.[15]

The large migrant population played an important role in pushing forward China's economic growth and social advancement. However, due to the segmented urban-rural *hukou* registration system, many people who moved from rural areas are not registered with *hukou* in the urban places where they reside, limiting the pathways for them to access the same basic public services (also known as essential social services) as urban residents in terms of education, employment, health care, pension and subsidized housing. Thus, they are unable to fully integrate into urban society.

Figure 1.1
Geographic regions of China

Source: National Bureau of Statistics

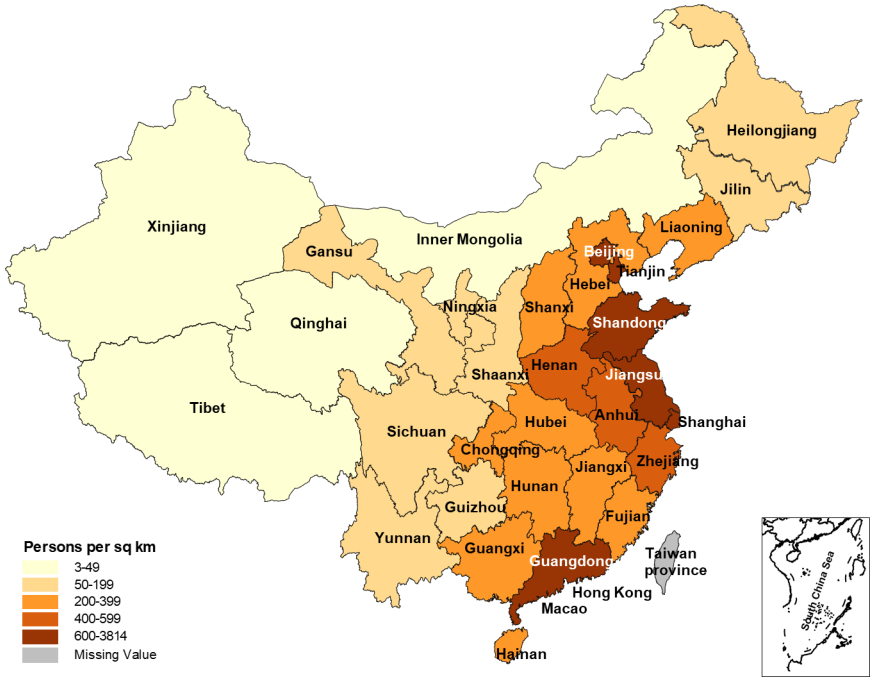
Figure 1.1
Administratively, China[16] is divided into 23 provinces, 5 autonomous regions (Inner Mongolia, Guangxi, Tibet, Ningxia, Xinjiang), 4 municipalities (Beijing, Tianjin, Shanghai, Chongqing) and 2 Special Administrative Regions (Hong Kong, Macao). Mainland China is also classified into different geographic areas, specifically eastern, central and western regions. [a] Many economic and human development indicators are lower in the western region, compared to the eastern region.

[a] Eastern region includes 11 provinces (municipalities): Beijing, Tianjin, Hebei, Liaoning, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong and Hainan.
Central region includes 8 provinces: Shanxi, Jilin, Heilongjiang, Anhui, Jiangxi, Henan, Hubei and Hunan.
Western region includes 12 provinces (autonomous regions, municipalities): Inner Mongolia, Guangxi, Chongqing, Sichuan, Guizhou, Yunnan, Tibet, Shaanxi, Gansu, Qinghai, Ningxia and Xinjiang.

Figure 1.2
Total population, by province, 2017

Source: National Bureau of Statistics, *China Statistical Yearbook,* 2018

Figure 1.3
Population density, by province, 2017



Source: (Derived from) National Bureau of Statistics, *China Statistical Yearbook*, 2018

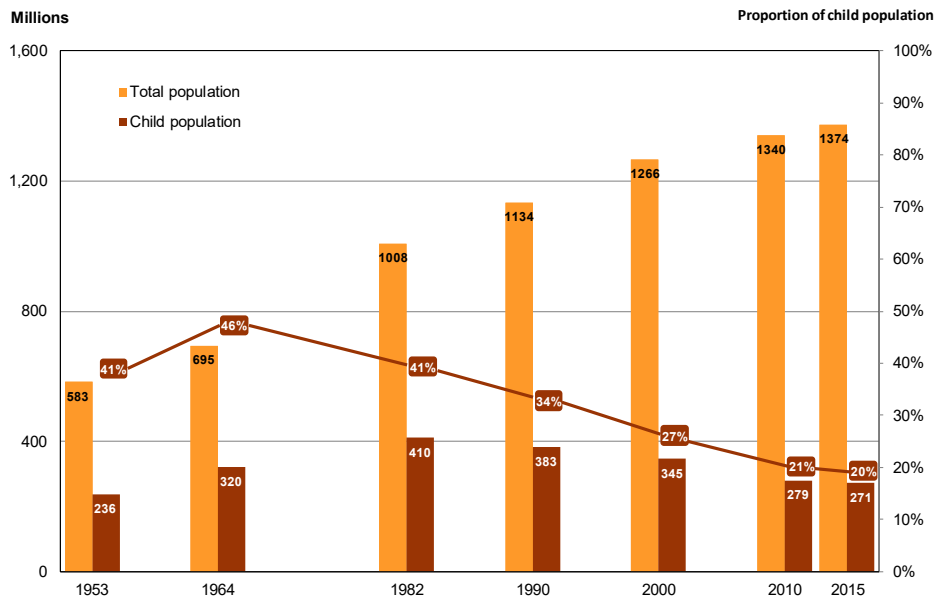
Figure 1.2
With a total population of 1.39 billion, China is the world's most populous country. China's population distribution is uneven, with 70 per cent living on 30 per cent of the country's land area. In 2017, Guangdong (112 million) was the most populous province while Tibet (3.37 million) was the least.

Figure 1.3
The average population density is 148 people per sq km, but it varies greatly across the country. While Shanghai has an average of 3,800 persons per sq km, Tibet, Qinghai and Xinjiang have fewer than 15 persons per sq km. The vast majority of people live in the country's historic heartland – the plateaus, plains and basins of eastern and central China – where fertile soils and water resources make it the country's most productive agricultural region. In contrast, western China, with its high mountains and harsh weather conditions, is sparsely populated.

Figure 1.4
Percentage of ethnic minority groups, by province, 2015

Source: National Bureau of Statistics, *Tabulation on the 2015 1% National Population Sample Survey,* 2016

Figure 1.5
Total population and child population, 1953–2015



Sources: National Bureau of Statistics, 1953, 1964, 1982, 1990, 2000 and 2010 *Tabulation on the Population Census of China* (respectively published in 1955, 1966, 1985, 1993, 2002 and 2012); *Tabulation on the 2015 1% National Population Sample Survey,* 2016

Figure 1.4
China is comprised of 56 ethnic groups, including Han and 55 ethnic minority groups. In 2015, the total population of the ethnic minority groups was 117 million, accounting for 8.5 per cent of the total population and mostly residing in western China. Four ethnic minority groups had a population over 10 million, namely Zhuang, Hui, Uyghur and Manchu. Among all provinces in 2015, the population of Tibet had the highest proportion of ethnic minorities (95 per cent), while Guangxi was home to 18 million people of ethnic minority status, who were mainly Zhuang. This is the largest population of a single ethnic minority group within a province.

Figure 1.5
According to the 2015 1% National Population Sample Survey, the child population aged 0–17 in China was estimated to be 271 million in 2015, accounting for 20 per cent of the total population. Although the total population in China keeps rising, the size and proportion of China's child population has continually declined since 1982, though it did become more stable during the period between 2010 and 2015. This is due to rapid economic development and changing demographic structures, together with sustained low birth rates since the implementation of the family planning policy in the late 1970s.

Figure 1.6

Family size and distribution of families with children, 2000, 2010 and 2015

Year		2000	2010	2015
Average family size (number of persons)		3.4	3.1	3.1
Proportion of families with children (per cent)		63.4	47.2	45.0
Distribution by number of children (per cent)	One	59.3	66.6	65.6
	Two	30.8	27.3	28.4
	Three or more	9.9	6.1	6.0
	Total	100	100	100

Source: National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017

Figure 1.6

The size of families in China is shrinking, from 3.4 persons per family in 2000 to 3.1 persons per family in 2015. Moreover, the number of families with children is declining, and the number of children in a given family is also changing. In 2015, among the 410 million families in China, 45 per cent had children aged 0–17. Families with only one child accounted for 65.6 per cent of all families with children, while families with two children accounted for 28.4 per cent, and those with three or more children accounted for the remaining 6.0 per cent.

Figure 1.7

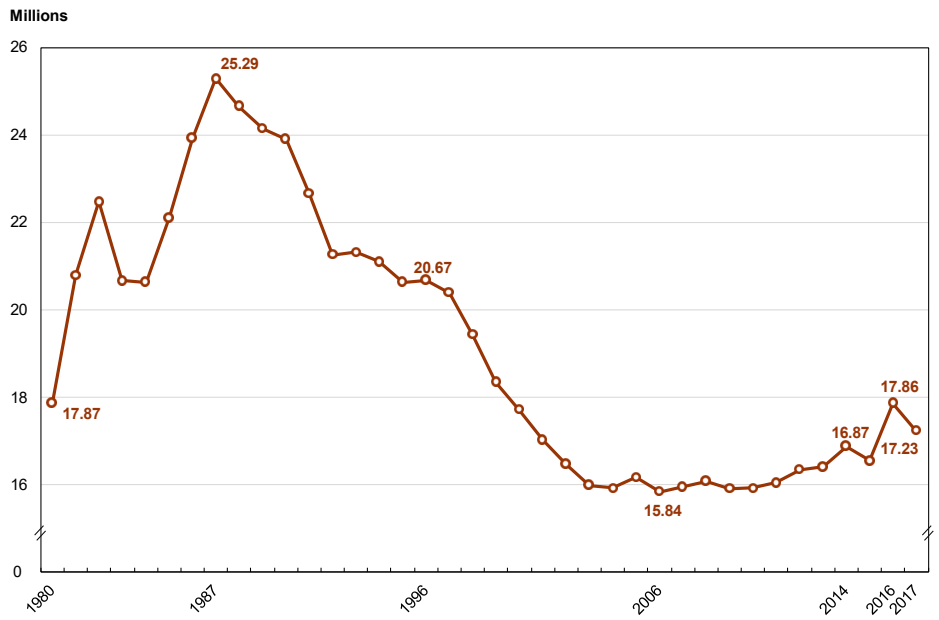
Child population, by province, 2015

Source: National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017

Figure 1.7

Seventy per cent of the child population is concentrated in the eastern and central regions. Henan province has a child population of 24.01 million, the largest among all provinces, while Tibet has the smallest with only 910,000. Although the child population in absolute numbers is smaller in the western region, the proportion of children among the total population is higher in the western region (22 per cent), as compared to the eastern region (18 per cent) and the central region (21 per cent). The proportion of families with children in all of China's provinces varied significantly in 2015. Only one-quarter of households in Shanghai had children, and one-third of households in Beijing and Tianjin had children. In contrast, in Tibet, more than 60 per cent of families had children, and its average family size also ranked highest among the provinces, reaching 4.1 persons.

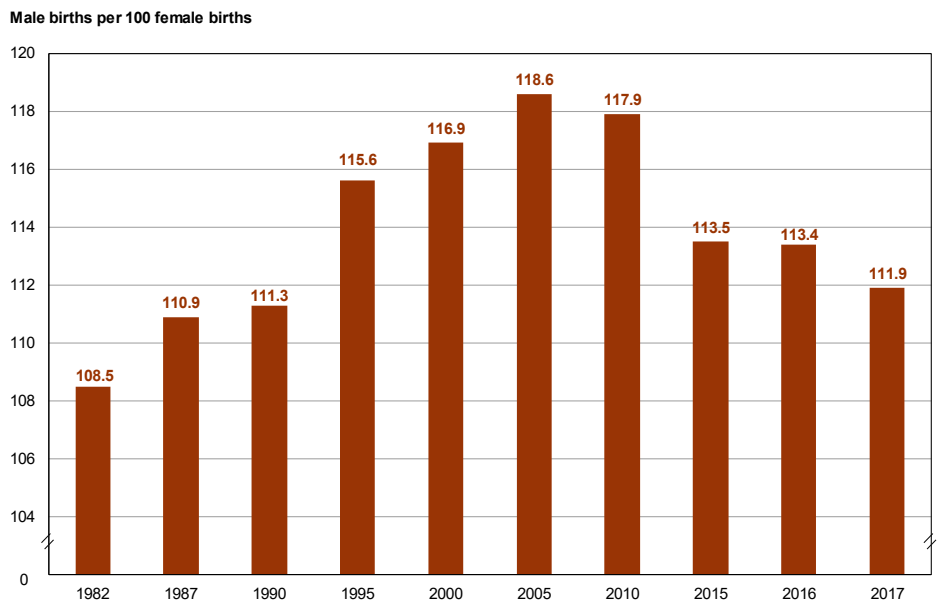
Figure 1.8
Total number of births, 1980–2017



Sources: National Bureau of Statistics, *China Statistical Yearbook,* 1980–2010 data (calculated by mid-year population and birth rate)*;* 'Statistical Communiqué on the National Economic and Social Development'*,* 2011–2017 data

Figure 1.8
The total number of births shows a long-term decline with some fluctuations, reflecting the influence of family planning policy adjustments in different periods. In the mid-1980s, there was a small peak in the total number of births when the family planning policy was slightly relaxed. After 2014, when the Government issued the second-child policy, followed by the universal second-child policy, the total number of births in 2016 reached 17.86 million, the highest total since 2000. In 2017, the total number of births was 17.23 million. Although this is a slight decrease from the figures in 2016, it was still higher than the average level of 16.44 million during the Twelfth Five-Year Plan (FYP) period between 2011 and 2015, and it was the second-highest total since 2000. The effects of the universal second-child policy remain evident.

Figure 1.9
Sex ratio at birth, 1982–2017

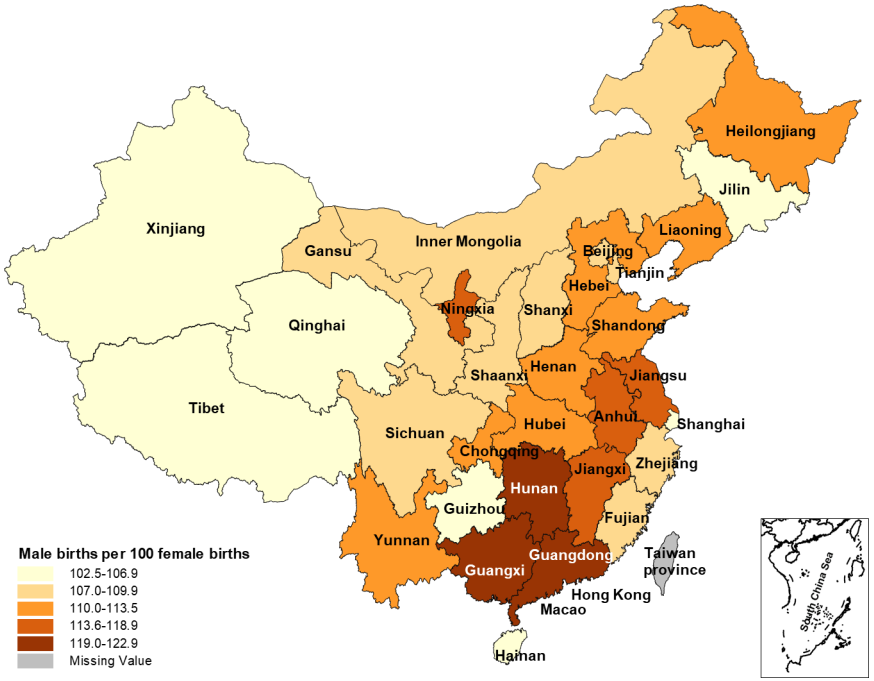


Sources: National Bureau of Statistics, 1982, 1990, 2000, and 2010 *Tabulation on the Population Census of China* (respectively published in 1985, 1993, 2002 and 2012); 1987, 1995, 2005 and 2015 *1% Tabulation on the National Population Sample Survey* (respectively published in 1988, 1997, 2007 and 2016); *Statistics on Women and Children in China*, 2018 (2016–2017 data)

Figure 1.9
In the absence of intervention, the SRB generally ranges between 103 and 107 male births per 100 female births. China's SRB has become progressively skewed, increasing from 108.5 males per 100 females in 1982 to the peak of 118.6 males per 100 females in 2005. Although it dropped to 113.5 in 2015 and declined further to 111.9 in 2017 due to gradual relaxation of the family planning policy in recent years, China still has one of severely imbalanced SRBs in the world. The abnormally high SRB highlights the extent to which girls are denied the right to life and reflects deep-seated sex discrimination that adversely affects girls' development.

Figure 1.10

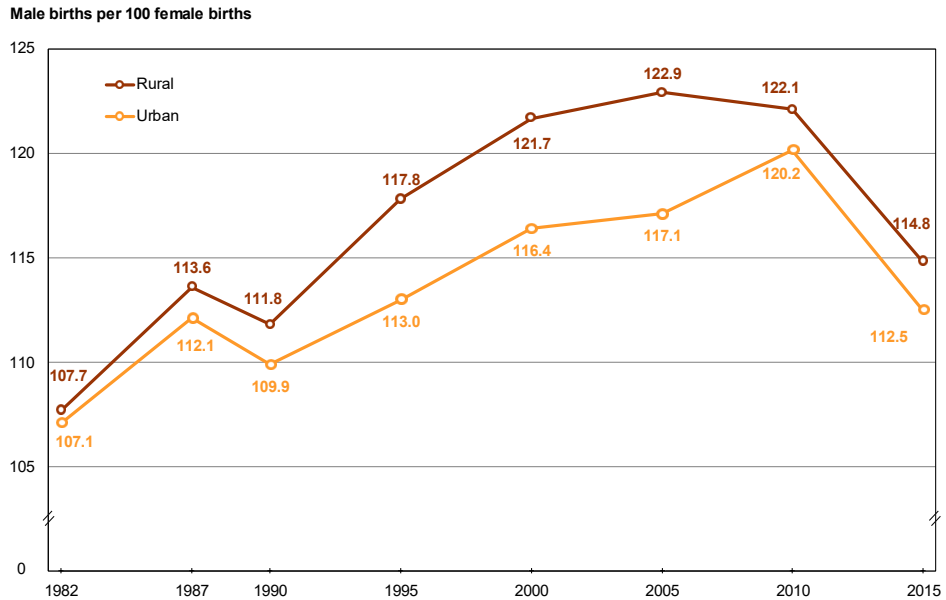
Sex ratio at birth, by province, 2015



Source: (Derived from) National Bureau of Statistics, *Tabulation on the 2015 1% National Population Sample Survey*, 2016

Figure 1.11

Sex ratio at birth, by urban-rural, 1982–2015



Sources: (Derived from) National Bureau of Statistics, 1982, 1990, 2000, and 2010 *Tabulation on the Population Census of China* (respectively published in 1985, 1993, 2002 and 2012); 1987, 1995, 2005 and 2015 *Tabulation on the 1% National Population Sample Survey* (respectively published in 1988, 1997, 2007 and 2016)

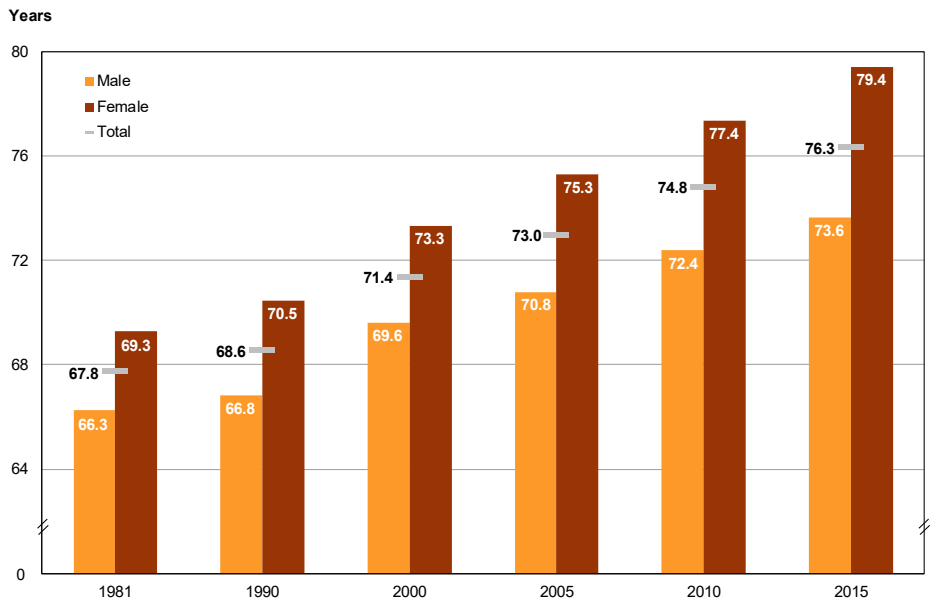
Figure 1.10

The degree of imbalance in the SRB differs across regions. SRB in seven provinces and autonomous regions including Shanghai was within 107, while the SRB in provinces such as Guangxi, Hunan and Guangdong were still seriously imbalanced. The direct and indirect factors that resulted in a high SRB include son preference and corresponding sex selection practices, the influence of the family planning policy, unequal social and family status of females, and incomplete coverage of and access to the social protection system, particularly in rural areas and certain provinces.

Figure 1.11

The SRB is higher in rural areas than in urban areas. Since 1982, the SRB has increased in both urban and rural areas, but more rapidly in rural areas until 2005. In 2010, the SRB decreased in rural areas, and the urban-rural disparity began to decrease. During the 2010–2015 period, the SRB in both urban and rural areas decreased greatly.

Figure 1.12
Life expectancy at birth, 1981–2015



Sources: National Bureau of Statistics, 1982, 1990, 2000, and 2010 *Tabulation on the Population Census of China* (respectively published in 1985, 1993, 2002 and 2012); 2005 and 2015 *Tabulation on the 1% National Population Sample Survey* (respectively published in 2007 and 2016)

Figure 1.12
According to the National Health Commission (formerly the Ministry of Health), the average life expectancy at birth[17] was only 35 years in 1949,[18] when the People's Republic of China was founded. By 2015, this had risen to 76 years. Between 1981 and 2015, life expectancy increased by 10 years for men and 7 years for women. Average life expectancy at birth in China is higher than many other countries with a similar Gross National Income (GNI) per capita.[19]

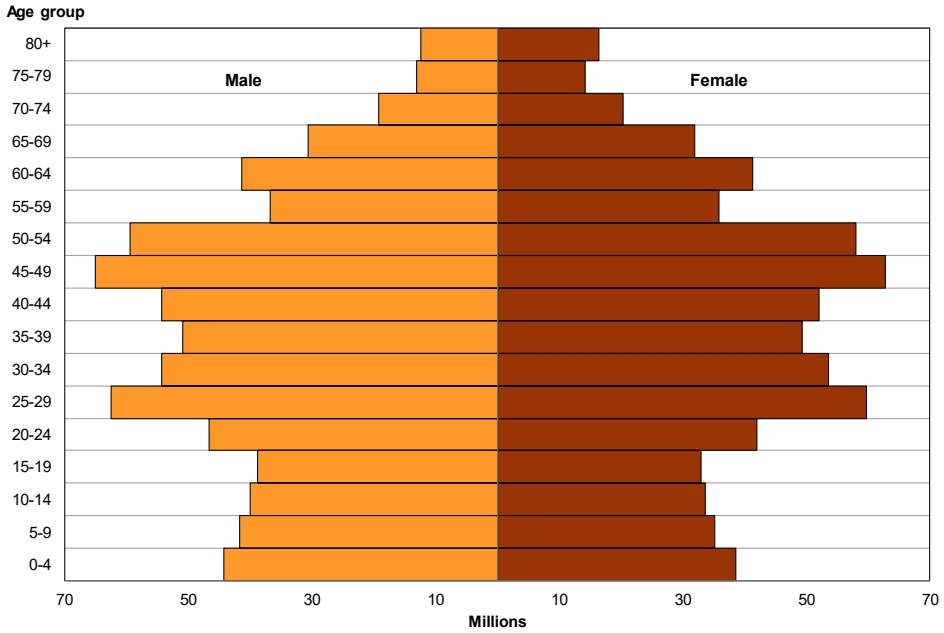
Figure 1.13
Life expectancy at birth, by province, 2010

Source: National Bureau of Statistics, *China Statistical Yearbook*, 2012

Figure 1.13
There are significant disparities in life expectancy at birth between western and eastern provinces. Life expectancy at birth in Beijing and Shanghai has reached 80 years, while in western provinces such as Tibet, Yunnan and Qinghai, it still lags over 10 years behind, although it increased by four to five years between 2000 and 2010.

Figure 1.14

Population pyramid, 2017

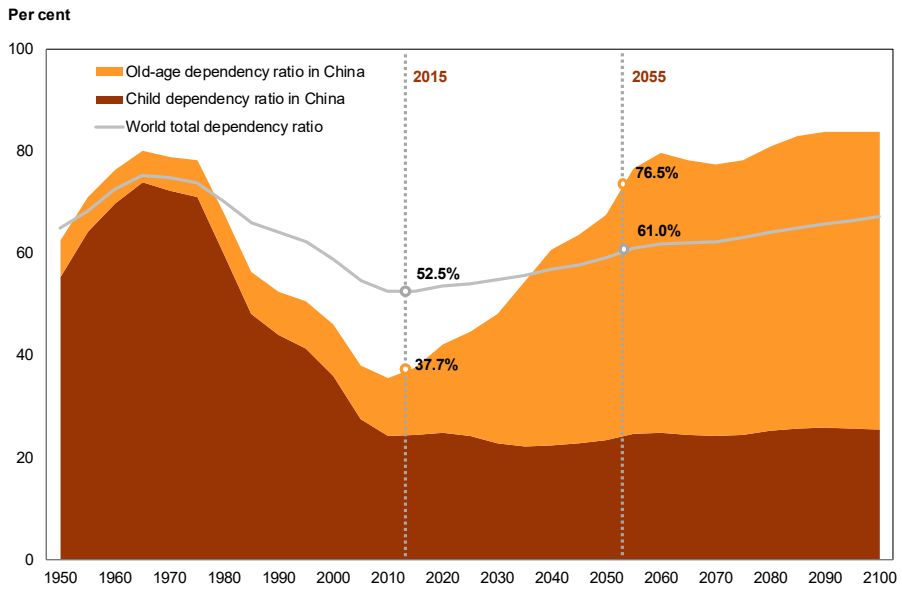


Source: National Bureau of Statistics, *China Statistical Yearbook*, 2018

Figure 1.14
China's population is ageing due to its long-term low fertility rate and the increase in life expectancy. This is reflected in the shape of the population pyramid where the bottom bars are narrower, and the top bars are wider than a standard pyramid.

Figure 1.15

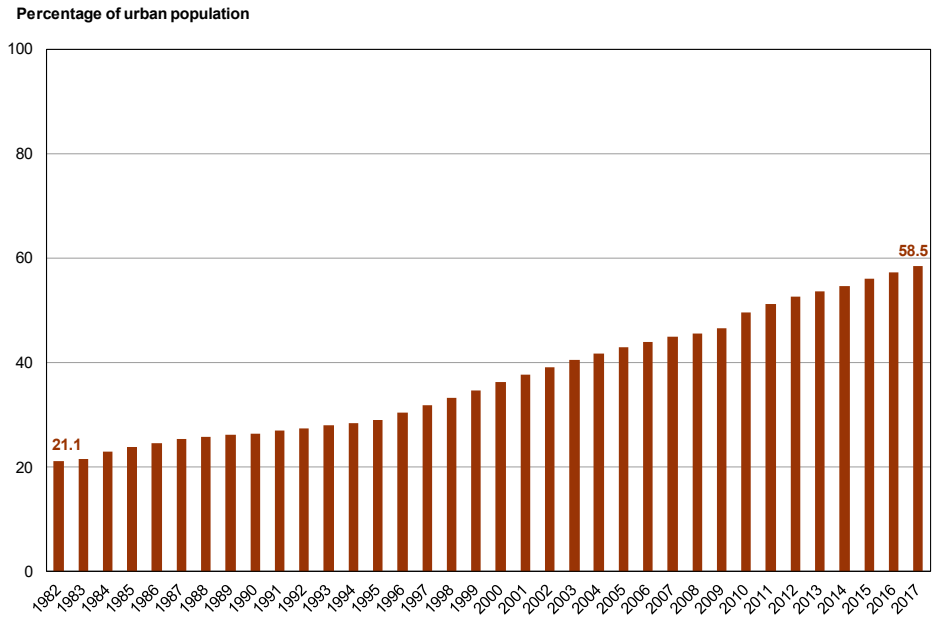
Dependency ratio, 1950–2100



Source: United Nations, Department of Economic and Social Affairs, Population Division, *World Population Prospects: The 2017 Revision,* 2017

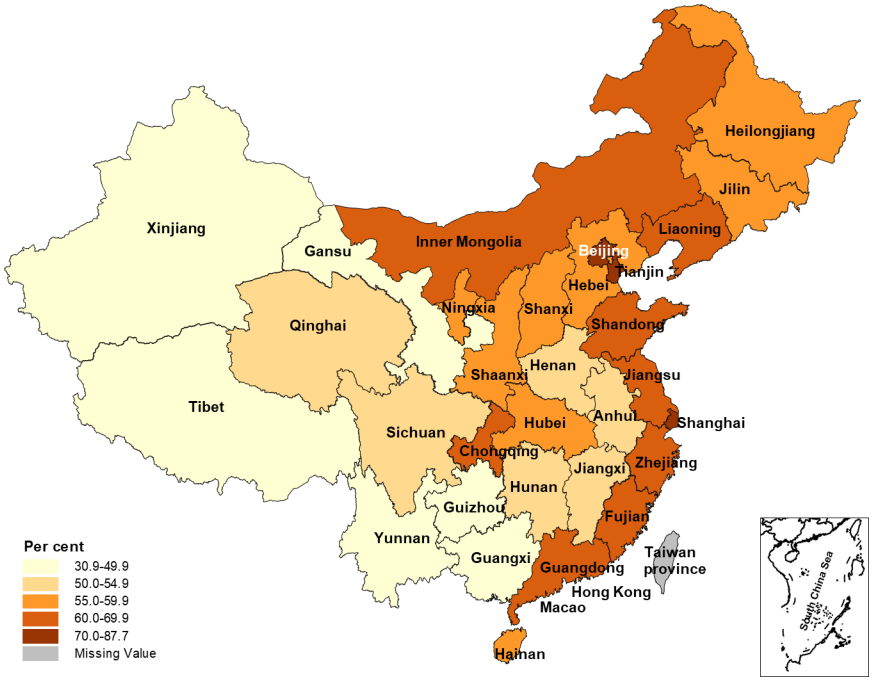
Figure 1.15
According to estimates by the United Nations Population Division (UNPD) of the Department of Economic and Social Affairs, China now has one of the lowest child dependency ratios (the ratio of the population aged 0–14 to the population aged 15–64), as its child dependency ratio declined 60 per cent during the 1980–2015 period. Meanwhile, China's old-age dependency ratio (the ratio of the population aged 65 years or over to the population aged 15–64) keeps increasing, and its population ageing is accelerating. Currently, the total dependency ratio in China is about 38 per cent, which is considered low globally. With further demographic transition and the decline of the 'demographic dividend', it is estimated that China's total dependency ratio will exceed 75 per cent by 2055, much higher than the estimated global average.

Figure 1.16
Urban share of population, 1982–2017



Source: National Bureau of Statistics, *China Statistical Yearbook, 2018*

Figure 1.17
Urban share of population, by province, 2017



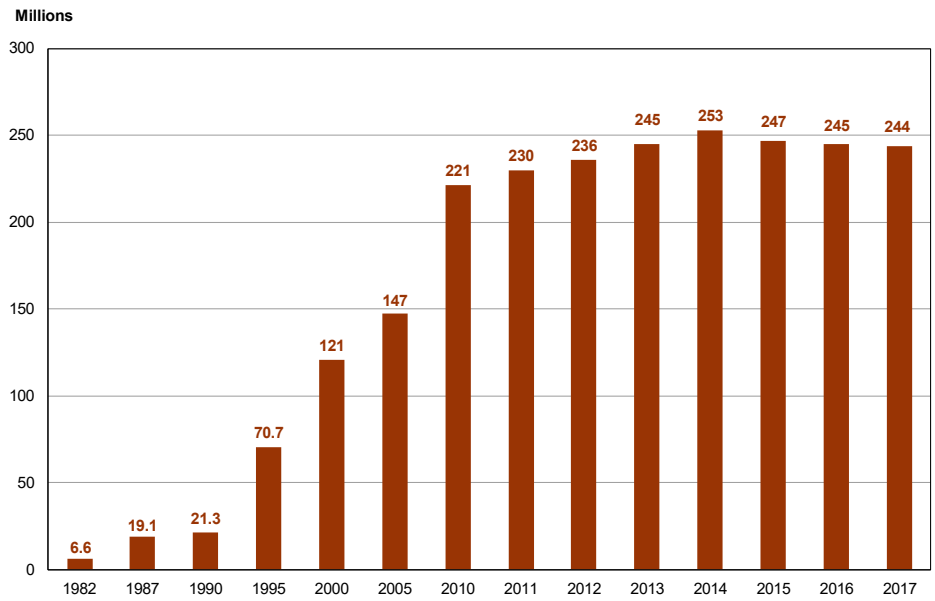
Source: National Bureau of Statistics, *China Statistical Yearbook*, 2018

Figure 1.16
The urbanization rate (the urban share of population[20]) increased from 21.2 per cent in 1982 to over 50 per cent in 2011 for the first time, and rose further to 58.5 per cent in 2017, corresponding to 813 million urban population. Beginning in the early 1980s, this increase was fuelled by the migration of large numbers of surplus agricultural workers and rural populations seeking better economic opportunities in cities. [a]

Figure 1.17
Provinces in China's eastern region have the highest rates of urbanization. Municipalities including Shanghai, Beijing and Tianjin have urbanization rates of between 80 and 90 per cent, while other eastern provinces such as Guangdong, Jiangsu, Zhejiang, Liaoning, Fujian and Shandong have urbanization rates of between 60 and 70 per cent. Some western provinces like Inner Mongolia and Chongqing also have urbanization rates of over 60 per cent.

[a] Since 1987, China has implemented a strategy to manage urbanization by supporting the growth of small cities, developing medium-sized cities and limiting the size of big cities. In order to promote steady urbanization at this stage, help the migrant population to settle in cities and ensure they are gradually covered by urban basic public services, the Government issued the *Opinions on Further Promoting Reform of Household Registration System* in 2014. One of its measures was to adjust the household registration policy for migrants. The country will relax overall control of farmers settling in towns and small cities (cities with fewer than 500,000 people, reduce restrictions on settling in medium-sized cities (500,000–1,000,000 people) in an orderly manner, set requirements for rural residents to obtain *hukou* in large cities (1–5 million people), and control the size of population in megacities (over 5 million people).

Figure 1.18
Migrant population, 1982–2017

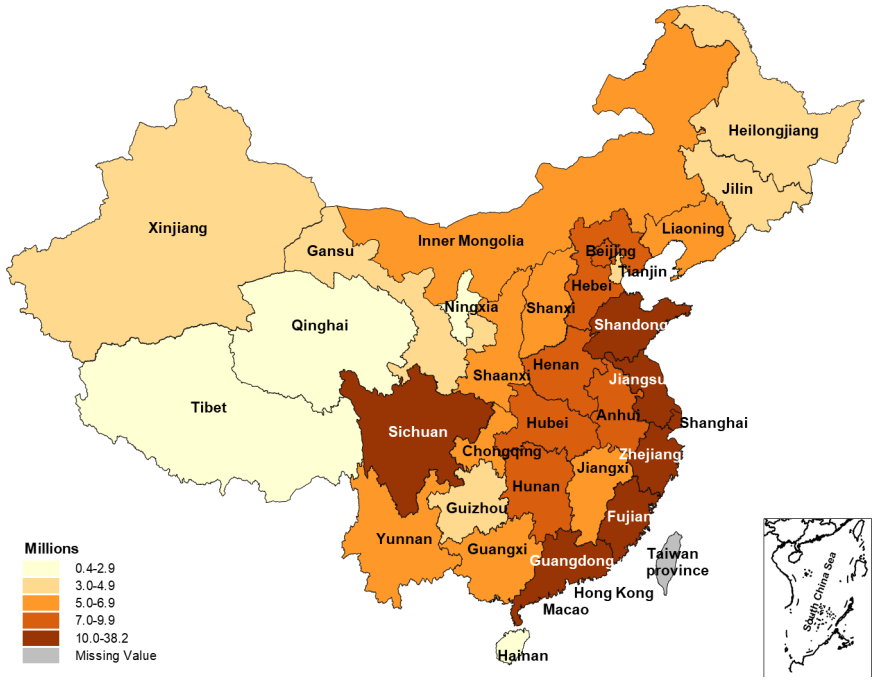


Sources: National Bureau of Statistics, 1982, 1990, 2000, and 2010 *Tabulation on the Population Census of China* (respectively published in 1985, 1993, 2002 and 2012); 1987, 1995, 2005 and 2015 *Tabulation on the 1% National Population Sample Survey* (respectively published in 1988, 1997, 2007 and 2016); 'Statistical Communiqué on the National Economic and Social Development' (other years)

Figure 1.18
China has been experiencing large-scale population migration. In 1982, the migrant population totalled only 6.6 million. From the 1990s, the migrant population increased substantially, reaching a high of 253 million in 2014, and now appears to be slowly decreasing. In 2017, the migrant population was 244 million, accounting for 17.6 per cent of the total population. Around 100 million children were affected by migration. [a]

[a] Specific data on children affected by migration can be found in chapter 10 of this ATLAS.

Figure 1.19
Migrant population, by province, 2015



Source: National Bureau of Statistics, *Tabulation on the 2015 1% National Population Sample Survey,* 2016

Figure 1.19
In 2015, the migrant population was generally concentrated in the economically developed eastern coastal provinces and the densely populated inland provinces. There were seven major provinces/municipality to which a total of 120 million people had migrated, namely Guangdong, Zhejiang, Jiangsu, Sichuan, Shandong, Fujian and Shanghai. The migrant population in these provinces accounted for 48.8 per cent of all migrant populations nationwide.

Population Demographics

Data sources and references

[1] National Bureau of Statistics, *China Statistical Yearbook*, 2018.

[2] According to the 2010 National Population Census, China's ethnic minority groups are, by population size: Zhuang, Hui, Manchu, Uyghur, Miao, Yi, Tujia, Tibetan, Mongolian, Dong, Bouyei, Yao, Bai, Korean, Hani, Li, Kazak, Dai, She, Lisu, Dongxiang, Gelao, Lahu, Va, Shui, Naxi, Qiang, Tu, Mulam, Xibe, Kirgiz, Jingpo, Daur, Salar, Blang, Maonan, Tajik, Pumi, Achang, Nu, Ewenki, Jing, Jino, De'ang, Bonan, Russian, Yugur, Ozbek, Moinba, Oroqen, Drung, Hezhen, Gaoshan, Lhoba and Tatar. (National Bureau of Statistics, *China Statistical Yearbook*, 2013).

[3] National Bureau of Statistics, *Tabulation on the 2015 1% National Population Sample Survey*, 2016.

[4] National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017.

[5] **Total fertility rate** – The mean number of children a woman would have by age 50 if she survived to age 50 and was subject, throughout her life, to the age-specific fertility rates observed in a given year (UNPD).

[6] United Nations, Department of Economic and Social Affairs, Population Division, *World Population Prospects: The 2017 Revision*, 2017.

[7] **Birth rate (also called crude birth rate)** – Annual number of births per 1,000 population (UNPD).

[8] **Rate of natural increase** – Crude birth rate minus the crude death rate. Represents the portion of population growth determined exclusively by births and deaths (UNPD).

[9] National Bureau of Statistics, *China Statistical Yearbook*, 2018.

[10] United Nations, Department of Economic and Social Affairs, Population Division, *World Population Prospects: The 2017 Revision*, 2017.

[11] James H. William, 'The Human Sex Ratio. Part 1: A review of the literature', *Human Biology*, vol. 59, no. 5, 1987, pp. 721–725.

[12] National Bureau of Statistics, *China Statistical Yearbook*, 2018.

[13] National Bureau of Statistics, *China Statistical Yearbook*, 2018.

[14] National Bureau of Statistics, *China Statistical Yearbook*, 2018.

[15] National Bureau of Statistics, *China Statistical Yearbook*, 2018.

[16] Located in the east of the Asian continent on the western shore of the Pacific Ocean, the People's Republic of China has a land area of 9.6 million sq km, the third largest in the world. China's territory stretches about 5,500 km from north to south and around 5,000 km from east to west, and shares land borders with 14 countries. Its neighbours are North Korea to the north-east; Russia and Mongolia to the north; Kazakhstan, Kyrgyzstan, Tajikistan, Afghanistan and Pakistan to the west; and India, Nepal, Bhutan, Myanmar, Laos and Vietnam to the south.

[17] **Life expectancy at birth** – The average number of years a new-born would live if current age-specific mortality rates were to continue (UNPD).

[18] National Health Commission (formerly the Ministry of Health), *China Health Statistical Yearbook*, 2009.

[19] World Bank, World Bank Open Data, https://data.worldbank.org/, accessed November 2018.

GNI per capita – Gross national income (GNI) is the sum of value added by all resident producers, plus any product taxes (less subsidies) not included in the valuation of output, plus net receipts of primary income (compensation of employees and property income) from abroad. GNI per capita is gross national income divided by mid-year population. GNI per capita in US dollars is converted using the World Bank Atlas method (World Bank).

[20] **Urban share of population** – Percentage of the population living in urban areas as defined according to the national definition used in the most recent National Population Census (UNPD).

2

ECONOMIC AND SOCIAL DEVELOPMENT

OVERVIEW

Economic development

Since the reform and opening up four decades ago, China has experienced unprecedented rates of economic growth. In transitioning from a planned economy to a market-oriented economy, China adopted a series of reforms which facilitated rapid economic growth, including the Household Responsibility System in Agriculture, the creation of a conducive environment for the rise of township and village enterprises in rural areas, the restructuring of the state-owned industrial sector, and opening up to global trade and investment. The Gross Domestic Product (GDP) per capita[1] has grown at an average annual rate of 9.5 per cent from 1978 to 2017, and stood at about US$8,830 (RMB 59,660) in 2017, as converted using the average exchange rate of the year.[2]

Since the Twelfth FYP (2011–2015), the Chinese economy has entered a phase of the 'new normal'. While the average annual growth rate, in real terms, has slowed down to 7.9 per cent from the double-digit levels of the Eleventh FYP period, this growth rate still ranks high among the top economies in the world.

Based on its GNI per capita, China became an upper-middle-income country by World Bank standards in 2010.[3]

Measured by its aggregate economic volume, China became the second-largest economy in the world after the United States in 2010, whether measured in terms of currency exchange rate or purchasing power parity (PPP). In 2017, China's economy accounted for 15 per cent of the world economy, 6 percentage points higher than in 2010.[4] However, China is still considered as a developing country. As a country with a large population, China's per capita GDP is lower than the global average, ranking between seventieth and eightieth out of all countries in the world.

Urban-rural dual structure

The long-term urban-rural divide in the household registration system in China has led to a dual structure. As exhibited in many social and economic development indicators, urban-rural disparities have been quite evident. Although a series of measures have been taken by the Government to promote integrated and balanced development of urban and rural areas, further efforts and more time are required to break this long-established dual structure.

In 2014, the Government issued the *Opinions on Further Promoting Reform of the Household Registration System*, aiming to promote the orderly urbanization of China's population with stable employment and life, and steadily extend the coverage of urban basic public services to the migrant population in urban areas. The Government aims to achieve this through integrating household registration systems, including desegregating the agricultural and non-agricultural *hukou*; establishing an urban-rural integrated residence permit system; expanding the coverage of urban basic public services such as compulsory education, employment services, basic pension, basic health services and housing; providing the migrant population with the same services and equal rights as locally registered residents; and improving public financing to ensure equal access to basic public services.

Income disparities

Economic growth has been uneven across China. Consequently, large income disparities remain between rural and urban residents and among residents living in eastern, central and western regions. For example, the ratio between per capita income of urban and rural residents rose from 1.9 in 1985 to 3.3 in 2009. Even though the gap has been narrowing slightly since then, the figure was still high at 2.7 in 2017.

From a global perspective, China is no longer a country where income inequality is low, as it was at the start of the reforms. The Gini index of income inequality rose from 0.29 in 1981 to 0.42 in 2012, according to the World Bank estimates. It was only lower than some African countries, Latin America, as well as Malaysia, another country ranked as an upper-middle-income country.[5] In 2013, China for the first time released its official national Gini index estimates, which were higher than the World Bank estimates and stood at around 0.48 in recent years.

Poverty reduction performance

Along with progress in other human development indicators, China's advances in poverty reduction over the past four decades are impressive,[6] measured by both China's official poverty line and the internationally used World Bank poverty line. Its strong poverty alleviation performance reflects China's rapid economic growth performance in the past, as well as the more recent policies and measures to support rural income, human development, and social protection programmes in both urban and rural areas, and to combat poverty.

In 2011, China launched *the Rural Poverty Reduction Strategy (2011–2020)*, which put forward an overall goal of poverty alleviation and development work in rural areas: "By 2020, to ensure that the poverty-stricken rural population has stable access to adequate food and clothing, compulsory education, and basic medical services and housing; to realize a growth rate of per-capita disposable income in poor rural areas higher than the national average; to improve basic public services close to the national average levels as measured by key indicators; and to reverse the widening trend of disparities." In the same year, the Government increased its official rural poverty line, nearly doubling it to RMB 2,300 (at 2010 prices) to benefit more poverty-prone households in rural areas. This has demonstrated enhanced

financial capacity and strong commitment to the poverty alleviation work from the Government.

In the meantime, geographic coverage was expanded from 592 originally designated national key poverty counties to 832, which also include counties in 'poverty blocks'. These 832 counties have become key 'battlefields' for poverty alleviation efforts under the current Rural Poverty Reduction Strategy, with over 60 per cent of people in poverty live in these poverty counties. The Government has adopted a poverty exit mechanism to realize the goal set out in the *Decision of the Central Committee of Communist Party of China and the State Council on Winning the Tough Battle against Poverty,* which ensures that by 2020, all people living below the current poverty line are lifted out of poverty, all poverty counties are removed from the list, and the issue of regional poverty is resolved. Since 2016, 153 poverty counties have successfully been removed from the list.

China has been pushing forward poverty alleviation in the era of the 'new normal' since 2013. The role of economic growth in poverty reduction has been weakened and the growth rate of national fiscal revenue has declined. This poses challenges to lifting the remaining populations out of poverty, and the costs of doing so have risen significantly.[7] In response, the Government has adopted a strategy of targeted and accurate poverty alleviation, provided more preferential policies and strengthened focused investments in poverty counties to promote pro-poor growth and development. Taking income as an example, the real growth of average annual per capita disposable income of rural residents in the 832 poverty counties during the 2012−2017 period reached 10.4 per cent, which was 2.5 percentage points higher than the national average for rural areas.[8] At the same time, basic public services in poverty counties have improved significantly. China's approach to and practice of targeted and accurate poverty alleviation has set an example for global poverty reduction.

Despite this, some major challenges remain:

- The task of poverty reduction, in some sense, has become more demanding. Poor households below the poverty line are scattered in hundreds and thousands of remote villages and communities, often in a harsh natural environment and with higher incidence of poverty. These households face deprivations in multiple dimensions, including income, health and education, making it much more challenging to lift them out of poverty.
- Vulnerability to poverty remains significant, especially in rural China. The number of people vulnerable to the risk of falling into poverty is estimated to be about twice as high as the number of people who are poor, and more efforts are needed to prevent people from falling back into poverty. In order to achieve the goal of eliminating absolute poverty by 2020, the Government must adopt measures to promote sustainable development for poverty alleviation targets and support vulnerable populations to avoid falling back into poverty.
- Population migration continues to pose challenges in the targeting of social policies and systems aimed at reducing poverty and improving children's wellbeing.

Child poverty

Disparities in human development starts in childhood. Deprivation experienced in childhood may have a persistent effect on one's life and contribute to intergenerational poverty. Under the Sustainable Development Goals (SDGs), in particular Goal 1 on Ending Poverty, children are explicitly identified for the first time as a key group, and the aspiration is that child poverty, both income poverty and multidimensional poverty, must be eliminated or reduced by 2030.

The Government of China has been paying increasing attention to child poverty and is working hard to address the issue through relevant policy measures. In 2014, the Government endorsed the *Child Development Plan in National Poverty Areas (2014–2020)* to ensure services and interventions in health and education for children in 'poverty blocks', covering the period from birth to the compulsory education stage.

From the perspective of monetary poverty, the incidence of rural poverty in China was 3.1 per cent in 2017, whereas the poverty rate among children aged 0–17 in the same year was 3.9 per cent.[9] The incidence of child poverty being higher than that of adults indicates a greater impact of poverty on children.

Besides the monetary poverty measurement which is often used, it is also important to examine poverty from non-monetary dimensions. UNICEF has developed a methodology called Multiple Overlapping Deprivation Analysis (MODA) which provides a comprehensive approach to measure the multidimensional aspects of child poverty and deprivation.[10] MODA uses the *Convention on the Rights of the Child* and other international standards as guiding principles for choosing a core set of dimensions that are essential to children's development and well-being, including nutrition, health, water and sanitation, housing, protection from violence, education and information. In doing this, MODA adopts a life-cycle approach, with age-appropriate dimensions aligned to different age groups. There are suggested indicators under each dimension. Although the MODA methodology is widely recognized, China still lacks systematic measurement of multidimensional child poverty due to data constraints.

Urban-rural minimum subsistence allowance

As a major component of China's social assistance framework within the national social protection system, and an item of China's basic public services, the Minimum Subsistence Allowance, also known as *dibao*, was adopted nationwide in urban areas in 1999 and expanded to rural areas in 2007. Under this programme, households with a per capita income below a defined minimum level, not covered or inadequately covered by any other social protection system, are eligible to obtain subsidies under *dibao* to cover some basic living costs.

With increased government investment in social assistance, the coverage of *dibao* in urban and rural areas has improved, and the eligibility threshold has continued to increase. In 2017, the national average eligibility threshold of *dibao* in urban areas was RMB 541 per person per month, equivalent to 27 per cent of urban residents' consumption expenditure; and the national average eligibility threshold in rural areas was RMB 358 per person per month, which was 39 per cent of rural consumption expenditure. Due to different levels of development and financial capacity of provinces, the eligibility threshold varies across regions, with the *dibao* threshold in eastern provinces being generally higher than those in central and western provinces. As the next step, an important task of the Government is to strengthen the overall coordination of goals, funds, eligibility thresholds and other dimensions of *dibao* to ensure equitable access to basic public services between urban and rural areas, and among different regions.

Other remaining challenges include:

- Although there is no official data on the accuracy and efficacy of *dibao* targets, many studies have shown that the targeting precision for urban and rural *dibao* needs to be further improved[11] to more effectively benefit the poorest and most disadvantaged groups.

- To achieve the poverty alleviation goal (lifting all people living under the current poverty line out of poverty) by 2020, the rural *dibao* will play an important role as a social protection floor. Therefore, it is essential to strengthen the effective coordination between *dibao* and the poverty alleviation and development efforts in rural areas, including the formulation of thresholds and the identification of targets.

- There is a need to identify and understand the multidimensional ways in which children and families experience poverty. In the next phases, the Government should strive to meet these diverse and multidimensional needs, through transitioning from single-dimensional cash support to a multidimensional approach that provides both cash and service guarantees, while expanding the content of assistance from only living assistance to more comprehensive social assistance.

- As several other assistance mechanisms[12] also target *dibao* recipients, there may be a potential 'cliff effect' with the current social assistance schemes. Therefore, coordination between *dibao* and the other assistance mechanisms needs to be improved, so that differentiated and customized assistance can be provided based on the specific difficulties faced by the targeted recipients.

Basic public services

China has long been committed to providing basic public services for children and women. Through introducing relevant policies and measures and ensuring financial investment, it has increased the accessibility of public services, expanded coverage to include more vulnerable children and women, and improved the equity and quality of basic public service provision. Besides the Minimum Subsistence Allowance as mentioned above, the basic public services cover many aspects including education, health and child protection:

- In 2011, China announced the achievement of its strategic goal of providing universal access to nine-year free compulsory education and the elimination of youth illiteracy.[13] This marked the beginning of a new stage focused on balanced development through improving education quality. The *Thirteenth Five-Year Plan on National Education Development* issued in 2017 took equity as a basic principle for the development of education with specific emphasis on the importance of targeted poverty alleviation in education, focusing on central and western China, particularly remote and poverty-stricken areas, to strengthen the level of support to students from poverty-stricken families.

- Since the 2011 autumn semester, China has been providing nutritional subsidies to students at the compulsory education stage in rural areas. By the end of 2016, the central government allocated a total of RMB 159 billion to implement the Nutrition Intervention Programme, benefiting 36 million students in 1,590 counties. As a result, the prevalence of anemia among students in the pilot areas decreased from 17 per cent in 2012 to 7.8 per cent in 2015.[14]

- During 2011 and 2016, China has implemented two rounds of the *Plan of Actions for Pre-primary Education* at the county level, and these efforts have led to the continuous improvement of pre-primary education for children aged 3–6. The gross enrolment ratio of pre-primary education has increased from 56.6 per cent in 2010 to 77.4 per cent in 2016. However, in general, pre-primary education remains the weakest component of the overall education system. Consequently, the Government of China initiated a third round of the *Plan of Action for Pre-primary Education (2017–2020)*, which places emphasis on poverty alleviation in education to block the transmission of intergenerational poverty at the early stages of life.[15] The gross enrolment ratio of pre-primary education reached 79.6 per cent in 2017.

- China is actively promoting 0–3 early childhood development (ECD) through a series of policies and measures, such as the First 1,000 Days Campaign on nutrition and health, and Nutrition Improvement for Children in Poverty Areas, which provides free nutrition supplementation packages to children aged 6–23 months. The Government is also implementing programmes in selected pilot sites, setting up community-based and family-oriented platforms for 0–3 ECD services, to provide integrated ECD services on child development and growth, family nurturing, parenting and child play. Investment in interventions targeted towards the first three years of life during the period of maximal brain development is the most cost-effective way to realize sustainable development.[16] However, there are still clear gaps in the supply of public facilities and service resources for the care of children aged 0–3. More proactive health, education, and protection oriented ECD policies and programmes will be implemented to strengthen the community-based ECD service system.

- Since the implementation of the *National Programme on Basic Public Health Services* in 2009, the standards for per capita subsidies for basic public health services have been adjusted several times, steadily increasing from RMB 15 before 2011 to RMB 50 in 2017, and the number of service categories for all urban and rural residents has increased from 9 to 14.[17] In addition, health management for children, pregnant women, the elderly, and patients with major diseases are further underlined.

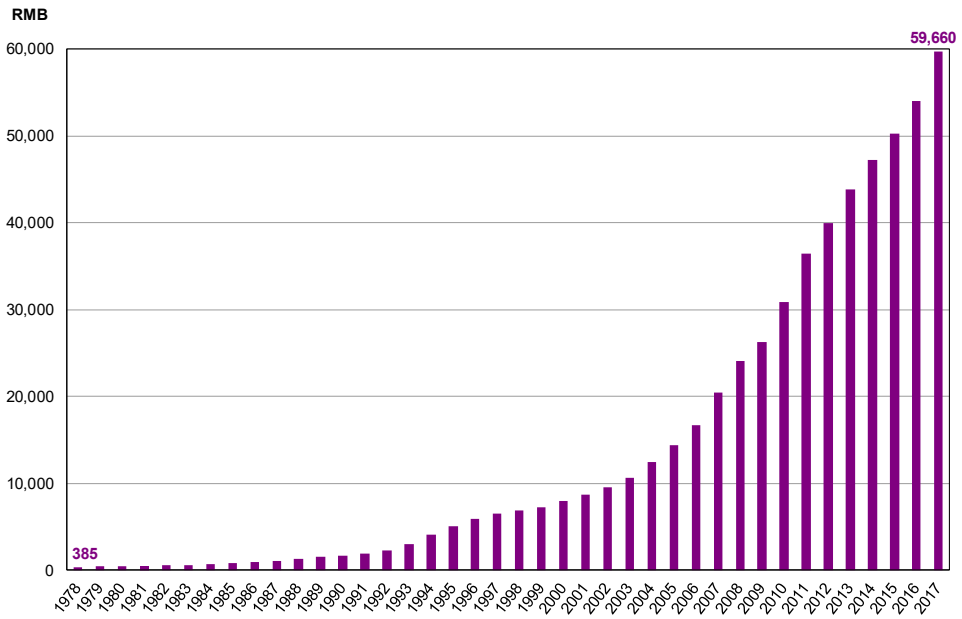
- From January 2016, China started to promote the integration of the basic medical insurance for urban residents and the new rural cooperative medical insurance, aiming to establish a unified basic medical insurance system for urban and rural residents; diversify the health care seeking options of urban and rural residents; promote urban rural equity; and improve the quality of public services. By the end of 2017, more than 80 per cent of prefectures had established a unified health insurance system for urban and rural residents, and the enrolment rate has remained stable at over 95 per cent.[18] At the same time, the per capita subsidy for health insurance of residents at all levels has increased to an average of RMB 450 per person per year.[19]

- According to the *Opinions on Strengthening Protection for Vulnerable Children* issued by the State Council in 2016, differentiated assistance and care should be provided to vulnerable children who fail to thrive, experience developmental difficulties, face safety risks due to their families' economic situation, or have disabilities or inadequate guardianship based on their different vulnerabilities. The *Opinions* requires that their basic living, health care and education are provided, and effective guardianship is guaranteed. It is also stressed that welfare services for children with disabilities must be strengthened.

In January 2017, the State Council issued the *Thirteenth Five-Year Plan for Promoting Equalization of Basic Public Services*. With the Basic Public Services List as the core component, it promoted equitable access to 81 basic public service items under eight categories: public education, employment and entrepreneurship, social insurance, health care, social services, housing security, public culture and sports, and services for people with disabilities. It emphasized the basic rights of special and vulnerable groups to survival and equal participation in social development. More specifically, it required that the basic living assistance mechanism for orphans and the social protection for vulnerable children be strengthened, and the pilot on social protection for minors as well as care and protection for rural children left-behind be promoted in a coordinated way.

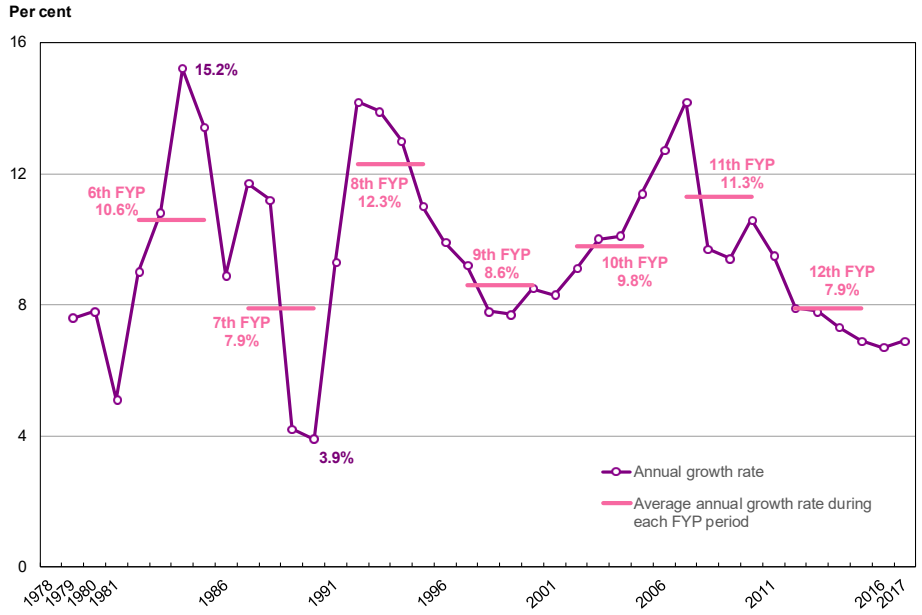
However, gaps between different social groups still persist. In the *Thirteenth Five-Year Plan* (2016–2020), the Government proposes measures to further promote the equalization of basic public services to address the challenges faced by vulnerable children. The Third Plenary Session of the Nineteenth Central Committee of Communist Party of China in 2018 also emphasized the need for modernization of the national governance system and strengthening of governance capabilities, to be achieved through deepening the reform of state institutions and improving public service management.

Figure 2.1
GDP per capita, 1978–2017



Source: National Bureau of Statistics, *China Statistical Yearbook*, 2018

Figure 2.2
Growth rate of GDP, 1978–2017

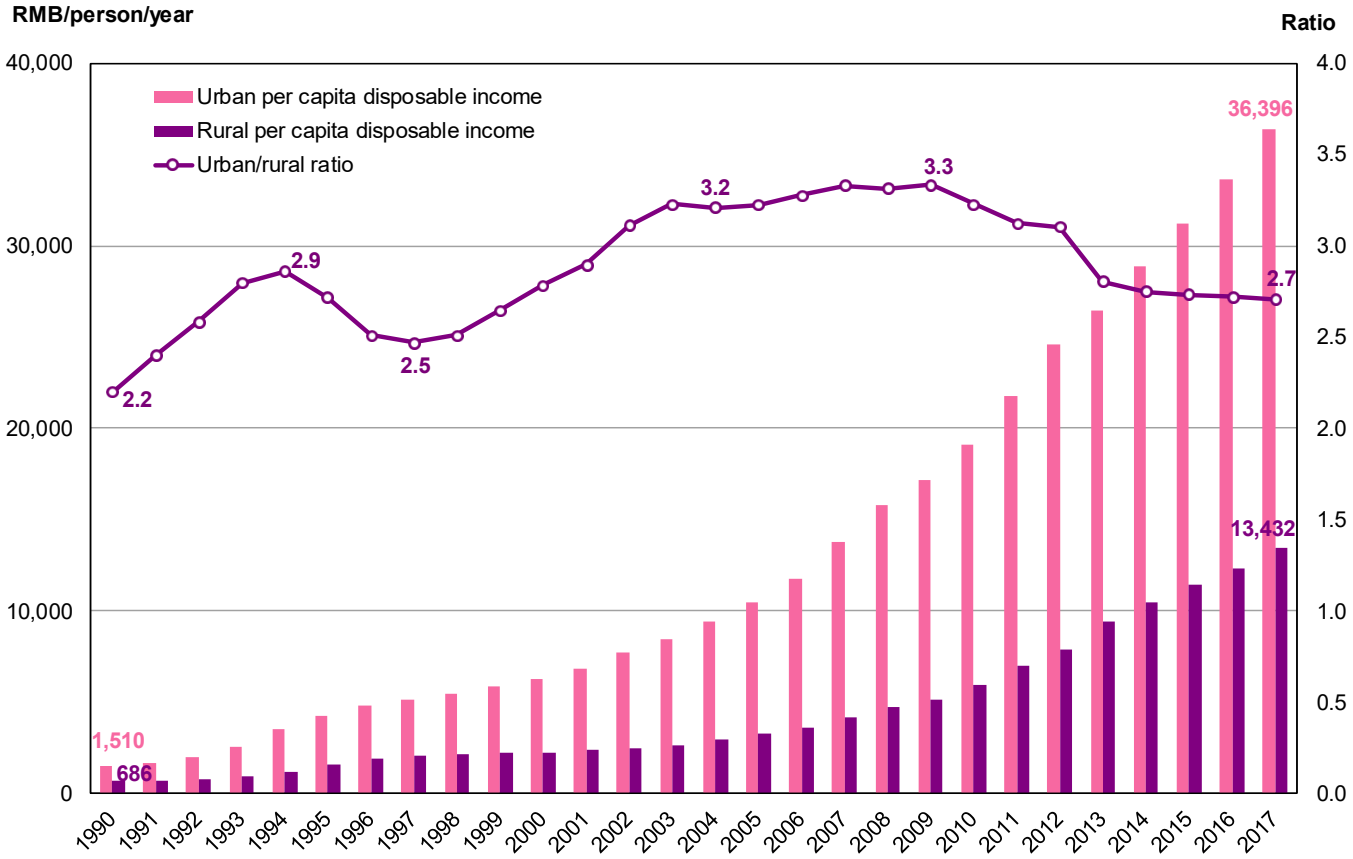


Source: National Bureau of Statistics, *China Statistical Yearbook*, 2018

Figure 2.1
China, one of the poorest countries in the world four decades ago, with a GDP per capita of only RMB 385 (about US$156) in 1978, is now the world's second-largest economy, with an annual growth rate averaging 8.5 per cent over the past 40 years, and GDP per capita of RMB 59,660 in 2017 (about US$8,830 as converted using the average exchange rate of 2017).

Figure 2.2
During the sixth FYP (1981–1985), the eighth FYP (1991–1995) and the eleventh FYP (2006–2010), China's GDP has maintained an average growth rate at double-digit levels. Since the twelfth FYP (2011–2015), the annual average growth rate fell back to 7.9 per cent, signifying China's economy has entered into a phase of 'new normal'. The GDP has grown at an average annual rate of 9.5 per cent from 1978 to 2017.

Figure 2.3
Per capita disposable income, by urban-rural, 1990–2017



Source: National Bureau of Statistics, *China Statistical Abstract*, 2018

Figure 2.3
Per capita disposable income[20] has grown in both urban and rural areas [a], but urban-rural income inequities have intensified, exceeding the ratio of 3.3 to 1 in 2009. Though the urban-rural income ratio decreased in the 2010–2017 period due to more rapid rural income growth, it still stood at 2.7 to 1.

[a] Starting from 2013, the National Bureau of Statistics of China officially implemented the National Integrated Urban-Rural Household Survey, and released estimates of disposable income for all residents and by place of usual residence. Rural data for 2012 and before followed the previous definition of 'rural per capita net income' [21] which was used before the integration.

Figure 2.4
Urban per capita disposable income, by province, 2017

Source: National Bureau of Statistics, *China Statistical Yearbook*, 2018

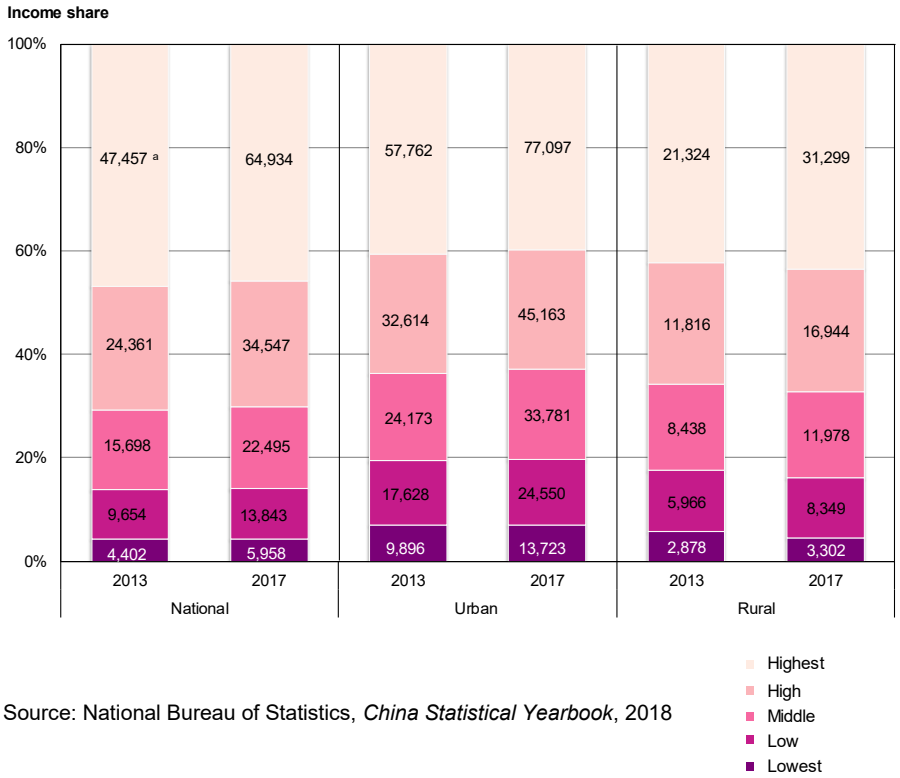
Figure 2.5
Rural per capita disposable income, by province, 2017

Source: National Bureau of Statistics, *China Statistical Yearbook,* 2018

Figure 2.4
Per capita disposable income in urban areas differs across provinces. Central and western regions are significantly lower in comparison with the eastern region.

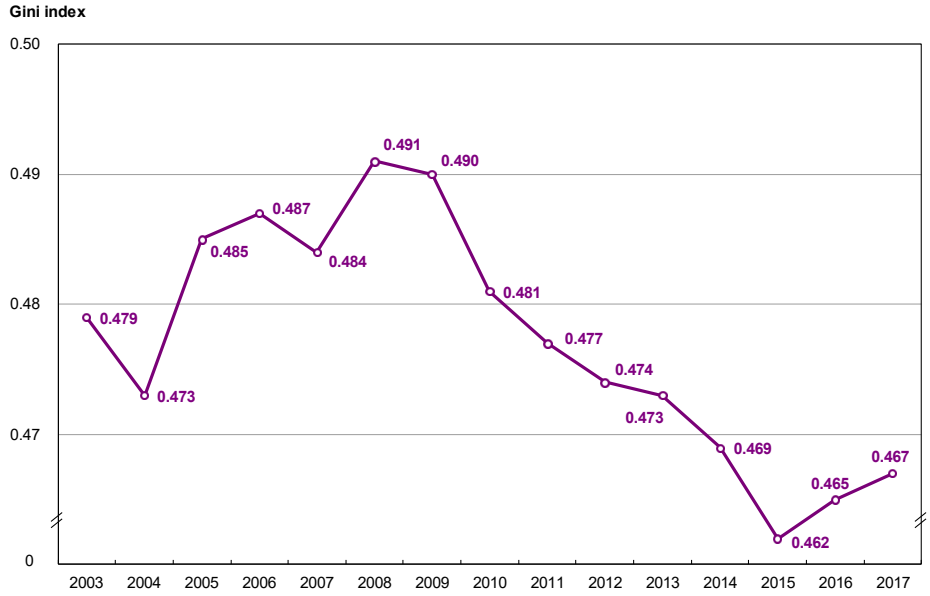
Figure 2.5
Per capita disposable income in rural areas also differs across provinces and is significantly lower in the western region.

Figure 2.6
Per capita disposable income, by urban-rural and quintile, 2013 and 2017



Source: National Bureau of Statistics, *China Statistical Yearbook*, 2018

Figure 2.7
National Gini index, 2003–2017



Source: National Bureau of Statistics, *China Yearbook of Household Survey,* 2018

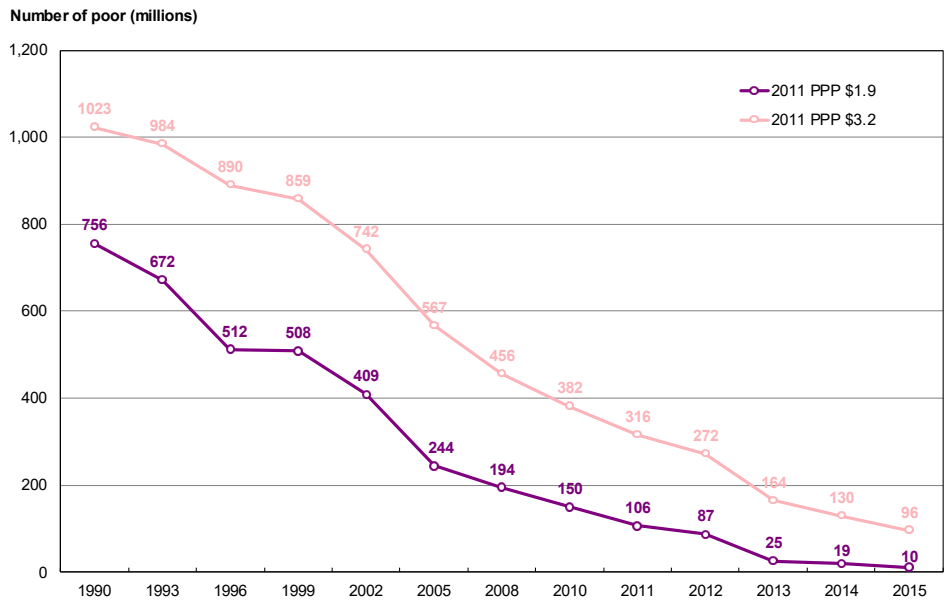
Figure 2.6
The quintiles show that, nationwide, the highest quintile had an income share of 45.8 per cent, and the lowest quintile accounted for only 4.2 per cent in 2017. Different quintiles within urban or rural areas also show a large discrepancy. The pattern of income share by quintile remained relatively unchanged between 2013 and 2017.

[a] Data labels in the chart indicate the average annual income per capita in RMB for each quintile.

Figure 2.7
The national Gini index [a] estimate ranged from 0.462 to 0.491 across China between 2003 and 2017, indicating a high level of income inequality. However, the rising trend has been curbed since 2008 and is showing a fall back. The rural-urban dual economy and unequal access to public services may contribute, among others, to the high level of income inequality.

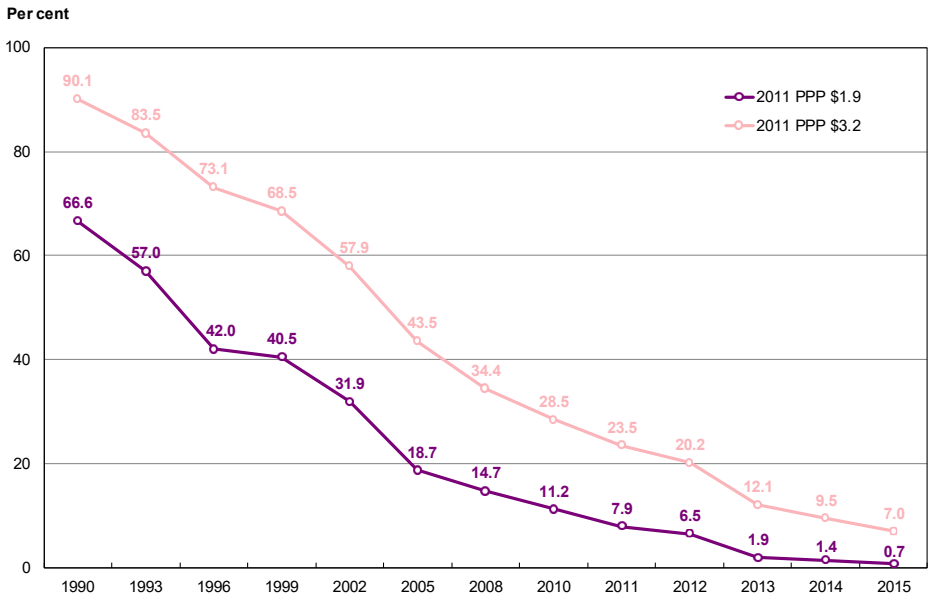
[a] Although there are no internationally defined standard cut-off values, it's commonly recognized that Gini index<0.2 corresponds with perfect income equality, 0.2–0.3 corresponds with relative equality, 0.3–0.4 corresponds with a relatively reasonable income gap, 0.4–0.5 corresponds with high income disparity, above 0.5 corresponds with severe income disparity.

Figure 2.8
Number of poor, 1990–2015



Source: World Bank, World Bank Open Data (data.worldbank.org), 2018

Figure 2.9
Poverty rate, 1990–2015

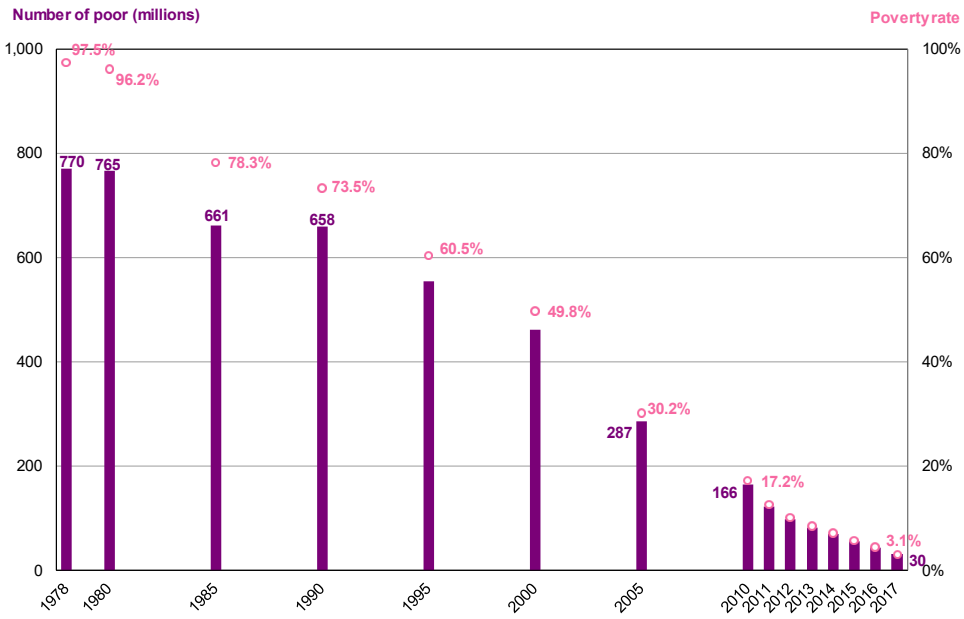


Source: World Bank, World Bank Open Data (data.worldbank.org), 2018

Figure 2.8 and 2.9
The World Bank assesses and publishes the international consumption poverty estimates, based on 2011 PPP of US$1.9 per person per day, which is the updated international extreme poverty line. This is equivalent to the previously used 2005 PPP of US$1.25 per person per day. Data indicates that during the 1990–2015 period, 746 million people in China were lifted out of poverty as defined by the updated extreme poverty line, accounting for 65.3 per cent of the total number of people lifted out of poverty in the world during the same period. This is a huge contribution for global poverty alleviation and realization of the Millennium Development Goals (MDGs). The progress of poverty reduction in China has been similarly dramatic when measured by the US$3.2 per person per day standard.

Figure 2.10
Number of poor and poverty rate in rural areas, 1978–2017

SDG 1.2.1



Source: National Bureau of Statistics, *China Statistical Yearbook*, 2018

Figure 2.11
Rural poverty rate, by province, 2017

SDG 1.2.1

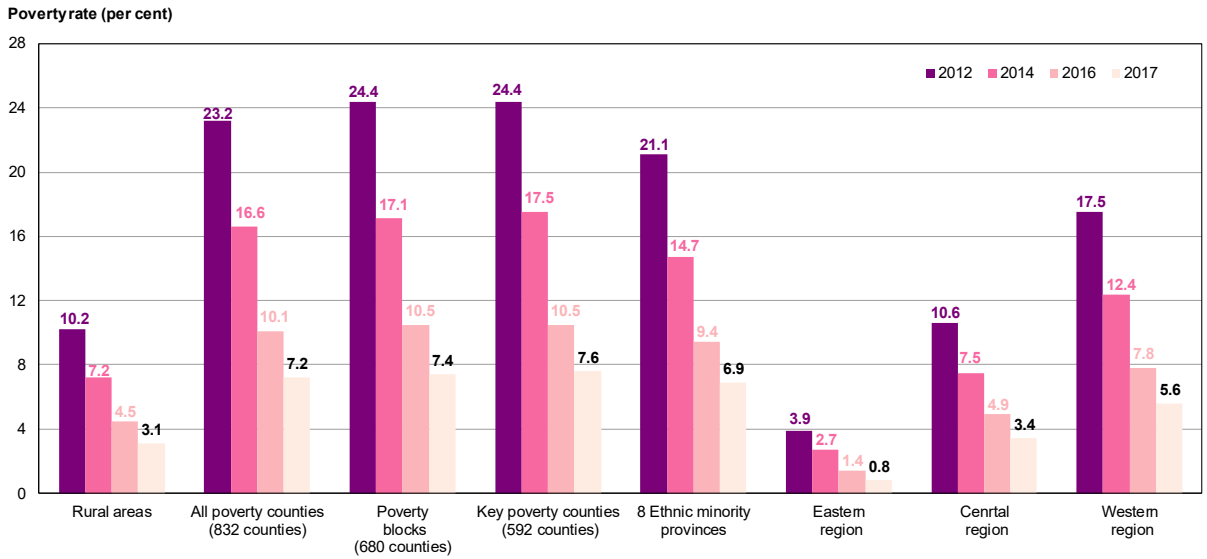
Source: National Bureau of Statistics, *Poverty Monitoring Report of Rural China,* 2018

Figure 2.10
China's official poverty measurement focuses mainly on rural areas. The current rural poverty line is RMB 2,300 per person per year at 2010 prices, equivalent to US$2.3 per person per day, and higher than the updated international extreme poverty line (US$1.9 per person per day) of the World Bank. Based on estimates according to the current official rural poverty line, China has lifted 740 million rural population out of poverty during the 1978–2017 period, playing an important role in poverty alleviation globally.

Figure 2.11
In 2017, 53.6 per cent of the rural poor population is concentrated in the western region, with a total number of 16.34 million. There are seven provinces each with a poverty population of over 2 million. Guizhou has the largest poverty population, with 2.95 million. Xinjiang has the highest poverty rate, which is 9.9 per cent. Gansu, Guizhou, Tibet and Yunnan also have a poverty rate above 7 per cent. The average poverty rate in western rural areas in 2017 was 5.6 per cent, much higher than in the eastern and central regions.

Figure 2.12
Regional poverty rate in rural areas, 2012–2017

SDG 1.2.1



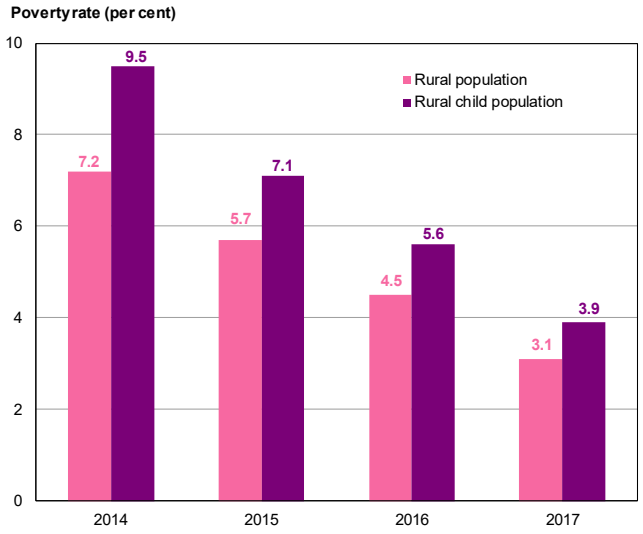
Sources: National Bureau of Statistics, *Poverty Monitoring Report of Rural China,* 2017–2018

Figure 2.12
Poverty in China's rural areas shows obvious regional characteristics. A large proportion of the poor population is concentrated in poverty counties, [a] ethnic minority areas, the western region, and the 'San Qu San Zhou' (three areas and three prefectures),[22] where there is higher incidence and greater extent of poverty. More than 60 per cent of the rural poor population reside in poverty counties, with more than half of them in the western region, and one third of them in eight ethnic minority provinces (namely Inner Mongolia, Guangxi, Guizhou, Yunnan, Tibet, Qinghai, Ningxia, and Xinjiang). To ensure that by 2020 all people living below the current poverty line are lifted out of poverty, all poverty counties are removed from the poverty list, and the issue of regional poverty is resolved, the Government has already adopted targeted and accurate poverty alleviation measures, among other initiatives.

[a] Altogether, there are 832 poverty counties in China, including the counties located in 'poverty blocks' as well as those out of the blocks yet identified as 'key poverty counties' by the Government of China for focused poverty alleviation efforts. Among them, there are 680 counties in 14 'poverty blocks" (11 blocks, along with the Tibet Autonomous Region, ethnically Tibetan regions in four provinces, and South Xinjiang where special poverty alleviation measures have already been implemented) as defined in the *Rural Poverty Reduction Strategy (2011–2020)*, and 592 'key poverty counties'. There is an overlap of 440 counties between the list of 'key poverty counties' and the 'poverty blocks'.

Figure 2.13
Poverty rate among rural children, 2014–2017 [a]

SDG 1.2.1



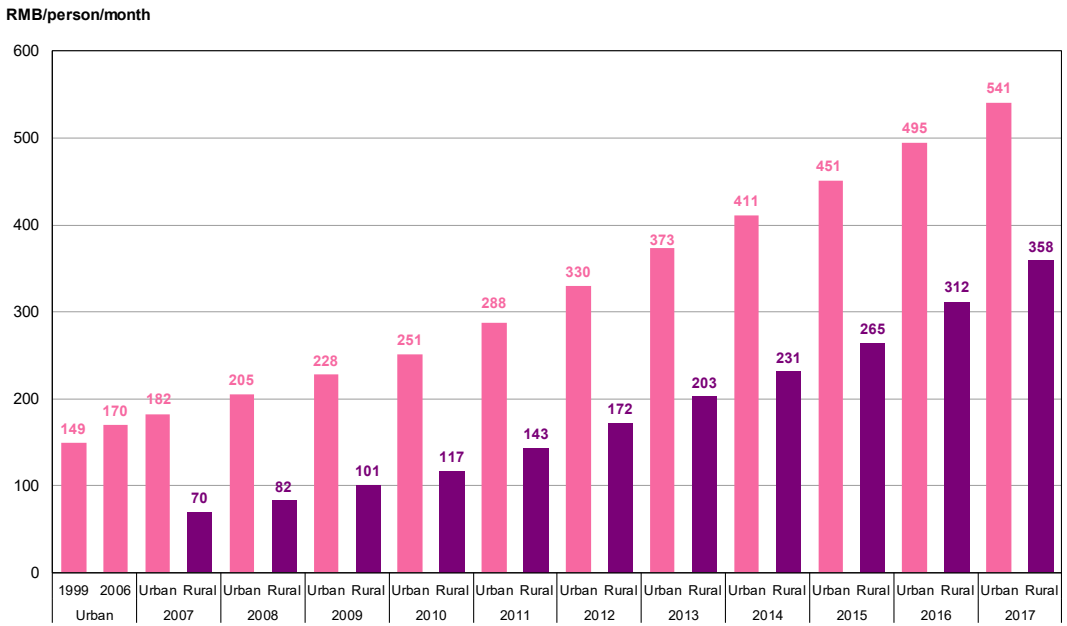
Sources: National Bureau of Statistics, *Poverty Monitoring Report of Rural China,* 2015–2018

Figure 2.13
Using RMB 2,300 at 2010 prices as the poverty line, the poverty rate in rural areas in 2017 was 3.1 per cent, while among rural children it was 3.9 per cent, [b] which indicates poverty disproportionately affects children. A similar pattern is suggested in an estimate by the World Bank and UNICEF in 2016 which found that children are twice as likely to be living in households in extreme poverty – with 19.5 per cent of children in developing countries estimated to live on less than US$1.90 a day, compared to 9.2 per cent of adults.[23]

[a] Child poverty rate in 2014 is estimated for children aged 0–15, while in 2015, 2016 and 2017 for those aged 0–17.

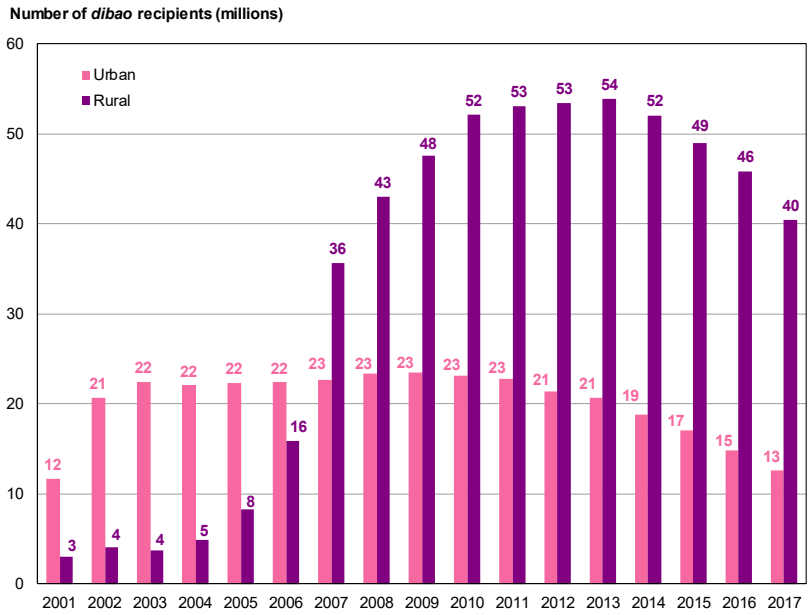
[b] According to UNICEF China estimates based on the child poverty rate, there were 15 million, 11 million and 8 million rural children in poverty in 2015, 2016 and 2017, respectively.

Figure 2.14
Dibao standard in urban and rural areas, 1999–2017



Source: Ministry of Civil Affairs, *China Civil Affairs' Statistical Yearbook,* 2018

Figure 2.15
Dibao recipients in absolute numbers, by urban-rural, 2001–2017



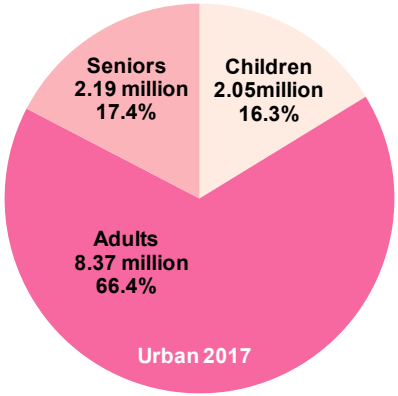
Source: Ministry of Civil Affairs, *China Civil Affairs' Statistical Yearbook,* 2018

Figure 2.14
Dibao was adopted in all urban areas in 1999 and expanded to rural areas in 2007. It has benefited from increasing government commitment and financing, which has not only allowed an increase in *dibao* standards, but has also raised the level of the average benefit received by poor households.

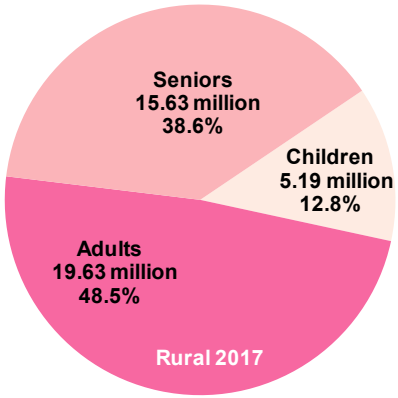
Figure 2.15
The Government seeks to address the basic needs of poor households in both urban and rural areas through, for example, cash transfers in the form of the *dibao* programme. Social assistance has become one of the Government's priorities. By 2017, *dibao* covered 12.61 million people in urban areas and 40.45 million people in rural areas. This totals 53.06 million *dibao* recipients in China in 2017, accounting for 3.8 per cent of the total population. In recent years, as the size of the poor population continues to decrease, the number of *dibao* recipients is also declining.

Figure 2.16

Age distribution of urban and rural *dibao* recipients, 2007–2017



Year	Number of urban *dibao recipients (millions)*				Percentage		
	Urban total	Children (0–17 years old)	Adults (18–59 years old)	Seniors (>=60 years old)	Children (0–17 years old)	Adults (18–59 years old)	Seniors (>=60 years old)
2007	**22.72**	5.45	14.29	2.98	24.0%	62.9%	13.1%
2008	**23.35**	5.88	14.30	3.17	25.2%	61.3%	13.6%
2009	**23.46**	5.80	14.32	3.34	24.7%	61.1%	14.2%
2010	**23.11**	5.59	14.13	3.39	24.2%	61.2%	14.7%
2011	**22.77**	5.40	13.90	3.47	23.7%	61.1%	15.2%
2012	**21.44**	4.73	13.31	3.39	22.1%	62.1%	15.8%
2013	**20.64**	4.45	12.89	3.30	21.5%	62.5%	16.0%
2014	**18.77**	3.87	11.75	3.16	20.6%	62.6%	16.8%
2015	**17.01**	3.41	10.67	2.94	20.0%	62.7%	17.3%
2016	**14.80**	2.71	9.51	2.58	18.3%	64.2%	17.4%
2017	**12.61**	2.05	8.37	2.19	16.3%	66.4%	17.4%



Year	Number of rural *dibao recipients (millions)*				Percentage		
	Rural total	Children (0–17 years old)	Adults (18–59 years old)	Seniors (>=60 years old)	Children (0–17 years old)	Adults (18–59 years old)	Seniors (>=60 years old)
2007	**35.66**	4.03	21.45	10.18	11.3%	60.2%	28.5%
2008	**43.06**	5.34	24.46	13.25	12.4%	56.8%	30.8%
2009	**47.60**	6.09	24.90	16.61	12.8%	52.3%	34.9%
2010	**52.14**	6.87	26.69	18.57	13.2%	51.2%	35.6%
2011	**53.06**	6.82	26.90	19.34	12.9%	50.7%	36.5%
2012	**53.45**	6.41	26.87	20.17	12.0%	50.3%	37.7%
2013	**53.88**	6.15	26.95	20.78	11.4%	50.0%	38.6%
2014	**52.07**	5.78	25.64	20.65	11.1%	49.2%	39.7%
2015	**49.04**	5.25	23.73	20.06	10.7%	48.4%	40.9%
2016	**45.87**	5.12	22.15	18.59	11.2%	48.3%	40.5%
2017	**40.45**	5.19	19.63	15.63	12.8%	48.5%	38.6%

Source: Ministry of Civil Affairs, *China Civil Affairs' Statistical Yearbook,* 2018

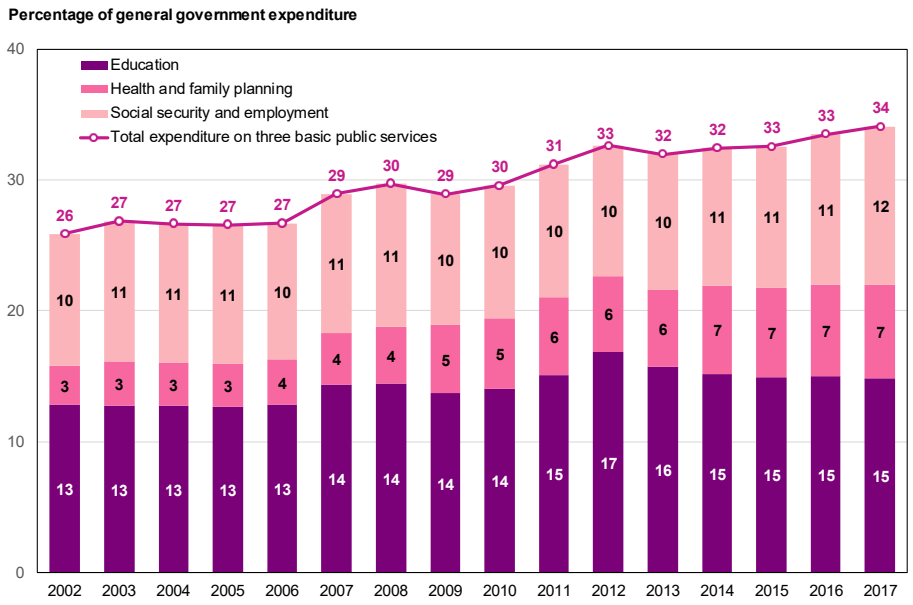
Figure 2.16

In 2017, *dibao* covered 7.24 million or 2.7 per cent of children, among which 2.05 million were in urban areas and 5.19 million were in rural areas. Children only accounted for 11 to 13 per cent of rural *dibao* recipients, much lower than the proportion of children among urban *dibao* recipients (16 to 25 per cent). Children in poor households have already benefited from the *dibao* cash transfer, and their nutrition, health and education outcomes have been improved.[24]

Figure 2.17

Government expenditure on basic public services as a percentage of general government expenditure, 2002–2017

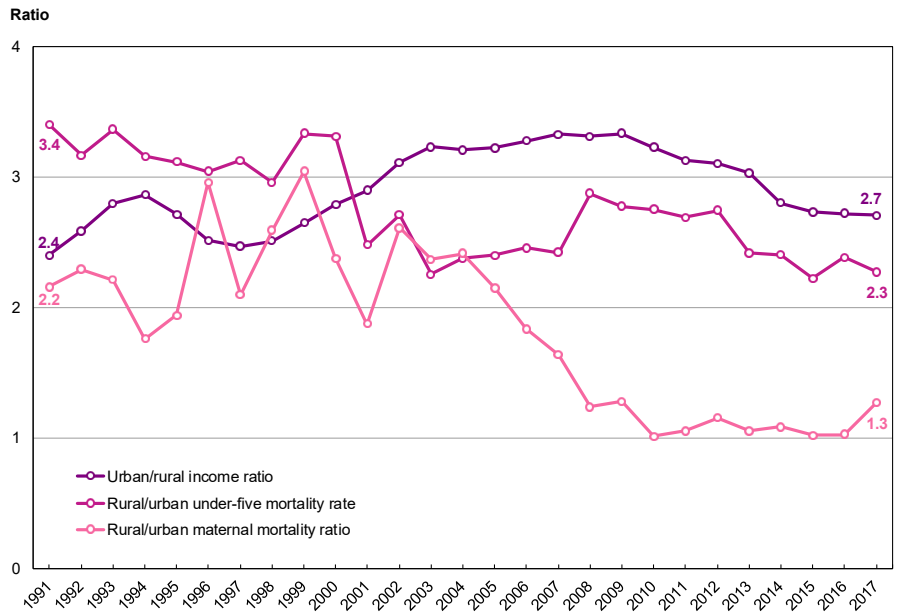
SDG 1.a.2



Sources: Ministry of Finance, *Finance Yearbook of China,* 2008 (2002–2007 data);
National Bureau of Statistics, *China Statistical Yearbook,* 2009–2018 (2008–2017 data)

Figure 2.18

Urban-rural income and health outcome disparities, 1991–2017



Source: National Bureau of Statistics, *China Statistical Yearbook,* 2018

Figure 2.17

During the past several decades, the Government's overall fiscal capacity has grown, and government spending on social sectors, including on health, education, social security and employment, as a share of total government spending has increased, accounting for about one third in recent years. During the same period, the government expenditure on these three basic public services as a percentage of GDP has increased steadily from 4.7 per cent in 2002 to 8.4 per cent in 2017.

Figure 2.18

Although the gap between the income of urban and rural residents has been narrowing since 2009, the ratio between per capita income of urban and rural residents was still high at 2.7 to 1 in 2017. However, urban-rural disparities in selected health indicators, such as maternal mortality ratio, have been narrowing since 2000 and has started to be disappearing in recent years.

Figure 2.19

The number of fatalities and the direct economic loss caused by natural disasters, 1976–2017

Year	Fatalities
1976 [a]	242,000
1979	6,962
1980	6,821
1981	7,422
1982	7,935
1983	10,952
1984	6,927
1988	7,306
1990	7,338
1991	7,315
1993	6,125
1994	8,549
1996	7,273
2008	88,928
2010	7,844

Year	Direct economic loss (billion RMB)
1994	187.6
1995	186.3
1996	288.2
1997	197.5
1998	300.7
1999	196.2
2000	204.5
2001	194.2
2002	171.7
2003	188.4
2004	160.2
2005	204.2
2006	252.8
2007	236.3
2008	1,175.2
2009	252.4
2010	534.0
2011	309.6
2012	418.6
2013	580.8
2014	337.4
2015	270.4
2016	503.3
2017	301.9

Sources: Ministry of Civil Affairs, *China National Civil Affairs Statistical Yearbook*, 2017 (1977–2016 data); China Earthquake Data Center (1976 data); National Bureau of Statistics, *China Statistical Yearbook,* 2018 (2017 data)

Figure 2.19
China is a country with recurrent and major natural disasters, including floods, snowstorms, droughts and earthquakes. Globally, China ranks among the top 10 countries suffering the greatest toll from disasters, both in terms of the number of fatalities and in the economic costs from the damages.[25, b]

[a] Data reflect fatalities from the 1976 Tangshan earthquake only.
[b] Data reflect years in which the number of fatalities exceeded 6,000 and the direct economic loss exceeded RMB 150 billion (US$23 billion equivalent).

Economic and Social Development

Data sources and references

[1] **GDP per capita** – GDP is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output. GDP per capita is gross domestic product divided by mid-year population. Growth is calculated from constant price GDP data in local currency (World Bank).

[2] National Bureau of Statistics, '2017 Statistical Communiqué on the National Economic and Social Development', 28 February 2018, http://www.stats.gov.cn/tjsj/zxfb/201802/t20180228_1585631.html, accessed May 2018.

[3] According to the thresholds for World Bank classification in 2017, low-income economies are defined as those with a GNI per capita of US$995 or less; lower-middle-income economies are those with a GNI per capita between US$996 and US$3,895; upper-middle-income economies are those with a GNI per capita between US$3,896 and US$12,055; high-income economies are those with a GNI per capita of US$12,056 or more (https://datahelpdesk.worldbank.org/knowledgebase/articles/906519, accessed November 2018).

[4] World Bank, World Bank Open Data, https://data.worldbank.org/, accessed November 2018.

[5] World Bank, World Bank Open Data, https://data.worldbank.org/, accessed November 2018.

[6] According to 'the Report on China's Implementation of the Millennium Development Goals (2000–2015)', China has realized the following seven targets: halved the proportion of people in poverty, halved the proportion of people who suffer from hunger, achieved universal primary education, promoted gender equality and empowered women, reduced the under-five mortality rate by two thirds, reduced maternal mortality ratio by three quarters, and halved the proportion of the population without sustainable access to safe drinking water and basic sanitation, http://www.cn.undp.org/content/china/zh/home/library/mdg/mdgs-report-2015-/, accessed May 2018.

[7] LI Peilin, et al., *Blue Paper on Poverty Alleviation: A report on poverty alleviation and development in China (2017)*, 2017, p.15.

[8] National Bureau of Statistics, 'China's Impressive Progress in Poverty Reduction in 40 Years after the Reform and Opening-up', 3 September 2018, http://www.stats.gov.cn/ztjc/ztfx/ggkf40n/201809/t20180903_1620407.html, accessed November 2018.

[9] National Bureau of Statistics, *Poverty Monitoring Report of Rural China*, 2018.

[10] Chris De Neubourg, et al., 'Cross-country MODA Study: Multiple Overlapping Deprivation Analysis (MODA) – Technical note', Working Paper, May 2012 (https://www.unicef-irc.org/publications/696-cross-country-moda-study-multiple-overlapping-deprivation-analysis-moda-technical.html, accessed May 2018)

[11] ZHU Mengbing, et al., 'The Key to Accurate and Targeted Poverty Alleviation – Accurate Identification of Poverty-Stricken Population – Analysis of Targeting Effectiveness of Rural *Dibao* Policy', *China Social Sciences*, no. 9, 2017, pp. 90–112.

[12] Besides *dibao*, China has established other social assistance mechanisms to provide a protection floor to people's livelihoods, which includes assistance for especially vulnerable people, assistance for people affected by disasters, and medical, education, housing, employment, and temporary assistance. These eight assistance schemes, combined with the participation of social forces, forms an overall framework of '8+1' social assistance, http://www.gov.cn/flfg/2014-02/27/content_2624221.htm, accessed May 2018.

[13] Ministry of Education, 'Memorandum on the 'Two Basics' (Basic Popularization of 9-year Compulsory Education and Basic Elimination of Illiteracy among Young People)', 13 November 2012, http://www.moe.gov.cn/jyb_xwfb/moe_2082/s6236/s6688/201211/t20121113_144412.html, accessed May 2018.

[14] Ministry of Education, 'Progress Report on the Implementation Status of Nutrition Intervention Programme for Students at Compulsory Education Stage in Rural Areas', 2 March 2017, http://www.moe.gov.cn/jyb_xwfb/gzdt_gzdt/s5987/201703/t20170302_297934.html, accessed May 2018.

[15] Ministry of Education, 'Opinions on the Implementation of the 3rd Round Plan of Actions on Pre-primary Education by Four Ministries including the Ministry of Education', 14 April 2017, http://www.moe.edu.cn/srcsite/A06/s3327/201705/t20170502_303514.html, accessed May 2018.

[16] Douglas J. Noble, et al., 'What Could Cognitive Capital Mean for China's Children?' *PsyCh Journal*, vol. 6, 2017, pp. 153–160.

[17] National Health Commission (formerly the National Health and Family Planning Commission), 'Notice on Implementing the National Basic Public Health Service Programme in 2017', 5 September 2017, http://www.nhfpc.gov.cn/jws/s3577/201709/fb16b2e306bd469ab84e0c42173bc52d.shtml, accessed May 2018.

[18] Ministry of Human Resources and Social Security, 'A Four-Level System for Medical Insurance Site-off Settlement', 28 February 2018, http://www.mohrss.gov.cn/SYrlzyhshbzb/dongtaixinwen/buneiyaowen/201802/t20180228_288941.html, accessed May 2018.

[19] Ministry of Human Resources and Social Security, 'Notice on Implementing Well the Work on Basic Medical Insurance for Urban Residents in 2017', 24 April 2017, http://www.mohrss.gov.cn/SYrlzyhshbzb/shehuibaozhang/zcwj/201704/t20170428_270179.html, accessed May 2018.

[20] **Per capita disposable income** – Disposable income refers to the income households have available for final consumption and savings, both in cash and in kind. It includes four components by income source, namely wages and salaries, net business income, net transfer income and net property income. Per capita disposable income equates to household disposable income divided by the number of household members (National Bureau of Statistics).

[21] **Rural per capita net income** – Net income of rural households refers to the income of rural households received in the current year and after deduction of expenses. Net income is used mainly for its input in production and consumption expenditure, and also for non-compulsory expenditure and savings. Net income equates to total income, minus expenses incurred in the operation of household business, taxes and fees, depreciation of fixed assets, and transfer to relatives and friends living outside rural areas. Per capita net income equates to net income of rural households divided by the number of permanent household members (National Bureau of Statistics).

[22] 'San Qu' (three areas) refers to Tibet Autonomous Region, South Xinjiang, and ethnically Tibetan regions in four provinces of Sichuan, Yunnan, Gansu and Qinghai. 'San Zhou' (three prefectures) refers to Linxia prefecture in Gansu, Liangshan prefecture in Sichuan and Nujiang prefecture in Yunnan. 'San Qu San Zhou' are identified by the Government as areas with higher incidence and greater extent of poverty.

[23] UNICEF and the World Bank, 'Ending Extreme Poverty: A focus on children', October 2016, https://www.unicef.org/publications/index_92826.html, accessed May 2018.

[24] GAO Qin, et al., 'How Does Public Assistance Affect Family Expenditures? The Case of Urban China', *World Development*, vol. 38, no. 7, pp. 989–1000, 2010.

[25] **Fatalities** (Disaster casualties) – Number of deaths caused directly by natural disasters, including deaths of non-permanent residents (Ministry of Civil Affairs).

Direct Economic Loss – Economic loss caused by damage or a decrease in the value of certain objects subject to natural disaster(s). It is calculated by multiplying the pre-disaster value of objects by the damage factor of the disaster (Ministry of Civil Affairs).

3

MATERNAL AND CHILD HEALTH

OVERVIEW

Progress and achievements

China has made remarkable progress in maternal and child health (MCH) over the last few decades, and achieved the MDGs of reducing under-five mortality rate (U5MR) by two thirds and maternal mortality ratio (MMR) by three quarters by 2015 as compared with the numbers in 1990.[1]

Succeeding the MDGs, the United Nations 2030 Sustainable Development Agenda, launched on 1 January 2016, charted a new direction for national development and international cooperation. China achieved the following targets in health on the sustainable development agenda ahead of the 2030 timeline: by 2030, reduce the MMR to less than 70 per 100,000 live births (achieved in 1993), reduce the U5MR to at least 25 per thousand live births (achieved in 2004), and reduce the neonatal mortality rate (NMR) to at least 12 per thousand live births (achieved in 2006).[2]

In 2017, MMR, U5MR, infant mortality rate (IMR) and NMR in China further dropped to 19.6 per 100,000 live births, 9.1 per thousand live births, 6.8 per thousand live births and 4.5 per thousand live births, respectively.[3] To achieve greater progress, the Government has recently proposed more ambitious national goals, namely, MMR decreased to 12 per 100,000 live births, U5MR reduced to 6 per thousand live births and IMR reduced to 5 per thousand live births by 2030.[4]

Coverage of MCH services in China has increased gradually. In 2017, there were more than 3,000 MCH institutions across the country and about 350,000 professionals engaged directly in MCH services. An MCH service system has been well developed in China, with MCH institutions at the core, community-level health centers as the foundation and large and medium-sized health institutions and relevant research and teaching institutions as key technical supporters.[5] Based on these achievements, there are still opportunities for further reduction of China's child and maternal mortality, by improving staff quality, increasing financial support for poor families in rural areas, and improving the health status of women and children in the western region, rural areas and among migrant populations. Several provinces and cities have developed local policies to include migrant women in the systematic maternal care management mechanism. Central and local governments have also initiated services for migrant children and explored mechanisms to integrate them into the local child health care system.

Maternal mortality

Since 2000, the great achievements in reducing maternal and neonatal mortality in China are largely attributed to the Government's policy and financial support for hospital delivery for rural pregnant women. The cornerstone 'Jiangxiao' Project or Reducing Maternal Mortality and Eliminating Neonatal Tetanus has been implemented since 2000, and paved the way for the national roll-out of subsidized hospital delivery for rural pregnant women in 2009. This special subsidy has reduced out-of-pocket expenditure for families, so that an increased number of rural pregnant women can seek safe delivery services at health institutions. The policy has also played a pivotal role in narrowing the urban-rural gap in maternal mortality.

The reduction in maternal mortality has also resulted from better public awareness of antenatal care and improved transportation and infrastructure conditions. On average, pregnant women between 2009 and 2013 took up 6.3 antenatal visits (7.4 visits for women in urban areas and 5.4 visits in rural areas), vis-à-vis five antenatal visits minimally required by China's systematic maternal care management.[6] Timely hospital delivery for the majority of pregnant women has helped to reduce the number and proportion of preventable deaths of mothers and newborns that occur at home.

The leading causes of maternal death are obstetric haemorrhage, amniotic fluid embolism, pregnancy-related hypertension, and heart disease. Along with lifestyle and behaviour changes, such as postponed age of first pregnancy, obesity, an increased number of people with non-communicable diseases, as well as climate change and environmental degradation, pregnant women are now facing increasingly more diverse health issues. In addition, following the recent universal second-child policy, there is a small upward trend of advanced maternal age and scarred-uterus pregnancies, triggering an increase in high-risk pregnancies. This proportion against overall pregnancies hit 25 per cent in 2016 from approximately 20 per cent between 2012 and 2014.[7] Therefore, complex pregnancies warrant special attention, and the management of high-risk pregnancies should be improved.

Under-five mortality

Among all under-five child deaths in China, roughly three fourths occur during infancy, namely 12 months after birth, and half of them take place during the neonatal period (28 days after birth). In 2017, 71 per cent of neonatal deaths were

caused by preterm birth, intrapartum-related complications and congenital abnormalities.[8] As the main cause of under-five child death for both urban and rural areas, preterm birth has seen an increased incidence in recent years, which is closely linked to a number of determinants such as social risk factors, harmful environmental exposure, use of assistive reproductive techniques, increase in multiple births, and advances in perinatal technologies. In response, the coverage of premature birth interventions and techniques should be enhanced, so that preterm births can be reduced, preterm birth fatality can be decreased through better treatment and care, and the life quality of preterm infants can be improved.[9] The national pre-pregnancy physical examinations provided for free in all counties has effectively reduced the risk of birth defects. In addition, China has also been providing free folic acid supplements since 2009 for rural women before pregnancy and during the first trimester, as a vital measure to prevent birth defects. Thus, the incidence of neural tube defects has since been drastically reduced.[10]

It is essential for China to further scale up and universalize these high-impact child survival interventions. In particular, early essential newborn care (EENC) should be scaled up and the Neonatal Safety Project should be introduced in poor areas, with the aim of improving service accessibility and equity, and enhancing the survival and development of newborns. Specifically, the EENC package consists of interventions such as early contact, early breastfeeding initiation, kangaroo mother care, six-month exclusive breastfeeding, special care for small preterm/low birthweight infants and sick newborns.[11]

In 2017, 15.2 per cent of under-five deaths in rural areas were still untreated, with children died either at home or on their way to hospital. There was no significant improvement between 2008 and 2017,[12] indicating the ongoing need to enhance the accessibility of child health services.

Equalization of basic public health service package

In response to the major health issues confronted by women and children, the Government has provided a series of policy and system support to further promote the equalization of relevant basic public services:

- In recent years, China has continued to deepen medical and health system reforms. During the Thirteenth FYP period, the Government aims to achieve progress in the tiered health care system, modernize hospital management, universalize health coverage, secure drug supplies and ensure integrated supervision.[13] Overall, the goal of the health reform is to ensure the effective and well-regulated operation of the health care system, including in MCH services, with appropriate legal and policy frameworks, supervision and regulation.

- Since the implementation of the National Programme on Basic Public Health Services in 2009, the standards for per capita subsidies for basic public health services have been adjusted several times, steadily increasing from RMB 15 before 2011 to RMB 50 in 2017. Services included in the basic public health services package have gradually expanded from the original nine categories, including child health management, maternal health management and immunization, to 14 categories in 2017.[14]

- Both the Rural Cooperative Medical Scheme (RCMS)[15] and the Medical Financial Assistance Scheme provide further relief in rural areas, benefitting more and more rural residents, especially pregnant women. From January 2016, China started to promote the integration of basic medical insurance for urban residents and RCMS, aiming to establish a unified basic medical insurance system for urban and rural residents; diversify the health-care-seeking options of urban and rural residents; promote urban-rural equity; and improve the quality of public services. By the end of 2017, more than 80 per cent of prefectures had established a unified health insurance system for urban and rural residents, and the enrolment rate has remained stable at over 95 per cent.[16]

- In terms of laws, regulations, and policies, a relatively complete policy and legal framework on MCH has been established, with the *Law on Maternal and Infant Health Care* (1994) and the *National Programme of Action for Women and Children* (1990s, 2001–2010, 2011–2020), usually mentioned as the core components. Others include the national health development plan (*Health China 2030 Plan*, 2016) and special laws and regulations on MCH protection, such as those on the prevention of mother-to-child transmission of Human Immunodeficiency Virus (HIV), and others relating to financing, systematic health management and human resources for MCH services. However, the implementation of these frameworks relies heavily on the initiative, financing and capacity of local authorities. As a result, significant variations in the maternal and child mortality rates continue to exist among provinces.

Disparities and challenges

China's U5MR is relatively low nationally, ranking 131st globally in 2016. However, given the large number of children in China, the absolute number of under-five deaths was still very high, ranking sixth globally in 2016.[17] This means that China's further progress in the survival and development of women and children will greatly contribute to the global achievement of the SDGs. Much work remains to be done to improve MCH in China, in term of access, equity and quality:

- On the whole, China has made great progress in improving MCH. However, the national averages have, to some extent, masked the uneven development among regions and the disparities among sub-groups. In less developed areas, relevant indicators lag far behind the national averages, and major inequalities and disparities still exist, particularly between urban and rural areas, among eastern, central and western regions, and among different sub-groups. Indicators such as hospital delivery rate have neared universal coverage at the national level, across provinces and in both urban and rural areas. However, upon closer examination, disparities remain when the indicator is disaggregated by smaller administrative units, such as at the district and county levels. For example, less than 80 per cent of pregnant women in 39 counties in western China[18] delivered in hospital in 2015. Thus, disadvantaged populations in China have limited access to health services, and the quality of services is often inadequate.

- While the expansion of health insurance in both geographic and population coverage terms is impressive, attention paid to insuring young children, who are at the greatest risk of dying, is still insufficient. As shown by the fifth National Health Services Survey (NHSS)[19] in 2013, only 22 per cent of newborns in China were covered by health insurance. For infants between 1 and 11 months, the percentage stood at 60.7 per cent, much lower than the coverage for adults.[20]

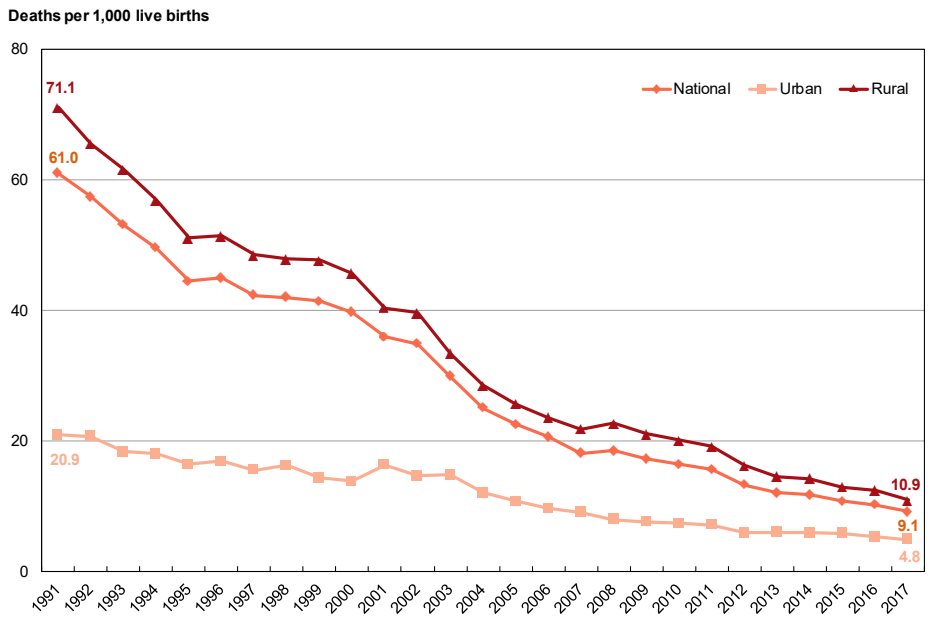
- Shortly after the introduction of the Reform and Opening-up Initiative in 1979, the health financing system in China depended mainly on market-oriented service charges, supplemented by government subsidies. In this context, out-of-pocket expenditure continued to grow rapidly to reach a peak of 60 per cent in 2001, and by 2005 it still accounted for more than half of the total health spending. Due to the health reform, the health financing system shifted its main sources back to government investment and thus the share of out-of-pocket expenditure decreased gradually, dropping to below 30 per cent in 2015 for the first time and to 28.8 per cent in 2017.[21] However, the share of out-of-pocket expenditure in total health expenditure is still far above the 15–20 per cent threshold recommended by the World Health Organization (WHO), above which catastrophic expenditure can be incurred.[22]

Due to financial reasons, rural patients find it more difficult to pay out-of-pocket expenditure, thus limiting their access to high-quality MCH services. To respond to such urgent needs, the Government has implemented a health poverty alleviation campaign, conducting programmes including Nutrition Improvement for Children in Poverty Areas, New-born Screening for Poverty Areas, as well as Free Breast and Ovarian Cancer Screening. Moreover, preferential medical insurance has been provided for poor people identified and tracked through a poverty profile, and those who are impoverished due to disease are targeted with focused poverty alleviation interventions.[23] All of these measures are of great importance to ensure poor rural women and children's access to basic health care services, improve the life quality for vulnerable groups, advance the building of a Healthy China, prevent the emergence and re-emergence of poverty due to disease, and eradicate absolute poverty by 2020.

Figure 3.1

Under-five mortality rate, 1991–2017

SDG 3.2.1

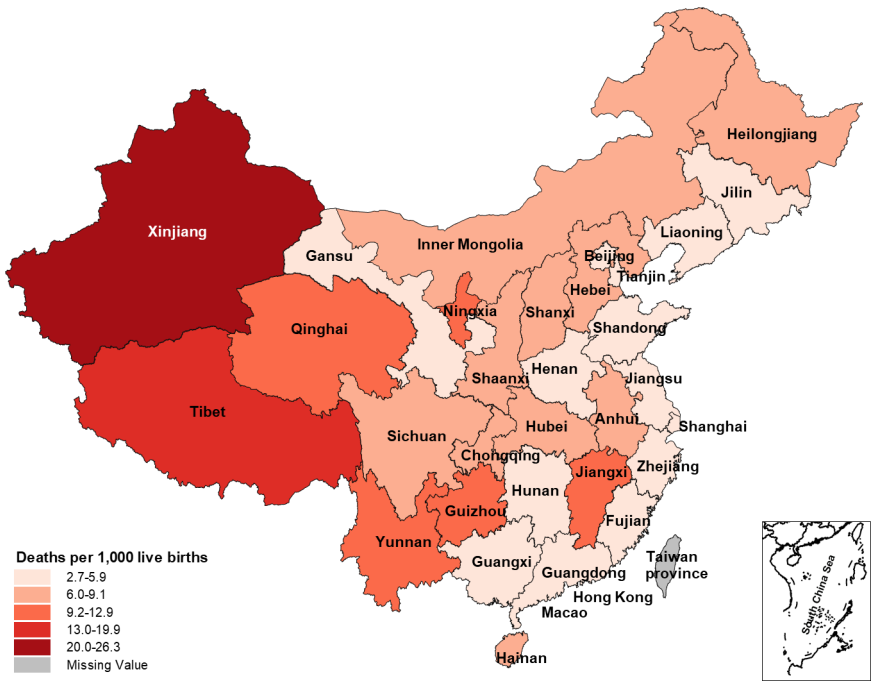


Source: National Health Commission, *China Health Statistical Yearbook*, 2018

Figure 3.2

Under-five mortality rate, by province, 2016

SDG 3.2.1

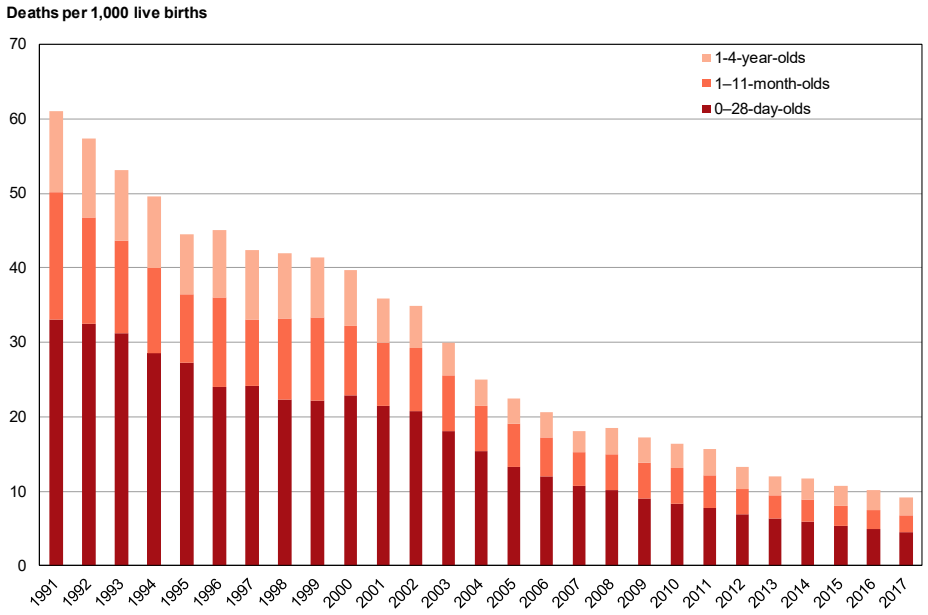


Source: National Office for Maternal and Child Health Surveillance, Provincial Maternal and Child Health Surveillance and Annual Reporting, 2017

Figure 3.1
China's national U5MR[24] has declined by 85.1 per cent, from 61 per thousand live births in 1991 to 9.1 per thousand live births in 2017, with an average annual reduction of 7.1 per cent. During this period, the U5MR dropped by 77.0 per cent in urban areas and by 84.7 per cent in rural areas. In 1991, U5MR in rural areas was 3.4 times that of urban areas. By 2017, this ratio had decreased to 2.3 times, though still revealing a significant urban-rural gap.

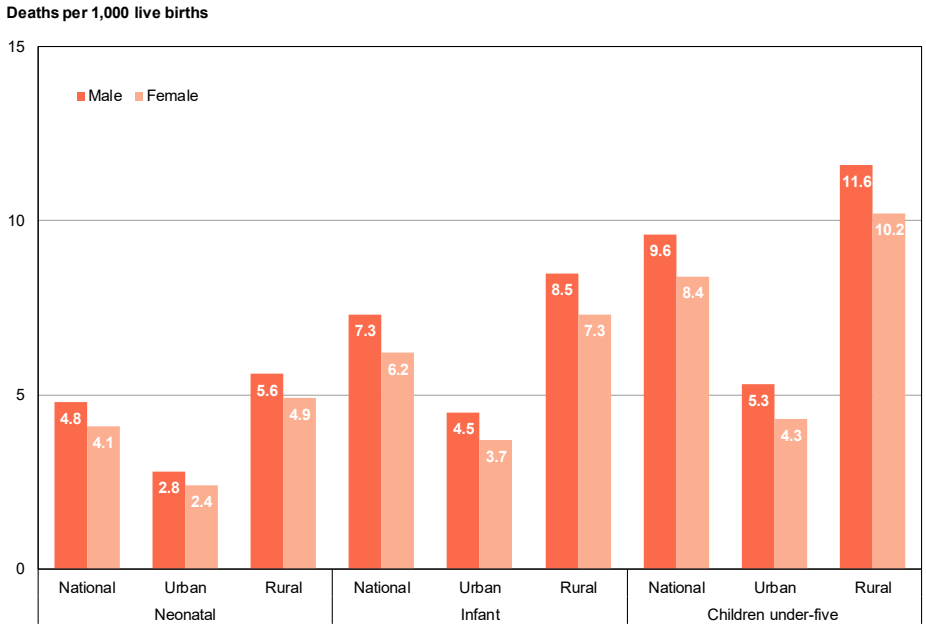
Figure 3.2
Disparities in the U5MR exist among different provinces. In general, the U5MR is highest in western provinces and lowest in eastern provinces.

Figure 3.3
Under-five mortality rate, by age, 1991–2017



Source: National Health Commission, *China Health Statistical Yearbook*, 2018

Figure 3.4
Under-five mortality rate, by urban-rural and sex, 2017



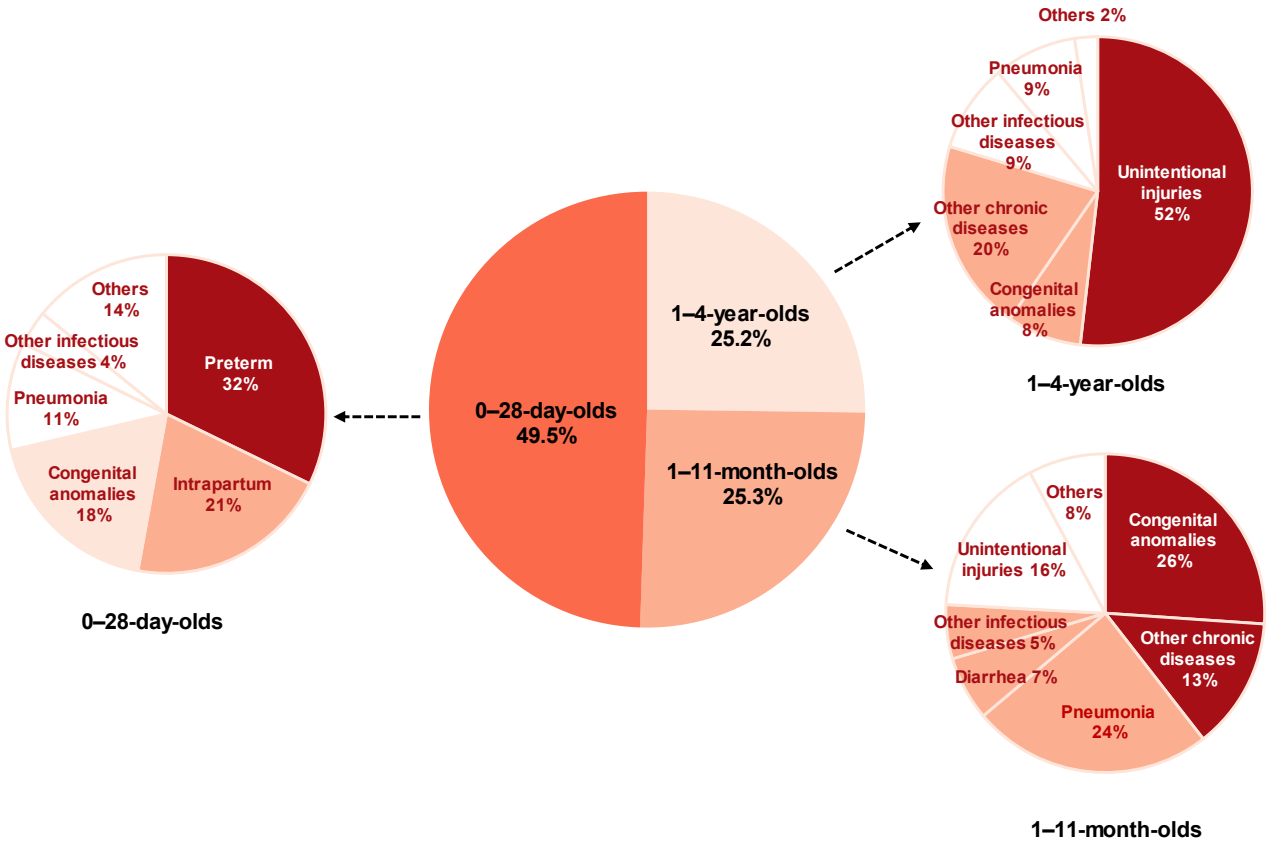
Source: National Health Commission, *Report on China's National Maternal and Child Health Information*, 2018

Figure 3.3
Between 1991 and 2017, the U5MR decreased steadily. In 2017, three fourths (74.8 per cent) of under-five mortality occurred during infancy (deaths before 12 months), while neonatal mortality (deaths during the first 28 days of life) accounted for half (49.5 per cent) of all under-five deaths. Many of these deaths were preventable.

Figure 3.4
There is a gender discrepancy in mortality rates of children under five. Boys have a higher risk of death in both urban and rural areas.

Figure 3.5

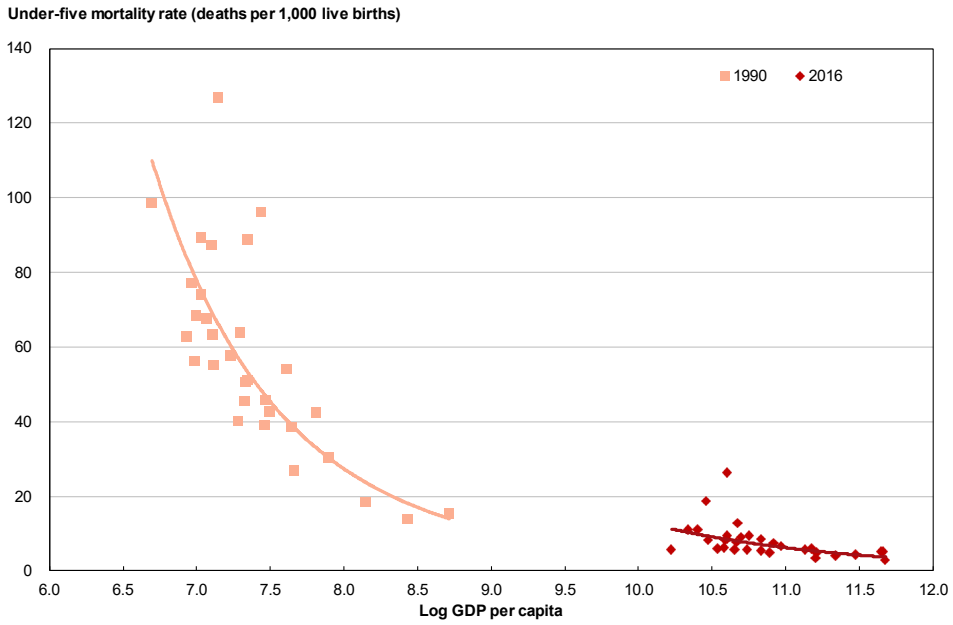
Causes of under-five mortality, 2017



Source: National Health Commission, *Report on China's National Maternal and Child Health Information*, 2018

Figure 3.5
The distribution of the causes of under-five mortality varies among different age groups of children. Aligned with the WHO classification of causes of death in Global Burden of Disease, the leading causes of neonatal death are preterm birth (32.2 per cent), intrapartum-related complications (20.6 per cent) and congenital abnormalities (18.5 per cent). The leading causes of infant (1–11 months old) death are chronic diseases (39.5 percent, including congenital abnormalities and other chronic diseases), infectious diseases (36.4 per cent, including pneumonia, diarrhea and other infectious diseases) and unintentional injuries (16.3 per cent). Unintentional injuries are the leading cause of death for children between 1 and 4 years old (51.8 per cent), with chronic diseases and infectious diseases responsible for 27.9 per cent and 17.9 per cent, respectively. Increased efforts to prevent and manage premature and low birth weight infants will contribute to reducing under-five mortality, along with efforts to improve management of labour and neonatal resuscitation, prevent birth defects, improve treatment of common childhood infectious illnesses such as pneumonia and diarrhoea, and prevent child injury.

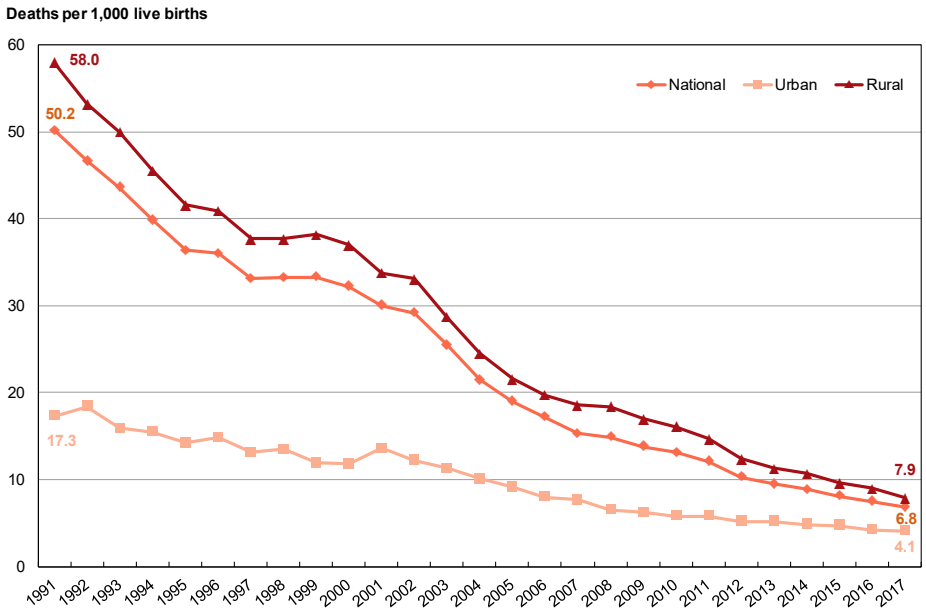
Figure 3.6
GDP per capita and under-five mortality rate, 1990 and 2016



Sources: National Bureau of Statistics, *China Statistical Yearbook*, 1991 and 2017 (GDP per capita); National Bureau of Statistics, NPA Monitoring Statistics, 1991 (U5MR in 1990); National Office for Maternal and Child Health Surveillance, Provincial Maternal and Child Health Surveillance and Annual Reporting, 2017 (U5MR in 2016)

Figure 3.6
China has made remarkable progress on both economic and health indicators between 1990 and 2016. Along with the increase in per capita GDP, the U5MR of the poorest provinces in 2016 were similar to those of the wealthiest provinces in 1990. Under-five mortality in China has an inverse relationship with economic development. In general, despite some exceptions, provinces with a low GDP per capita have relatively high child mortality rates, and provinces with a high GDP per capita have relatively low child mortality rates. Eastern provinces have the highest GDP per capita and the lowest U5MR.

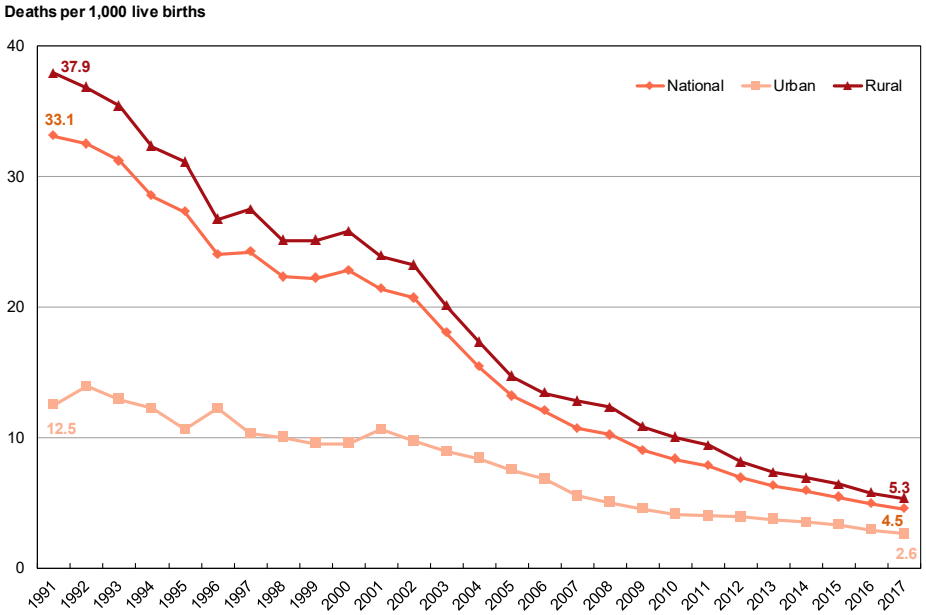
Figure 3.7
Infant mortality rate, 1991–2017



Source: National Health Commission, *China Health Statistical Yearbook*, 2018

Figure 3.7
Since 1991, there has been a significant decline in the IMR.[25] Nationally, the IMR dropped 86.5 per cent from 50.2 per thousand live births in 1991 to 6.8 per thousand live births in 2017. Between 1991 and 2017, the IMR dropped by 76.3 per cent in urban areas and 86.4 per cent in rural areas. Again, significant disparities remain, as the IMR in rural areas in 2017 was 1.9 times that of urban areas.

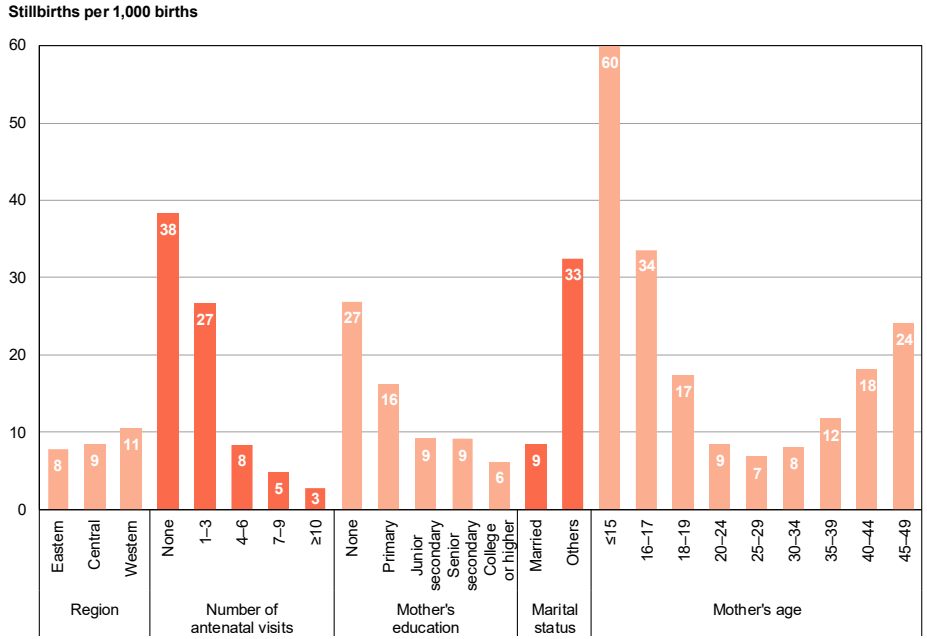
Figure 3.8
Neonatal mortality rate, 1991–2017



Source: National Health Commission, *China Health Statistical Yearbook*, 2018

Figure 3.8
Since 1991, there has been a significant decline in the NMR.[26] China's NMR dropped from 33.1 per thousand live births in 1991 to 4.5 per thousand live births in 2017. In 1991, the NMR in rural areas was three times that of urban areas. In 2017, the NMR in rural areas was reduced to two times that of urban areas.

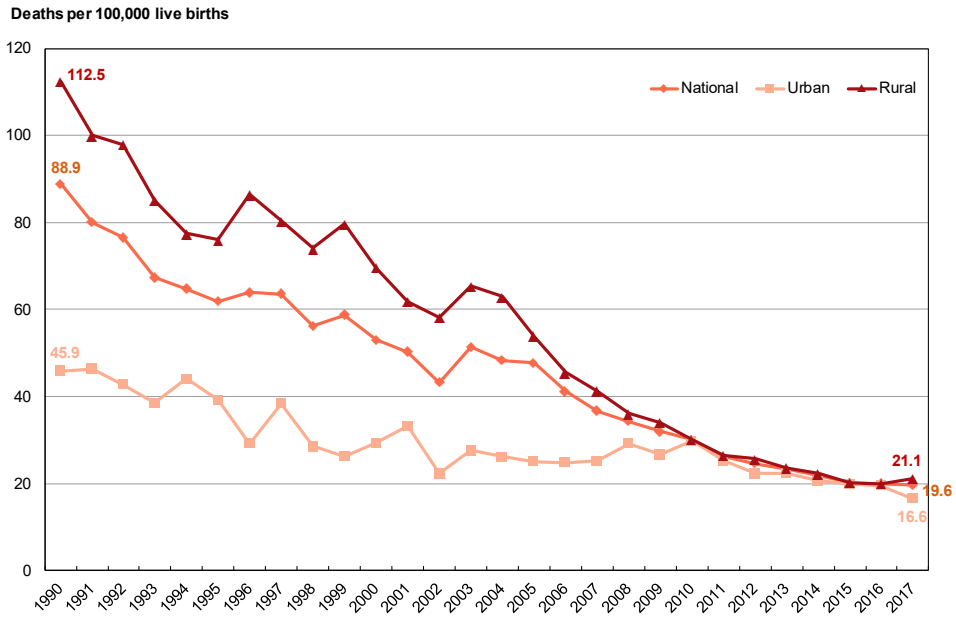
Figure 3.9
Stillbirth rate, 2012–2014



Source: ZHU Jun, et al., 'Sociodemographic and Obstetric Characteristics of Stillbirths in China: A census of nearly 4 million health facility births between 2012 and 2014', *Lancet Global Health*, vol. 4, 2016, pp. 109–118

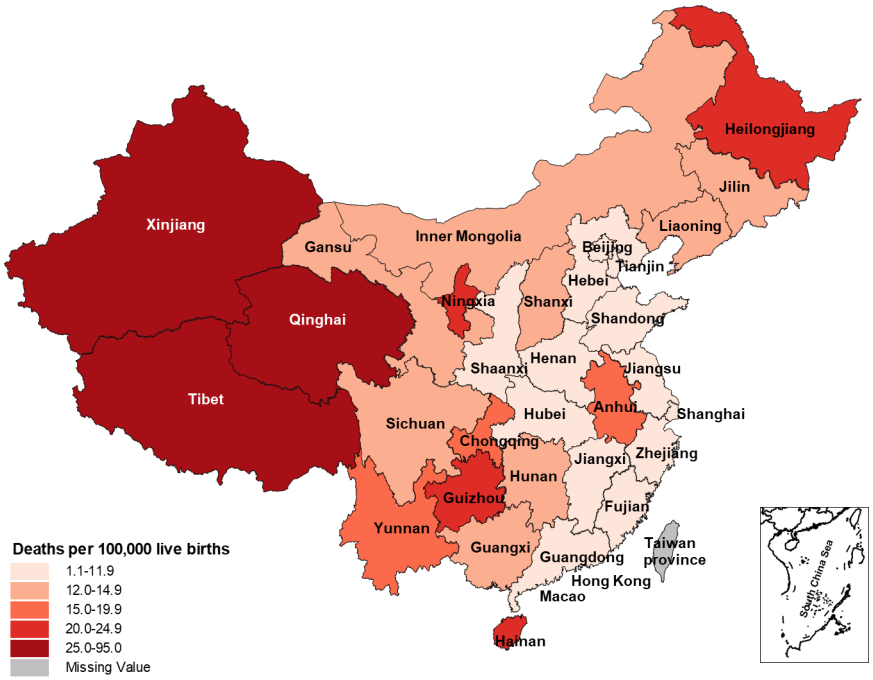
Figure 3.9
Data analysis of nearly 4 million births in 441 health facilities, as recorded in China's National Maternal Near Miss Surveillance System between 2012 and 2014, suggests a stillbirth rate of 8.8 per thousand births. This analysis presents, for the first time, an empirical estimate of the stillbirth rate in a large sample that is representative of all facility births in China. Though the rate is much lower than those in much of Asia, it remains higher than those in high-income countries, despite excessively high caesarean section rates in China. Stillbirths are not monitored in most information systems. The Government needs to pay attention to stillbirths by systematically collecting and using relevant data. At the same time, as stillbirths are strongly correlated with the number of antenatal visits, special attention should be given to the most disadvantaged women and adolescent girls aged 15–19, as well as pregnant women that are younger, unmarried, and less educated.[27]

Figure 3.10
Maternal mortality ratio, 1990–2017



Source: National Health Commission, *China Health Statistical Yearbook*, 2018

Figure 3.11
Maternal mortality ratio, by province, 2017

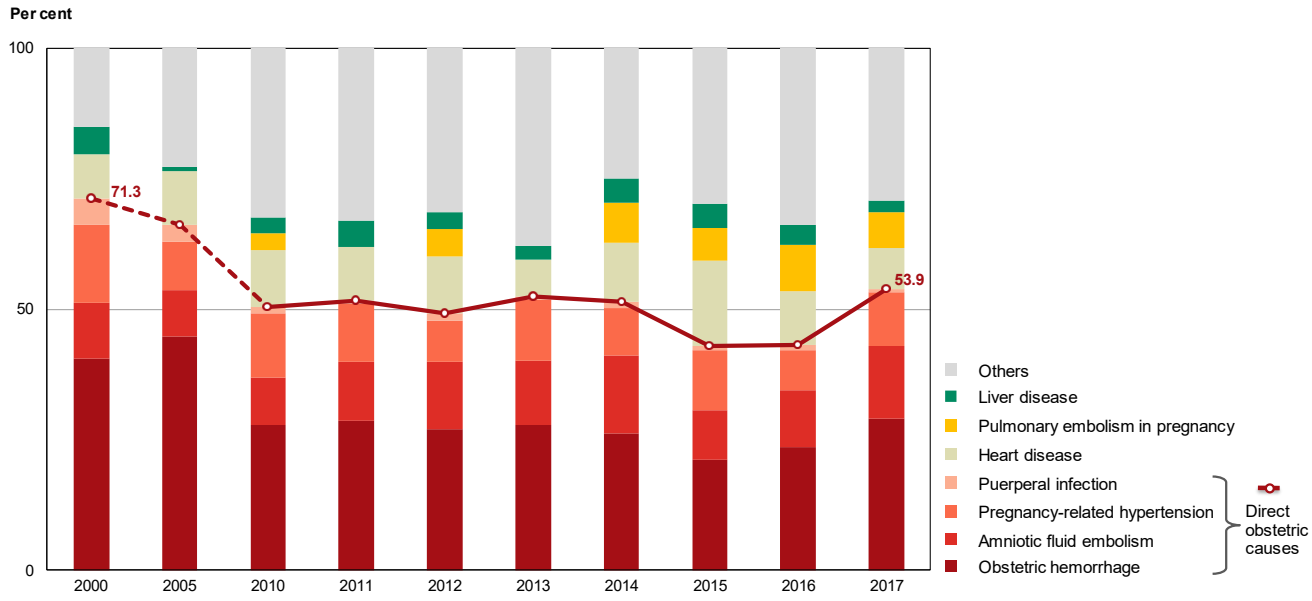


Source: National Health Commission, *China Health Statistical Yearbook*, 2018

Figure 3.10
Since 1990, the MMR[28] has decreased significantly, and the disparities between urban and rural areas has also decreased. The MMR in rural areas was 2.5 times that of urban areas in 1990. In recent years, the MMR in rural and urban areas have stabilized at a similar level. This is mainly due to the significant decrease of MMR in rural areas, and the fact that maternal deaths among urban migrant women has been roughly static since 1998.

Figure 3.11
Significant disparities exist in MMR among China's provinces, with the same pattern observed in child mortality. MMR range from less than 10 per 100,000 live births in some coastal provinces, around 15 per 100,000 live births in central provinces, to above 25 per 100,000 live births in some western provinces.

Figure 3.12
Causes of maternal mortality, 2000–2017

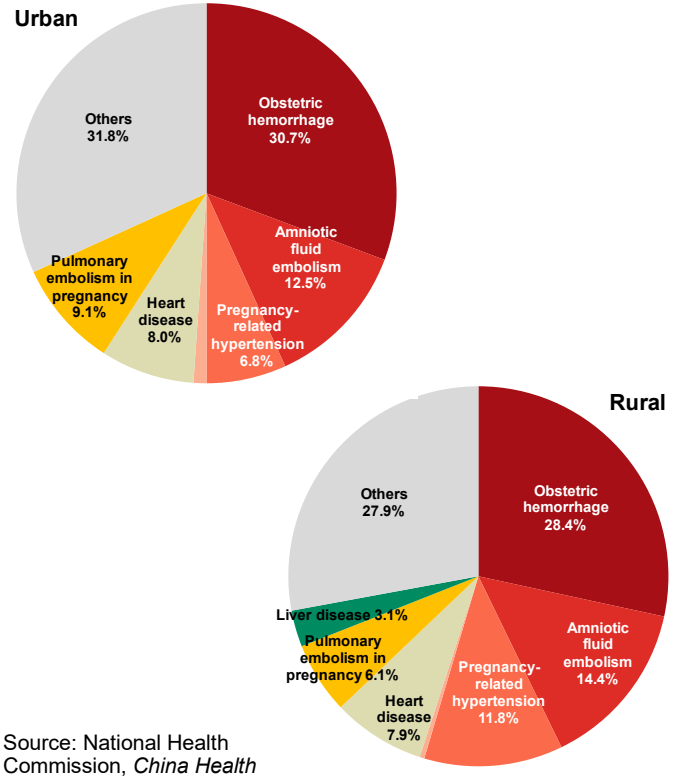


Source: National Health Commission, *China Health Statistical Yearbook*, 2018

Figure 3.12
Obstetric haemorrhage, amniotic fluid embolism, and pregnancy-related hypertension were the three leading causes of maternal mortality in 2017. Although obstetric haemorrhage is still the leading cause of maternal mortality, it has declined from over 40 per cent of maternal deaths before 2005 to 28.6 per cent of maternal deaths in 2017. Before 2000, direct obstetric causes [a] accounted for over 70 per cent of maternal deaths. This proportion has decreased steadily during the 2000–2010 period, with some fluctuations around 50 per cent since then. During the 2015–2016 period, deaths brought about by direct obstetric causes were less than those as a result of indirect obstetric causes. However, in 2017, there was a rebound, when 53.9 per cent of maternal deaths were brought about by direct obstetric causes. Generally, over 75 per cent of maternal and neonatal deaths are preventable or can be treated by providing necessary obstetric services.[29]

[a] Direct obstetric causes normally include obstetric haemorrhage, amniotic fluid embolism, pregnancy-related hypertension, and puerperal infection; indirect obstetric causes normally include heart disease, liver disease, venous thrombosis and pulmonary embolism in pregnancy, pneumonia and other diseases.

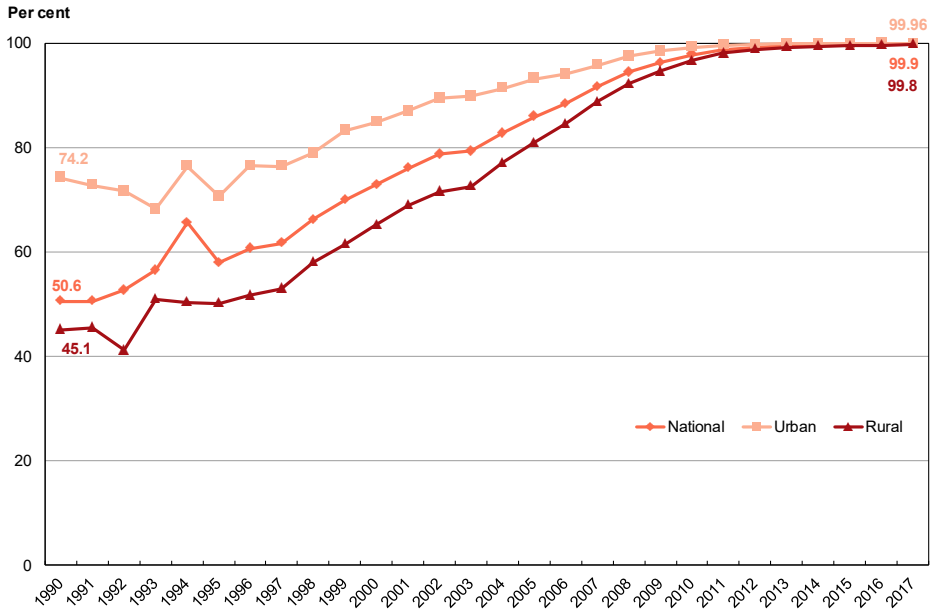
Figure 3.13
Causes of maternal mortality, by urban-rural, 2017



Source: National Health Commission, *China Health Statistical Yearbook*, 2018

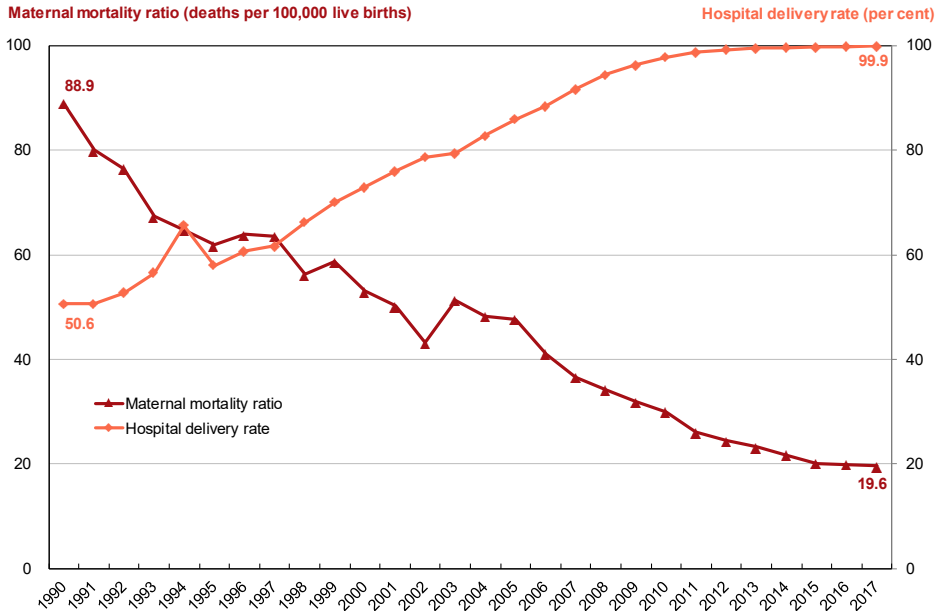
Figure 3.13
The distribution of causes of death shows that, in 2017, obstetric haemorrhage, pregnancy-related hypertension, amniotic fluid embolism and other direct obstetric causes led to 55 per cent of maternal deaths in rural China, taking a higher share than indirect obstetric causes. In urban areas, maternal deaths are caused mainly by indirect obstetric causes.

Figure 3.14
Hospital delivery rate, 1990–2017



Source: National Health Commission, *China Health Statistical Yearbook*, 2018

Figure 3.15
Hospital delivery rate and maternal mortality ratio, 1990–2017



Source: National Health Commission, *China Health Statistical Yearbook*, 2018

Figure 3.14
China's hospital delivery rate has increased steadily over the last two decades. The urban-rural disparity, which was obvious in the 1990s, no longer exists. The remarkable increase in hospital delivery in rural and urban areas has played a significant role in ensuring the safety of mothers and children and reducing maternal and neonatal mortality.

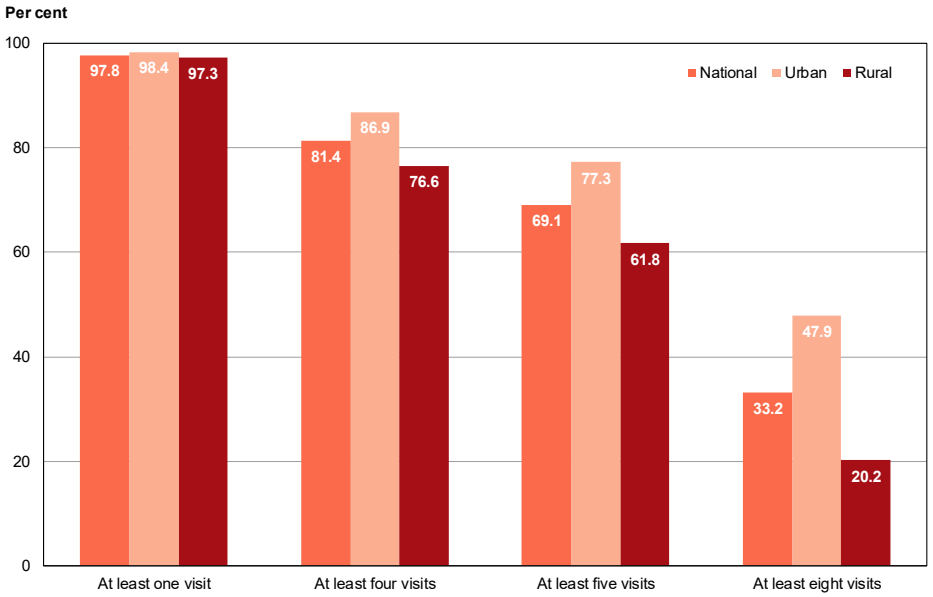
Figure 3.15
There is an inverse relationship between China's MMR and hospital delivery rate. From 1990 to 2017, the hospital delivery rate increased from 50.6 per cent to 99.9 per cent. Over the same period, the MMR decreased from 88.9 per 100,000 live births to 19.6 per 100,000 live births.

Figure 3.16
Hospital delivery rate, by province, 2017

Source: National Health Commission, *China Health Statistical Yearbook*, 2018

Figure 3.16
Overall, the hospital delivery rate is high across all provinces, but relatively low rates persist in some western provinces. Tibet has the lowest hospital delivery rate at 92.5 per cent.

Figure 3.17
Antenatal care coverage, by number of visits, 2013

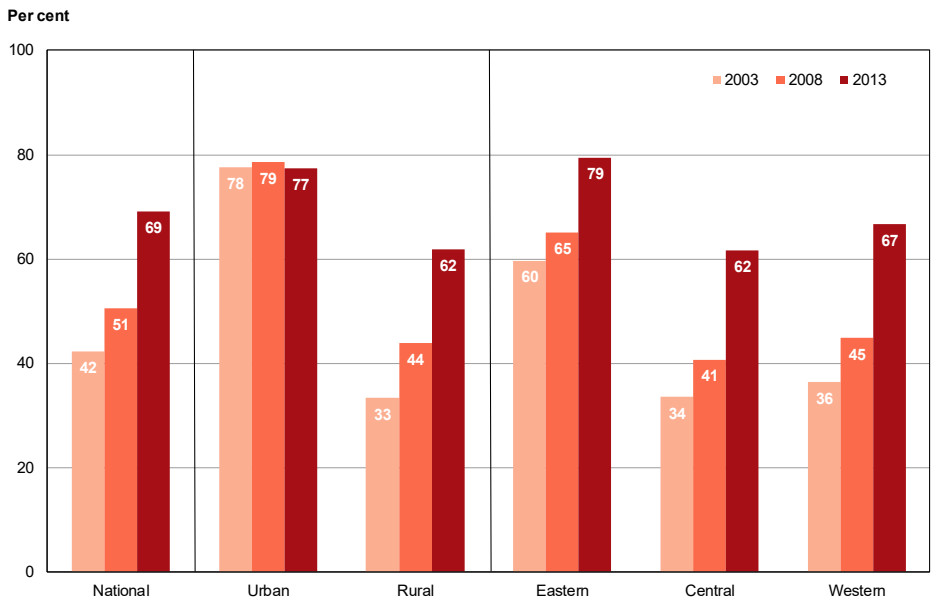


Source: National Health Commission (formerly the National Health and Family Planning Commission), National Health Services Survey, 2013

Figure 3.17
Women should receive antenatal care attended by skilled health personnel (e.g. doctors, nurses or midwives) during their pregnancy. UNICEF and WHO recommend a minimum of four antenatal care visits during pregnancy. The most recent recommendation by WHO is a minimum of eight antenatal contacts during pregnancy, to reduce perinatal death and improve women's experience of receiving health care during their pregnancy.[30] According to the requirements of China's systematic maternal care management, pregnant women are recommended to receive at least five antenatal care visits. The results of the NHSS show that antenatal care coverage of at least one visit was 97.8 per cent in 2013, without obvious disparity between urban and rural areas. However, with the increase in the recommended number of visits, coverage decreased rapidly, and the urban-rural gap also increased.

Figure 3.18

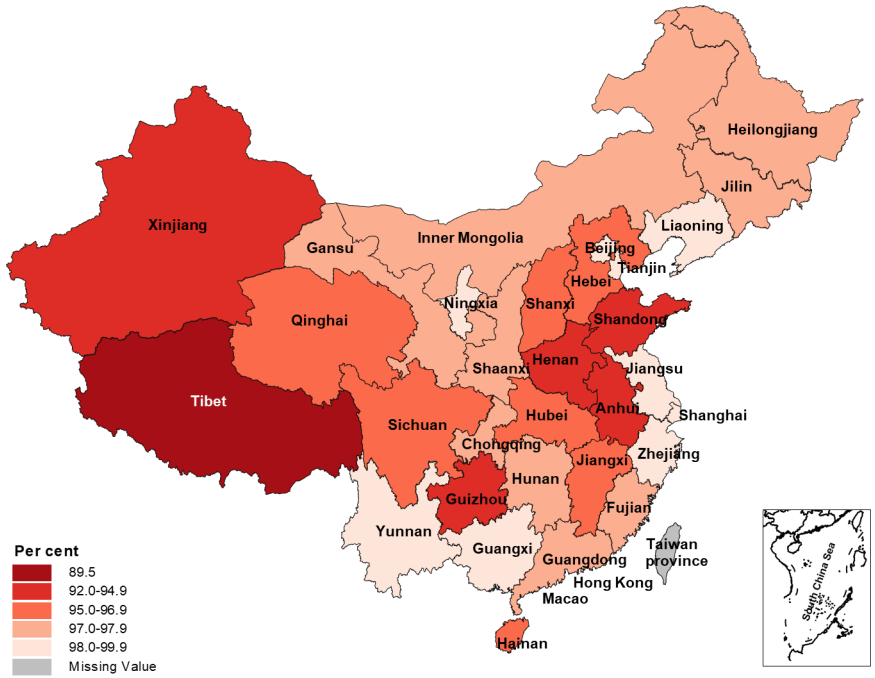
Antenatal care coverage: at least five visits, 2003, 2008 and 2013



Sources: National Health Commission (formerly the National Health and Family Planning Commission), National Health Services Survey, 2003, 2008 and 2013

Figure 3.19

Antenatal care coverage: at least one visit, by province, 2017



Source: National Health Commission, *China Health Statistical Yearbook*, 2018

Figure 3.18

According to the requirements of China's systematic maternal care management, pregnant women are recommended to receive at least five antenatal care visits. The latest three rounds of NHSS show the coverage of antenatal care of five or more visits increased by 27 percentage points between 2003 and 2013 to reach 69.1 per cent. This increase was mainly attributed to progress in rural areas and in central and western provinces. However, there are still substantial gaps between urban and rural areas and among regions.

Figure 3.19

In China, the antenatal care coverage of at least one visit is high across all provinces, all above 92 per cent, apart from Tibet, which is lagging behind at 89.5 per cent.

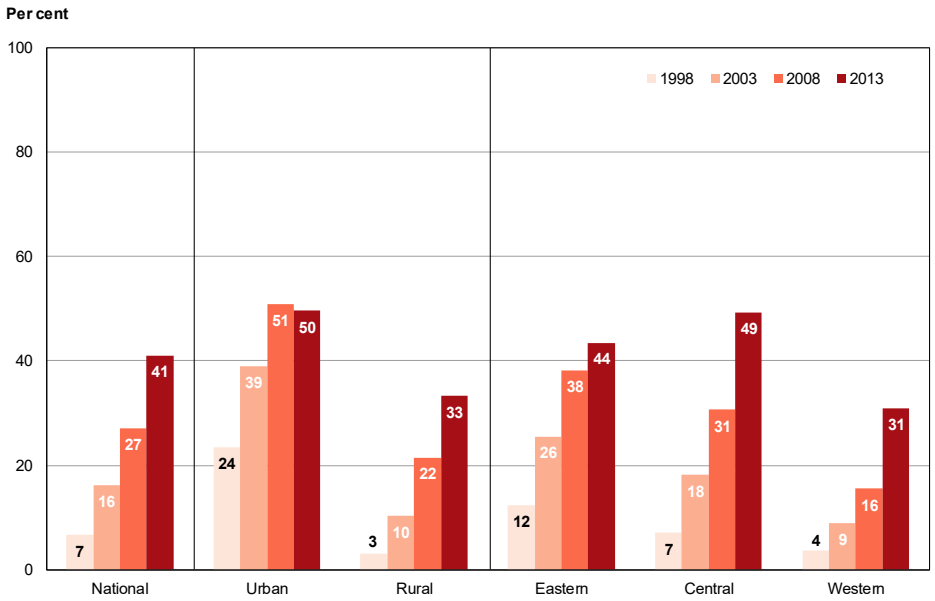
Figure 3.20

Percentage of births attended by skilled health personnel, by province, 2016

Source: National Health Commission (formerly the National Health and Family Planning Commission), *China Health and Family Planning Statistical Yearbook*, 2017

Figure 3.21

Caesarean section rate, 1998, 2003, 2008 and 2013



Sources: National Health Commission (formerly the National Health and Family Planning Commission), National Health Services Survey, 1998, 2003, 2008 and 2013

Figure 3.20

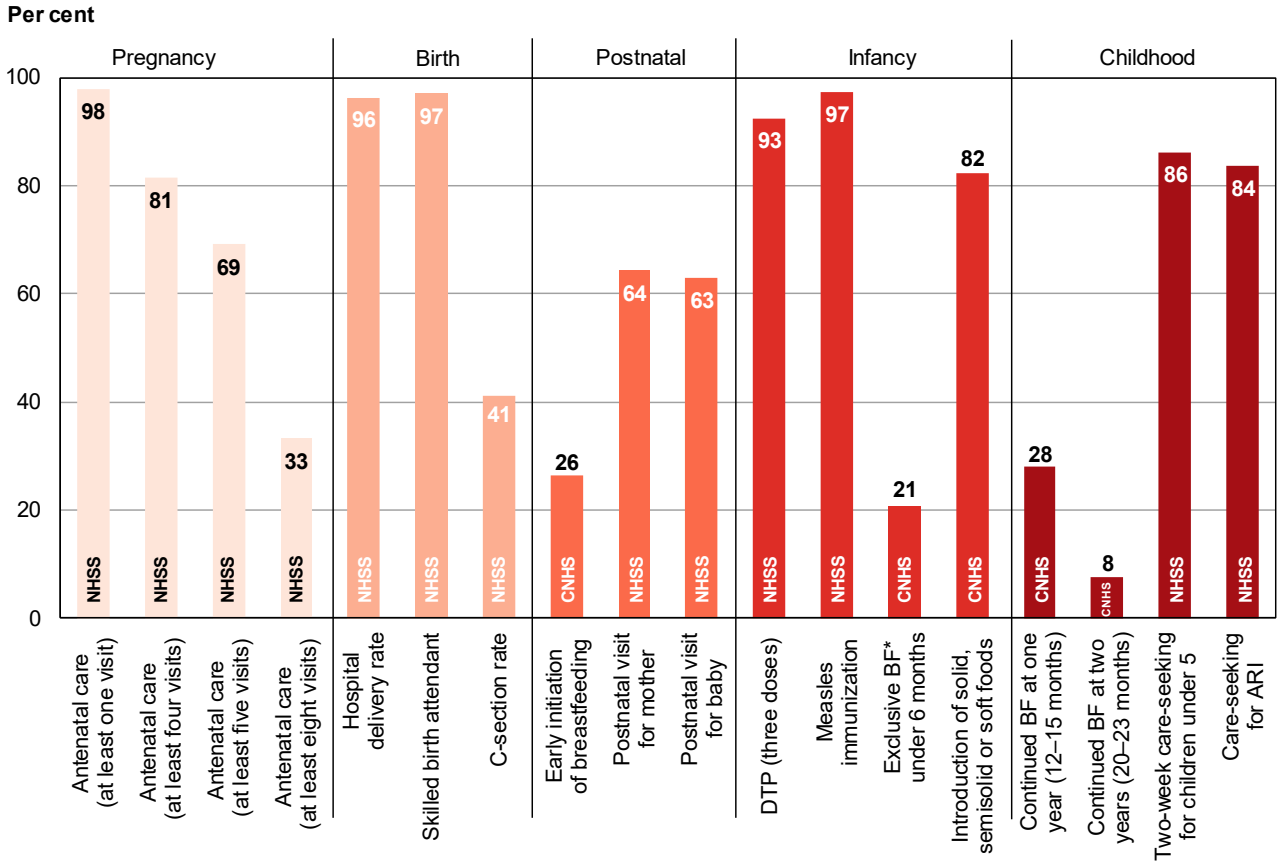
Overall, the percentage of births attended by skilled health personnel[31] is high across all provinces, but is slightly lower in western China and the lowest in Tibet (98 per cent).

Figure 3.21

Results from the latest four rounds of NHSS show a general increase in caesarean section rates both nationally and at the sub-national level, except for a slight decrease in urban areas during the 2008–2013 period. Caesarean section deliveries have reached numbers that exceed the clinical need.[32] Nationally, two in five women delivered by caesarean section in 2013, compared with less than one in ten in 1998. Although urban women continue to have the highest rates of caesarean section, rural areas and central and western provinces experienced a more significant increase in caesarean rates between 1998 and 2013.

Figure 3.22

Coverage of interventions across the continuum of care for maternal and child health, 2013



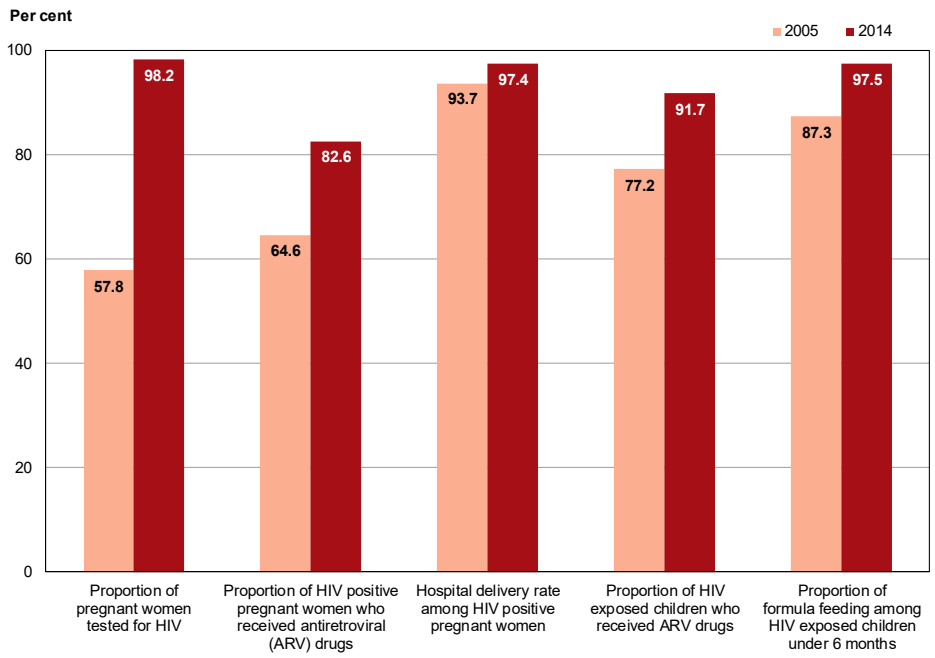
∗ BF stands for breastfeeding.

Sources: China CDC, China Nutrition and Health Surveillance (CNHS, data on infant and young child feeding), 2013; National Health Commission (formerly the National Health and Family Planning Commission), NHSS, other data, 2013

Figure 3.22
The coverage of interventions varies across the continuum of care. It reflects the advancements in maternal health care, such as in the case of antenatal care of at least one visit, hospital delivery, child immunization and care-seeking for pneumonia. Coverage lags behind for other key interventions, such as in the case of antenatal care that reaches the internationally recommended number of visits, postnatal care, and infant and young child feeding.

Figure 3.23

Service coverage for prevention of mother-to-child transmission of HIV, 2005–2014



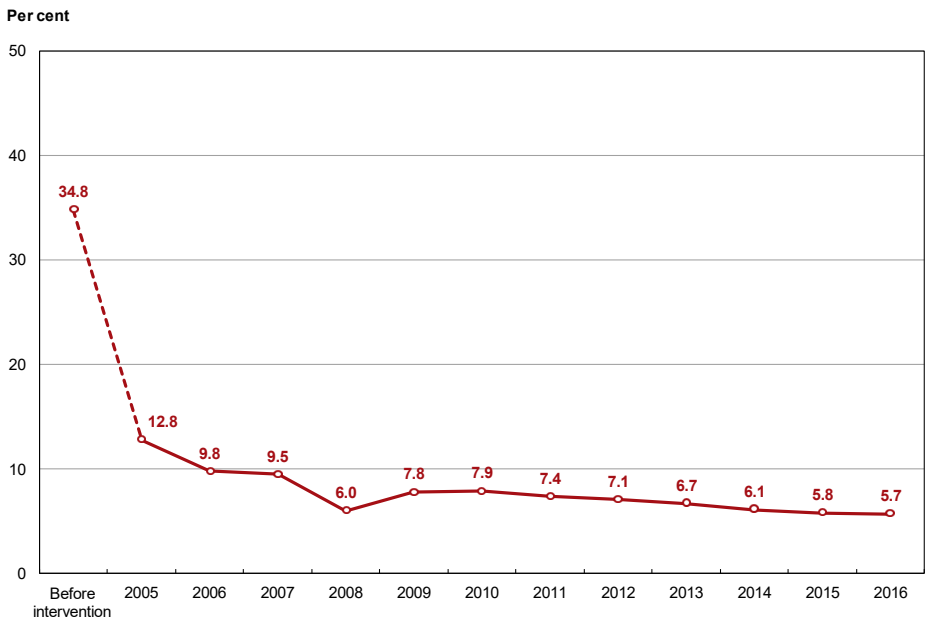
Source: National Health Commission (formerly the National Health and Family Planning Commission), 'China National Programme for Prevention of Mother-to-Child Transmission of HIV, Syphilis and Hepatitis B – Progress Report', 2015

Figure 3.23

China began to pilot prevention of mother-to-child transmission (PMTCT) of HIV in 2001 under its National PMTCT Programme, and gradually scaled up the interventions to more counties. In 2010, China developed the integrated PMTCT strategies for HIV, syphilis and hepatitis B.[33] By 2015, the integrated National PMTCT Programme covered all counties in China. In 2014, the proportion of pregnant women tested for HIV, syphilis and hepatitis B increased to 98.2 per cent, 99.5 per cent, and 98.9 per cent, respectively. This has significantly helped with identification, with comprehensive interventions implemented for pregnant women infected with HIV/AIDS. Between 2005 to 2014, the service coverage for all interventions in the chart has increased notably.

Figure 3.24

Rate of mother-to-child transmission of HIV, 2005–2016



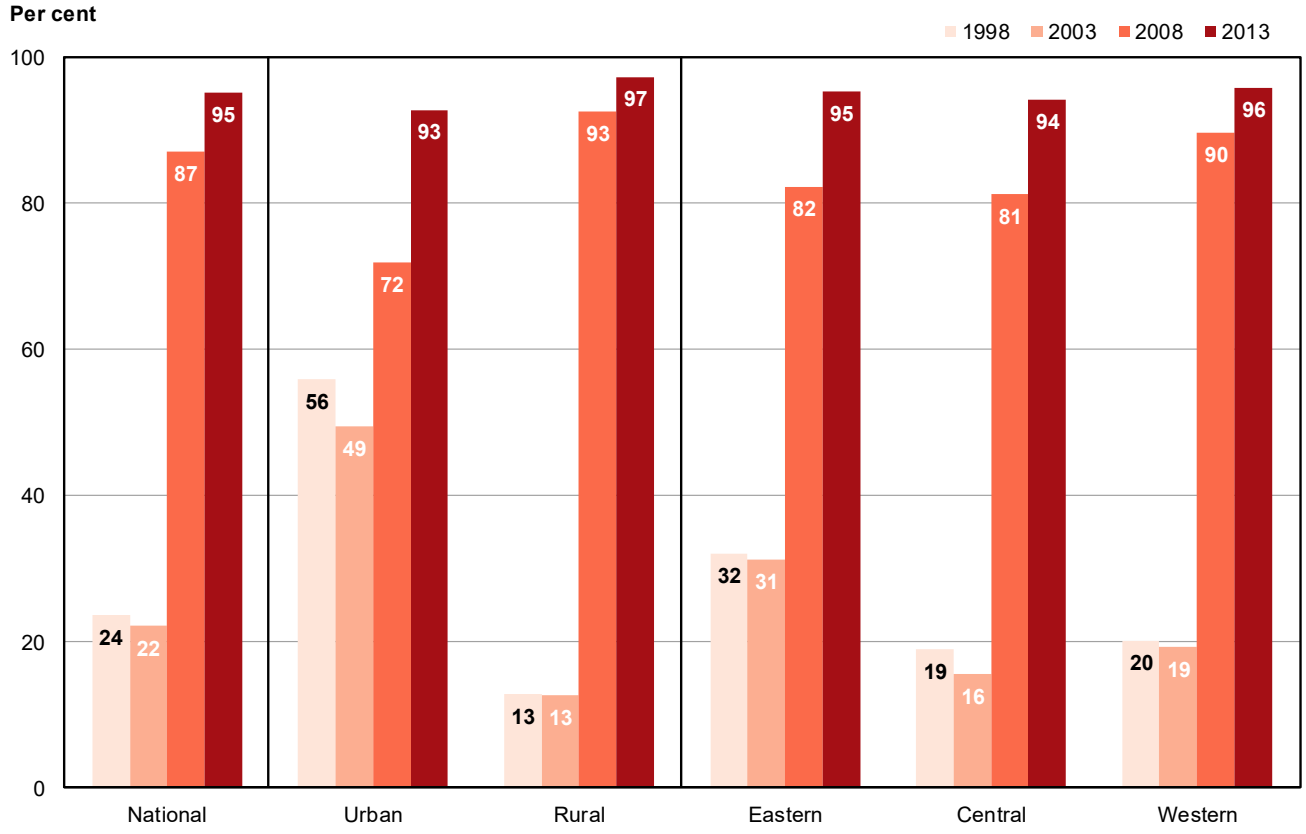
Sources: National Health Commission (formerly the National Health and Family Planning Commission), 'China National Programme for Prevention of Mother-to-Child Transmission of HIV, Syphilis and Hepatitis B – Progress Report', 2015 (data from 2014 and previous years); National Health Commission (formerly the National Health and Family Planning Commission), Management Information System for PMTCT of HIV, Syphilis and Hepatitis B (2015 and 2016 data)

Figure 3.24

In China, the rate of mother-to-child transmission of HIV has been reduced from 34.8 per cent before the initiation of the National PMTCT Programme to 5.7 percent in 2016. Moreover, the proportion of mother-to-child transmitted infections against the annually reported new HIV infections and AIDS patients dropped from 1.6 per cent in 2005 to 0.5 per cent in 2016.[34] However, the National PMTCT Programme is still confronted with several challenges. Along with the large population in China and the fast-expanding coverage of the programme, an increasing number of pregnant women infected are detected each year. In addition, regional disparities still exist. The coverage, quality and utilization of MCH and PMTCT services need to be advanced in poor, remote and ethnic minority concentrated areas.

Figure 3.25

Health insurance coverage, 1998, 2003, 2008 and 2013

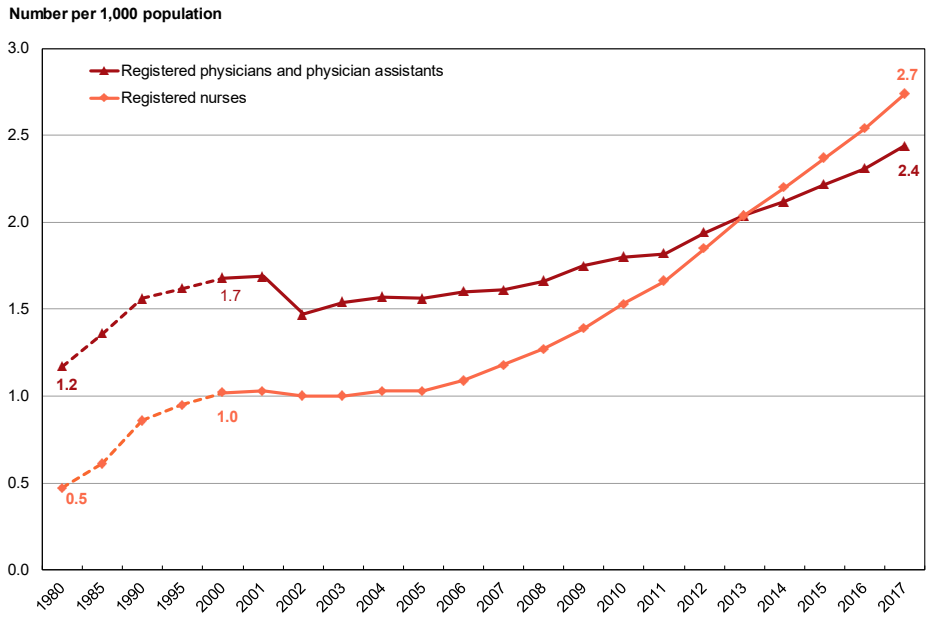


Sources: National Health Commission (formerly the National Health and Family Planning Commission), National Health Services Survey, 1998, 2003, 2008 and 2013

Figure 3.25
Health insurance coverage has increased steadily since 2003, both nationally and at the sub-national level. In 2013, 95 per cent of urban and rural residents were covered by health insurance nationally. The remarkable increase in health insurance coverage in rural areas was due to the introduction of the RCMS in early 2000. Health insurance coverage for 2008 and 2013 was high for rural areas compared with urban areas.

Figure 3.26

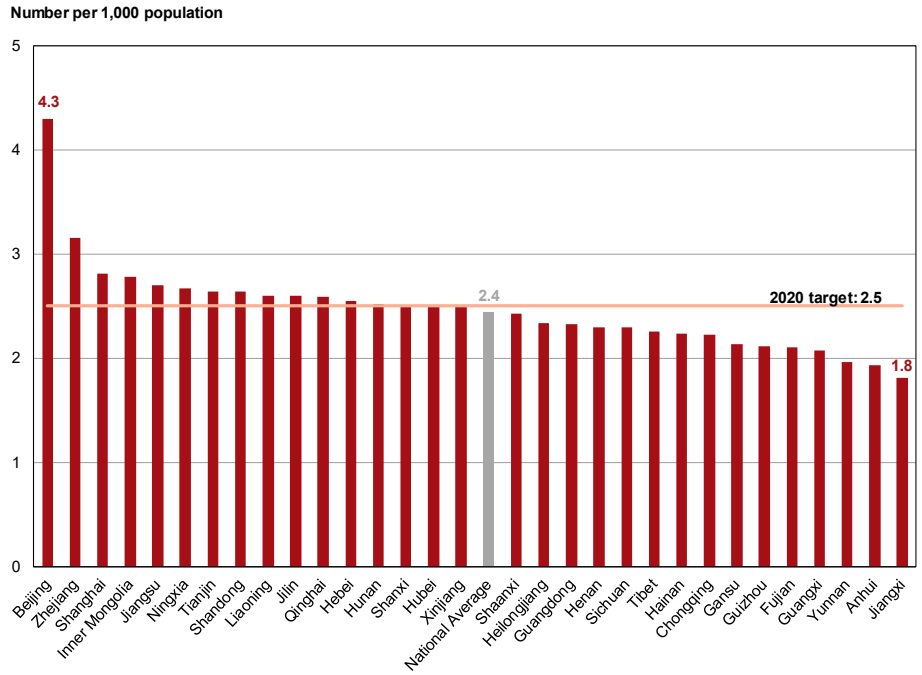
Number of registered physicians/ physician assistants and registered nurses, 1980–2017



Source: National Health Commission, *China Health Statistical Yearbook*, 2018

Figure 3.27

Number of registered physicians/ physician assistants, by province, 2017



Source: National Health Commission, *China Health Statistical Yearbook*, 2018

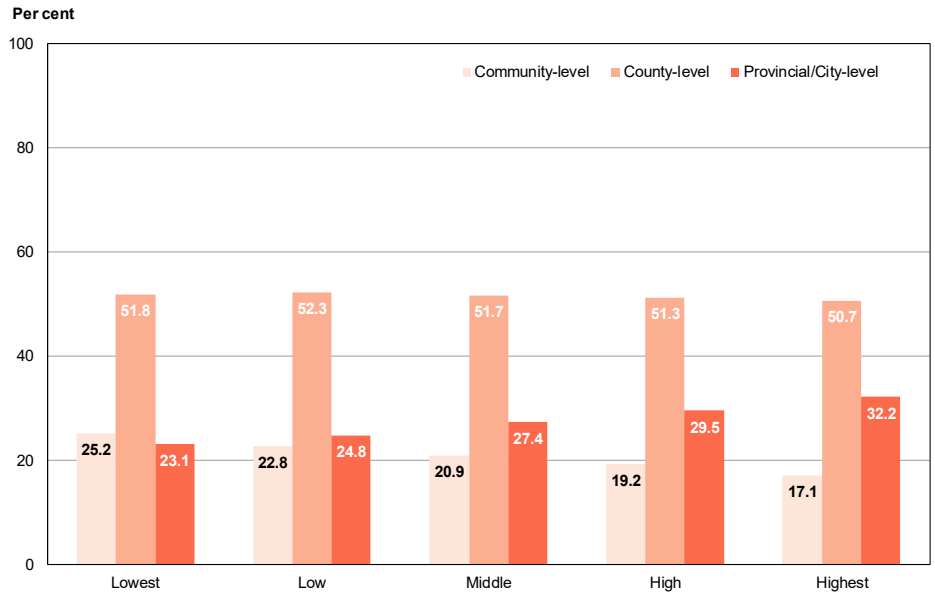
Figure 3.26

Over the last four decades, the number of registered physicians and physician assistants[35] has increased from less than 1.2 per thousand population to 2.4 per thousand population, and the number of registered nurses has increased from 0.5 per thousand population to 2.7 per thousand population. The drop observed between 2001 and 2002 is due to more restrictive definition of the competencies and qualifications required to become a health professional. According to the *Health China 2030 Plan*, the number of registered physicians and physician assistants should reach 2.5 per thousand population in 2020 and 3.0 per thousand population in 2030, and the number of registered nurses should reach 4.7 per thousand population in 2030.

Figure 3.27

The number of physicians and physician assistants per thousand population varies among provinces. Beijing has the largest number, which was 4.3 physicians and physician assistants per thousand population. In 2017, 16 provinces reached the 2020 target of 2.5 per thousand population as set in the *Health China 2030 Plan*.

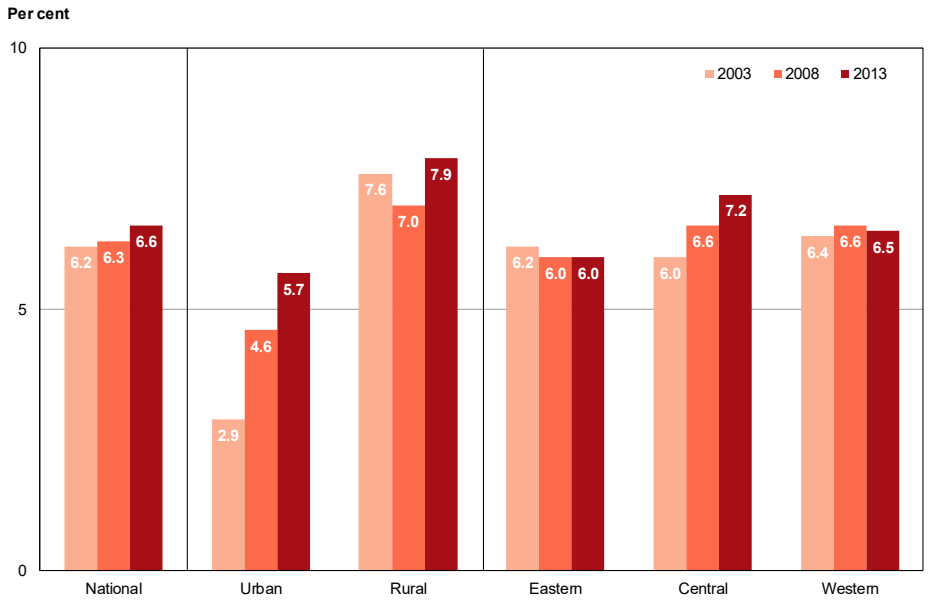
Figure 3.28
Choice of health care provider for inpatient care, by income quintile, 2013



Source: National Health Commission (formerly the National Health and Family Planning Commission), National Health Services Survey, 2013

Figure 3.29
Percentage of households with catastrophic health expenses, 2003, 2008 and 2013

SDG 3.8.2



Sources: National Health Commission (formerly the National Health and Family Planning Commission), National Health Services Survey, 2003, 2008 and 2013

Figure 3.28
There are clear differences in the choice of health care provider among the richest, poorest and middle quintiles of the population. The richest quintile tends to favour provincial and city-level health facilities, which offer the most comprehensive care. In China, community-level clinics tend to offer health care at a lower price. As such, the poorest quintile is more likely than the middle or upper quintiles to use health care providers at the local level, where the quality of care they receive is relatively poor. Data in the chart also show that over half of inpatients chose county-level hospitals in 2013.

Figure 3.29
According to NHSS data, during the 2003–2013 period, about 6.2 per cent to 6.6 per cent of households had catastrophic health expenses every year, which is defined as household expenditure on health exceeding 40 per cent of its income. Households in rural areas and western and central provinces were more likely to have catastrophic health expenses. Relatedly, households in rural areas and western and central provinces reported higher rates of self-discharge from hospital for financial reasons, and these households normally spent a higher portion of their income on health.[36]

Figure 3.30

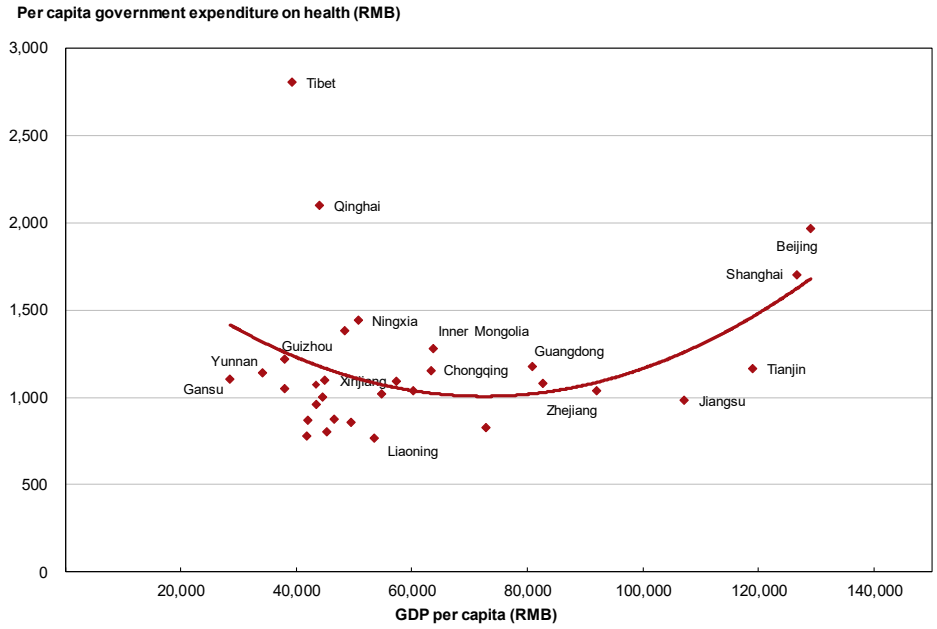
Ratios of the poorest and the richest quintile for selected indicators, 2003, 2008 and 2013

	2003	2008	2013
Antenatal care coverage (at least five visits)	0.72	0.90	0.88
Hospital delivery rate	0.87	0.95	0.98
Health insurance coverage	0.58	0.93	0.98
Outpatient utilization rate	0.88	0.92	1.14
Inpatient reimbursement rate	0.35	0.85	0.92
Proportion of households with catastrophic health expenses	3.79	4.72	5.34

Sources: National Health Commission (formerly the National Health and Family Planning Commission), National Health Services Survey, 2003, 2008 and 2013

Figure 3.31

Per capita government expenditure on health and per capita GDP, by province, 2017



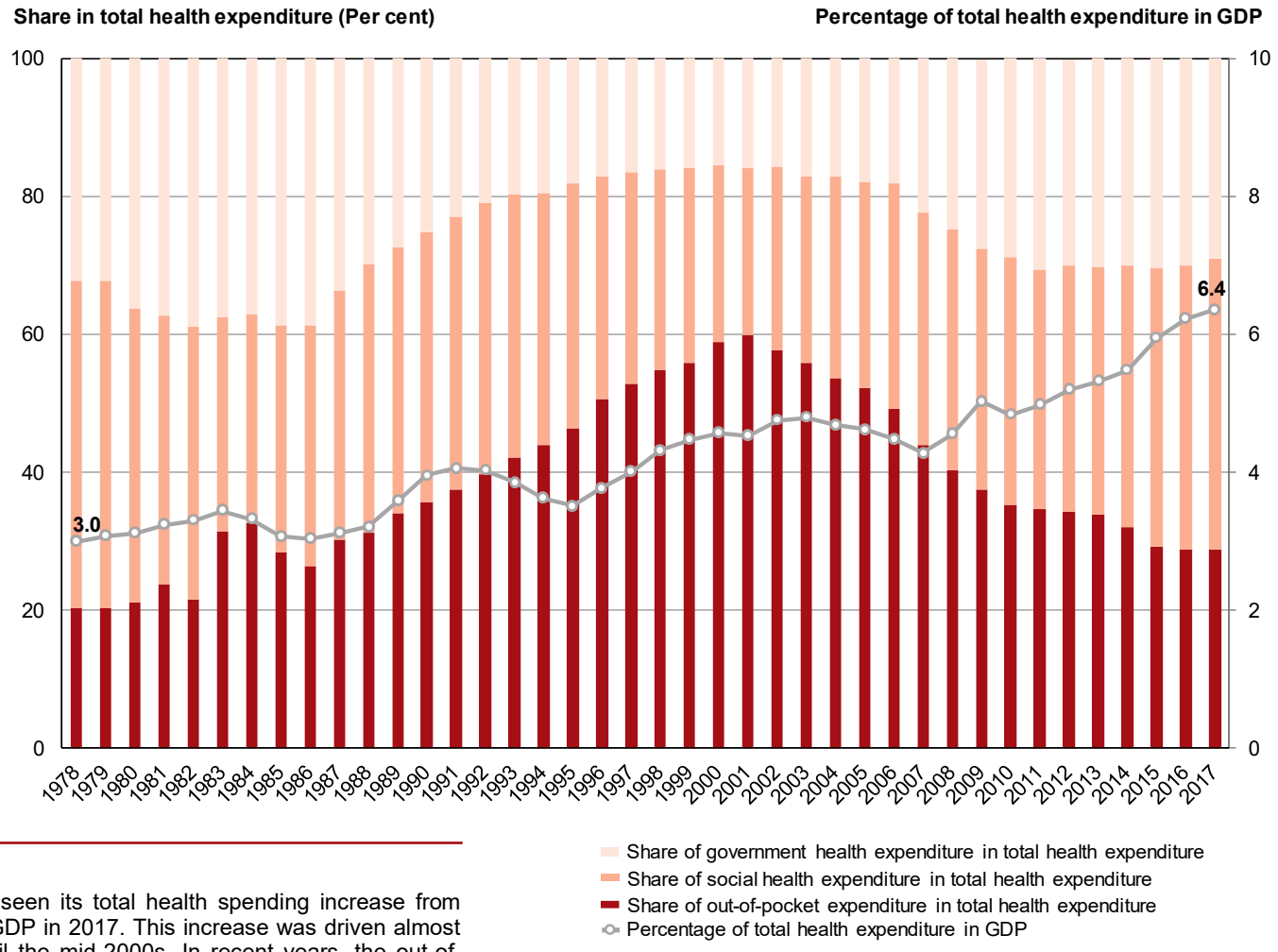
Source: National Bureau of Statistics, *China Statistical Yearbook*, 2018

Figure 3.30
Dramatic progress has been achieved for the first five indicators listed in this table, as seen by the narrowing gap between the poorest and richest quintiles. However, the gap between the highest quintile and the lowest quintile in catastrophic health expenses is still growing. In 2013, households from the poorest quintile were five times as likely as those from the richest quintile to experience catastrophic health expenses.

Figure 3.31
Plotting the provinces by their respective per capita spending on health care and per capita GDP reveals a general pattern in which eastern provinces spent more on health than western provinces. However, the relationship is not linear. Some western provinces with a low GDP per capita may have similar levels of per capita expenditure on health care as some eastern provinces.

Figure 3.32

Government, social and out-of-pocket expenditure on health, 1978–2017



Source: National Health Commission, *China Health Statistical Yearbook*, 2018

Figure 3.32
Over the past four decades, China has seen its total health spending increase from about 3.0 per cent to 6.4 per cent of its GDP in 2017. This increase was driven almost entirely by out-of-pocket expenditure until the mid-2000s. In recent years, the out-of-pocket share had decreased to 28.8 per cent in 2017. China aims to offer citizens better financial protection in health, by increasing the share of government health expenditure and reducing the share of out-of-pocket expenditure to around 28 per cent by 2020, a target set in the *Health China 2030 Plan*.

Maternal and Child Health

Data sources and references

[1] Ministry of Foreign Affairs, United Nations System in China, 'Report on China's Implementation of the Millennium Development Goals (2000–2015)', July 2015, http://www.cn.undp.org/content/china/zh/home/library/mdg/mdgs-report-2015-/, accessed May 2018.

[2] United Nations, 'Global Indicator Framework for the Sustainable Development Goals and Targets of the 2030 Agenda for Sustainable Development', 10 July 2017, Ref. No. A/RES/71/313, http://undocs.org/en/A/RES/71/313, accessed May 2018.

[3] National Health Commission, *China Health Statistical Yearbook,* 2018.

[4] The Central Committee of the Communist Party of China, State Council, *Health China 2030 Plan*, 25 October 2016, http://www.gov.cn/xinwen/2016-10/25/content_5124174.htm, accessed May 2018.

[5] National Health Commission (formerly the National Health and Family Planning Commission), UNICEF China, China CDC, *Strategy for the Survival and Development of Children Aged 0–6 in China: From evidence to action*, 2017.

[6] National Health Commission (formerly the National Health and Family Planning Commission), *Analysis Report of the 2013 National Health Services Survey in China*, 2015.

[7] National Health Commission (formerly the National Health and Family Planning Commission), *Report on China's National Maternal and Child Health Information*, 2017.

[8] National Health Commission, *Report on China's National Maternal and Child Health Information*, 2018.

[9] National Health Commission (formerly the National Health and Family Planning Commission), UNICEF China, China CDC, *Strategy for the Survival and Development of Children Aged 0–6 in China: From evidence to action*, 2017.

[10] National Health Commission (formerly the National Health and Family Planning Commission), UNICEF China, China CDC, *Strategy for the Survival and Development of Children Aged 0–6 in China: From evidence to action*, 2017.

[11] WHO, *Early Essential Newborn Care: Clinical Practice Pocket Guide*, 2014.

[12] National Health Commission, *Report on China's National Maternal and Child Health Information*, 2018.

[13] State Council, *Thirteenth Five-year Plan on Health Reform*, 27 December 2016, http://www.gov.cn/zhengce/content/2017-01/09/content_5158053.htm, accessed May 2018.

[14] National Health Commission (formerly the National Health and Family Planning Commission), 'Notice on Implementing the National Basic Public Health Service Programme in 2017', 5 September 2017, http://www.nhfpc.gov.cn/jws/s3577/201709/fb16b2e306bd469ab84e0c42173bc52d.shtml, accessed May 2018.

[15] **The New Rural Cooperative Medical Scheme (RCMS)**, initiated under the principle of fundraising from multiple sources (with contributions from individuals, collective units and government at various levels) and voluntary participation of farmers, aims to improve rural health insurance through major support for farmers' in-patient hospital costs and assistance for certain out-patient medical expenses. Pilot trials of RCMS began in selected areas in 2003 before it was progressively scaled up in China (National Health Commission (formerly the Ministry of Health), 'Suggestion on Establishing Rural Cooperative Medical Scheme', 2003).

[16] Ministry of Human Resources and Social Security, 'A Four-Level System for Medical Insurance Site-off Settlement', 28 February 2018, http://www.mohrss.gov.cn/SYrlzyhshbzb/dongtaixinwen/buneiyaowen/201802/t20180228_288941.html, accessed May 2018.

[17] UNICEF, *The State of the World's Children 2017*, 2017.

[18] ZHANG Yuan, et al., 'Long-term Trends of Hospital Delivery Rate in China between 1996 and 2015, *National Medical Journal of China*, vol. 97, no. 17, 2017, pp. 1337–1342.

[19] The National Health Services Survey (NHSS) is conducted every five years by the National Health Commission (formerly the National Health and Family Planning Commission, or the Ministry of Health), with five rounds of the survey conducted between 1993 and 2013. The sixth round of NHSS was conducted in September 2018.

[20] National Health Commission (formerly the National Health and Family Planning Commission), UNICEF China, China CDC, *Strategy for the Survival and Development of Children Aged 0–6 in China: From evidence to action*, 2017.

[21] National Health Commission, *China Health Statistical Yearbook*, 2018.

[22] WHO, *The World Health Report*, 2012.

[23] National Bureau of Statistics, *Poverty Monitoring Report of Rural China*, 2017.

[24] **Under-five mortality rate** – Probability of dying between birth and exactly 5 years of age, expressed per thousand live births (UNPD).

[25] **Infant mortality rate** – Probability of dying between birth and exactly 1 year of age, expressed per thousand live births (UNSD).

[26] **Neonatal mortality rate** – Probability of dying during the first 28 completed days of life, expressed per thousand live births (UNSD).

[27] ZHU Jun, et al., 'Sociodemographic and Obstetric Characteristics of Stillbirths in China: A census of nearly 4 million health facility births between 2012 and 2014', *Lancet Global Health*, vol. 4, 2016, pp. 109–118.

[28] **Maternal mortality ratio** – Annual number of deaths of women from pregnancy-related causes per 100,000 live births (UNSD).

[29] National Health Commission (formerly the National Health and Family Planning Commission), UNICEF China, China CDC, *Strategy for the Survival and Development of Children Aged 0–6 in China: From evidence to action*, 2017.

[30] WHO, *WHO Recommendations on Antenatal Care for a Positive Pregnancy Experience*, 2016.

[31] **Births attended by skilled health personnel** – Percentage of live births attended by skilled health personnel (doctors, nurses or midwives) (WHO).

[32] MENG Qun, et al., 'Trends in Access to Health Services and Financial Protection in China between 2003 and 2011: A cross-sectional study', *The Lancet*, vol. 379, no. 9818, 2012, pp. 805–814.

[33] After the implementation of integrated PMTCT of HIV, syphilis and hepatitis B, screening for and management of pregnant women with syphilis infection was rapidly expanded. The proportion of pregnant women with syphilis infection receiving treatment increased from 48.0 per cent in 2011 to 68.1 per cent in 2014. The increasing trend in the number of congenital syphilis cases identified was reversed and continued to decline. In 2014, 9,252 congenital syphilis cases were reported, with an incidence rate of 61.6 per 100,000 live births, which was a 22 per cent decrease from 2011. Aside from routine immunization, hepatitis B immunoglobulin is provided for free to newborns of mothers tested positive for hepatitis B surface antigen (HBsAg) within 24 hours of birth. Results of the Seroepidemiologic Survey of Hepatitis B Virus Infections in 2014 showed that the carriage rate of HBsAg among children aged 1–4 years declined from 0.96 per cent in 2006 to 0.32 per cent in 2014 (National Health Commission (formerly the National Health and Family Planning Commission), 'China National Programme for Prevention of Mother-to-Child Transmission of HIV, Syphilis and Hepatitis B – Progress Report', 2015).

[34] China CDC, 'Update on the AIDS/STD Epidemic in China in December 2016', *China Journal of AIDS and STD*, vol. 23, no. 2, 2017, p. 93.

[35] **Number of physicians per 1,000 population** – Ratio of total number of physicians working in the country to the total population, expressed per 1,000 population (WHO).

[36] MENG Qun, et al., 'Trends in Access to Health Services and Financial Protection in China between 2003 and 2011: A cross-sectional study', *The Lancet*, vol. 379, no. 9818, 2012, pp. 805–814.

4

NATIONAL IMMUNIZATION PROGRAMME

OVERVIEW

Launched in 1978, China's Expanded Programme on Immunization (EPI) has been a highly successful and cost-effective public health intervention. Hundreds of millions of children have been protected from vaccine-preventable diseases. Major achievements made by the programme include:

- A 98 per cent decrease in mortality from and incidence of major infectious diseases [poliomyelitis (hereafter 'polio'), measles, tetanus, diphtheria and pertussis] between 1978 and 1995.
- China achieved universal childhood immunization in 1990, which means that all provinces and counties in the country reached 85 per cent coverage of Bacilli Calmette-Guérin vaccine (BCG), oral polio vaccine (OPV), diphtheria, pertussis and tetanus vaccine (DPT) and measles vaccine for 1-year-old children.[1]
- An 85 per cent coverage of BCG, OPV, DPT and measles vaccines for 1-year-old children in every township in China in 1996.[2]
- In 2000, China achieved polio-free status. Though there was a subsequent outbreak following the importation of wild poliovirus in 2011 in Xinjiang, the Government immediately adopted a variety of response measures, including carrying out several rounds of supplementary immunization activities (SIAs) for polio in the region, which helped to prevent the circulation of wild poliovirus and stopped the epidemic.[3] In November 2012, WHO affirmed China's polio-free status.
- In 2012, WHO declared that maternal and newborn tetanus had been eliminated in China.
- A dramatic fall in hepatitis B infection rates among young children since the addition of the hepatitis B vaccine to the immunization programme in 2002. According to the Seroepidemiologic Survey of Hepatitis B Virus Infections in 2014, the prevalence of the hepatitis B surface antigen among children under five decreased to 0.32 per cent, further testament to the success of China's immunization programme.

Aimed at benefitting more children and promoting universal immunization for children, the State Council ratified the revised *Law of the People's Republic of China on Prevention and Treatment of Infectious Diseases* in 2004, making routine immunization for children free of charge. In 2007, the Government of China expanded the types of vaccines covered by the National Immunization Programme (NIP) to protect children from 13 infectious diseases.

Besides sustaining the immunization programme through policy support, China has been making technical breakthroughs in the development of new vaccines, such as the world's first hepatitis E vaccine, Sabin inactivated polio vaccine (Sabin-IPV), and inactivated enterovirus type 71 (EV71) vaccine, which have been approved and launched on the market. A number of locally produced vaccines, such as live attenuated Japanese Encephalitis vaccine, influenza vaccine, bi-valent OPV, and inactivated hepatitis A vaccine, have been included on the list of WHO prequalified vaccines.

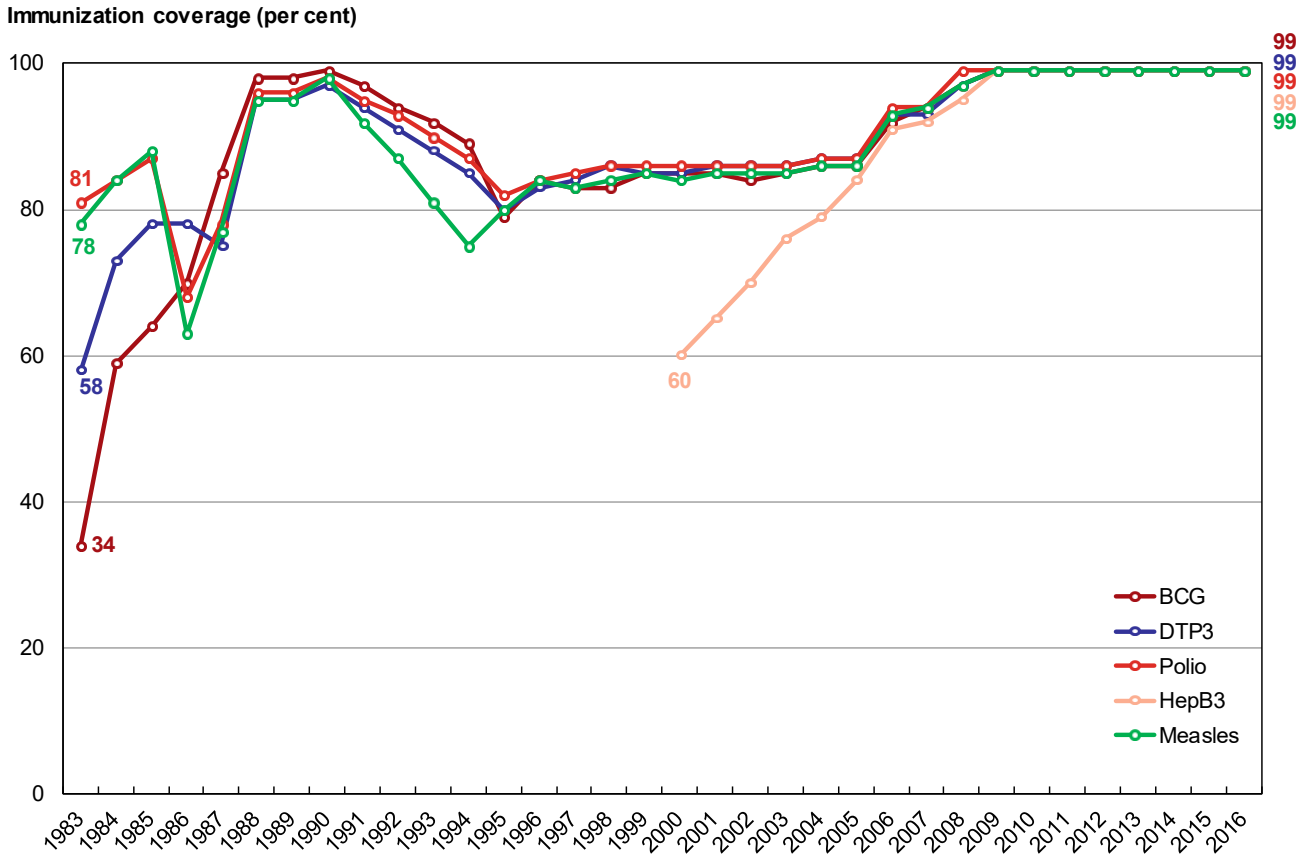
Since 1 May 2016, China has adopted a new strategy for polio immunization in response to the Global Polio Eradication Initiative. The new strategy requires at least one dose of IPV to be introduced into the childhood immunization schedule and a switch from tri-valent OPV to bi-valent OPV. This strategy has served to both decrease the incidence of vaccine-derived polioviruses and reduce the risks of wild poliovirus importation and circulation.[4] The locally produced polio vaccines played a vital role in the introduction of IPV and the cessation of trivalent OPV.

In October 2017, the first National Immunization Advisory Committee (NIAC) was established. Responsible for providing advice to the development and revision of major national immunization policies, the NIAC reviews and develops resolutions for adjusting the types of vaccines in the NIP, and revising the immunization schedules in the programme, based on a comprehensive assessment of evidence such as the burden of vaccine-preventable diseases, and the safety, effectiveness, health economic evaluation, production and supply capacity of vaccines. It plays an active role in promoting the inclusion of new vaccines into the NIP, which can effectively reduce under-five mortality on the basis of collecting, compiling and analysing scientific evidence, including type II vaccines such as pneumococcal, Haemophilus Influenzae Type b (Hib) vaccine and rotavirus vaccines.

Since the implementation of health sector reform in 2009, and in recognition of the previously inadequate attention paid to immunization in the public health service package, the central government increased funding for the NIP. However, challenges remain, as there are insufficient operational funds and human resources to administer the increased number of vaccines and the corresponding expanded number of surveillance activities. The importance of immunization as the foundation of a basic public health service programme has been weakened; there is limited capacity in terms of the number and expertise of health personnel; some areas have an inadequate vaccine supply chain and cold chain management; the roll-out of new vaccines in some western provinces and remote areas is relatively slow; and the geographical accessibility and distribution of the population also pose hurdles to the delivery of quality immunization services. Generally speaking, the implementation of the immunization programme at sub-national levels is still variable, with some areas still under-served.

As a result of high immunization coverage, the incidence of and mortality from vaccine-preventable diseases has dropped. Media coverage of isolated negative vaccine incidents has dampened public motivation for and confidence in vaccines and vaccination, with the public paying increasing attention to vaccine safety, while showing lower levels of awareness of immunization. Therefore, immunization coverage of certain vaccines has fallen and the immunization programme in China has experienced negative impacts.

Figure 4.1
Immunization coverage of five vaccines among 1-year-olds, 1983–2016

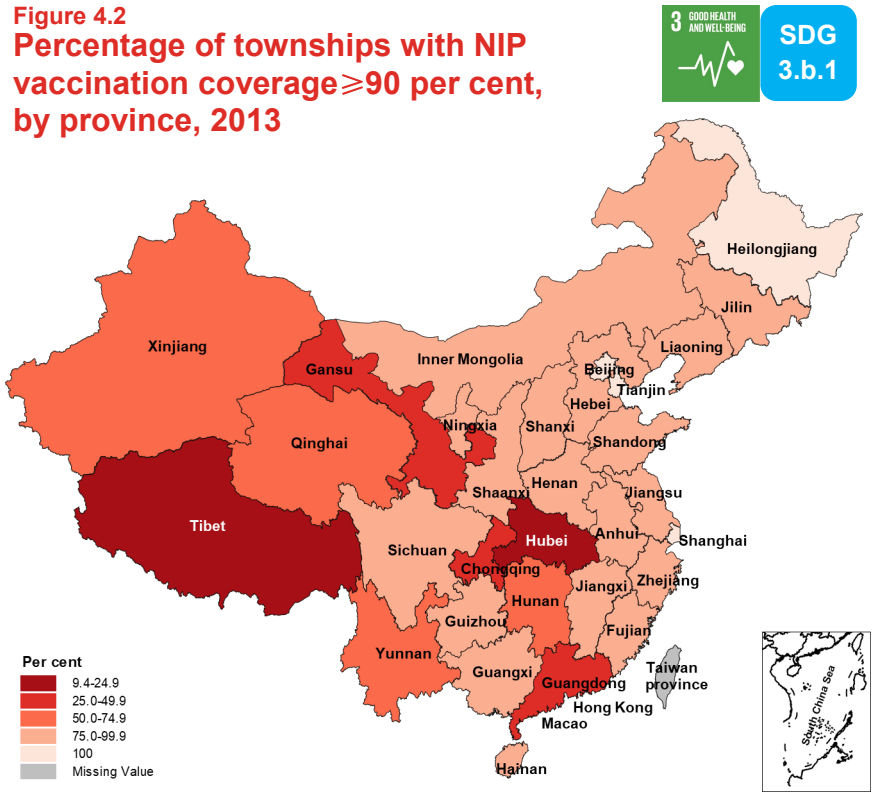


Source: National Health Commission (formerly the National Health and Family Planning Commission), WHO and UNICEF, *Joint Report on Child Immunization Coverage*, 2017

Figure 4.1
In the early 1980s, coverage of some vaccinations was as low as 34 per cent. Through the EPI, national vaccination coverage reached above 90 per cent by the early 1990s. A slight drop in coverage was noted during a following period – a result of reduced financial investment from the Government and an increasing reliance on out-of-pocket contributions to cover some of the costs related to immunization services. In 2002, hepatitis B was introduced into the National Immunization Schedule. In 2004, the Government began to implement the revised *Law on Prevention and Treatment of Infectious Diseases* that made routine immunization services free of charge for children. Vaccination coverage has since risen accordingly. Vaccination coverage of BCG, DTP3, polio, HepB3 and measles have all reached 99 per cent since 2009.

Figure 4.2

Percentage of townships with NIP vaccination coverage⩾90 per cent, by province, 2013



Source: ZHENG Jingshan, et al., 'Immunization Coverage of the National Immunization Program Vaccines at the Township Level, Based on a Survey Conducted by Provincial CDCs in China, 2013', *Chinese Journal of Vaccines and Immunization*, vol. 20, no. 6, 2014, pp. 492–498, 546

Figure 4.2
China's national goal in 2015 was that vaccination coverage for children of an appropriate age should reach over 90 per cent at the township level. The immunization coverage survey conducted by provincial centers for disease control and prevention (CDCs) in 2013 focused on eight NIP vaccines, including BCG, OPV, DTP, measles-containing vaccine, hepatitis B, group A meningococcal polysaccharide, Japanese Encephalitis, and live attenuated hepatitis A. The survey showed various progress among provinces, with some under-served areas in central and western regions.

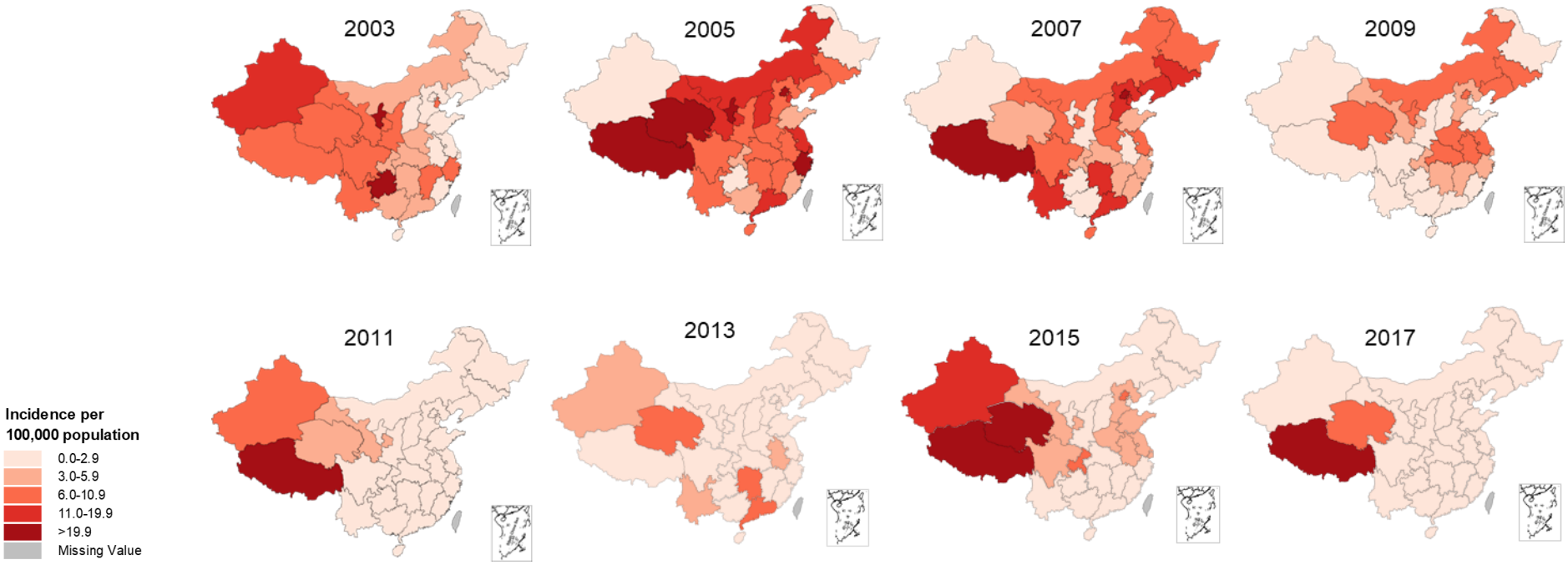
Figure 4.3

Percentage of townships with hepatitis B vaccination coverage⩾90 per cent, by province, 2013

Source: ZHENG Jingshan, et al., 'Immunization Coverage of the National Immunization Program Vaccines at the Township Level, Based on a Survey Conducted by Provincial CDCs in China, 2013', *Chinese Journal of Vaccines and Immunization*, vol. 20, no. 6, 2014, pp. 492–498, 546

Figure 4.3
Upon the completion of the China-GAVI (Global Alliance for Vaccines and Immunization) Project, the Government has continued to strengthen hepatitis B vaccination for children, with stable supplies and improved immunization capacity. The coverage of the hepatitis B birth dose for newborns and full-course vaccination coverage of the hepatitis B vaccine among 1-year-olds remain high, with gaps narrowing gradually across the regions and between urban and rural areas. Based on the immunization coverage survey conducted by provincial CDCs in 2013, hepatitis B vaccination coverage reached over 90 per cent of the target children in at least 90 per cent of townships in all provinces, apart from Tibet and Qinghai, which have relatively low hepatitis B vaccination coverage.

Figure 4.4
Measles incidence, 2003–2017



Source: China CDC, National Measles Surveillance Reporting System, 2018

Figure 4.4
The map shows provincial-level measles incidence every two years between 2003 and 2017. Between 2004 and 2009, 27 of the 31 provinces in China conducted provincial-level SIAs for measles vaccine, followed by a national-level SIA in 2010.[5] Afterwards, the measles incidence dropped noticeably. However, from the end of 2012, it experienced a rebound, reaching its highest level (4/100,000) in 2014, but began to fall again in 2015.[6] In 2017, the reported incidence of measles reached a record low (0.4/100,000), mainly concentrated in Tibet and Qinghai.

National Immunization Programme

Data sources and references

[1] National Health Commission (formerly the National Health and Family Planning Commission), *60 Years for Disease Control and Prevention in China*, 2015, p. 259.

[2] National Health Commission (formerly the National Health and Family Planning Commission), *60 Years for Disease Control and Prevention in China*, 2015, p. 260.

[3] China CDC, 'One Year for China's Effort to Interrupt the Circulation of Imported Wild Poliovirus', 16 October 2012, http://www.chinacdc.cn/zxdt/201210/t20121016_70677.html, accessed May 2018.

[4] National Health Commission (formerly the National Health and Family Planning Commission), 'China Responded Positively to WHO's Resolution to Implement the New Strategy for Polio Vaccine', 29 April 2016, http://www.nhfpc.gov.cn/jkj/s3582/201604/8c760a934d5b4d41a81752915c58d304.shtml, accessed April 2018.

[5] WHO Western Pacific Region, 'Measles Factsheets', http://www.wpro.who.int/china/mediacentre/factsheets/measles/en/, accessed May 2018.

[6] SU Qiru, et al., 'Epidemiology of Measles in China, 2015–2016', *Chinese Journal of Vaccines and Immunization*, vol. 24, no. 2, 2018, pp. 146–151.

5

NUTRITION

OVERVIEW

The double burden of child malnutrition in China

In China, children are faced with the double burden of malnutrition. Thanks to rapid economic development and government interventions targeting undernutrition, the prevalence of underweight (low weight-for-age) and wasting (low weight-for-height) have dropped dramatically. However, stunting (low height-for-age) remains a problem, especially in poor rural areas; and the rate of child overweight and obesity (high body mass index or BMI for age) has continued to increase.[1]

Intrauterine growth retardation, inadequate nutrition and frequent infections during early life are the most frequently cited causes of malnutrition. In addition, subclinical conditions such as environmental enteropathy may also have a cumulative effect on gut structure and function, which can cause nutrition malabsorption, resulting in negative impact on child growth and decreasing the efficacy of nutrition interventions.[2]

Currently, stunting is the primary indicator to measure the extent of child malnutrition.[3] Worldwide, stunting affects 22.2 per cent of children under five or a total of 151 million children.[4] Between 1990 and 2013, in China, the stunting prevalence of children under five decreased from 33.1 per cent to 8.1 per cent, while in poor rural areas, the stunting prevalence of children under five was as high as 18.7 per cent in 2013, 2.3 times the national average.[5] While China's stunting prevalence of children under five ranks 119th in the world, given the huge number of children in China, in absolute numbers of stunted children – China ranks fifth in the world, accounting for 4.1 per cent of the total number of stunted children worldwide.[6]

The issue of being overweight results from energy intakes from food and beverages that exceed children's energy requirements over a prolonged period. This increases the risk of diet-related non-communicable diseases later in life.[7] The child overweight and obesity rates have grown rapidly over the past decades in both urban and rural areas, becoming a noticeable public health problem. Between 2002 and 2012, the prevalence of overweight increased from 6.5 per cent to 8.4 per cent and the obesity rate increased from 2.7 per cent to 3.1 per cent among children under six.[8] In terms of school-aged children, the increments were greater in boys than in girls. From 2002 to 2012, the prevalence of overweight among boys aged 7–17 increased from 5.1 per cent to 10.9 per cent, while the obesity rate among the same group increased from 2.5 per cent to 7.5 per cent. During the same period, the prevalence of overweight among girls aged 7–17 increased from 3.9 per cent to 8.0 per cent, while the obesity rate among the same group increased from 1.7 per cent to 4.6 per cent. The overweight and obesity rates of primary school students rank the highest among all school-aged children.[9]

Essential micronutrients

Micronutrients, particularly iron, vitamin A, zinc, iodine and folate, play a vital role in a child's development and health. Anaemia is caused by limited amounts of iron and other vitamins in the diet, as well as by factors that inhibit iron absorption. In 2009, China approved general standards on a complementary food supplement (Ying Yang Bao)[10] to be used in nutrition interventions to prevent and control the deficiency of iron and other micronutrients among infants and young children. Based on the 2013 China Food and Nutrition Surveillance, the prevalence of anaemia among children under five decreased from 12.6 per cent in 2010 to 10.9 per cent in 2013. Studies on the effectiveness of Ying Yang Bao intervention among children in poverty areas have also demonstrated its positive impact on development quotient and intelligence quotient.[11]

Evidence indicates that the first 1,000 days of life (the time spanning roughly between conception and one's second birthday) is the most critical period as this is when nutritional deficiencies have a significant and often irreversible adverse impact on child survival and growth, affecting children's ability to learn in school and their productivity in later life. Micronutrient deficiency is more prominent in poor rural areas. In response, the Government of China began to implement its Nutrition Improvement for Children in Poverty Areas programme in 2012, through the free distribution of Ying Yang Bao for infants and young children aged 6–23 months. It also began to carry out campaigns and promote health education on child nutrition to improve the nutritional and health status of infants and young children in poverty areas and increase parents' knowledge of scientific feeding practices. By the end of 2017, the programme covered 341 counties located in 14 'poverty blocks', benefitting 5.8 million children.[12]

In 2012, the prevalence of anaemia among pregnant women was as high as 17.2 per cent in China.[13] The process of malnourishment among children typically begins in utero. In order to ensure adequate nutrition for every child, the Government of China has actively promoted the First 1,000 Days campaign on nutrition and health since 2017. It has supported pre-pregnancy and maternal nutrition assessments and issuance of dietary guidance, implemented nutrition intervention programmes for women and children, and advised women during the periconceptional period to increase their intake of multiple micronutrient supplements including folate and iron, reduce the prevalence of anaemia among pregnant women, and prevent nutrition deficiency among children.[14]

Breastfeeding and complementary feeding

Scientific feeding and balanced dietary intake for children under two directly affect the nutritional status of infants and young children, thus affecting children's survival. WHO and UNICEF recommend that mother's breastmilk should be provided to infants within one hour of birth (early initiation of breastfeeding); during the first six months of life, infants should be given only breastmilk, and no other fluids or food; after six months, nutritionally adequate and safe complementary foods should be introduced, and breastfeeding should continue up to 2 years of age and beyond.[15]

Breastfeeding has a profound impact on a child's survival, health, nutrition and development. Breastmilk provides all of the nutrients, vitamins and minerals that an infant needs for growth during the first six months, which can reduce the incidence of and mortality from infectious disease and improve children's intelligence. Breastfeeding is also beneficial for mothers, in terms of helping to prevent breast cancer, extending birth intervals, and preventing diabetes, overweight, and ovarian cancer.

Despite the benefits mentioned above and the fact that most mothers can produce enough milk to support the normal growth and development of their babies, breastfeeding in China is undermined by a lack of proper knowledge and guidance on breastfeeding, insufficient social support, and interference from the promotion of breastmilk substitutes. In 2013, the exclusive breastfeeding rate within the first six months of life was 20.8 per cent,[16] much lower than the average level (37 per cent) of middle- and low-income countries in the world.[17] There is still a long way to go to achieve China's target of increasing the exclusive breastfeeding rate for infants under six months to at least 50 per cent by 2020, as proposed in the National Nutrition Plan (2017–2030).

China has made continuous efforts in promoting breastfeeding, including conducting a re-assessment of baby-friendly hospitals to ensure sustainable development; promoting the implementation of the International Code of Marketing of Breastmilk Substitutes in China; pushing forward the 10m2 of Love campaign to promote public breastfeeding rooms; and carrying out training on breastfeeding counselling. In the National Nutrition Plan (2017–2030), the Government proposed to further improve the system and environment for breastfeeding.

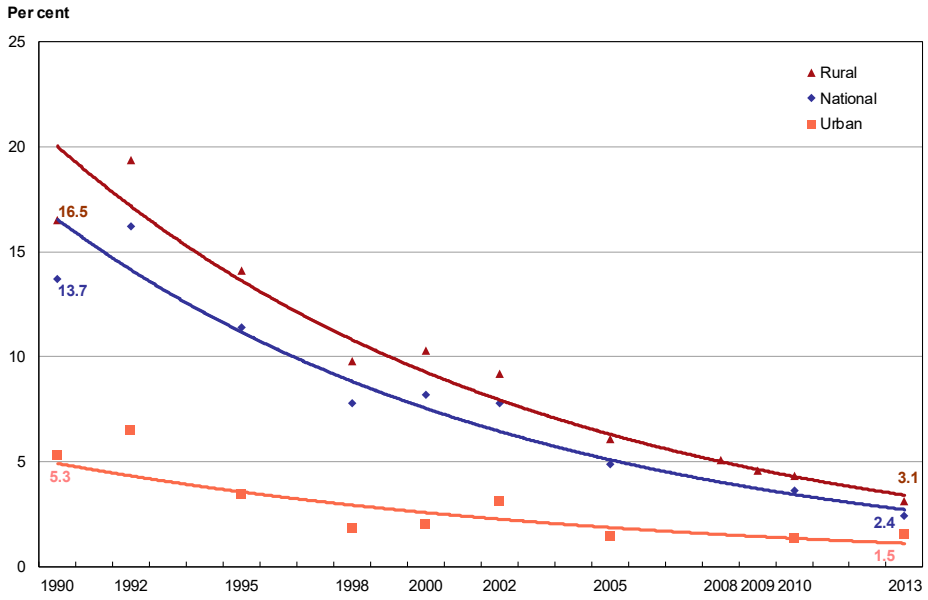
Complementary feeding is also an important part of scientific infant feeding practices. Data from the 2013 China Nutrition and Health Surveillance show that the prevalence of minimum dietary diversity, minimum meal frequency and minimum acceptable diet[18] were 52.5 per cent, 69.8 per cent, and 27.4 per cent among children aged 6–23 months, respectively, with noticeable differences between urban and rural areas. Studies have shown that food availability, household income and maternal education are positively related to feeding practices.[19]

Sustainable elimination of iodine deficiency

Globally, iodine deficiency is one of the primary causes of preventable learning disabilities and brain damage for a developing foetus. In line with WHO recommendations, China has adopted Universal Salt Iodization (USI) as the national strategy since 1994 for improving iodine intake and preventing iodine deficiency. The global USI target is for 90 per cent of households to consume adequately iodized salt. China also established a more rigorous target: at least 90 per cent of households to be consuming adequately iodized salt in at least 95 per cent of counties by 2010. Thanks to government commitment, strict regulation of the salt industry and the continuously improving monitoring and evaluation system, 28 provinces in China achieved the goal of eliminating iodine deficiency disorders (IDD) at the provincial level in 2010, while Tibet, Qinghai and Xinjiang almost eliminated IDD. Approximately 98 per cent of all counties nationwide have achieved the goal of eliminating IDD.[20]

While China has achieved significant success in eliminating IDD, some challenges remain: a) new factors have led to a reduction in iodine intake – some families have the incorrect and unscientific belief that long-term consumption of iodized salt leads to thyroid disease; more and more processed food contains non-iodized salt, and others have curtailed their salt consumption to prevent and control high blood pressure; b) pregnant and lactating women need higher levels of iodine than the general population, thus they have a higher risk of inadequate intake of iodine; and c) the health risk of excessive iodine intake in high water iodine areas.[21] In response to these challenges, the Government is taking proactive measures to ensure residents' appropriate iodine nutrition level,[22] including communicating the risks of IDD and providing information on thyroid disease to guide the public on scientific iodine supplementation; further strengthening monitoring of iodized salt at the county level or above and promoting the public release of results; and carrying out interventions that take into account local contexts, such as advocating water improvement while providing non-iodized salt in high water iodine areas.

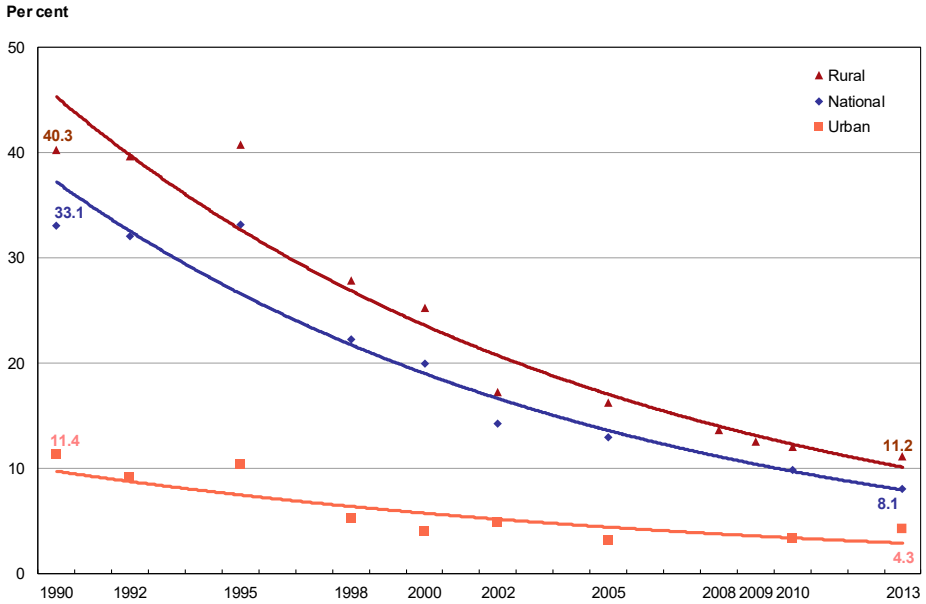
Figure 5.1
Prevalence of underweight among children under five, 1990–2013



Sources: China CDC, China Nutrition and Health Surveillance (1992, 2002 and 2013 data); China Food and Nutrition Surveillance System, other years

Figure 5.2
Prevalence of stunting among children under five, 1990–2013

SDG 2. 2.1

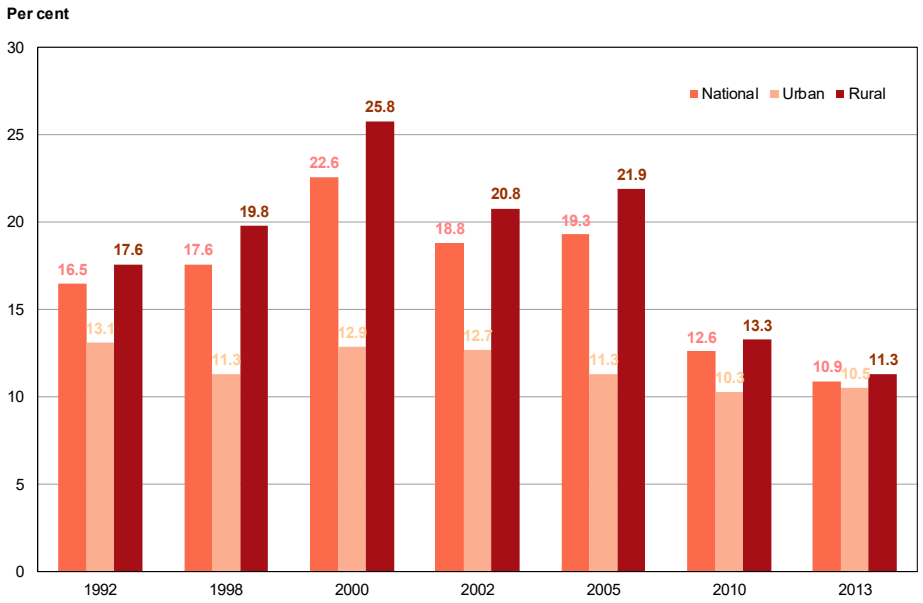


Sources: China CDC, China Nutrition and Health Surveillance (1992, 2002 and 2013 data); China Food and Nutrition Surveillance System, other years

Figure 5.1
In 1990, the national prevalence of underweight[23] (low weight-for-age) among children under five was 13.7 per cent (5.3 per cent in urban areas and 16.5 per cent in rural areas). Between 1990 and 2013, the prevalence of underweight among children under five decreased significantly to 2.4 per cent nationally, with 1.5 per cent in urban areas and 3.1 per cent in rural areas. Prevalence of underweight was much higher in poor rural areas at 5.2 per cent. Underweight is measured according to WHO Child Growth Standards.

Figure 5.2
The prevalence of stunting[24] (low height-for-age) decreased from 33.1 per cent in 1990 to 8.1 per cent in 2013. Between 1990 and 2013, stunting among urban children decreased from 11.4 per cent to 4.3 per cent while rural children's stunting prevalence decreased from 40.3 per cent to 11.2 per cent. Specifically, in poor rural areas, the prevalence of stunting remained high in 2013, at about 18.7 per cent. Stunting is measured according to WHO Child Growth Standards.

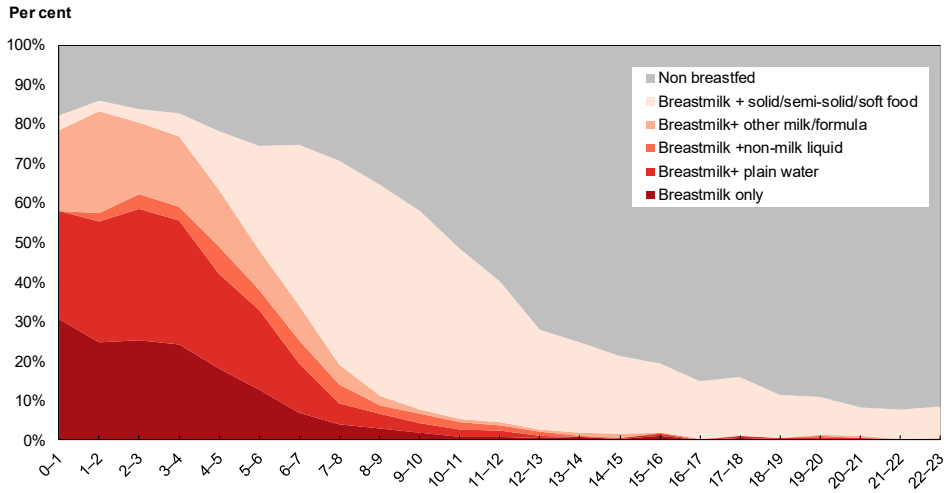
Figure 5.3
Prevalence of anaemia among children under five, 1992–2013



Sources: China CDC, *China Food and Nutrition Surveillance Report*, 2005; National Health Commission (formerly the Ministry of Health), *2012 National Report on the Nutritional Status of Children Aged 0–6 Years,* 2012 (2010 data); 2013 China Nutrition and Health Surveillance (2013 data)

Figure 5.3
Anaemia[25] remains a persistent problem among children in China. Between 1992 and 2005, the prevalence of anaemia fluctuated between 16 and 23 per cent, without obvious decline. From 2005, anaemia prevalence began to decrease, reaching 10.9 per cent in 2013, with around one in nine children reported as anaemic.

Figure 5.4
Infant and young child feeding practices in the first two years of life, 2013



Source: (Derived from) China CDC, 2013 China Nutrition and Health Surveillance

Figure 5.4
Based on data from China Nutrition and Health Surveillance in 2013, this chart illustrates feeding practices for infants and young children during their first two years of life, nationally. It shows that for infants under one month, the percentage of exclusive breastfeeding is 30 per cent, and the percentage of predominant breastfeeding (breast milk and plain water only) is 27 per cent, amounting to a total of 57 per cent. For infants under four months, the two percentages combined maintains at a level above 50 per cent. However, beyond four months of age, the percentages of both exclusive breastfeeding and predominant breastfeeding drop rapidly, amounting to a total of only 32 per cent for infants aged 5–6 months. On the other hand, more than one third of infants under six months were not breastfed, or were breastfed along with other milk/formula, and around 50 per cent of infants aged 10–11 months were not breastfed anymore. Non-breastfeeding rate increases quickly after one year of age: only one fourth of children aged one continued to receive breast milk, and more than 96 per cent of children aged two were not breastfed. The introduction of solid/semi-solid/soft food surged promptly after four months of age, with 80 per cent of eight-month-old infants receiving solid/semi-solid/soft food. For infants under six months, non-exclusive breastfeeding is mainly associated with not being breastfed after birth, intake of other milk/formula, intake of water, and premature intake of solid/semi-solid/soft food.

Figure 5.5
Infant and young child breastfeeding and complementary feeding, 2013

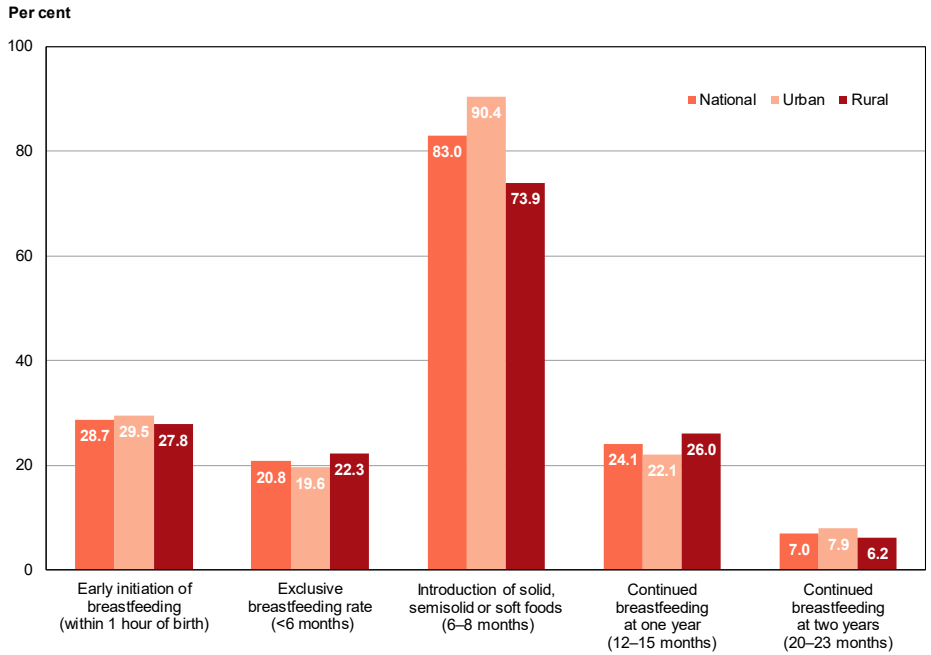
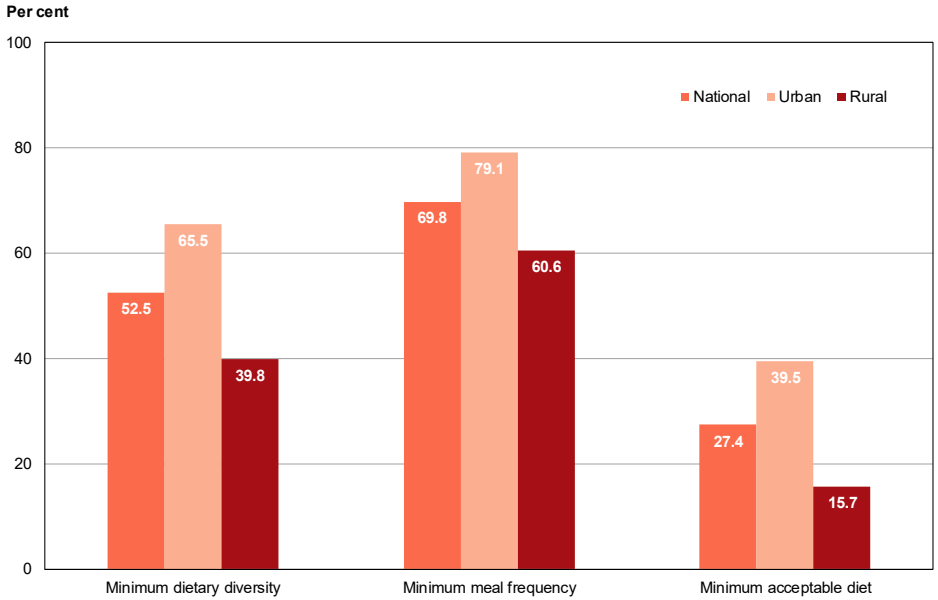


Figure 5.6
Dietary intake among infant and young child aged 6–23 months, 2013



Sources: National Health Commission (formerly the National Health and Family Planning Commission), *China Nutrition and Non-Communicable Disease Report (2015)*, 2015 (exclusive breastfeeding in the first six months); data for other indicators are derived from China CDC, 2013 China Nutrition and Health Surveillance

Figure 5.5 and 5.6

Results from the 2013 China Nutrition and Health Surveillance found that, in 2013, the national rate for early initiation of breastfeeding within one hour of birth was 28.7 per cent, for exclusive breastfeeding in the first six months was 20.8 per cent, for continued breastfeeding at 12–15 months was 24.1 per cent, and for continued breastfeeding at 20–23 months was only 7.0 per cent.

Though the rate of timely complementary feeding was as high as 83.0 per cent, the rate of minimum dietary diversity, minimum meal frequency and minimum acceptable diet was only 52.5 per cent, 69.8 per cent and 27.4 per cent for 6–23 months infants and young children, respectively.

These two charts show suboptimal infant and young child feeding from birth to 23 months old in general, and show urban and rural differences.

Nutrition

Data sources and references

[1] National Health Commission (formerly the National Health and Family Planning Commission), *China Nutrition and Non-Communicable Disease Report (2015)*, 2015.

[2] Kathryn G. Dewey, et al., 'Early Child Growth: How do nutrition and infection interact', *Maternal and Child Nutrition*, vol. 7, suppl. 3, 2011, pp. 129–142.

[3] Environment and Health Data Center, 'Beyond Malnutrition: The role of sanitation in stunted growth', 23 February 2016, http://www.eh-data.cn/xwdt/gwxx/201602/t20160223_636296.html, accessed May 2018.

[4] UNICEF/WHO/World Bank, 'Levels and Trends in Child Malnutrition', *Joint Child Malnutrition Estimates, 2018 edition*, https://data.unicef.org/wp-content/uploads/2018/05/JME-2018-brochure-web.pdf, accessed May 2018.

[5] YU Dongmei, et al., 'Comparison of Undernutrition Prevalence of Children under-five in China between 2002 and 2013', *Biomedical and Environmental Sciences*, vol. 29, no. 3, 2016, pp. 165–176.

[6] UNICEF, 'The State of the World's Children 2017 Statistical Tables', https://data.unicef.org/resources/state-worlds-children-2017-statistical-tables/, accessed May 2018.

[7] UNICEF/WHO/World Bank, 'Levels and Trends in Child Malnutrition', *Joint Child Malnutrition Estimates, 2018 edition*, https://data.unicef.org/wp-content/uploads/2018/05/JME-2018-brochure-web.pdf, accessed May 2018.

[8] China CDC, UNICEF, *Nutrition and Health Atlas among Chinese Population*, 2017.

[9] China CDC, UNICEF, *Nutrition and Health Atlas among Chinese Population*, 2017.

[10] **Ying Yang Bao** – This is a complementary food supplement developed by Chinese scientists that is suitable for the growth and developmental needs of children in China, based on infants and young children's dietary intake and habits. A pack of Ying Yang Bao contains 12 grams of soybean powder supplemented with calcium, iron, zinc, and vitamin A and B vitamins. It can be made into semi-solid food for children to eat. After the Wenchuan earthquake in 2008, UNICEF provided Ying Yang Bao for children aged 6–23 months in eight counties affected by the earthquake for 18 months, which demonstrated the positive impact of Ying Yang Bao on the improvement of child nutrition.

[11] CHEN Chunming, et al., 'Effect of In-home Fortification of Complementary Feeding on Intellectual Development of Chinese Children', *Biomedical and Environmental Sciences*, vol. 23, no. 2, 2010, pp. 83–91.

[12] China CDC, 'Surveillance Report on Nutrition Improvement for Children in Poverty Areas Programme' (Internal Report), 2018.

[13] China CDC, UNICEF China, *Nutrition and Health Atlas among Chinese Population*, 2017.

[14] State Council, 'The State Council's Notice on Disseminating National Nutrition Plan (2017–2030)', 13 July 2017, http://www.gov.cn/zhengce/content/2017-07/13/content_5210134.htm, accessed May 2018.

[15] WHO, 'Infant and Young Child Feeding Key Facts', 16 February 2018, http://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding, accessed June 2018.

[16] National Health Commission (formerly the National Health and Family Planning Commission), *China Nutrition and Non-Communicable Disease Report (2015)*, 2015.

[17] Cesar G. Victora, et al., 'Breastfeeding in the 21st Century: Epidemiology, mechanisms, and lifelong effect', *The Lancet: Breastfeeding Series*, vol. 387, 2016, pp. 475–490.

[18] **Minimum dietary diversity** – Foods have been categorized into seven groups, including: 1) grains, roots and tubers, 2) legumes and nuts, 3) dairy products, 4) flesh foods, 5) eggs, 6) vitamin-A rich fruits and vegetables, and 7) other fruits and vegetables. Children aged 6–23 months who received foods from four or more food groups during the previous day could be regarded as meeting minimum dietary diversity.

Minimum meal frequency – This depends on whether a child aged 6–23 months is currently breastfed or not. For breastfeeding children: solid, semi-solid, or soft foods, twice a day for infants aged 6–8 months, and three times a day for children aged 9–23 months; for non-breastfeeding children: solid, semi-solid, or soft foods, or milk feeds, four times a day for children aged 6–23 months.

Minimum acceptable diet – This refers to children aged 6–23 months who had at least the minimum dietary diversity and the minimum meal frequency during the previous day.

(UNICEF, Multiple Indicator Cluster Surveys 5 (MICS5), Table NU.8, http://mics.unicef.org/)

[19] DUAN Yifan, et al., 'Exclusive Breastfeeding Rate and Complementary Feeding Indicators in China: A national representative survey in 2013', *Nutrients*, vol. 10, 2018, p. 249.

[20] SHEN Hongmei, 'The Current Status and Countermeasures of Iodine Deficiency Disorders and Iodine Excess in China', *Chinese Journal of Epidemiology*, vol. 31, no. 3, 2012, pp. 239–240.

[21] SUN Dianjun, et al., 'Eliminating Iodine Deficiency in China: Achievements, challenges and global implications', *Nutrients*, vol. 9, no. 4, 2017, p. 361.

[22] National Health Commission (formerly the National Health and Family Planning Commission), 'Announcement on the Solicitation of Public Opinions on the Revised Version of the Regulations on Iodized Salt Consumption to Eliminate Iodine Deficiency Disorder', 14 May 2018, http://www.moh.gov.cn/jkj/s7929/201805/18bb651c452e433e8d78c23f525305e2.shtml, accessed May 2018.

[23] **Underweight** – Moderate and severe: percentage of children aged 0–59 months who are below minus two standard deviations from median weight-for-age of WHO Child Growth Standards (UNICEF, *The State of the World's Children 2017*, 2017).

[24] **Stunting –** Moderate and severe: percentage of children aged 0–59 months who are below minus two standard deviations from median height-for-age of WHO Child Growth Standards (UNICEF, *The State of the World's Children 2017*, 2017).

[25] **Anaemia –** A condition in which the number of red blood cells or their oxygen-carrying capacity is insufficient to meet physiologic needs, which vary by age, sex, altitude, smoking, and pregnancy status. Iron deficiency is the most common cause of anaemia globally. Other conditions, such as folate, vitamin B12 and vitamin A deficiencies, chronic inflammation, parasitic infections, and inherited disorders can all cause anaemia. The threshold for anaemia in children aged 6–59 months is 110 g/l, as defined by WHO.

6

CHILD INJURY

OVERVIEW

Child injury is increasingly recognized as an important public health problem and social issue. According to WHO estimates, in 2016 alone, injuries and violence led to more than 640,000 deaths among children aged 0–14 worldwide, accounting for 9.6 per cent of all child deaths. Among all deaths caused by injuries, the proportion of unintentional injuries exceeded 90 per cent.[1]

In China, it is estimated that more than 10 million children aged 0–17 are injured each year, and over 60,000 children among them die from these injuries. The leading causes of injury-related deaths are drowning, road traffic injuries, falls and poisoning,[2] and the ranking of causes varies among different age groups. As China has made progress in reducing infectious diseases and improving maternal and child health care, child injury has risen to become the leading cause of fatality among children aged 1–17, yielding significant losses to families and the society at large.

In addition to fatality, child injury is also one of the direct causes of disability. According to the second National Sample Survey on Disability in 2006, the prevalence of children with disabilities due to injury was 14.2 per ten thousand, accounting for 8.9 per cent of all children with disabilities.[3]

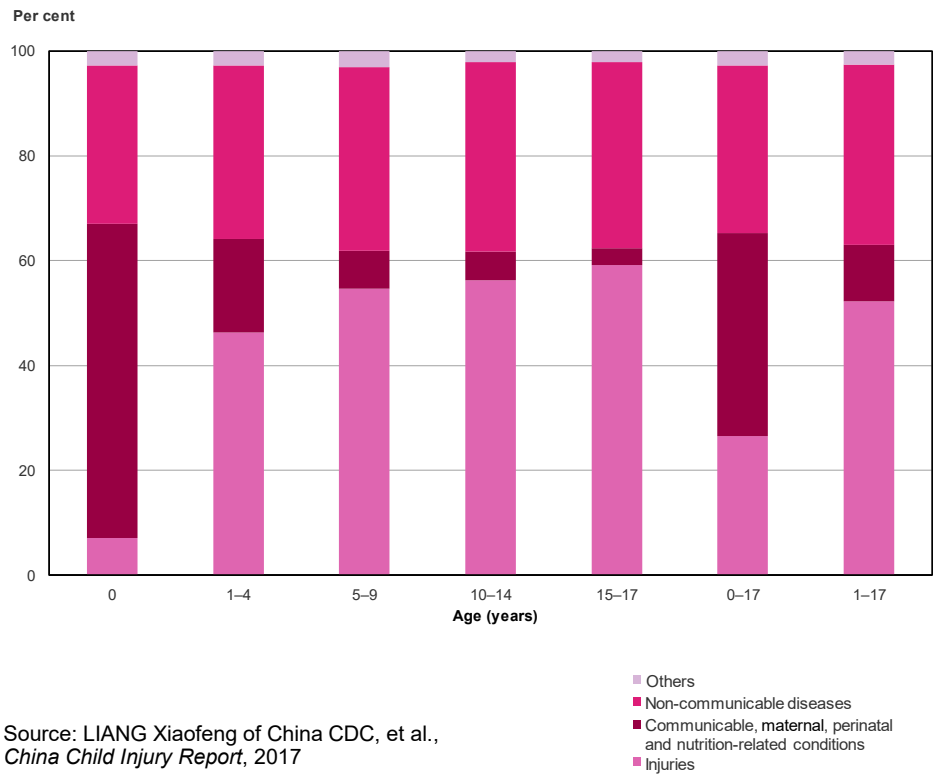
The prevalence of child death and disability caused by injury reveals gender, urban-rural, and regional differences, with the prevalence higher in boys than in girls, higher in rural areas than in urban centers, and higher in the western region than in the central and eastern regions. In 2013, the five provinces with the highest injury-related mortality rates and disease burden among children aged 0–14 years are located in the western region of China, namely Xinjiang, Tibet, Gansu, Qinghai and Ningxia.[4] Existing surveys and the meta-analysis of the incidence of injuries among children left-behind indicate that children left-behind and migrant children are at higher risk of injuries.

Road traffic injuries are the second leading cause of deaths for children aged 0–17 in China and the first leading cause of deaths for children aged 15–17. The SDGs propose to “halve the number of deaths caused by road traffic accidents globally by 2020” (SDG 3.6). Road traffic injuries not only lead to mortality but result in disabilities and injuries that can hinder child development and deprive children of opportunities for education and social development. With the drastic increase in the number of vehicles and the rapid development of transportation systems, effective prevention of road traffic injuries for children has become an urgent issue.

Child injury prevention has received greater attention among policymakers and the general public. The *National Programme of Action for Children (2011–2020)* set a target to reduce the injury-related mortality rate in 2010 by one-sixth among children aged 0–17, which is indicated as one of the main goals in promoting child health. In recent years, the child injury prevention work in China has achieved positive results, but there are still several challenges. Governments at all levels have insufficient understanding of the importance of child injury prevention, with inadequate investments in the issue. A comprehensive coordination mechanism for child injury prevention has not yet been established, due to insufficient policy support. Moreover, child injury monitoring data is limited, and the quality of monitoring data needs to be improved.

Figure 6.1

Causes of deaths among children aged 0–17, by age, 2014

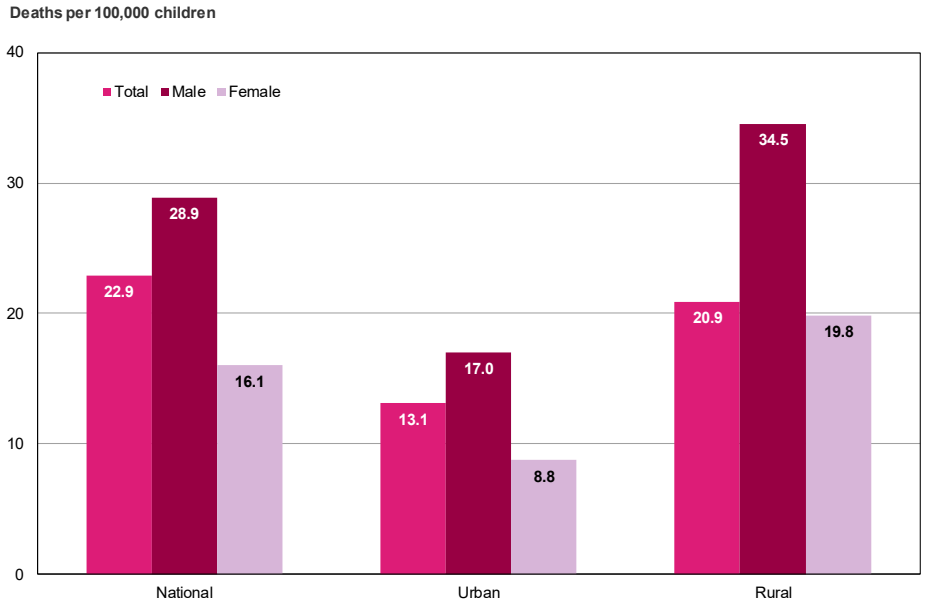


Source: LIANG Xiaofeng of China CDC, et al., *China Child Injury Report*, 2017

Figure 6.1
Injury is one of the main causes of deaths among children in China. If the infant mortality rate is not accounted for, injury is the main cause of deaths among children over age 1, and accounts for more than half of the deaths among children aged 1–17.

Figure 6.2

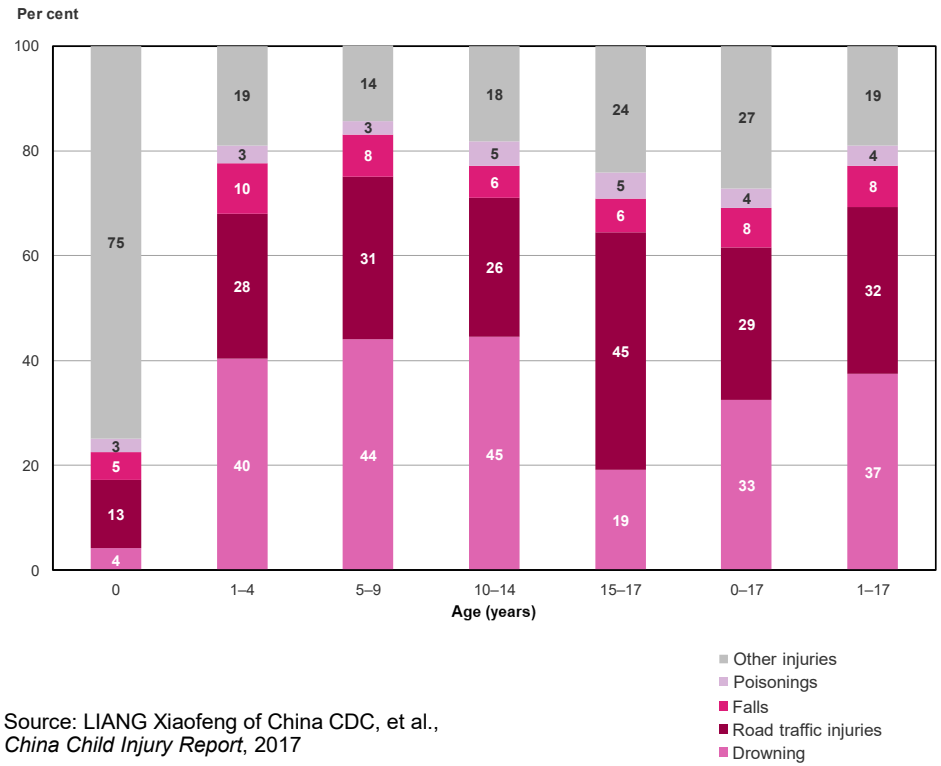
Injury-related mortality rate among children aged 0–17, by urban-rural and sex, 2014



Source: LIANG Xiaofeng of China CDC, et al., *China Child Injury Report*, 2017

Figure 6.2
In 2014, the injury-related mortality rate among children aged 0–17 was 22.9 per 100,000. The child injury mortality rate is higher among boys than girls, and higher in rural areas than in urban areas.

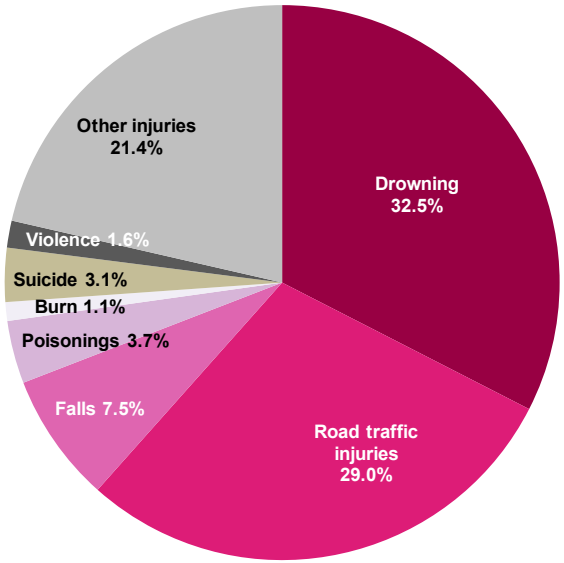
Figure 6.3
Causes of injury-related deaths among children aged 0–17, by age, 2014



Source: LIANG Xiaofeng of China CDC, et al., *China Child Injury Report*, 2017

Figure 6.3
In China, common causes of injury-related deaths are drowning, road traffic injuries, falls and poisonings, while other causes include burn, suicide, violence, asphyxiation and blunt injury. The ranking of causes varied in different age groups. In 2014, the main cause of injury-related deaths among children aged 1–14 was drowning, and among children aged 15–17 was road traffic injury.

Figure 6.4
Leading causes of injury-related deaths among children aged 0–17, 2014

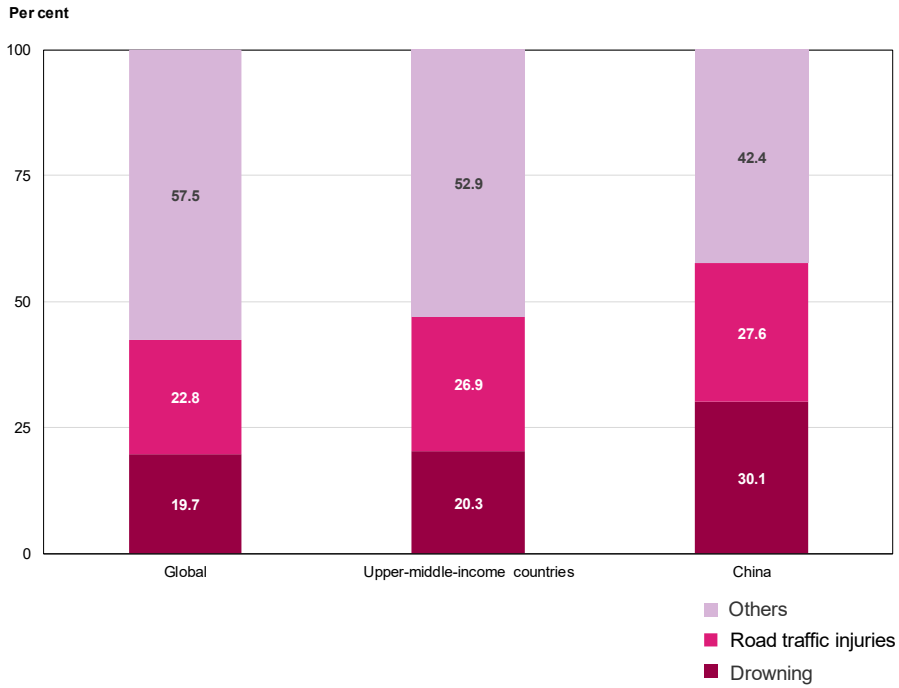


Source: LIANG Xiaofeng of China CDC, et al., *China Child Injury Report*, 2017

Figure 6.4
Drowning and road traffic injuries were the two main causes of deaths from injuries among children aged 0–17. The drowning mortality rate was 7.5 per 100,000, accounting for 32.5 per cent of injury-related child deaths. The road traffic injury death rate was 6.7 per 100,000, accounting for 29 per cent of injury-related child deaths.

Figure 6.5

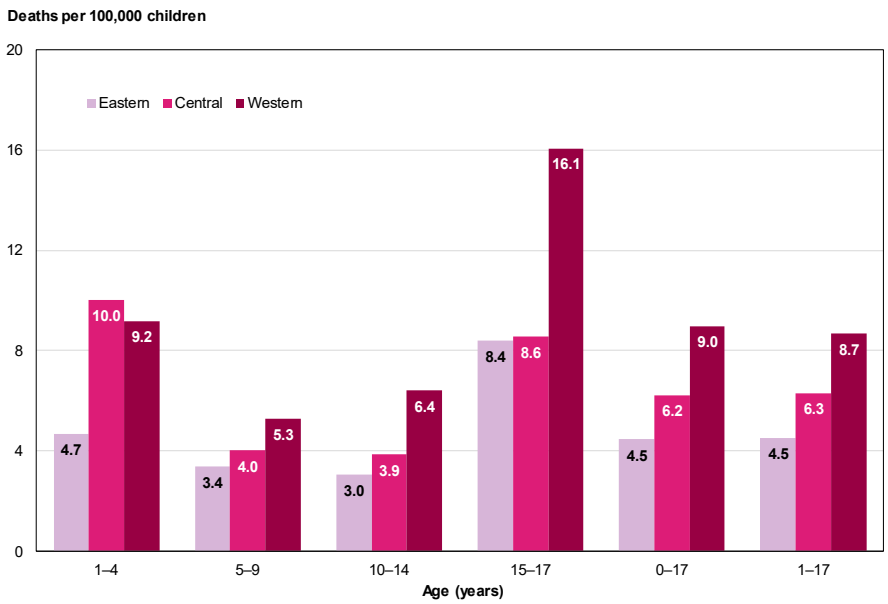
Leading causes of injury-related deaths among children aged 0–14 in the world, upper-middle-income countries and China, 2016



Source: WHO, 'Global Health Estimates 2016 Summary Tables', 2018

Figure 6.6

Road traffic injury death rate among children aged 0–17, by age and region, 2014



Source: LIANG Xiaofeng of China CDC, et al., *China Child Injury Report*, 2017

Figure 6.5
According to WHO global health estimates in 2016, globally, drowning and road traffic injuries are the two leading causes of deaths among children aged 0–14, accounting for 42.5 per cent; the percentage in upper-middle-income countries is 47.1 per cent; while in China, this percentage is 57.6 per cent. Foundational data used by WHO for estimation are provided by individual countries, however, due to the use of different estimation methods and age groups, the WHO estimates differ from those published by China CDC.

Figure 6.6
From analysing data in different regions, except children aged 1–4, all other age groups of children residing in the eastern region have relatively low road traffic injury death rate, followed by the central region, with the western region having relatively high road traffic injury death rate. Children aged 15–17 residing in the western region have the highest road traffic injury death rate.

Figure 6.7
Composition of different types of injury-related disabilities among children aged 0–17, 2006

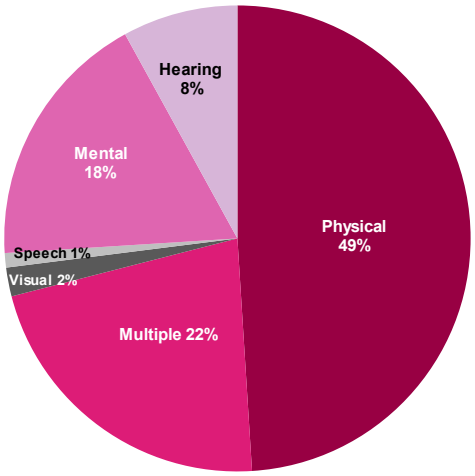


Figure 6.8
Prevalence of injury-related disabilities among children aged 0–17, by urban-rural and sex, 2006

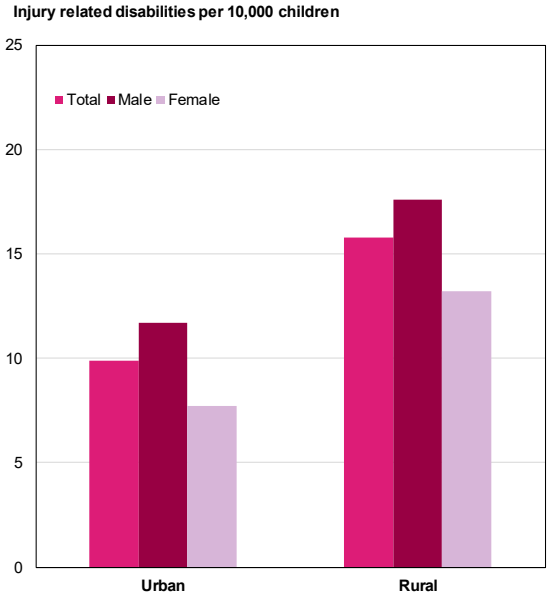
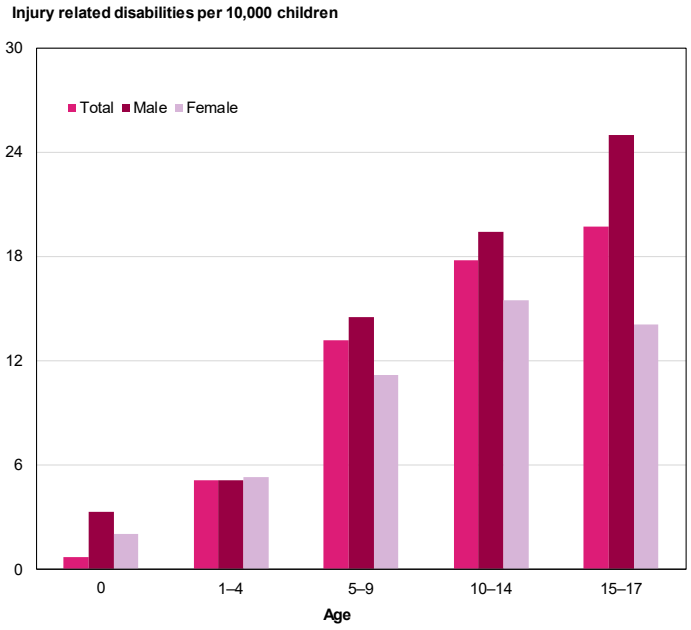


Figure 6.9
Prevalence of injury-related disabilities among children aged 0–17, by age and sex, 2006



Source: LIANG Xiaofeng of China CDC, et al., *China Child Injury Report*, 2017

Figure 6.7, 6.8 and 6.9
The second National Sample Survey on Disability in 2006 showed that the prevalence of children with disabilities due to injury was 14.2 per ten thousand, of which physical disabilities accounted for 49 per cent of all disabilities due to injury, followed by multiple disabilities (22 per cent) and intellectual disabilities (18 per cent). The prevalence was higher in rural areas (15.8 per ten thousand) than urban areas (9.9 per ten thousand), and higher among boys (16.3 per ten thousand) than girls (11.9 per ten thousand). Moreover, the older children tend to have a higher prevalence of disabilities due to injury than the younger children.

Child Injury

Data sources and references

[1] WHO, 'Global Health Estimates 2016 Summary Tables', *Disease Burden and Mortality Estimates*, http://www.who.int/healthinfo/global_burden_disease/estimates/en/, accessed June 2018.

[2] LIANG Xiaofeng of China CDC, et al., *China Child Injury Report*, 2017, p. 3.

[3] LIANG Xiaofeng of China CDC, et al., *China Child Injury Report*, 2017, pp. 4–5.

[4] YE Pengpeng, et al., 'Disease Burden of Injuries in Chinese Children Aged 0–14-year-old in 1990 and 2013', *Chinese Journal of Epidemiology*, vol. 38, no.10, 2017, pp. 1334–1341.

7

WATER, SANITATION AND HYGIENE

OVERVIEW

Since its participation in the first International Drinking Water Supply and Sanitation Decade (1981–1990), China has demonstrated long-term commitment to work with the international community to improve water supply and sanitation in the country, especially in rural areas. Through institutional improvement, technological innovation, internal and external exchanges, and capacity building strengthening, the Government laid the foundation for the rapid development of urban and rural water supply and environmental sanitation. These efforts have led to significant achievements in improving drinking water sources[1] and sanitation facilities,[2] and supported China to accomplish the water and sanitation targets set out in the MDGs.

The United Nations 2030 Agenda for Sustainable Development includes a goal focused on sustainable management of water and sanitation for all (SDG 6) that sets ambitious targets for "universal and equitable access to safe and affordable drinking water for all" (SDG 6.1), and "adequate and equitable sanitation and hygiene for all" (SDG 6.2). The indicators selected for tracking progress towards these global targets are the population using safely managed drinking water services,[3] the population using safely managed sanitation services,[4] and the population using handwashing facilities with soap and water. The 2030 Agenda emphasises the integrated nature of development and the interlinkages between progress on Goal 6 and progress towards related targets under other Sustainable Development Goals.

Rural drinking water safety

The central government has allocated funds for rural water supply since 2000. As the *Eleventh Five-Year Plan* (2006–2010) put forward the requirement of accelerating the implementation of the Rural Drinking Water Safety Project,[5] the central government's expenditure on rural water supply has increased significantly over time. During the Eleventh FYP period, the central government invested a total of RMB 59 billion, and local governments and the general public raised an additional RMB 46.3 billion, which collectively provided access to safe drinking water for 210 million rural residents.[6] During the Twelfth FYP period (2011–2015), the central government invested a total of RMB 121.5 billion, and local governments raised RMB 55.3 billion,[7] which essentially resolved the rural drinking water safety problem with 304 million rural residents and 41.3 million rural school teachers and students accessing safe drinking water.[8]

During the Thirteenth FYP period (2016–2020), the Government committed to implement the Rural Water Safety Consolidation and Upgrading Project to further improve the centralized water supply rate, the water supply guarantee rate, and the water quality compliance rate in rural areas, and promote the equalization of urban and rural public services.[9] In addition, the Government incorporated the Rural Drinking Water Safety Project under the key support areas of the new 'San Qu San Zhou' poverty alleviation funds,[10] with increased focus on the establishment of water infrastructure and improvement of water supply in poverty-stricken areas. These efforts are in support of providing access to centralized water supply for over 85 per cent of rural residents and ensuring over 80 per cent of rural residents can access piped water by 2020.[11]

Rural sanitation

Faecal management and sanitation reform have been key components of the patriotic health campaigns of China. In the 1990s, the Government incorporated the sanitation reform work into the *National Programme of Action for Children in China in the 1990s* and the *Decision of the Central Committee of the Communist Party of China and the State Council on Health Reform and Development,* which promulgated the 'toilet revolution' in rural areas. In 2004, the central government set up the cash transfer programme for sanitation reform in rural areas to promote the construction of harmless sanitary latrines.[12] In 2009, sanitation reform in rural areas was further supported through its inclusion in major public health service projects for deepening the medical and health system reform. From 2004 to 2014, the central government accumulatively invested RMB 8.4 billion, which established and improved 21.3 million rural household latrines.[13]

The decades of continued rural sanitation reform increased the percentage of rural households with access to sanitary latrines from 7.5 per cent in 1993 to 81.8 per cent in 2017.[14] The Government of China aims to achieve the coverage of 85 per cent by 2020.[15] Moreover, considering that the current harmless faecal management rate in rural areas is only 62.7 per cent,[16] it is necessary to further advance the sanitation reform work. The *Health China 2030 Plan* proposes that most rural residents should be able to access harmless sanitary latrines by 2030.[17]

As important components of rural sanitation and ecological construction, the rural sanitation reform is also key to creating liveable, beautiful, and sanitary villages and towns, and promoting the healthy development of the new socialist countryside. In recent years, Chinese President Xi Jinping has repeatedly emphasized the importance of the 'toilet revolution' as a key component of the urban-rural civilization construction and rural revitalization strategy.[18]

Hygiene

According to data from the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP), only 70 countries had comparable data available on handwashing with soap and water in 2015. The available data indicate that in the Least Developed Countries, 27 per cent of the population had basic handwashing facilities with soap and water, while 26 per cent had handwashing facilities lacking soap or water. The remaining 47 per cent had no facilities. At present, China lacks the relevant statistics to estimate the coverage of handwashing facilities.

Water, sanitation and hygiene (WASH) in schools and health facilities

The SDG targets aim for "universal access" to water supply, sanitation and hygiene which not only includes households but also WASH in schools, health care facilities and other institutions.

In recent years, the water supply and sanitation conditions in primary and secondary schools have greatly improved. Between 2011 and 2017, the proportion of basic education schools (including pre-primary schools, primary schools, junior secondary schools, and senior secondary schools) with centralized water supply increased from 54.2 per cent to 75.8 per cent, and the proportion of schools with sanitary latrines increased from 56.5 per cent to 80.1 per cent while most of schools with non-sanitary latrines are concentrated in the central and western regions of the country.[19] School toilets in China are generally separated by sex, but often the number of stalls for girls are equal to or less than the number of stalls for boys, making it more common for girls to wait in line. In addition, some school toilets do not allow for privacy, and accessible designs for children with disabilities are not in place.

Statistics on the status of WASH in health facilities are not currently available in China.

Challenges

- According to estimates by WHO and UNICEF in 2015,[20] China still had approximately 57 million people without basic access to drinking water services,[21] 340 million people without access to basic sanitation services,[22] including around 20 million people still practicing open defecation. China needs to continue its efforts to achieve the targets of "universal access to basic services" (including basic drinking water, sanitation and hygiene) for all and to "end open defecation", as well as progressively increasing coverage of safely managed drinking water and safely managed sanitation services as set out in the SDGs.

- There are regional differences in drinking water and sanitation services in China, with the central and western provinces lag far behind the eastern coastal provinces. This is one of the bottlenecks for poverty reduction in the central and western regions, posing huge constraints on health, cultural and economic development. The constraints also affect the overall progress of a healthy China. Studies on multidimensional poverty have shown that the contribution of drinking water and sanitation on poverty is usually high but shows significant room for improvement. Advancing water and sanitation services can play a positive role in reducing multidimensional poverty, and can be included as a focus of the future poverty reduction work of the central and western regions.[23] Therefore, during the Thirteenth FYP period, special attention should be paid to poverty-stricken areas, and effective community-led and government-assisted models should be adopted to provide basic drinking water, sanitation and hygiene services to the most vulnerable groups in order to eliminate the gap as soon as possible.

- To push forward the 'toilet revolution', it is necessary to consider how to encourage behavioural change and promote the development of healthy habits. This can include creating demand through institutionalizing community approaches to total sanitation, addressing behavioural barriers, creating a sustained social norm of not practicing open defecation, and promoting the proper use and safe management of toilet facilities.[24] Specifically, the general public can be advocated to leave a clean public toilet for others.

- Although there is currently no nationally representative data, some surveys in selected provinces[25] have found the rate of proper handwashing is low among residents. Handwashing and disease prevention knowledge should be widely disseminated to cultivate proper hand washing habits and strengthen interventions for targeted populations in key areas.

- Water, sanitation and hygiene services in schools and health facilities should be further improved to ensure that all schools and health facilities have universal access to basic water, sanitation and hygiene services by 2030 as set out in the SDGs. Existing evidence shows that WASH in school programme could reduce the prevalence of hygiene-related infectious disease[26] and reduce absenteeism.[27]

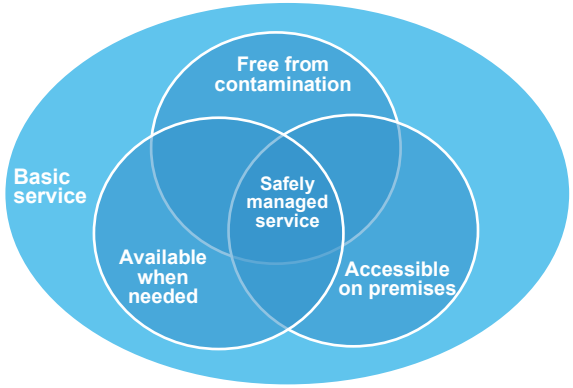
- Strengthen supply-side innovation, through changing the method of project promotion, such as establishing social norms, encouraging the public to actively use safely managed sanitation facilities; providing multiple types of funding subsidies to adapt to different situations; and strengthening the development and delivery of innovative technologies. It is necessary to identify the bottlenecks for development and advance the improvement of sanitation and hygiene services according to the needs of individuals, households and local conditions.

- Monitoring of water supply, sanitation and hygiene facilities and services should be strengthened, and monitoring methods and indicators should be designed to align with the WHO/UNICEF JMP, focusing on service accessibility and use. There is an urgent need to incorporate monitoring of water supply, sanitation and hygiene into the Government's relevant surveys and administrative data information systems, and to publish them regularly through public channels such as statistical yearbooks.

- In China, new and old problems such as frequent floods and droughts, water shortages, serious water pollution, and ecological water damage pose serious challenges to ensuring water security.[28] As a country prone to natural disasters, it is apparent that disasters frequently deteriorate environmental conditions, often resulting in higher costs for safe water supply and sanitation solutions. There is a need to consider the influences of climate change, environmental degradation and disasters during the planning and design phase.

Figure 7.1
Drinking water facility and service level

Sources: WHO/UNICEF, Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, https://washdata.org/; UNICEF, Multiple Indicator Cluster Surveys 6 (MICS6) questionnaire, http://mics.unicef.org/



SDG 6.1.1

SDG 1.4.1

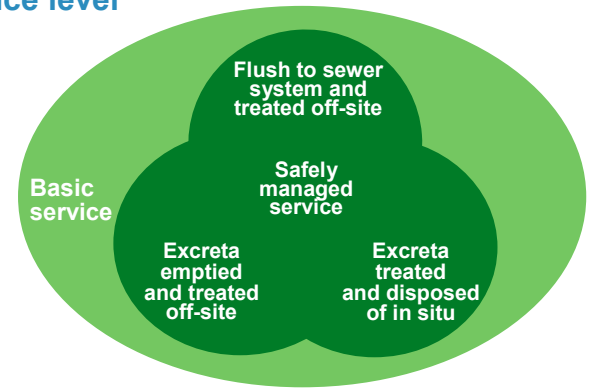
SERVICE LEVEL	DEFINITION	FACILITY LEVEL
SAFELY MANAGED	Drinking water from an improved water source that is located on premises, available when needed and free from faecal and priority chemical contamination	IMPROVED
BASIC	Drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing	
LIMITED	Drinking water from an improved source for which collection time exceeds 30 minutes for a round trip, including queuing	
UNIMPROVED	Drinking water from an unprotected dug well or unprotected spring	UNIMPROVED
SURFACE WATER	Drinking water directly from a river, dam, lake, pond, stream, canal or irrigation canal	

First level classification	Second level classification	Improved (√) Unimproved (×)
Tap water	Piped water into dwelling	√
	Piped water to yard/plot	√
	Public tap, standpipe	√
	Other	√
Ground water	Tubewell, borehole	√
	Protected well	√
	Protected spring	√
	Unprotected well	×
	Unprotected spring	×
Rainwater	Covered cistern/tank	√
	Uncovered cistern/tank	√
Packaged water	Bottled water	√
	Sachet water	√
Delivered water	Cart with small tank/ drum	√
	Tanker truck provided	√
Surface water	River	×
	Lake	×
	Dam	×
	Pond	×
	Stream	×
	Irrigation channel	×

Figure 7.1
The WHO/UNICEF JMP has produced regular estimates of national, regional and global progress on WASH since 1990. In the MDG period, indicators measuring 'use of improved facilities' were used to track progress of drinking water across countries. Drinking water sources are classified into two hierarchical levels based on technology as shown in the table on the right. Improved drinking water sources are those which by nature of their design and construction have the potential to protect the water source from outside contamination. Starting from 2015 with the adoption of the SDGs, the population using improved drinking water sources is subdivided into three groups according to the level of service provided: safely managed, basic and limited services, which form the JMP service 'ladders' shown in the table on the left to enable benchmarking and comparison of progress across countries and facilitate enhanced monitoring and promoting drinking water services.

Figure 7.2
Sanitation facility and service level

Sources: WHO/UNICEF, Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, https://washdata.org/; UNICEF, Multiple Indicator Cluster Surveys 6 (MICS6) questionnaire, http://mics.unicef.org/; Office of the National Patriotic Health Campaign Committee, *Standards of Rural Household Toilet Construction*, 2018



	SERVICE LEVEL	DEFINITION	FACILITY LEVEL
SDG 6.2.1	SAFELY MANAGED	Use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or transported and treated offsite	IMPROVED
SDG 1.4.1	BASIC	Use of improved facilities that are not shared with other households	
	LIMITED	Use of improved facilities shared between two or more households	
	UNIMPROVED	Use of pit latrines without a slab or platform, hanging latrines or bucket latrines	UNIMPROVED
SDG 6.2.1	OPEN DEFECATION	Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches or other open spaces, or with solid waste	

UNICEF/WHO Joint Monitoring Programme			China National Classification
First level classification	Second level classification	Improved (√) Unimproved (×)	Harmless
Flush toilets/ Pour flush latrines	to piped sewer system	√	√
	to septic tank	√	√ [a]
	to pit	√	
	to unknown place/not sure	√	
	to open drain	×	
	to elsewhere	×	
Dry latrines	Ventilated Improved Pit latrine	√	
	Composting toilets	√	
	Pit latrine with slab	√	
	Pit latrine without slab/ open pit	×	
	Hanging toilet/hanging latrine	×	
	Bucket latrine	×	
	Urine-diversion latrine		√
	Twin-vault alternating pit latrine		√
No Facility	Bush, field, forest	×	

[a] In China, harmless flush toilets/pour flush latrines to septic tank include: three-compartment septic tank latrine, double-urn funnel-shaped latrine and three-in-one biogas septic tank latrine.

Figure 7.2
Similar to standard classifications of drinking water, sanitation facilities are also classified into two hierarchical levels based on technology shown in the table on the right. Improved sanitation facilities are those designed to hygienically separate excreta from human contact. Since the adoption of the SDGs, the population using improved sanitation service is subdivided into three groups according to the level of service provided, namely safely managed, basic and limited services, which form the JMP service 'ladders' shown in the table on the left to enable benchmarking and comparison of progress across countries and facilitate enhanced monitoring and promoting sanitation services. Meanwhile, the JMP continues to monitor the population practicing open defecation, which is an explicit focus of SDG target 6.2.

In China, sanitation facilities are normally classified as sanitary latrines and unsanitary latrines. Sanitary latrines not only separate excreta from human contact, therefore meeting the JMP criteria for 'improved', it also requires the latrines to be clean without flies, maggots and odor, the storage pit water-sealed and fully covered by a slab with no excreta exposed, as well as the waste removed and treated to be harmless. Among sanitary latrines, those that can effectively kill pathogenic microorganism and prevent infection are categorized as harmless sanitary latrines. Harmless sanitary latrines include flush toilets/pour flush latrines to piped sewer system, three-compartment septic tank latrines, double-urn funnel-shaped latrines, three-in-one biogas septic tank latrines, urine-diversion latrines, and twin-vault alternating pit latrines. In order to meet the SDG criteria for safely managed sanitation services, the waste from sanitary latrines must either be safely treated in situ or removed and treated off-site.

Figure 7.3
Handwashing facility and service level

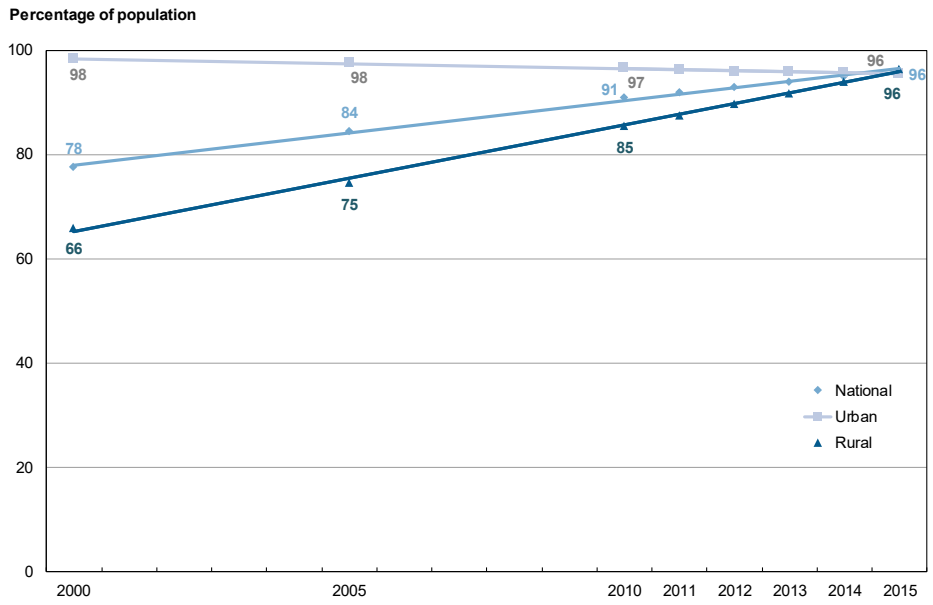
SDG 6.2.1
SDG 1.4.1

SERVICE LEVEL	DEFINITION
BASIC	Availability of a handwashing facility on premises with soap and water
LIMITED	Availability of a handwashing facility on premises without soap and water
NO FACILITY	No handwashing facility on premises

Sources: WHO/UNICEF, Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, https://washdata.org/; UNICEF, Multiple Indicator Cluster Surveys 6 (MICS6) questionnaire, http://mics.unicef.org/

Figure 7.4
Percentage of population having at least basic drinking water services, 2000–2015

SDG 1.4.1



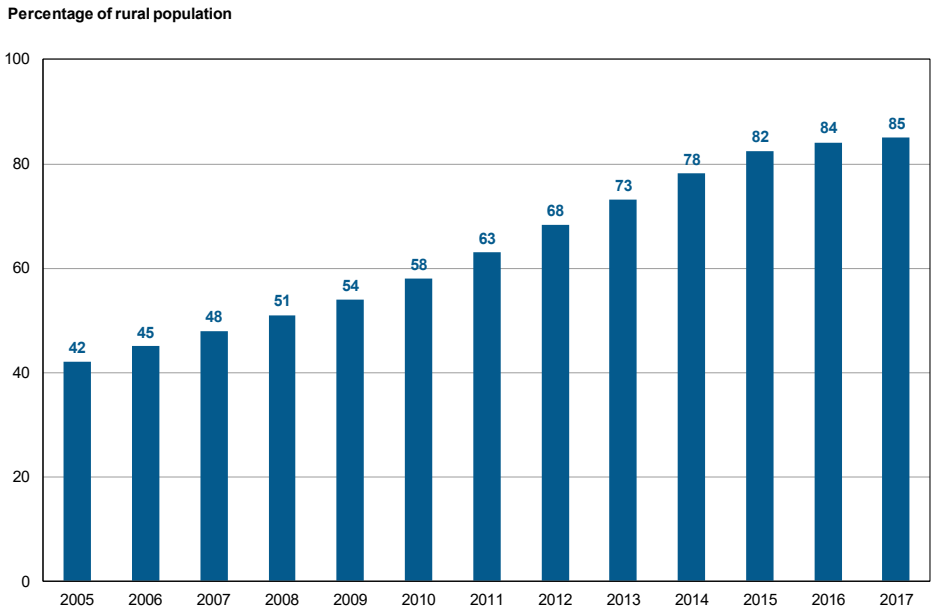
Source: WHO/UNICEF, Joint Monitoring Programme for Water Supply, Sanitation and Hygiene: 'Rural and urban drinking water service levels in China', updated in 2017

Figure 7.3
The presence of a handwashing facility with soap and water on premises has been identified as a priority indicator for global monitoring of hygiene under the SDGs. In JMP, the handwashing service level is divided into three categories: basic, limited and no facility. Handwashing facilities may be fixed such as a sink with tap water, or mobile like basins used for handwashing. Soap includes bar soap, liquid soap, hand sanitizer or similar detergents, but does not include ash, mud, sand or other handwashing agents.

Figure 7.4
According to the latest estimates released by the WHO/UNICEF JMP in 2017, the proportion of the population having at least basic drinking water services rose from 78 per cent to 96 per cent between 2000 and 2015 in China, and urban-rural differences were basically eliminated.

Figure 7.5

Percentage of rural population benefitting from centralized water supply, 2005–2017



Sources: National Bureau of Statistics, *Statistics on Women and Children in China*, 2012–2018

Figure 7.6

Percentage of rural population benefitting from centralized water supply, by province, 2017

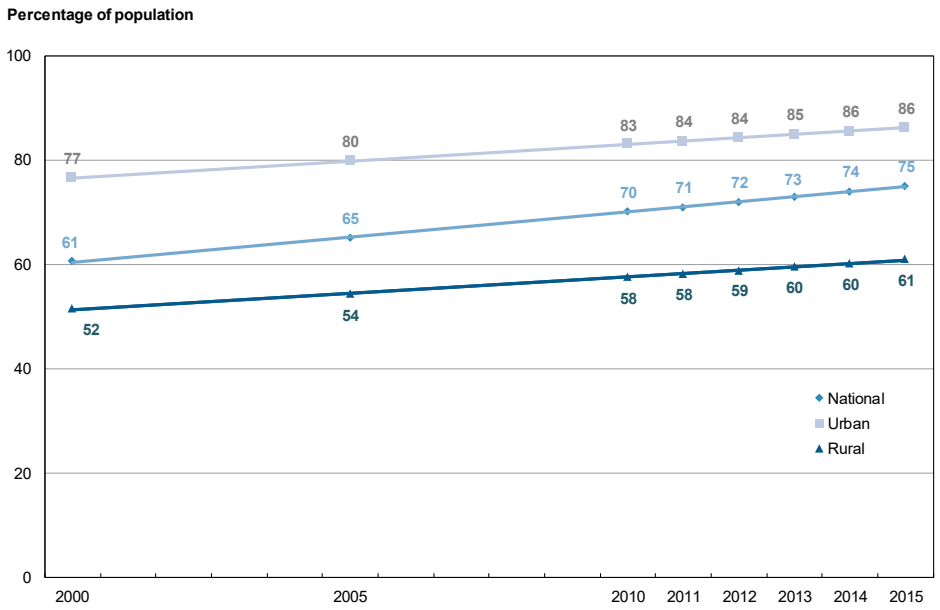
Source: National Bureau of Statistics, *Statistics on Women and Children in China*, 2018

Figure 7.5
Between 2005 and 2017, the proportion of rural population benefitting from centralized water supply increased steadily, from 42 per cent to 85 per cent. China has achieved the target of over 85 per cent of rural population with access to centralized water supply ahead of the 2020 timeline.

Figure 7.6
The percentage of rural population benefitting from centralized water supply varies widely across provinces. More than 90 per cent of rural population in most provinces of the eastern region benefit from centralized water supply. Provinces such as Liaoning in the eastern region, Jilin in the central region, and Qinghai and Sichuan in the western region have relatively low percentage (lower than 80 per cent) of rural population benefitting from centralized water supply.

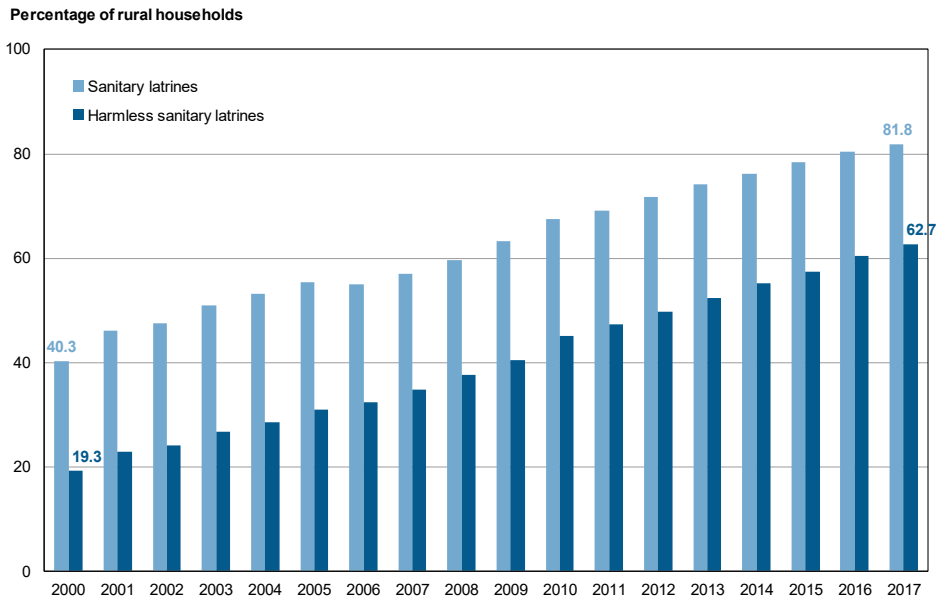
Figure 7.7
Percentage of population having at least basic sanitation services, 2000–2015

SDG 1.4.1



Source: WHO/UNICEF, Joint Monitoring Programme for Water Supply, Sanitation and Hygiene: 'Rural and urban sanitation service levels in China', updated in 2017

Figure 7.8
Access to sanitary latrines and harmless sanitary latrines in rural areas, 2000–2017



Source: National Health Commission, *China Health Statistical Yearbook*, 2018

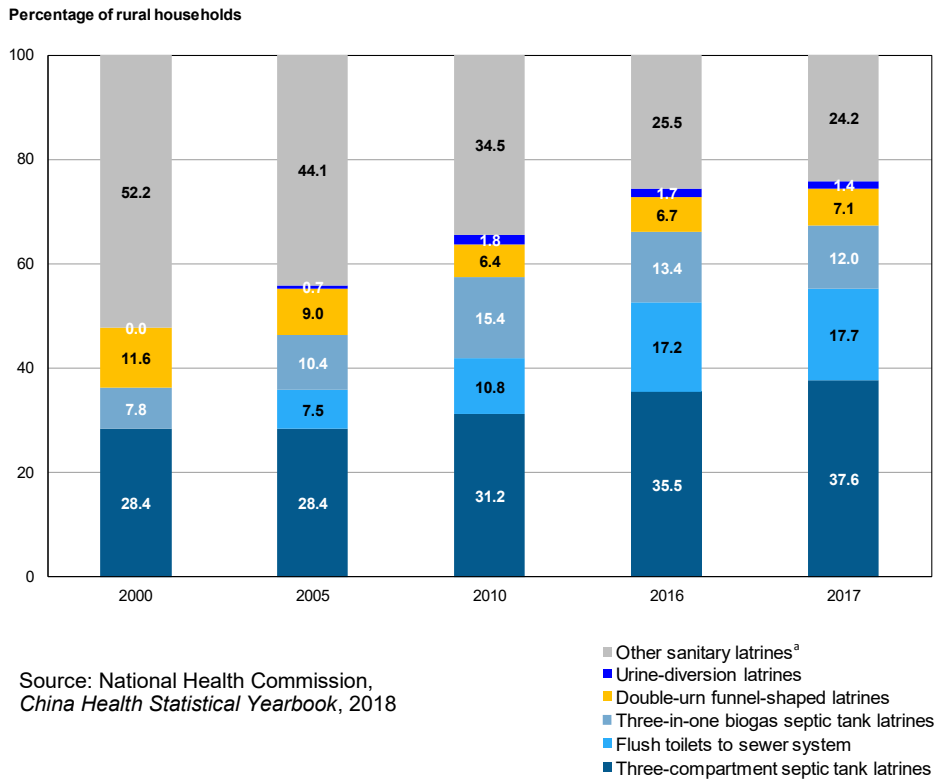
Figure 7.7
According to the latest estimates released by the WHO/UNICEF JMP in 2017, 75 per cent of China's population in 2015 used toilets that meet at least basic sanitation service standards. The proportion in rural areas was 61 per cent, 25 percentage points lower than in urban areas. Due to the use of different definitions and estimation methods, the JMP estimates differ from those published by the National Health Commission (formerly the National Health and Family Planning Commission, see Figure 7.8).[29]

Figure 7.8
According to data from the National Health Commission (formerly the National Health and Family Planning Commission), the proportion of rural households having sanitary latrines increased significantly from 40.3 per cent to 81.8 per cent between 2000 and 2017. The proportion of rural households having harmless sanitary latrines increased from 19.3 per cent to 62.7 per cent. Although the increases were significant, China is still far from achieving the goal set out in the *Health China 2030 Plan*, which proposes that most rural residents should use harmless sanitary latrines by 2030.

Figure 7.9
Access to sanitary latrines in rural areas, by province, 2017

Source: National Health Commission, *China Health Statistical Yearbook*, 2018

Figure 7.10
Access to sanitary latrines in rural areas, by type, 2000–2017



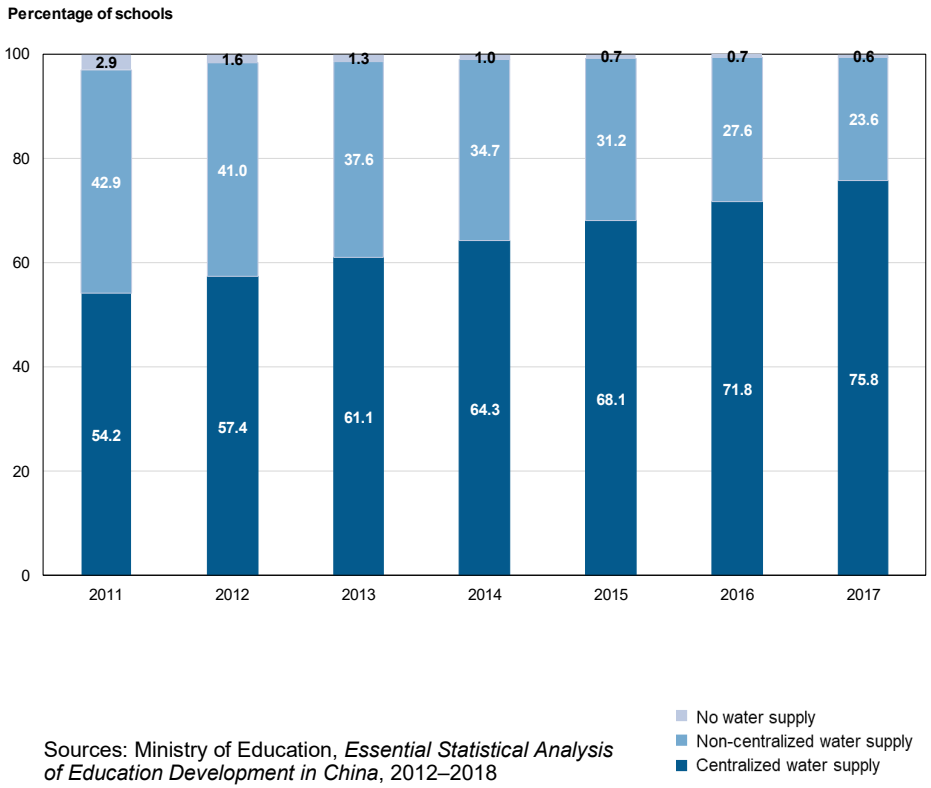
Source: National Health Commission, *China Health Statistical Yearbook*, 2018

Figure 7.9
The percentage of rural households having sanitary latrines varies greatly from province to province. More than 85 per cent of rural households in most provinces of the eastern region have access to sanitary latrines, while the percentage in provinces of the western region is relatively low. For example, Shaanxi province only has 47.2 per cent of rural households accessing to sanitary latrines.

Figure 7.10
In May 2018, the National Patriotic Health Campaign Committee issued the *Standards of Rural Household Latrine Construction* to scientifically guide the construction and management of rural household latrines, further improve the living environment in rural areas, and promote the 'toilet revolution'. According to geographical conditions and preferences, rural households in different regions choose different types of latrines. The three-compartment septic tank latrine is the most common type, accounting for 37.6 per cent of all rural household sanitary latrines in 2017. The flush toilet to piped sewer system has also become popular, accounting for 17.7 per cent of all rural household sanitary latrines in 2017.

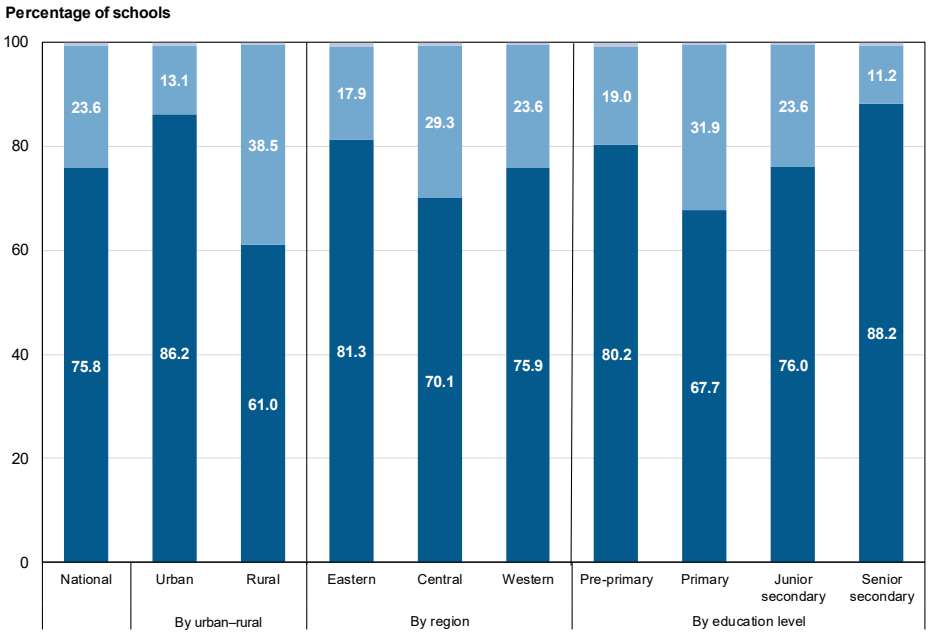
[a] Since 2007, the twin-vault alternating pit latrine was introduced in rural areas, which is one of the six types of harmless sanitary latrines recommended by the National Patriotic Health Campaign Committee. By 2017, 1.79 million rural households had access to the twin-vault alternating pit latrines, accounting for less than 1 per cent of all rural sanitary latrines. As the percentage value is too small to be displayed in the figure, this value is merged into the other types of sanitary latrine category.

Figure 7.11
Water supply in basic education schools, 2011–2017



Sources: Ministry of Education, *Essential Statistical Analysis of Education Development in China*, 2012–2018

Figure 7.12
Water supply in basic education schools, by urban-rural, region and education level, 2017

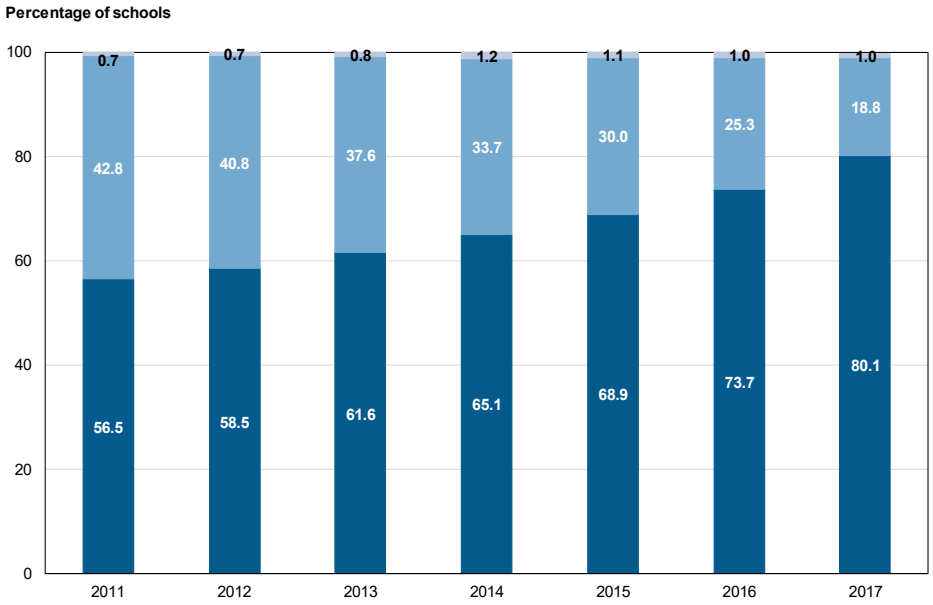


Source: Ministry of Education, *Essential Statistical Analysis of Education Development in China*, 2018

Figure 7.11 and 7.12

Between 2011 and 2017, the proportion of schools in the basic education stage with centralized water supply increased from 54.2 per cent to 75.8 per cent. The proportion of schools with non-centralized water supply decreased from 42.9 per cent to 23.6 per cent, and the proportion of schools without water sources decreased from 2.9 per cent to 0.6 per cent. According to 2017 data, the proportion of schools with centralized water supply in urban areas was 25 percentage points higher than that in rural areas. In terms of regions, the proportion of schools with centralized water supply in the eastern region was the highest, reaching 81.3 per cent, and the proportion of schools with non-centralized water supply in the central region was the highest, at 29.3 per cent.

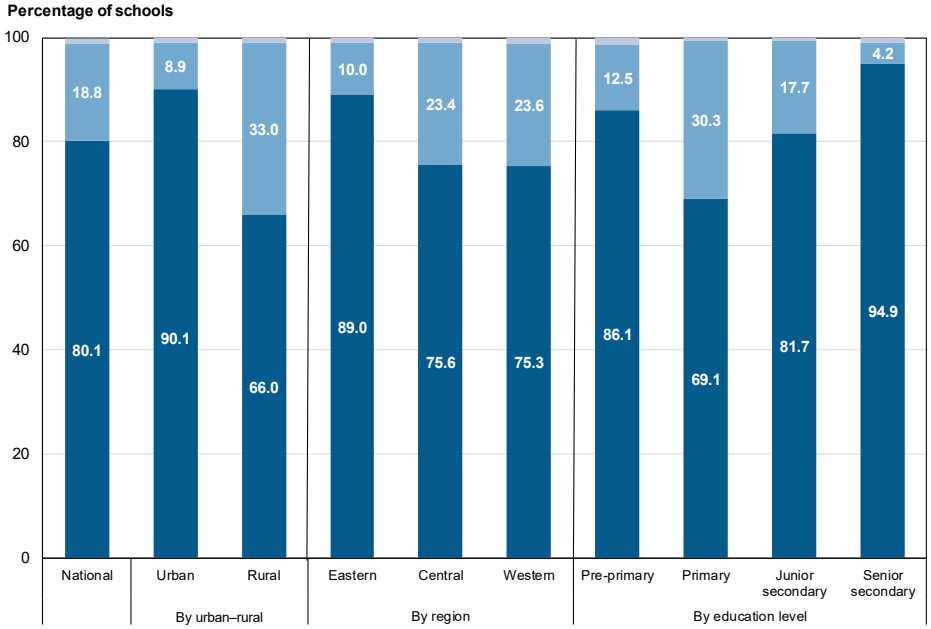
Figure 7.13
Latrines in basic education schools, 2011–2017



Sources: Ministry of Education, *Essential Statistical Analysis of Education Development in China*, 2012–2018

- No latrines
- Non-sanitary latrines
- Sanitary latrines

Figure 7.14
Latrines in basic education schools, by urban-rural, region and education level, 2017



Source: Ministry of Education, *Essential Statistical Analysis of Education Development in China*, 2018

- No latrines
- Non-sanitary latrines
- Sanitary latrines

Figure 7.13 and 7.14

Between 2011 and 2017, the proportion of basic education schools with sanitary latrines increased from 56.5 per cent to 80.1 per cent, and the proportion of schools with non-sanitary latrines dropped from 42.8 per cent to 18.8 per cent. The proportion of schools without latrines was about 1 per cent. According to 2017 data, the proportion of schools with sanitary latrines in urban areas was much higher than that in rural areas, with a difference of 24 percentage points. In terms of regions, the proportion of schools with sanitary latrines in the eastern region was higher than that in the central and western regions. Moreover, most of the schools with non-sanitary latrines were concentrated in the central and western regions.

Water, Sanitation and Hygiene

Data sources and references

[1] **Improved water sources** – Improved water sources include piped water, boreholes or tubewells, protected dug wells, protected springs, rainwater, and packaged or delivered water (WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, 2017).

[2] **Improved sanitation facilities** – Improved sanitation facilities include flush/pour flush to piped sewer systems, septic tanks or pit latrines; ventilated improved pit latrines, composting toilets or pit latrines with slabs (WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, 2017).

[3] **Safely managed drinking water service** – Drinking water from an improved water source that is located on premises, available when needed and free from faecal and priority chemical contamination (WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, 2017).

[4] **Safely managed sanitation service** – Use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or transported and treated offsite (WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, 2017).

[5] **The rural drinking water safety** is divided into two levels, safe and basically safe, as measured by four indicators: water quality, water quantity, ease of access and water supply guarantee rate. If one of the four indicators fall below the safe or basically safe minimum standards, it cannot be defined as safe or basically safe drinking water (Ministry of Water Resources, Ministry of Agriculture, 'Notice on Issuing the Evaluation Indicator System for Rural Drinking Water Safety', 2004).

[6] Ministry of Water Resources, 'Guangming Daily: Hoping for Clean Water in Rural Areas – Centralized Water Supply for China's 557 Million Farmers', 30 August 2011, http://www.mwr.gov.cn/ztpd/2011ztbd/2011gzhy/ Mtgzz/201108/t20110830_1003911.html, accessed June 2018.

[7] China Economic Net, 'Documentation of China Resolving the Rural Drinking Water Safety Problem during the Twelfth Five-Year Plan Period', 11 January 2016, http://www.ce.cn/xwzx/gnsz/gdxw/201601/11/t20160111_8177831.shtml, accessed July 2018.

[8] Ministry of Water Resources, 'Implementing New Ideas and Planning New Development to Comprehensively Improve Water Security – Deputy Minister Zhou Xuewen's Interpretation of *the Thirteenth Five-Year Plan for Water Resources Reform and Development*', 27 December 2016, http://www.mwr.gov.cn/ztpd/2016ztbd/qgslsswgh/bzft/201612/t20161227_782949.html, accessed June 2018.

[9] Ministry of Water Resources, 'Implementing New Ideas, Planning New Development and Comprehensively Improve Water Security – Deputy Minister Zhou Xuewen's Interpretation of the *Thirteenth Five-Year Plan for Water Resources Reform and Development*', 27 December 2016, http://www.mwr.gov.cn/ztpd/2016ztbd/qgslsswgh/bzft/201612/t20161227_782949.html, accessed June 2018.

[10] Ministry of Water Resources, 'Ministry of Water Resources' Notice on Conducting Solid Work to Improve Rural Drinking Water Safety in Deep-Poverty Areas', 21 December 2017, http://www.mwr.gov.cn/zwgk/zfxxgkml/201802/t20180209_1029592.html, accessed June 2018.

[11] Ministry of Water Resources, *The Thirteenth Five-Year Plan for Water Resources Reform and Development,* December 2016, http://www.mwr.gov.cn/ztpd/2016ztbd/qgslsswgh/ghqw/201612/P020161227521013284744.pdf, accessed June 2018.

[12] **Harmless sanitary latrines** – refers to sanitary latrines that are effective in reducing the infectious agents of biological virulence factors in feces. This includes three-compartment septic tank latrine, double-urn funnel-shaped latrine, three-in-one biogas septic tank latrine, urine-diversion latrine, twin-vault alternating pit latrine, and flush toilets to piped sewer system (Office of the National Patriotic Health Campaign Committee, *Standards of Rural Household Latrine Construction*, 2018).

[13] National Health Commission (formerly the National Health and Family Planning Commission), 'China's Active Promotion of the 'Toilet Revolution' has Achieved Remarkable Results in Rural Sanitation Reform', 28 November 2017, http://www.nhfpc.gov.cn/jkj/s5899/201711/fd1aef3edea64420ba88e495d5deec3b.shtml, accessed June 2018.

[14] National Health Commission, *China Health Statistical Yearbook*, 2018

[15] National Health Commission (formerly the National Health and Family Planning Commission), 'China's Active Promotion of the 'Toilet Revolution' has Achieved Remarkable Results in Rural Sanitation Reform', 28 November 2017, http://www.nhfpc.gov.cn/jkj/s5899/201711/fd1aef3edea64420ba88e495d5deec3b.shtml, accessed June 2018.

[16] National Health Commission, *China Health Statistical Yearbook*, 2018

[17] Central Committee of the Communist Party of China and the State Council, *Health China 2030 Plan*, 25 October 2016, http://www.gov.cn/xinwen/2016-10/25/content_5124174.htm, accessed June 2018.

[18] Xinhua News Agency, 'Promoting the 'Toilet Revolution' to Advance Social Civilization', 27 November 2017, http://www.xinhuanet.com/politics/2017-11/27/c_1122019428.htm, accessed June 2018.

[19] Ministry of Education, *Essential Statistical Analysis of Education Development in China*, 2012–2018.

[20] WHO/UNICEF, Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, 2017.

[21] **Basic drinking water services** – Drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing (WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, 2017).

[22] **Basic sanitation services** – refers to the use of improved facilities that are not shared with other households (WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, 2017).

[23] FENG Yilin, et al., 'Measurement of China's Multidimensional Poverty – Preliminary Estimation Based on the Global Multidimensional Poverty Index Method', *The World of Survey and Research*, no. 12, 2017, pp. 3–7.

[24] UNICEF, 'UNICEF's Game Plan to End Open Defecation', 2017.

[25] According to the first survey on the situation of handwashing in five provinces in 2011, the proper handwashing rate of the surveyed residents was only 4 per cent.

[26] Matthew Freeman, et al., 'Assessing the Impact of a School-based Water Treatment, Hygiene and Sanitation Programme on Pupil Absence in Nyanza Province, Kenya: A cluster-randomized trial', *Tropical Medicine and International Health*, vol. 17, no. 3, 2012, pp. 380–391.

[27] Anna Bowen, et al. 'A Cluster-Randomized Controlled Trial Evaluating the Effect of a Handwashing-promotion Program in Chinese Primary Schools', *American Journal of Tropical Medicine and Hygiene*, vol. 76, no. 6, 2007, pp. 1166–1173.

[28] Ministry of Water Resources, 'Implementing New Ideas, Planning New Development and Comprehensively Improve Water Security – Deputy Minister Zhou Xuewen's Interpretation of the *Thirteenth Five-Year Plan for Water Resources Reform and Development*', 27 December 2016, http://www.mwr.gov.cn/ztpd/2016ztbd/qgslsswgh/bzft/201612/t20161227_782949.html, accessed June 2018.

[29] WHO/UNICEF JMP utilizes nationally representative data from national statistical agencies and relevant ministries, including household-based sample surveys and census data, to derive fitted value of the percentage of population using various levels of drinking water and sanitation facilities and services. The estimates derived from different sources differ in value due to differences in methods and definitions.

8

EDUCATION AND CHILD DEVELOPMENT

OVERVIEW

Since the 1990s, the education situation of children in China has steadily improved. Access to basic education, which includes pre-primary, primary, junior secondary and senior secondary education, has continued to increase, reaching the average levels of upper middle-income countries.[1] In 2011, China achieved the MDG goal of universal access to primary education and met the goal of eliminating gender differences at all levels of education in advance of the 2015 timeline. Compared with the MDGs, the SDGs has a broader concept of education development and a larger number of targeted groups. Specifically, the SDG4 proposes to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all". It covers all education stages beginning from ECD and emphasizes life-long learning. In addition to continuing the MDGs' focus on gender equality in education, the SDGs also target at a wide range of vulnerable groups.

China's current outlook on education development is highly consistent with the SDG4. The *Education Law of the People's Republic of China* was amended in 2015, and it requires "the Government to adopt measures to promote equitable and balanced development of education", "guarantee the quality of education and teaching", and "promote lifelong learning for all".[2] The Government has repeatedly stressed the need to "develop higher quality and more equitable education", with special attention to children in areas where education development is lagging behind, including those living in remote areas, poverty-stricken areas, ethnic minority areas, and former revolutionary areas, as well as children with disabilities and children affected by migration.[3]

0–3 early childhood development

ECD is about the 'whole child' – the physical, social, emotional, cognitive thinking and language progression of each young individual. Investment in interventions targeted towards the first three years of life during the period of maximal brain development is the most cost-effective way to realize sustainable development.[4] China is actively promoting 0–3 ECD through a series of policies and measures, such as the First 1,000 Days Campaign on nutrition and health, and Nutrition Improvement for Children in Poverty Areas, which provides free nutrition supplementation packages to children aged 6–23 months. The Government is also implementing programmes in selected pilot sites, setting up community-based and family-oriented platforms for 0–3 ECD services, to provide integrated ECD services on child development and growth, family nurturing, parenting and child play.

However, there are still clear gaps in the supply of public facilities and service resources for the care of children aged 0–3. More proactive health, education, and protection oriented ECD policies and programmes will be implemented to strengthen the community-based ECD service system.

Pre-primary education

Receiving quality pre-primary education in kindergartens will have an important impact on stimulating children's curiosity and interest in learning, developing social skills, and building self-confidence. This will help children prepare for primary education and lay a solid foundation for lifelong learning. During 2011 and 2016, China has implemented two rounds of the *Plan of Action for Pre-primary Education* at the county level, and these efforts have led to the continuous improvement of pre-primary education for children aged 3–6. The gross pre-primary education enrolment ratio has increased from 56.6 per cent in 2010 to 77.4 per cent in 2016,[5] achieving the target of 70 per cent set out in the *National Medium- and Long-Term Education Reform and Development Plan (2010–2020)* ahead of the 2020 timeline.

However, in general, pre-primary education remains the weakest component of the overall education system. Consequently, the Government of China initiated a third round of the *Plan of Action for Pre-primary Education (2017–2020) and* committed to "build a basic public service system for pre-primary education with broad coverage, and ensure access and basic quality" by 2020. The Government strives to achieve 85 per cent pre-primary education enrolment ratio as set out in the *Thirteenth Five-Year Plan on National Education Development*. Concurrently, to promote the development of 'affordable kindergartens' (or 'universally accessible kindergartens'), the third round of implementation aims to increase the coverage to 80 per cent.[6] The gross enrolment ratio of pre-primary education reached 79.6 per cent in 2017.

Compulsory education

In 2011, China announced the achievement of its strategic goal of providing universal access to nine-year free compulsory education,[7] entering a new stage focused on balanced development through improving education quality. In 2013, the Government launched supervision and evaluation work at the county level to ensure balanced development of compulsory education. As of 2017, 2,379 counties have achieved balanced development of compulsory education, accounting for 81 per cent of the total number of counties in the country.[8]

In 2017, the cohort survival rate of the national nine-year compulsory education reached 93.8 per cent.[9] However, due to various factors such as inadequate school conditions, transportation difficulties, family poverty and loss of interest in studying, there are still children who are out of school in some areas of the country, especially in poor rural areas.[10] To ensure that the cohort survival rate of the national nine-year compulsory education reaches 95 per cent by 2020, the Government is actively taking measures to improve school attendance and minimize school drop-outs, including strengthening establishment of small-scale rural schools (primary schools in villages and teaching points of less than 100 students) and townships boarding schools. The Government guarantees to provide more support to these schools in terms of funding, teacher training, and teaching facilities.[11]

Senior secondary education

The gross enrolment ratio of senior secondary education has increased from only 26 per cent in 1992 to 88 per cent in 2017,[12] achieving considerable progress. However, when compared with compulsory education, the enrolment ratio is still significantly lower, and the urban-rural and inter-provincial differences are prominent. The Government has set a goal to realize universal access to senior secondary education by 2020, striving to achieve 90 per cent and above gross enrolment ratio at the national and provincial levels. Concurrently, it also proposes to strengthen school conditions, improve education quality, and increase recruitment ratio of secondary vocational education.[13] In 2017, there were 15.92 million students enrolled in secondary vocational education nationwide, accounting for 40 per cent of the total number of students enrolled in senior secondary education.[14]

According to incomplete statistics, 20 provinces across the country have implemented the '9+N' free education pilots as of May 2018 to provide universal access to pre-primary and senior secondary education, including all the other 11 western provinces except Chongqing. Specifically, Guangxi. Tibet, Qinghai, and Xinjiang took the lead in implementing free 15-year compulsory education, ensuring universal access from pre-primary education to senior secondary education.[15]

However, due to gaps in basic education level between urban and rural areas, differences in students' family education background and other factors,[16] rural students still face challenges to attend senior secondary education and university education. The differences in opportunities are especially apparent in the attendance rate of key senior secondary schools with high education quality and enrolment rates of top universities.

Investment in education

The Government of China has increased investment in education every year, which has guaranteed the implementation of various education policies and benefited hundreds of millions of urban and rural children. In the past ten years, the Government has vigorously developed rural compulsory education, thereby improving universal access and equity of compulsory education. From 2006, China began to establish a new mechanism for guaranteeing funding for compulsory education in rural areas in the central and western regions. It implemented the 'Two Exemptions and One Subsidy' policy (exemption of textbook fees, exemption of miscellaneous fees and subsidy for poor rural boarding school students), and instituted annual increases in the national standards for government spending per student. Empirical studies have shown that the new mechanism has significantly contributed to the rise in the probability of completing compulsory education and led to more years of schooling.[17]

The Government also aimed to boost the development of rural compulsory education and reduce disparities among regions and between rural and urban areas by providing special funds to accelerate the construction of rural schools, developing systems to share education resources among schools within a teaching district, and supporting efforts to recruit special post teachers in rural schools in the western region. In recent years, the Government begun to improve and integrate the funding guarantee mechanism for compulsory education in urban and rural areas, with specific focus on rural areas. From the spring semester of 2016, the average public funding quota for compulsory education in urban and rural areas was equalized, then from the spring semester of 2017, the 'Two Exemptions and One Subsidy' policy was standardized for students attending compulsory education in both urban and rural areas.[18]

In 2017, the national fiscal education funding reached RMB 3.4 trillion, accounting for more than 4 per cent of GDP for six consecutive years.[19] Although the funding for education has increased year by year, and the allocation of educational resources continues to increase in rural areas, remote poverty-stricken areas, and ethnic minority areas, the investment in education differ among regions, between urban and rural areas, between schools, among different groups, and at different educational stages. As structural imbalances still exist, investment in education quality needs to be further strengthened. In spite of the increased allocations, funds for improving education quality are still inadequate, and the bulk of funding goes into infrastructure, teachers' salaries and textbooks, while teacher training, curriculum reform and monitoring and evaluation remain under-funded.

Education equity and quality

The Government of China has pledged to promote education equity as a national basic education policy, ensuring quality improvement is the core task of education reform and development, and focusing on rural children, children left behind, ethnic minority children, and special education for children with disabilities.[20] It aims to emphasize education and poverty alleviation, with focus on the key poverty counties and counties located in 'poverty blocks', so that the children of poor families can receive equitable and quality education and be protected from intergenerational transmission of poverty.[21] At the same time, information and communication technology in education has been robustly promoted, and for the first time included into the newly amended *Education Law of the People's Republic of China* in 2015, which provides an effective pathway for the balanced development of education and plays an important role in narrowing differences among regions, between urban and rural areas, and among schools.

While significant achievements have been made overall, the uneven education development within the country continues to pose a huge challenge for China's education development. In addition to the above-mentioned issues that the Government is aiming to resolve, attention must be given to the following aspects to ensure that all children enjoy equal access to child-friendly, equitable and quality education:

- The Ministry of Education started monitoring the quality of compulsory education in the country in 2015. The first monitoring report, issued in July 2018, pointed out that key issues still need to be addressed, such as the lack of physical and aesthetic education (in comparison to the emphasis on intellectual education), limited development of comprehensive practical skills of students, and the heavy burden of schoolwork.[22]

- Delayed school entry at the compulsory education stage still exists, and it is most common among ethnic minority children and children living in poor rural areas. These children will face more challenges, such as being more likely to drop out of school.[23]

- Despite the Government's continuous efforts to improve policies and regulations on prohibiting discrimination against children of migrant populations,[24] 20 per cent of migrant children at the compulsory education stage[25] still only have the option to study in private schools, particularly in poor quality migrant schools. This is due to several factors, for example, migrant children often move from place to place with their parents and are subject to special regulations (such as paying additional fees) in local public schools.

- The Government has also adopted a series of measures in the education and care of children left-behind in rural areas, including accelerating construction of boarding schools, establishing custodial and support institutions when the School Merger Programme[26] was implemented some years ago, and strengthening construction of small-scale rural schools and township boarding schools more recently. However, the management and supervision mechanisms for boarding schools and relevant institutions need to be further improved.

- Participation among children with disabilities at all levels of education still needs to be improved. In 2017, the enrolment ratio in compulsory education among children with visual, hearing and intellectual disabilities was over 90 per cent,[27] but there are still gaps that need to be addressed to achieve universal access. In 2017, the Government promulgated the *Second Special Education Promotion Plan (2017–2020)*, which stated that “by 2020, special education at all levels will be improved comprehensively, the enrolment ratio of compulsory education for children with disabilities will reach 95 per cent or more, and non-compulsory special education will be significantly expanded.[28]

Figure 8.1
Structure of the education system in China

Ending age of nine-year compulsory education schooling

Age	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
School year				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Level	Pre-primary			Primary						Junior secondary			Regular senior secondary			University				Master's degree			Doctorate degree		
													Secondary vocational education			Higher vocational college									

Figure 8.1
China's *Law on Compulsory Education*[29] stipulates that all children aged 6, regardless of gender, ethnicity, race, family financial status, and religion, are equally entitled to nine years of free, compulsory education, including six years of primary education and three years of junior secondary education. In areas where conditions are inadequate, children can postpone their primary school enrolment to age 7.

Figure 8.2
Absolute numbers of students, teachers and schools at all education levels, 2017

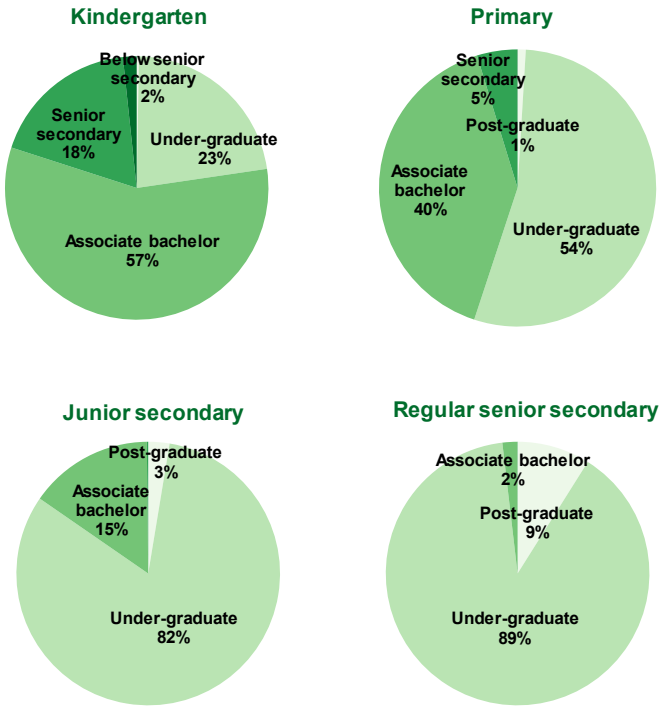
	Students in schools (10,000)	Percentage of female students	Full-time teachers (10,000)	Pupil-teacher ratio	Schools (10,000)
Pre-primary	4,600	46.7%	243	18.9	25.5
Regular primary schools	10,094	46.4%	594	17.0	16.7
Junior secondary schools	4,442	46.4%	355	12.5	5.2
Regular senior secondary schools	2,375	50.8%	177	13.4	1.4
Secondary vocational education	1,592	42.8%	84	19.0	1.1
Special education schools	58	35.8%	6	10.3	0.2
Total	23,161	46.7%	1,459	--	50.0

Source: Ministry of Education, *Essential Statistics of Education in China*, 2018

Figure 8.2
In 2017, there were a total of approximately 230 million students, taught by 14 million full-time teachers in about half a million schools in China's education system, from pre-school to senior secondary education.

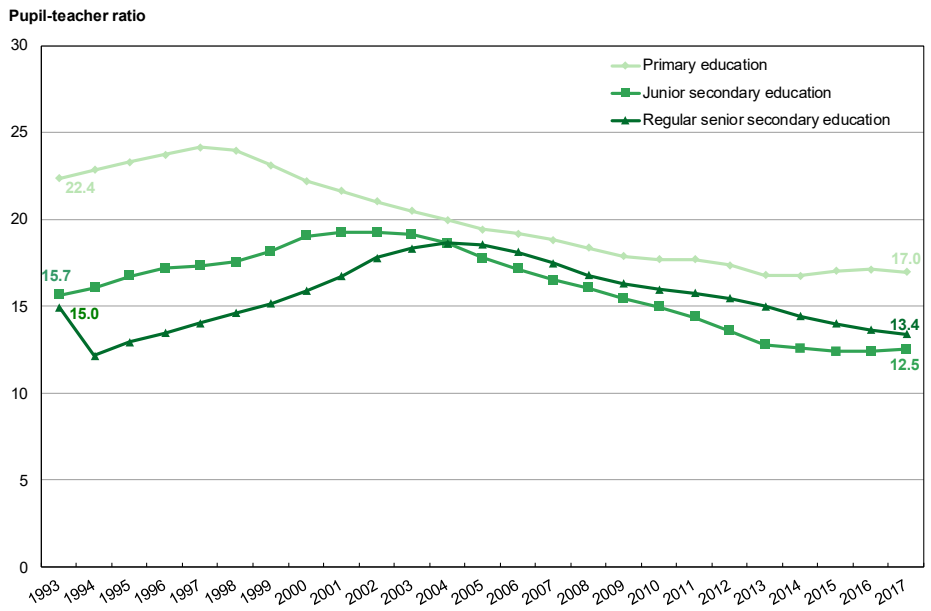
Figure 8.3
Teachers' qualifications, 2017

SDG 4.c.1



Source: Ministry of Education, *Essential Statistics of Education in China*, 2018

Figure 8.4
Pupil-teacher ratios at all education levels, 1993–2017



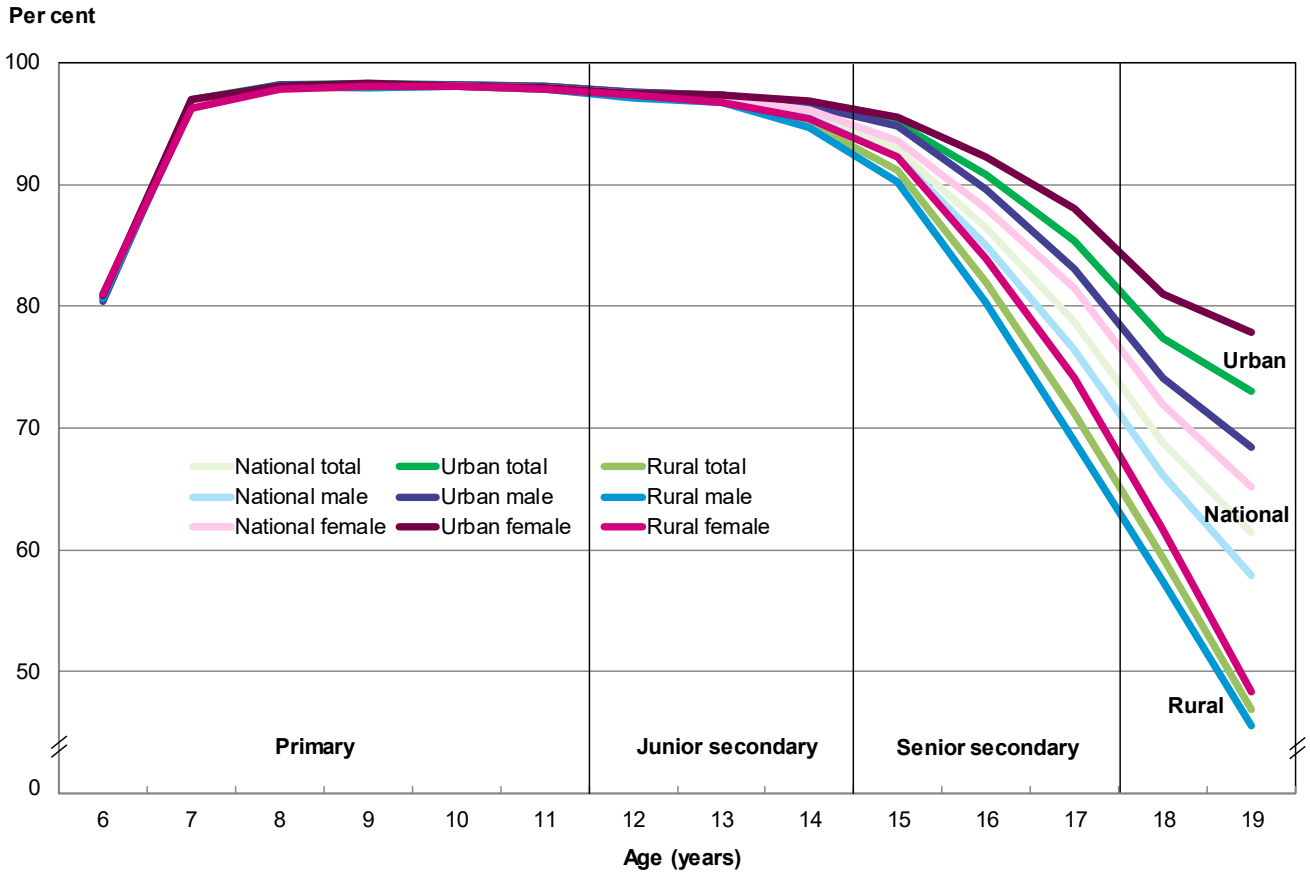
Source: National Bureau of Statistics, *China Statistical Yearbook*, 2018

Figure 8.3
The majority of teachers have the required educational qualifications[30] according to *China's Law on Teachers*. In 2017, almost all teachers at primary and junior secondary levels, 98 per cent at kindergarten level, and 98 per cent of regular senior secondary schools had the required educational qualifications.

Figure 8.4
In general, the pupil-teacher ratio[31] in primary education has continued to decrease since the late 1990s. This ratio in junior and senior secondary education increased during the 1993–2004 period but has since decreased steadily. Currently, China's pupil -teacher ratios at all education levels are better than the world's average, close to or even better than that of upper-middle-income countries, but still lagging behind high-income countries.[32]

Figure 8.5

School attendance rate among children and adolescents aged 6–19, by urban-rural, sex and age, 2015



Source: National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017

Figure 8.5

Data from the 2015 1% National Population Sample Survey show that, by age group, children's school attendance rate[33,34] remains high at the compulsory education stage, with no obvious urban-rural or gender differences. However, as children grew older, especially at senior secondary school age and during adolescence, their school attendance rate gradually fell, and the urban-rural disparity became prominent. The education level of girls, especially urban girls, was better than that of boys. The attendance rate for children aged 6 is relatively low because there are a small number of areas in China that allow children to enroll in primary school at age 7.

Figure 8.6

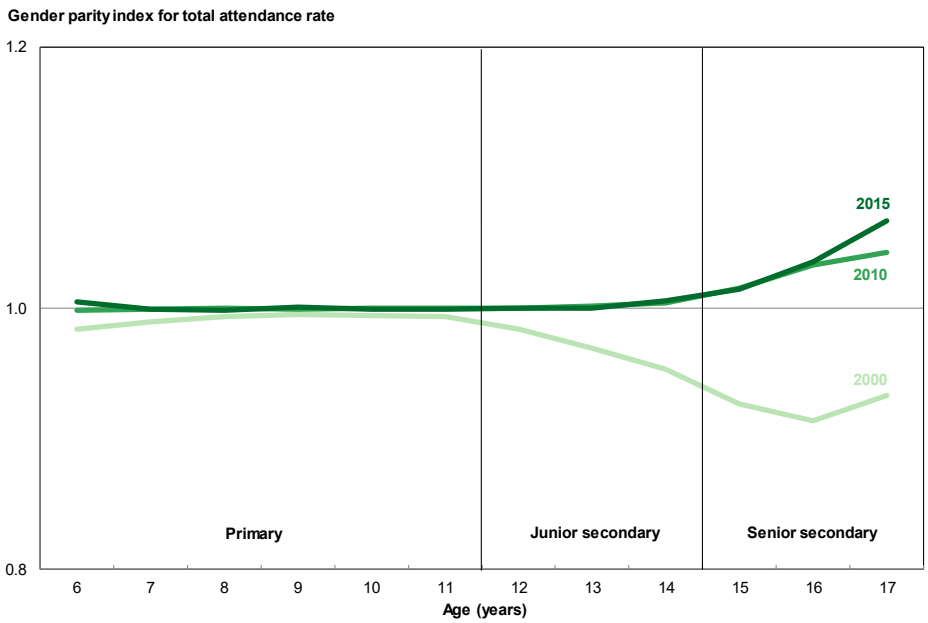
School attendance rate among children aged 6–17, 2000, 2010 and 2015

		School attendance rate (per cent)		
		2000	2010	2015
Children aged 6–17 years		86.1	91.8	93.0
Urban-rural	Urban	90.1	93.7	94.2
	Rural	84.4	90.3	91.9
	Poverty-stricken rural areas	-	88.9	90.3
Sex	Male	87.1	91.6	92.6
	Female	85.1	92.1	93.4
Ethnicity	Han	87.2	92.4	93.4
	Ethnic minorities	77.1	87.0	88.1
Children affected by migration	Migrant children	77.6	88.0	90.7
	Rural children left-children	89.4	91.4	92.7

Source: National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017

Figure 8.7

Gender parity index for school attendance rate, 2000, 2010 and 2015



Source: National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017

Figure 8.6

Between 2000 and 2015, the school attendance rate among children aged 6–17 markedly increased. By 2015, 93 per cent of children of school age were attending school. However, disparities in access to education between urban and rural areas, and between Han and ethnic minorities are still apparent. Rural areas lagged behind urban areas, poverty-stricken rural areas were worse off, and ethnic minority children performed poorer than Han children. The school attendance rate among rural children left-behind was better than that of other rural children. Migrant children's overall school attendance rate was low because some older migrant children joined the migrant workforce.

Figure 8.7

In terms of gender, boys' access to education at all levels was higher than that of girls in 2000, but this trend has been shifting since 2010. The chart utilizes the gender parity index[35] to characterize changes in gender differences in school attendance between 2000 and 2015, showing that attendance rates in primary schools among boys and girls have been very similar since 2000. Attendance rates in junior secondary schools were higher among boys in 2000, however, this disparity has disappeared since 2010, with similar attendance rates in junior secondary schools among boys and girls. The difference in attendance rates in senior secondary schools was even more apparent, with boys having obvious advantages over girls in 2000. In contrast, the 'male advantage' was less evident in this age group between 2010 and 2015, with the attendance rates of senior secondary school among girls higher than that of boys since 2010.

Figure 8.8
Measurement of early childhood development index

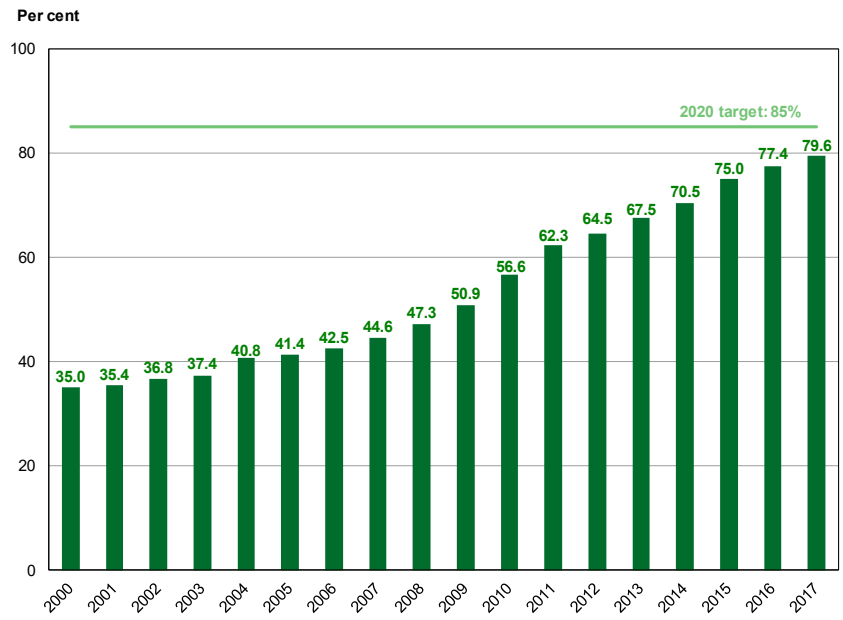
SDG 4.2.1

Four domains	Ten questions	Question item on track if the answer is…	Domain developmentally on track if…
Literacy-numeracy	1. Can the child identify or name at least ten letters of the alphabet?	Yes	At least two items on track
	2. Can the child read at least four simple, popular words?	Yes	
	3. Does the child know the name and recognize the symbol of all numbers from 1 to 10?	Yes	
Physical	4. Can the child pick up a small object with two fingers, like a stick or a rock from the ground?	Yes	At least one item on track
	5. Is the child sometimes too sick to play?	No	
Learning	6. Does the child follow simple directions on how to do something correctly?	Yes	At least one item on track
	7. When given something to do, is the child able to do it independently?	Yes	
Social-emotional	8. Does the child get along well with other children?	Yes	At least two items on track
	9. Does the child kick, bite, or hit other children or adults?	No	
	10. Does the child get distracted easily?	No	
Early childhood development index (ECDI): Percentage of children age 3–4 years (36–59 months) who are developmentally on track in at least three of the above four domains.			

Source: UNICEF, Multiple Indicator Cluster Surveys 6 (MICS6) questionnaires and indicators, http://mics.unicef.org/, 2018

Figure 8.8
UNICEF has developed the Early Childhood Development Index (ECDI) using a module called ECD in the global Multiple Indicator Cluster Surveys (MICS) to determine whether children are developmentally on track in the following four domains: literacy-numeracy, physical, learning and social-emotional, through asking ten age-appropriate questions for children aged 3–4. The ECDI is being used as the proxy measure for the global reporting on SDG indicator 4.2.1: proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being. UNICEF undertakes continued methodological work towards revision of the ECDI for improved alignment with the SDG indicator. Since there is no nationally representative data that measures ECD in China, adapting the MICS module for possible data collection, with reference to the *Early Learning and Development Guidelines for Children Aged 3–6* developed by the Ministry of Education for necessary customization is recommended.[36]

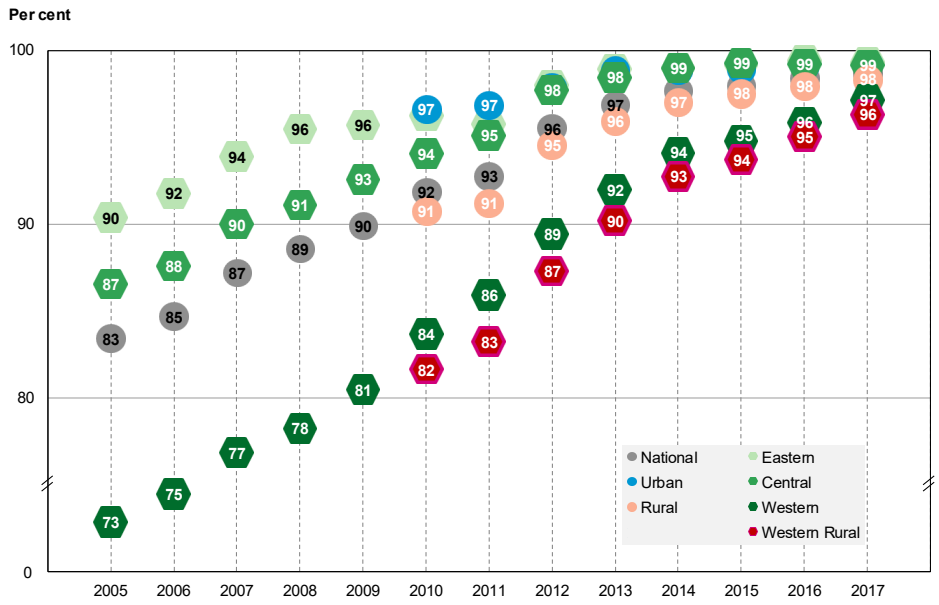
Figure 8.9
Gross enrolment ratio in pre-primary education, 2000–2017



Sources: Ministry of Education, *Essential Statistical Analysis of Education Development in China*, 2001–2018

Figure 8.9
The gross enrolment ratio in the three-year pre-primary education[37] has been steadily growing – exceeding 50 per cent in 2009 and reaching 79.6 per cent in 2017. According to the *Thirteenth Five-Year Plan on National Education Development*, this ratio should reach 85 per cent by 2020.

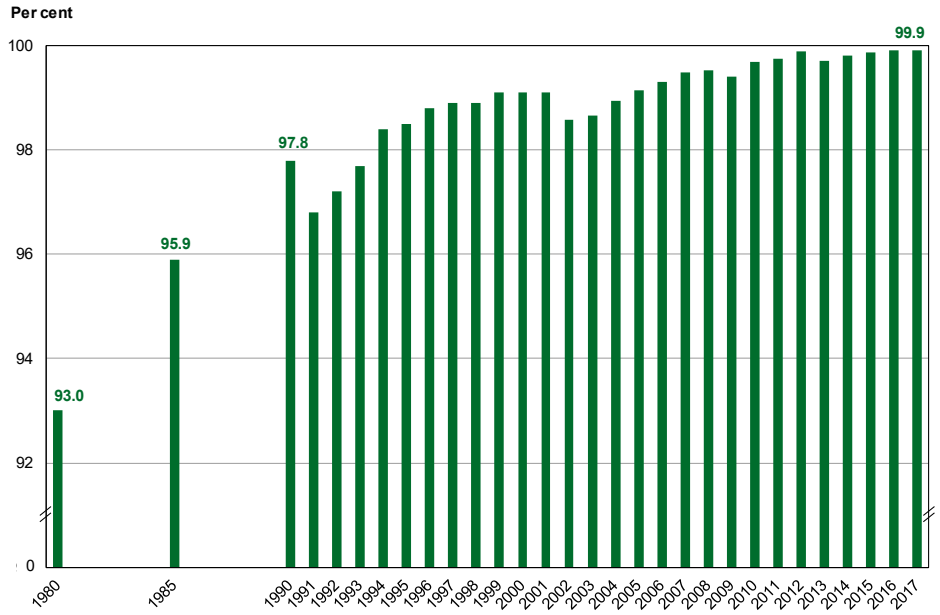
Figure 8.10
Participation rate in pre-primary education before enrolment in primary education, 2005–2017



Sources: Ministry of Education, *Essential Statistical Analysis of Education Development in China*, 2011–2018

Figure 8.10
The percentage of children who participated in at least one-year of pre-primary education before primary school enrolment has continued to increase, with the differences between urban and rural areas and among eastern, central, and western China decreasing rapidly. Western China still lags behind, particularly in rural areas. In 2017, the participation rate in at least one-year of pre-primary education before primary education enrolment in the western rural areas was 96.3 per cent, 2.3 percentage points lower than the national average of 98.7 per cent.

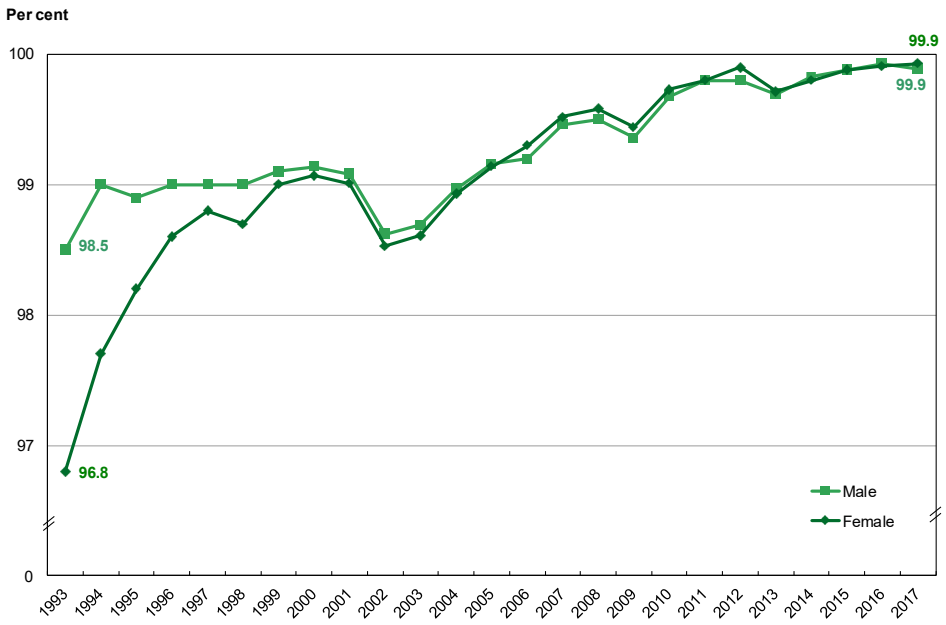
Figure 8.11
Net enrolment rate in primary education, 1980–2017



Source: National Bureau of Statistics, *China Statistical Yearbook*, 2018

Figure 8.11
The primary school net enrolment rate[38] has increased over the last four decades, and has remained high in recent years, reaching 99.9 per cent in 2017.

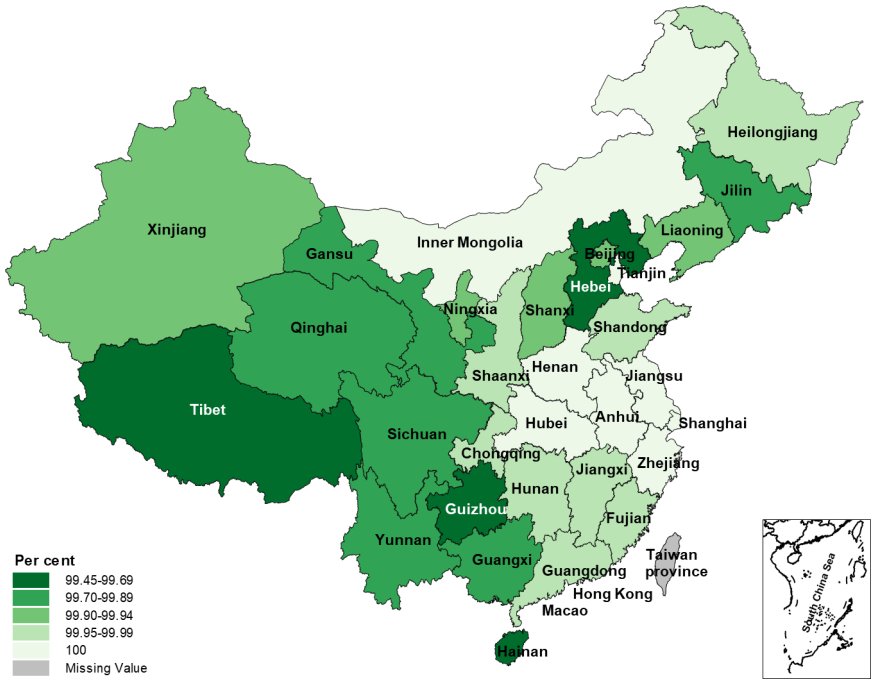
Figure 8.12
Net enrolment rate in primary education, by sex, 1993–2017



Sources: Ministry of Education, *Essential Statistics of Education in China*, 1994–2018

Figure 8.12
China has achieved gender parity at the primary school level. There are no significant differences in primary net enrolment rates of male and female students.

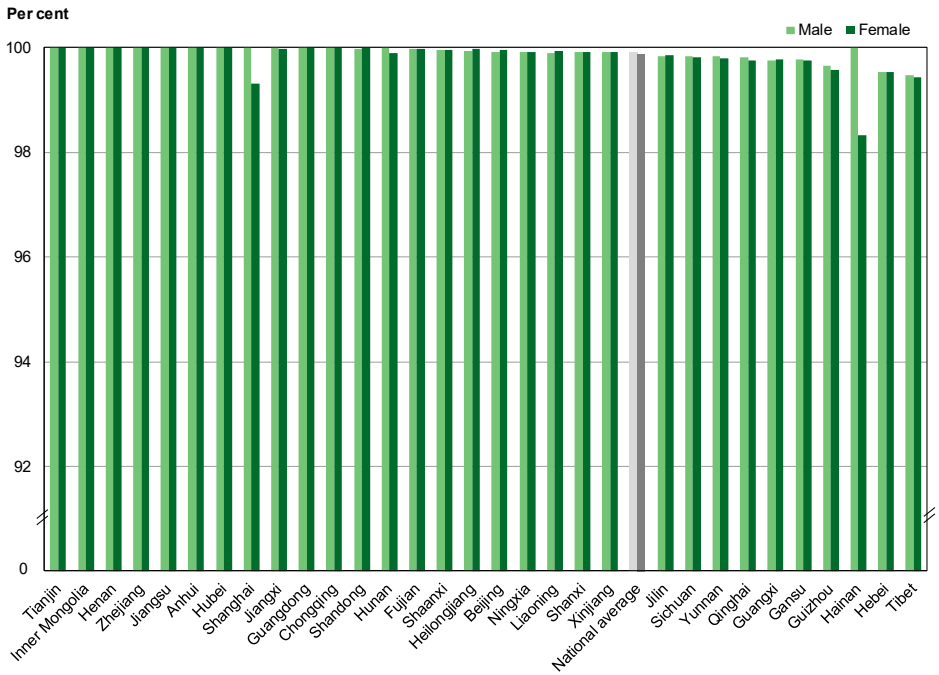
Figure 8.13
Net enrolment rate in primary education, by province, 2017



Source: Ministry of Education, *Essential Statistics of Education in China*, 2018

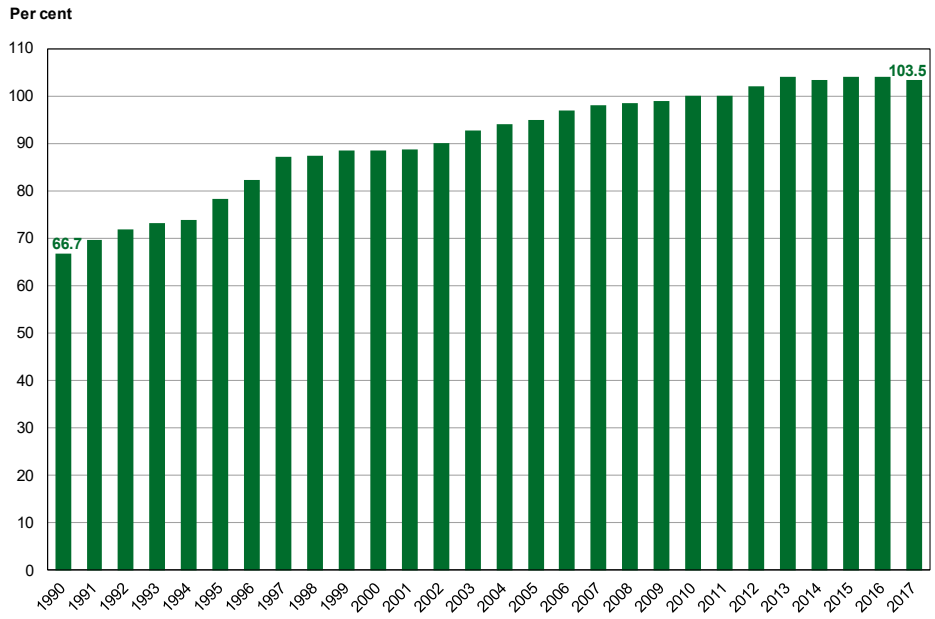
Figure 8.13
While the primary school net enrolment rate in China is quite high, provinces in the west lag behind the more developed provinces in the east.

Figure 8.14
Net enrolment rate in primary education, by province and sex, 2017



Source: Ministry of Education, *Essential Statistics of Education in China*, 2018

Figure 8.15
Gross enrolment ratio in junior secondary education, 1990–2017



Source: National Bureau of Statistics, *China Statistical Abstract*, 2018

Figure 8.14
There are no significant differences between male and female primary school net enrolment rates in almost all provinces.

Figure 8.15
The gross enrolment ratio in junior secondary education, which is part of the nine-year compulsory education, has increased steadily over the last three decades, from 66.7 per cent in 1990 to 103.5 per cent in 2017.

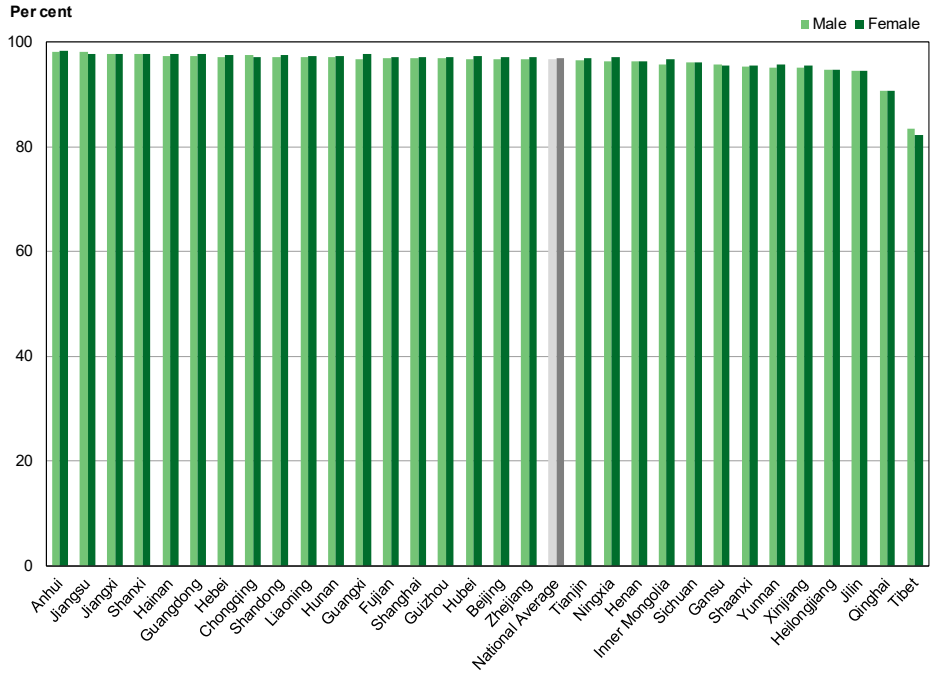
Figure 8.16

School attendance rate among children of junior secondary school age, by province, 2015

Source: (Derived from) National Bureau of Statistics, 2015 1% National Population Sample Survey

Figure 8.17

School attendance rate among children of junior secondary school age, by province and sex, 2015



Source: (Derived from) National Bureau of Statistics, 2015 1% National Population Sample Survey

Figure 8.16 and 8.17

The school attendance rate among junior secondary school-age children in 13 provinces throughout the country reached 97 per cent in 2015. There are no significant differences among provinces and between males and females. Compared with other provinces, Qinghai and Tibet are lagging behind in the school attendance rate for junior secondary school-age children, with Tibet having the lowest attendance rate at 82.8 per cent.

Figure 8.18

Migrant students as a percentage of all students in primary education in receiving cities, by province, 2017

Source: Ministry of Education, *Essential Statistical Analysis of Education Development in China*, 2018

Figure 8.19

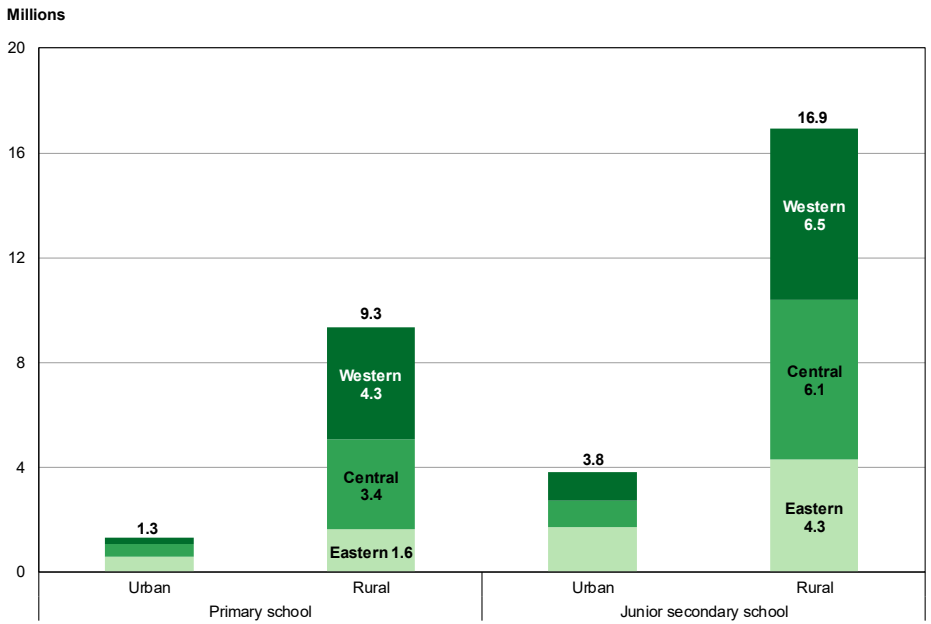
Migrant students as a percentage of all students in junior secondary education in receiving cities, by province, 2017

Source: Ministry of Education, *Essential Statistical Analysis of Education Development in China*, 2018

Figure 8.18 and 8.19

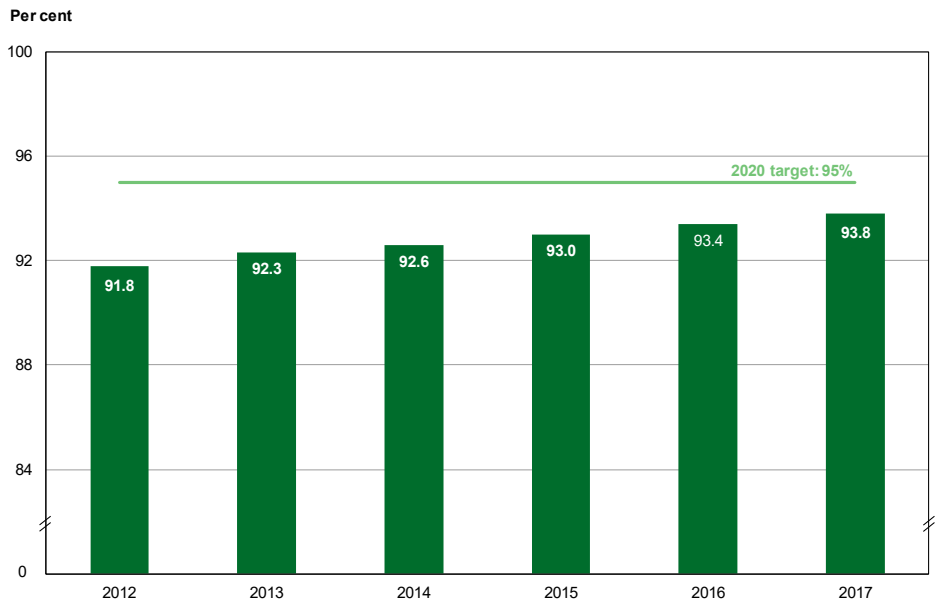
In 2017, 14.07 million migrant children attended primary and junior secondary education in receiving cities, accounting for 28 per cent of all students in receiving cities in primary and junior secondary education. Among them, 10.42 million migrant children attended primary education, accounting for 30.1 per cent of all students in receiving cities in primary education, and 3.64 million migrant children attended junior secondary education, accounting for 23.3 per cent of all students in receiving cities in junior secondary education. In eastern China, 58.3 per cent of migrant children attended primary and junior secondary schools. Across different provinces, the proportion of migrant children as a percentage of total school enrolment in receiving cities ranged from 15 to 47 per cent in primary schools, and 9 to 41 per cent in junior secondary schools.

Figure 8.20
Number of boarding students in primary and junior secondary education, 2017



Source: Ministry of Education, *Essential Statistical Analysis of Education Development in China*, 2018

Figure 8.21
Cohort survival rate in nine-year compulsory education, 2012–2017



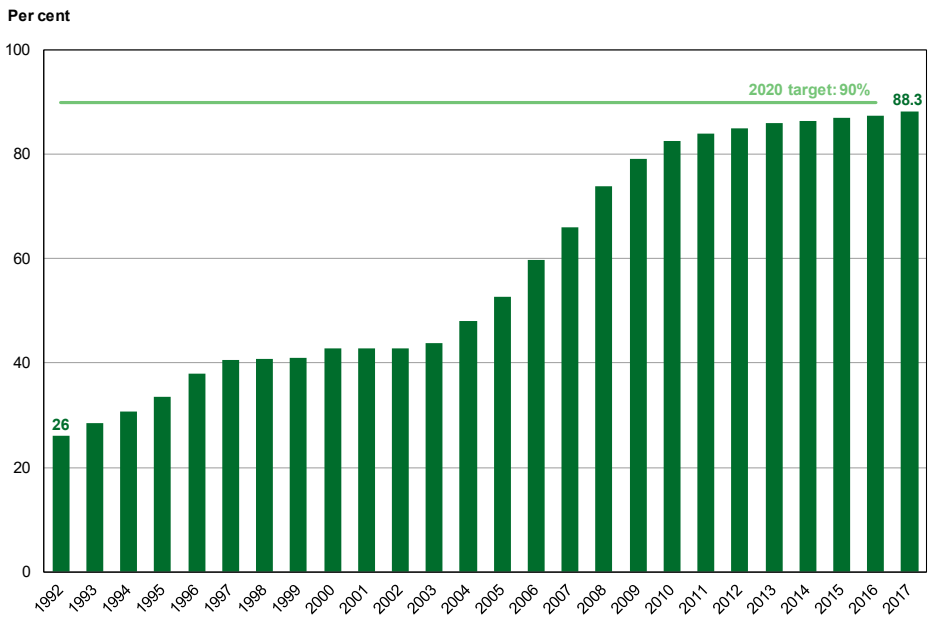
Sources: Ministry of Education, 'Statistical Communiqué on the National Education Development', 2012–2017

Figure 8.20
In 2017, 10.66 million primary school students and 20.74 million junior secondary school students were boarders, representing 10.6 per cent of all students in primary schools and 46.7 per cent of those in junior secondary schools. There were more boarders at the junior secondary level, in rural areas and in western and central China. For example, the proportion of boarders in junior secondary education exceeded 80 per cent in rural areas of Guangxi, Tibet and Yunnan in 2017.

Figure 8.21
The cohort survival rate[39] in nine-year compulsory education has increased steadily since 2012, reaching 93.8 per cent in 2017. Currently, China is striving to increase the cohort survival rate to 95 per cent by 2020, as stipulated in the *Thirteenth Five-Year Plan on National Education Development*.

Figure 8.22

Gross enrolment ratio in senior secondary education, 1992–2017



Source: National Bureau of Statistics, *China Statistical Abstract*, 2018

Figure 8.23

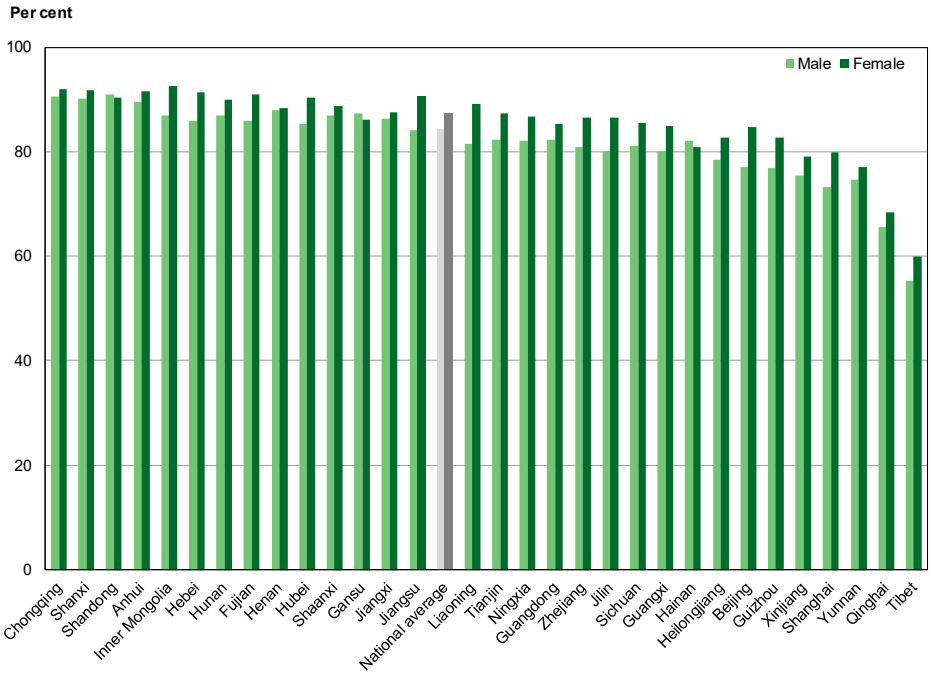
School attendance rate among children of senior secondary school age, by province, 2015

Source: (Derived from) National Bureau of Statistics, 2015 1% National Population Sample Survey

Figure 8.22
The gross enrolment ratio in senior secondary education has increased steadily over the last three decades. However, when compared with compulsory education enrolment, the senior secondary education gross enrolment ratio is lower, at 88.3 per cent in 2017. The Government of China has set a target of providing universal access to senior secondary education and raising the gross enrolment ratio in senior secondary education to more than 90 per cent by 2020.

Figure 8.23
Compared with compulsory education, large disparities among provinces are evident in school attendance rate among senior secondary school-age children, with some provinces exceeding 90 per cent, and other provinces such as Tibet falling below 60 per cent in 2015.

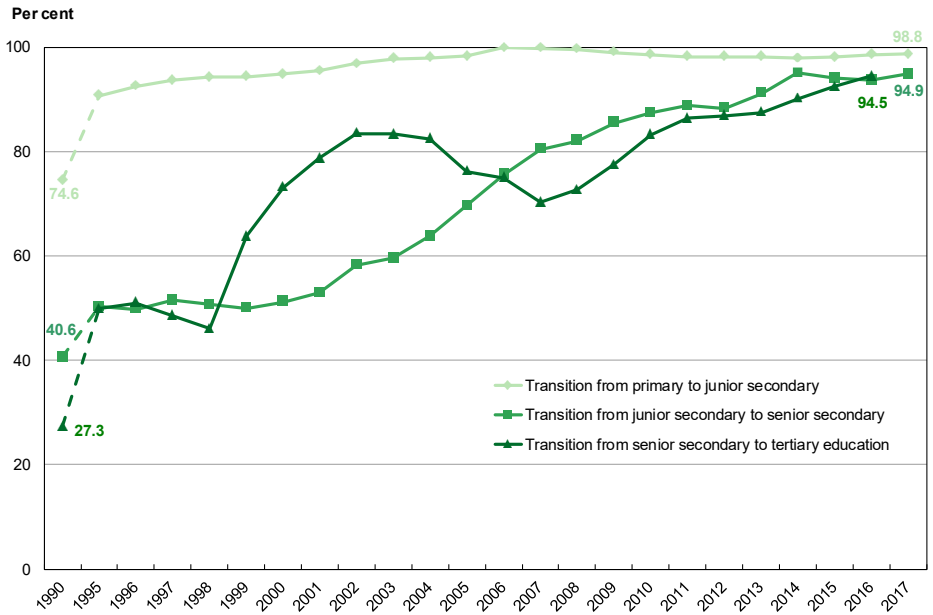
Figure 8.24
School attendance rate among children of senior secondary school age, by province and sex, 2015



Source: (Derived from) National Bureau of Statistics, 2015 1% National Population Sample Survey

Figure 8.24
In general, female students of senior secondary school-age are more likely to attend schools than male students across the provinces.

Figure 8.25
Transition rates from one level to the next level of education, 1990–2017

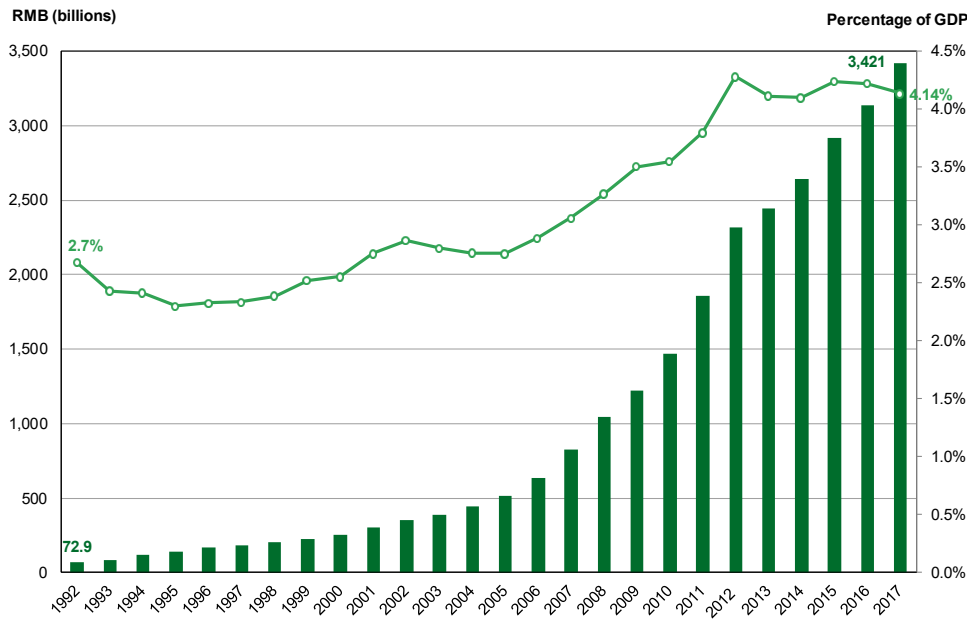


Source: National Bureau of Statistics, *China Statistical Yearbook*, 2018

Figure 8.25
Transition rates[40] from one level of schooling to the next have increased dramatically at primary level but still needs attention at the junior secondary and senior secondary levels. The surge in transition rates from senior secondary education to tertiary education from 1999 to the late 2000s is in part a result of China's expansion of higher education since 1999.

Figure 8.26

Government expenditure on education and its percentage of GDP, 1992–2017

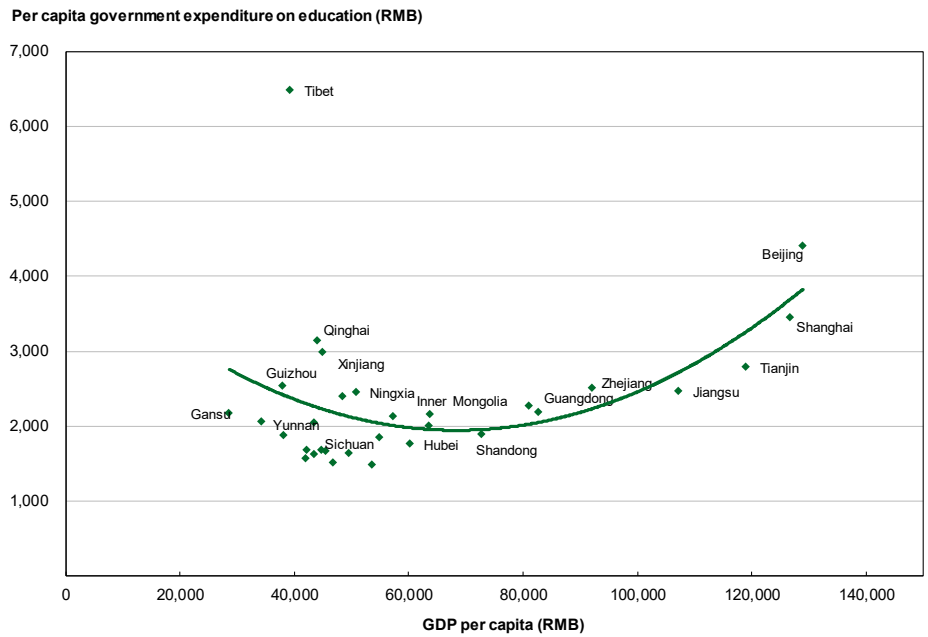


Sources: National Bureau of Statistics, *China Statistical Yearbook*, 2018 (GDP, 1992–2016 government expenditure on education); Ministry of Education, '2017 Statistical Bulletin on the Implementation of Education Expenditures', 2018 (2017 government expenditure on education)

Figure 8.26
Government expenditure on education has increased substantially since 1992, reaching RMB 3.4 trillion in 2017. Since 2012, China has achieved its national target of government expenditure on education accounting for more than 4 per cent of GDP for six consecutive years. However, this percentage is still lower than the world's average.

Figure 8.27

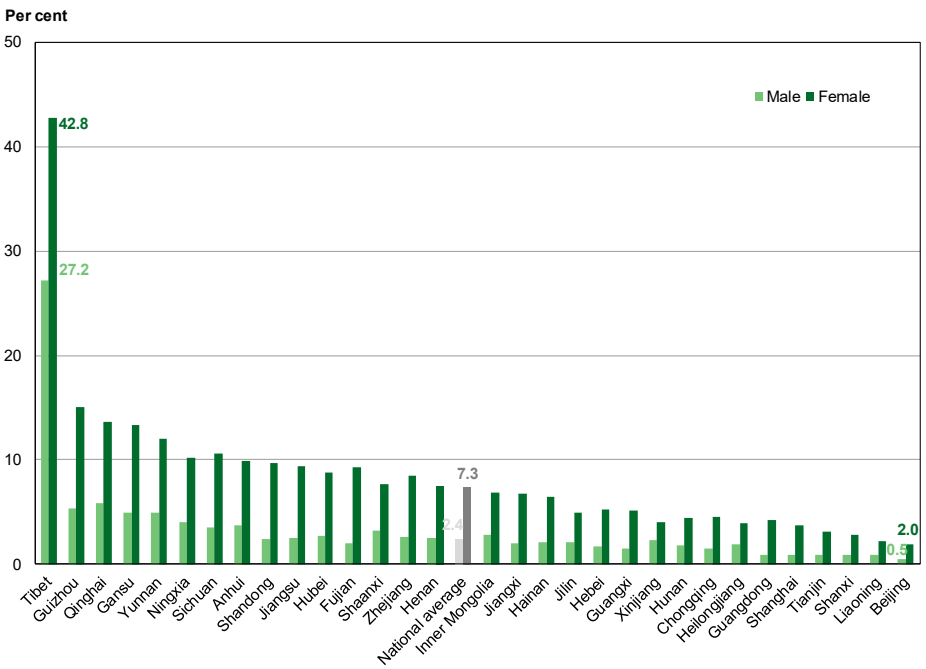
Per capita government expenditure on education and per capita GDP, by province, 2017



Sources: National Bureau of Statistics, *China Statistical Yearbook*, 2018 (per capita GDP); Ministry of Education, '2017 Statistical Bulletin on the Implementation of Education Expenditures', 2018 (government expenditure on education)

Figure 8.27
Plotting provinces by their respective per capita government spending on education and per capita GDP reveals that eastern provinces tend to spend more on education than western provinces. However, the relationship is not linear. Some western provinces with a low GDP per capita may have levels of per capita expenditure on education similar to or even higher than some eastern provinces. For example, although Tibet had a much lower per capita GDP than other provinces, its per capita government expenditure on education is the highest of all provinces.

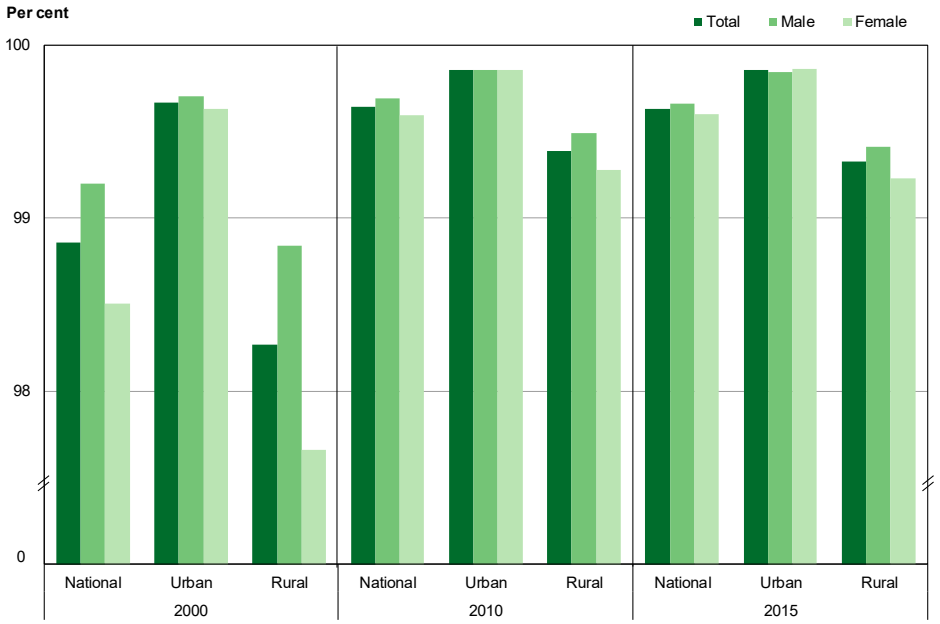
Figure 8.28
Illiteracy rate of adults aged 15 and above, by province and sex, 2017



Source: National Bureau of Statistics, *China Statistical Yearbook*, 2018

Figure 8.29
Literacy rate of youth aged 15–24, 2000, 2010 and 2015

SDG 4.6.1



Source: National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017

Figure 8.28
Basic reading, writing and numeracy skills are essential to individual well-being and societal development. Since the founding of the People's Republic of China, along with social and economic progress, there has been a substantial increase in educational attainment among citizens. Back in 1964, one third of China's adult population was illiterate. The illiteracy rate decreased to only 4.9 per cent in 2017. However, there are significant gender disparities: women and girls living in western provinces are more likely to be illiterate, with the highest illiteracy rate observed in Tibet.

Figure 8.29
Since the realization of universal access to compulsory education, the literacy rate among China's population aged 15–24 was high. The literacy rate between 2000 and 2015 remained stable, reaching 99.6 per cent in 2015, a significant increase from 2000. There were some differences between urban and rural areas, and between males and females in 2015, but these were not as significant as the differences in 2000.

Education and Child Development

Data sources and references

[1] UNESCO, UNESCO database, http://uis.unesco.org/, accessed August 2018.

[2] State Council, *Education Law of the People's Republic of China* (27 December 2015, second amendment), http://www.moe.gov.cn/s78/A02/zfs__left/s5911/moe_619/201512/t20151228_226193.html, accessed August 2018.

[3] Ministry of Education, 'New Expectations for Education in China: Higher quality and more equitable', 21 March 2016, http://www.moe.gov.cn/jyb_xwfb/s5148/201603/t20160321_234414.html, accessed August 2018.

[4] Douglas J. Noble, et al., 'What Could Cognitive Capital Mean for China's Children?' *PsyCh Journal*, vol. 6, 2017, pp. 153–160.

[5] Ministry of Education, *Essential Statistical Analysis of Education Development in China*, 2017.

[6] Ministry of Education, 'Opinions on the Implementation of the 3rd Round Plan of Actions on Pre-primary Education by Four Ministries including the Ministry of Education', 14 April 2017, http://www.moe.edu.cn/srcsite/A06/s3327/201705/t20170502_303514.html, accessed May 2018.

[7] Ministry of Education, 'Memorandum on the 'Two Basics' (Basic Popularization of 9 -year Compulsory Education and Basic Elimination of Illiteracy among Young People)', 13 November 2012, http://www.moe.gov.cn/jyb_xwfb/moe_2082/s6236/s6688/201211/t20121113_144412.html, accessed August 2018.

[8] Ministry of Education, 'Supervision and Evaluation Report on the Balanced Development of National Compulsory Education in 2017', 28 February 2018, http://www.moe.gov.cn/jyb_xwfb/xw_fbh/moe_2069/xwfbh_2018n/xwfb_20180227/sfcl/201802/t20180227_327990.html, accessed August 2018.

[9] Ministry of Education, '2017 Statistical Communiqué on the National Education Development', 19 July 2018, http://www.moe.edu.cn/jyb_sjzl/sjzl_fztjgb/201807/t20180719_343508.html, accessed August 2018.

[10] State Council, 'Notice of the General Office of the State Council on Further Strengthening School Attendance and Improving Cohort Survival Rate within Compulsory Education', 28 July 2017, http://www.gov.cn/zhengce/content/2017-09/05/content_5222718.htm, accessed August 2018.

[11] State Council, 'Guiding Opinions of the General Office of the State Council on Comprehensively Strengthening the Construction of Small-Scale Schools and Township Boarding Schools in Rural Areas', 25 April 2018, http://www.gov.cn/zhengce/content/2018%20-05/02/content_5287465.htm, accessed August 2018.

[12] Ministry of Education, '2017 Statistical Communiqué on the National Education Development', 19 July 2018, http://www.moe.edu.cn/jyb_sjzl/sjzl_fztjgb/201807/t20180719_343508.html, accessed August 2018.

[13] Ministry of Education, et al., 'Action Plan for Universalizing Senior Secondary Education (2017-2020)', 24 March 2016, http://www.gov.cn/xinwen/2017-04/06/content_5183767.htm, accessed August 2018.

[14] Ministry of Education, '2017 Statistical Communiqué on the National Education Development', 19 July 2018, http://www.moe.edu.cn/jyb_sjzl/sjzl_fztjgb/201807/t20180719_343508.html, accessed August 2018.

[15] China Philanthropy Research Institute, UNICEF China, *Child Welfare and Protection in China – Stocktaking Report 2018*, 2018.

[16] YANG Dongping, *China Education Development Report 2018*, 2018.

[17] HA Wei, et al., 'Does Money Matter? The Effects of Block Grants on Education Attainment in Rural China: Evidence from intercensal population survey 2015', *International Journal of Educational Development*, vol. 62, 2018, pp. 174–183.

[18] State Council, 'Notice of the State Council on Further Improving the Funding Guarantee Mechanism for Urban and Rural Compulsory Education', 25 November 2015, http://www.gov.cn/zhengce/content/2015-11/28/content_10357.htm, accessed August 2018.

[19] Ministry of Education, '2017 Statistical Bulletin on the Implementation of Education Expenditures', 8 October 2018, http://www.moe.edu.cn/srcsite/A05/s3040/201810/t20181012_351301.html, accessed November 2018.

[20] Office of the Working Group for the National Medium- and Long-term Education Reform and Development Plan, *National Medium- and Long-Term Education Reform and Development Plan (2010-2020)*, 29 July 2010, http://old.moe.gov.cn//publicfiles/business/htmlfiles/moe/info_list/201407/xxgk_171904.html, accessed August 2018.

[21] Ministry of Education, et al., *Thirteenth Five-Year Plan on Education Poverty Alleviation*, http://www.moe.gov.cn/srcsite/A03/moe_1892/moe_630/201612/t20161229_293351.html, accessed August 2018.

[22] Ministry of Education, *China Compulsory Education Quality Monitoring Report*, 2018 (http://www.eachina.org.cn/shtml/4/news/201807/1749.shtml).

[23] National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017.

[24] As early as 1998, the State Education Commission (Ministry of Education at that time) and the Ministry of Public Security promulgated the *Interim Measure of School Education for Temporary Migrant Children and Adolescents*, and put forward two main practices to ensure access to compulsory education, focusing on the local government and the public schools in the migration destinations. The *Law on Compulsory Education*, which was amended in 2006, specifically indicated that migrant children are entitled to equal access to the nine years of compulsory education. The *National Medium- and Long-Term Education Reform and Development Plan (2010-2020)* also reiterated the need to focus on local government efforts in the migration destinations and the efforts put forth by full-time public primary and secondary schools to resolve the issue of migrant children's education.

[25] Ministry of Education, 'China Education Overview – the National Education Development Situation in 2017', 18 October 2017, http://www.moe.gov.cn/jyb_sjzl/s5990/201810/t20181018_352057.html, accessed November 2018.

[26] The School Merger Programme in rural areas was introduced in the late 1990s, and expanded nation-wide since 2001. Small village schools were shut down and larger centralized schools were made available in towns and county seats for students to attend.

[27] Ministry of Education, 'From Universal Access to Quality Education: Achieving urban-rural integrated development in compulsory education', 30 August 2018, http://www.moe.gov.cn/jyb_xwfb/s5147/201808/t20180830_346565.html, accessed August 2018.

[28] Ministry of Education, et. al., 'The Second Special Education Development Plan (2017-2020)', 7 July 2017, http://www.gov.cn/xinwen/2017-07/28/content_5214071.htm, accessed August 2018.

[29] The *Law on Compulsory Education* was issued in 1986, and amended in 2006.

[30] *China's Law on Teachers* issued in 1993 requires teachers to have the corresponding academic qualifications as follows: (1) to obtain kindergarten teaching qualifications, a secondary degree in kindergarten education from a pre-primary normal school or above is required; (2) to obtain primary school teaching qualifications, a secondary degree in primary education from a secondary normal school or above is required; (3) to obtain junior secondary teaching qualifications, an associate bachelor's degree from a normal college (or other college) or above is required; (4) to obtain senior secondary teaching qualifications, a bachelor's degree from a normal university (or other university) or above is required.

[31] **Pupil-teacher ratio** – Average number of pupils per teacher at a given level of education, based on headcounts of both pupils and teachers (UNESCO).

[32] UNESCO, UNESCO database, http://uis.unesco.org/, accessed August 2018.

[33] **Attendance rate** – Here it refers to a concept of 'total net attendance rate', i.e., total number of students of the official age group for a given level of education who are attending school at any level of education, expressed as a percentage of the corresponding population (UNESCO).

[34] Besides having different definitions, school attendance rate and enrolment rate come from different data sources. Data reflecting school attendance usually come from household surveys, while data reflecting enrolment usually come from registration records in education departments. There are scenarios where children were registered in the education system but were not attending school.

[35] The gender parity index is defined as the ratio of female to male values of a given indicator. Here it is used to compare the gender difference in terms of the total net attendance rate. A gender parity index equal to 1 indicates parity between females and males. In general, a value less than 1 indicates a disparity in favour of boys and a value greater than 1 indicates a disparity in favour of girls (UNESCO).

[36] For example, three questions about literacy-numeracy may be adapted as: Can the child say chants, sing nursery rhymes or repeat simple stories clearly? Can the child understand the picture, and convey what is in the picture and what happened? Can the child point to objects while counting up to five items, and tell the total number correctly? (Ministry of Education, 'Notice by Ministry of Education to Publish *Early Learning and Development Guidelines for Children Aged 3–6'*, 9 October 2012, http://www.moe.gov.cn/srcsite/A06/s3327/201210/t20121009_143254.html, accessed August 2018.)

[37] **Gross enrolment ratio** – Number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education (UNESCO). The gross enrolment ratio may exceed 100 per cent since some children enrolled in this given level of education might be younger or older than the official school-age.

[38] **Net enrolment rate** – Total number of students in the theoretical age group for a given level of education enrolled in that level, expressed as a percentage of the total population in that age group (UNESCO).

[39] **Cohort survival rate** – Percentage of a cohort of students enrolled in the first grade of a given level or cycle of education in a given school year who are expected to reach a given grade, regardless of repetition (UNESCO).

[40] **Transition rate** – Number of students admitted to the first grade of a higher level of education in a given year, expressed as a percentage of the number of students enrolled in the final grade of the lower level of education in the previous year (UNESCO).

9

THE RIGHTS OF CHILDREN AND WOMEN

OVERVIEW

Convention on the Rights of the Child

The Convention on the Rights of the Child (CRC) was adopted and ratified by the United Nations General Assembly Resolution 44/25 on 20 November 1989 and entered into force on 2 September 1990.[1]

The CRC represents a major milestone in the historic effort to achieve a world fit for children, to make sure every child has their right to survival, development, protection and participation promoted, protected and fulfilled. As the first international treaty to articulate the entire complement of rights – economic, social, cultural, civil and political – relevant to children, the CRC is legally binding in all countries that have ratified it, and with its 196 State Parties, it is the most widely ratified human rights treaty in history.

The lives of millions of children have improved since 1990, when the CRC took global affect. Countries have incorporated the provisions of the CRC in their constitutions, laws, policies and budgets. Children are now widely viewed differently – as holders of their own rights to health care, adequate nutrition, education, participation, freedom from violence and exploitation, as well as to rest and play.

Convention on the Elimination of All Forms of Discrimination against Women

The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) was adopted and ratified by the United Nations General Assembly Resolution 34/180 on 18 December 1979 and entered into force on 3 September 1981.[2]

Among the international human rights treaties, CEDAW takes an important place in bringing the female half of humanity into the focus of human rights concerns. The spirit of CEDAW is rooted in the goals of the United Nations: to reaffirm faith in fundamental human rights, in the dignity and worth of the human person, and in the equal rights of men and women. It spells out the meaning of equality and how it can be achieved. In so doing, CEDAW establishes not only an international bill of rights for women, but also an agenda for action by countries to guarantee the enjoyment of those rights.

CEDAW covers three dimensions of the situation of women. Civil rights and the legal status of women are dealt with in great detail. In addition, and unlike other human rights treaties, CEDAW is also concerned with the dimension of human reproduction as well as with the impact of cultural factors on gender relations.

National Programme of Action for Children

In 1992, in support of the international commitment made at the 1990 World Summit for Children, and to implement the commitments made by China after its ratification of the CRC in 1992, the Government of China adopted the first *National Programme of Action (NPA) for Children* for the 1992–2000 period. This NPA was in line with the country's *National Plan for Economic and Social Development* and took into account the global goals set at the 1990 World Summit for Children.[3]

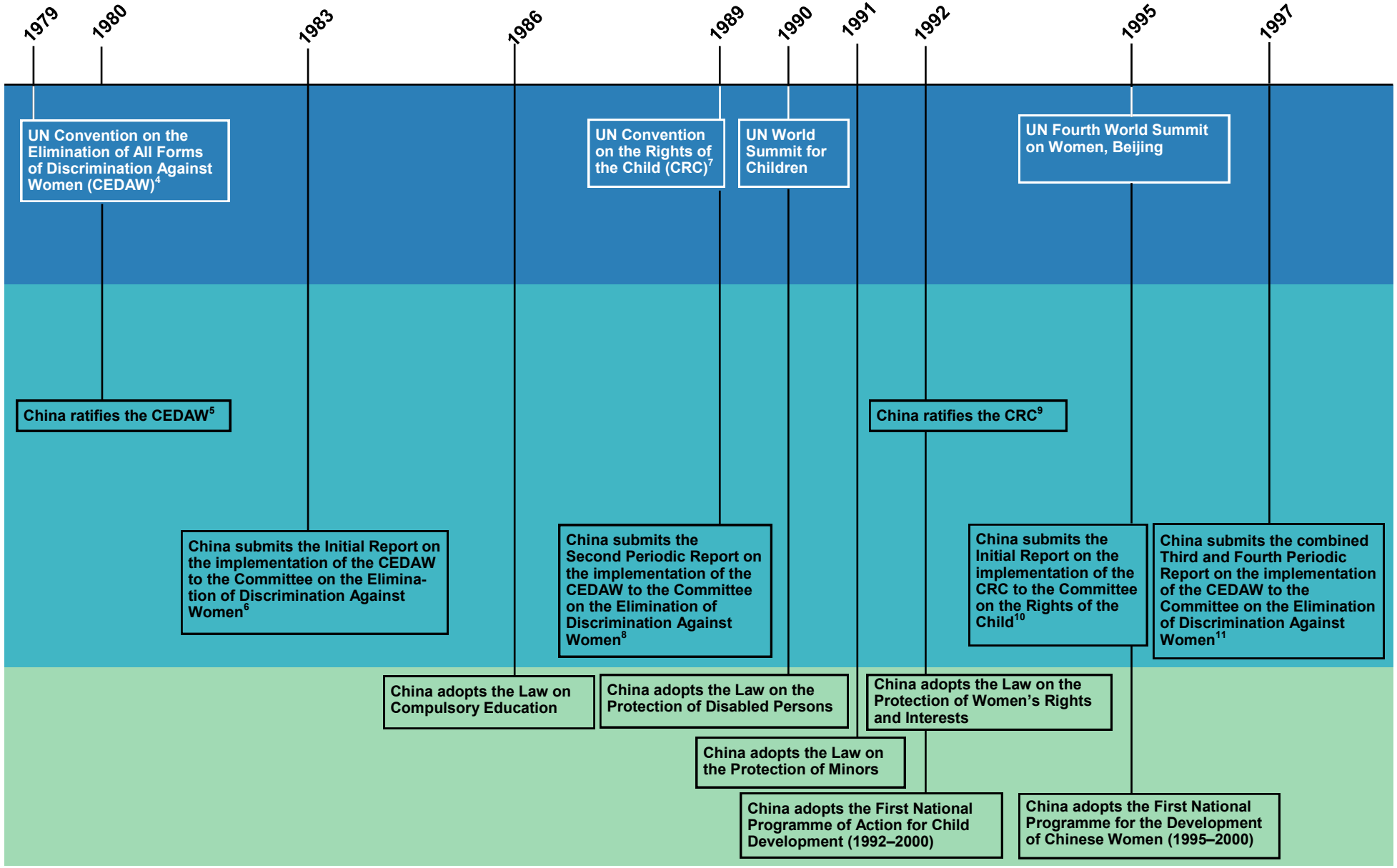
A second NPA for Children was adopted by the Government in May 2001 for the 2001–2010 period, and the third NPA was launched in July 2011 for the 2011–2020 period, with the objectives:

- to improve the basic medical and health care system that covers both rural and urban children to improve children's physical and mental health;
- to promote equalization of fundamental public education services and ensure higher-quality education for all children;
- to expand welfare coverage for children, establish and improve a moderately universal welfare system for children;
- to enhance social services and create a children-friendly social environment; and
- to improve the legal system and protection mechanism to safeguard children's legal rights and interests according to law.

Aside from the key international treaties and the NPAs mentioned above, China also adopted and continued to revise a series of laws to protect the rights of children and women, including the *Law on Compulsory Education*, the *Law on the Protection of Disabled Persons*, the *Law on the Protection of Minors*, the *Law on the Protection of Women's Rights and Interests*, the *Law of Preventing Minors from Committing Crimes*, the *Criminal Procedures Law*, the *Penal Code*, and the *Anti-Domestic Violence Law*.

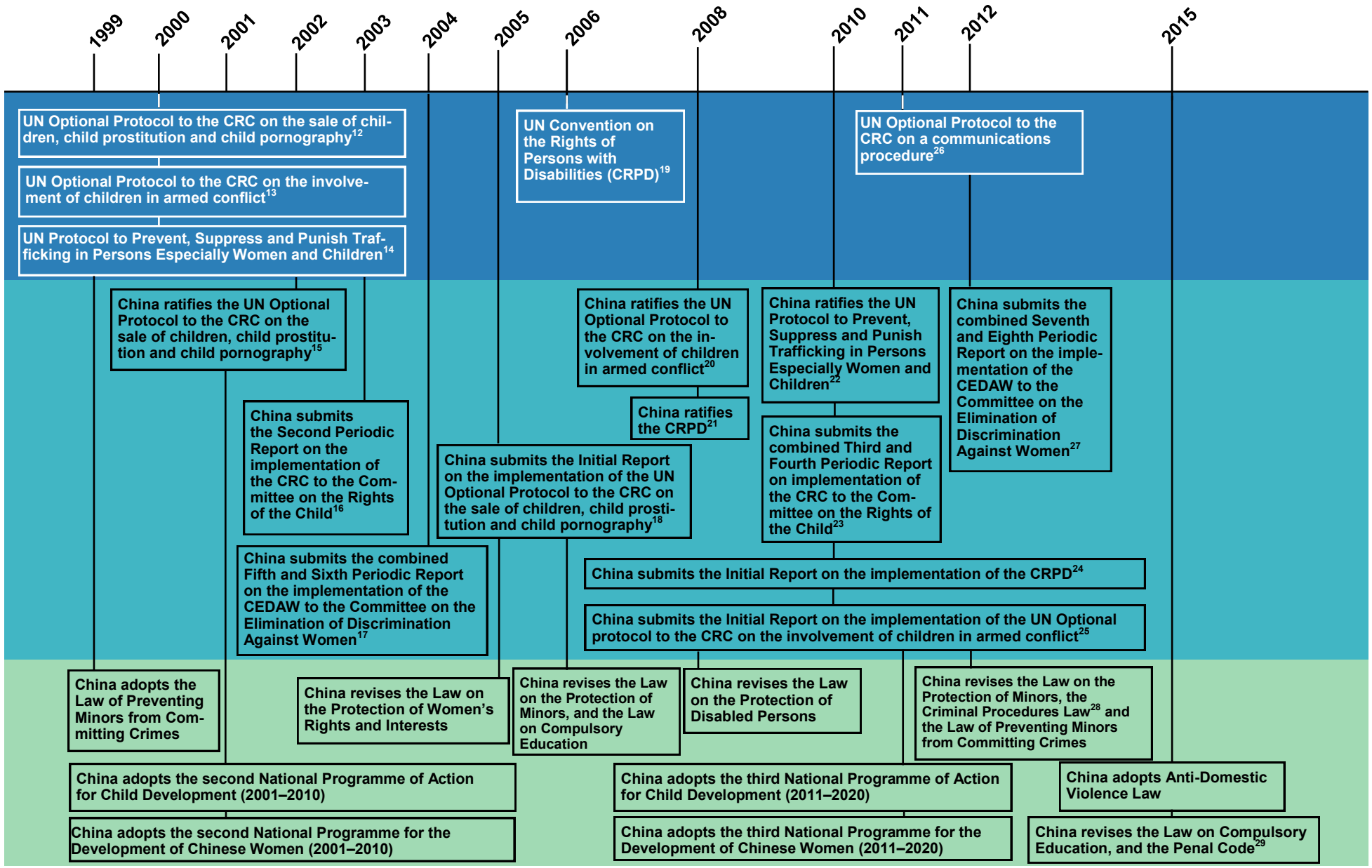
Figure 9.1

International and China's milestones in the rights of children and women



International milestones in children's and women's rights
China's ratification of International Conventions and its reports to the treaty bodies
China's important laws protecting the rights of children and women

Sources: http://treaties.un.org/ and https://www.ohchr.org/


1999
2000
2001
2002
2003
2004
2005
2006
2008
2010
2011
2012
2015
UN Optional Protocol to the CRC on the sale of children, child prostitution and child pornography[12]
UN Optional Protocol to the CRC on the involvement of children in armed conflict[13]
UN Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children[14]
UN Convention on the Rights of Persons with Disabilities (CRPD)[19]
UN Optional Protocol to the CRC on a communications procedure[26]
China ratifies the UN Optional Protocol to the CRC on the sale of children, child prostitution and child pornography[15]
China submits the Second Periodic Report on the implementation of the CRC to the Committee on the Rights of the Child[16]
China submits the Initial Report on the implementation of the UN Optional Protocol to the CRC on the sale of children, child prostitution and child pornography[18]
China ratifies the UN Optional Protocol to the CRC on the involvement of children in armed conflict[20]
China ratifies the CRPD[21]
China ratifies the UN Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children[22]
China submits the combined Third and Fourth Periodic Report on implementation of the CRC to the Committee on the Rights of the Child[23]
China submits the combined Seventh and Eighth Periodic Report on the implementation of the CEDAW to the Committee on the Elimination of Discrimination Against Women[27]
China submits the combined Fifth and Sixth Periodic Report on the implementation of the CEDAW to the Committee on the Elimination of Discrimination Against Women[17]
China submits the Initial Report on the implementation of the CRPD[24]
China submits the Initial Report on the implementation of the UN Optional protocol to the CRC on the involvement of children in armed conflict[25]
China adopts the Law of Preventing Minors from Committing Crimes
China revises the Law on the Protection of Women's Rights and Interests
China revises the Law on the Protection of Minors, and the Law on Compulsory Education
China revises the Law on the Protection of Disabled Persons
China revises the Law on the Protection of Minors, the Criminal Procedures Law[28] and the Law of Preventing Minors from Committing Crimes
China adopts the second National Programme of Action for Child Development (2001–2010)
China adopts the second National Programme for the Development of Chinese Women (2001–2010)
China adopts the third National Programme of Action for Child Development (2011–2020)
China adopts the third National Programme for the Development of Chinese Women (2011–2020)
China adopts Anti-Domestic Violence Law
China revises the Law on Compulsory Education, and the Penal Code[29]

The Rights of Children and Women

Data sources and references

[1] UN OHCHR, *Convention on the Rights of the Child*, https://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx, accessed September 2018.

[2.] UN OHCHR, *Convention on the Elimination of All Forms of Discrimination against Women*, https://www.ohchr.org/EN/ProfessionalInterest/Pages/CEDAW.aspx, accessed September 2018.

[3] *Goals for Children and Development in the 1990s* adopted at the World Summit for Children on 30 September 1990 along with the *World Declaration on the Survival, Protection and Development of Children* and *Plan of Action for Implementing the World Declaration on the Survival, Protection and Development of Children in the 1990s*.

[4] UN General Assembly Resolution 34/180 adopted the CEDAW on 18 December 1979 and it entered into force on 3 September 1981.

[5] China ratified the CEDAW on 4 November 1980* and it entered into force on 3 December 1981.

[6] The Initial Report on the implementation of the CEDAW was submitted on 25 May 1983.

[7] UN General Assembly Resolution 44/25 adopted the CRC on 20 November 1989 and it entered into force on 2 September 1990.

[8] The Second Periodic Report on the implementation of the CEDAW was submitted on 22 June 1989.

[9] China ratified the CRC on 2 March 1992* and it entered into force on 1 April 1992.

[10] The Initial Report on the implementation of the CRC was submitted on 27 March 1995.

[11] The combined Third and Fourth Periodic Report on the implementation of the CEDAW was submitted on 25 May 1997.

[12] UN General Assembly Resolution A/RES/54/263 adopted Optional Protocol to the CRC on the sale of children, child prostitution and child pornography on 25 May 2000 and it entered into force on 18 January 2002.

[13] UN General Assembly Resolution A/RES/54/263 adopted Optional Protocol to the CRC on the involvement of children in armed conflict on 25 May 2000 and it entered into force on 12 February 2002.

[14] UN General Assembly Resolution 55/25 adopted Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children, supplementing the UN Convention against Transnational Organized Crime on 15 November 2000 and it entered into force on 25 December 2003.

[15] China ratified the UN Optional Protocol to the CRC on the sale of children, child prostitution and child pornography on 3 December 2002* and it entered into force on 3 January 2003.

[16] The Second Periodic Report on the implementation of the CRC was submitted on 27 June 2003.

[17] The combined Fifth and Sixth Periodic Report on the implementation of the CEDAW was submitted on 4 February 2004.

[18] The Initial Report on the implementation of the UN Optional Protocol to the CRC on the sale of children, child prostitution and child pornography was submitted on 11 May 2005.

[19] UN General Assembly Resolution A/RES/61/106 adopted the CRPD on 13 Dec 2006 and it entered into force on 3 May 2008.

[20] China ratified the UN Optional Protocol to the CRC on the involvement of children in armed conflict on 20 February 2008* and it entered into force on 20 March 2008.

[21] China ratified the CRPD on 1 August 2008* and it entered into force on 31 August 2008.

[22] China ratified the UN Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children, supplementing the UN Convention against Transnational Organized Crime on 8 February 2010* and it entered into force on 10 March 2010.

[23] The combined Third and Fourth Periodic Report on the implementation of the CRC was submitted on 16 July 2010.

[24] The Initial Report on the implementation of the CRPD was submitted on 30 August 2010.

[25] The Initial Report on the implementation of the UN Optional Protocol to the CRC on the involvement of children in armed conflict was submitted on 17 November 2010.

[26] UN General Assembly Resolution A/RES/66/138 adopted Optional Protocol to the CRC on a communications procedure on 19 December 2011 and it entered into force on 14 April 2014.

[27] The combined Seventh and Eighth Periodic Report on the implementation of the CEDAW was submitted on 20 January 2012.

[28] China revised the *Criminal Procedures Law* to include a special chapter on the procedures for juvenile criminal cases in 2012.

[29] China amended the *Penal Code* in relation to child protection in 2015.

∗ The date indicated reflects the formal date of ratification recorded by the United Nations; this date may differ from the official date of ratification recorded by the Government of China.

10

CHILDREN AFFECTED BY MIGRATION

OVERVIEW

Massive internal migration

China's migrant population has increased substantially since 1980s and reached 244 million in 2017. The migrant population has contributed significantly to the overall social and economic development of the country, through driving a gainful urbanization process, increasing rural incomes, restructuring the economy, and reducing urban-rural and regional disparities.

However, the living conditions of migrant population remain inferior to those of the resident population in receiving cities. The planning, financing and delivery of public services by local authorities is based on one's residential *hukou* (household registration) status. The lack of permanent residence status in cities (an urban *hukou*) has become the main constraint for approximately 200 million migrants to access basic public services in education, employment, health care, pension, and affordable housing. The large-scale internal migration has also resulted in other social problems, including the issue of children left-behind in rural areas.[1]

Maximizing the benefits of internal migration, while mitigating its adverse effects, is a difficult balancing act for the Government. Over the years, policy reforms and new legislation have been introduced by the Government to improve migrants' equal access to civil rights, labour rights and rights to basic public services, and ensure that the benefits of economic growth and social development reach the migrants. Within the *National New Urbanization Plan (2014–2020)* and other recent documents, the Government proposes to put people at the core of its urbanization policies, through registering eligible rural workers as permanent urban residents in an orderly manner and progressively expanding the coverage of basic public services for all permanent residents, including migrant populations. However, to address the relevant challenges caused by the massive internal migration and the complex problems created, a gradual long-term process is expected.

Children affected by migration[2]

Children affected by migration include both migrant children[3] and children left-behind.[4] In 2015, the number of migrant children aged 0–17 was 34.26 million, and the number of children left behind by migrating parents was 68.77 million (of whom 40.51 million were rural children left-behind[5]). Adding these two groups together, the total number of children affected by migration was 103 million, accounting for 38 per cent of the total child population in China. That is, about four out of every 10 children in China were directly affected by migration.

The Government has attached importance to addressing the challenges faced by children affected by migration and has taken active measures. In the late 1990s, the Government began focusing on migrant children, and declared that the receiving municipal governments bore the main responsibility for providing compulsory education for migrant children through public primary and secondary school enrolment. In recent years, as migration challenges have grown in scale and prominence, the Government has increased its attention on issues related to migrant children and children left-behind and released a series of new policies related to education, health and social protection. The *National Programme of Action for Children (2011-2020)* facilitates cross-sectoral government policies and sets out development objectives specifically related to migrant children and children left-behind, including reducing infant and under-five mortality rates among migrant children, guaranteeing equal access to compulsory education by migrant children, and meeting the basic public service needs of migrant children and children left-behind.

In February 2016, the State Council issued the *Opinions on Strengthening Care and Protection of Rural Children Left-behind*. Since then, significant progress has been achieved in establishing a care and protection system for rural children left-behind. Moreover, for the first time, the care and protection of rural children left-behind was included in the *Thirteenth Five-Year Plan for Promoting Equalization of Basic Public Services*.

Migrant children

Of the 34.26 million migrant children nationwide in 2015, 28.96 million lived in urban areas, accounting for 21.8 per cent of all urban children. That is, one out of every five children in urban areas was a migrant child. Contrary to common misperception, most migrant children live and study in the places to which they had migrated for a long period of time. Their average duration of migration was four years. Of the migrant children aged 8–13 years, more than half had a migration period of over five years. When children migrate, they lose access to their traditional community support systems, and are confronted with difficulties and discrimination in their new environment.

Despite government policies and regulations barring discrimination against children of migrants and obligating municipal governments to provide public health, education and social protection services, at times there is inadequate implementation and enforcement of these policies. For example, many migrant children are unable to attend public schools; inter-provincial migrant children who have completed compulsory education continue to face barriers to access senior secondary school education and to participate in the college entrance examination in receiving provinces, and many have to return to their home provinces where they have a

registered residence. Furthermore, being born in a city does not entitle a child to receive an urban *hukou* and thus migrant status can be retained for generations. The Government need to put forth continuous efforts to ensure equitable access to basic public services for migrant children.

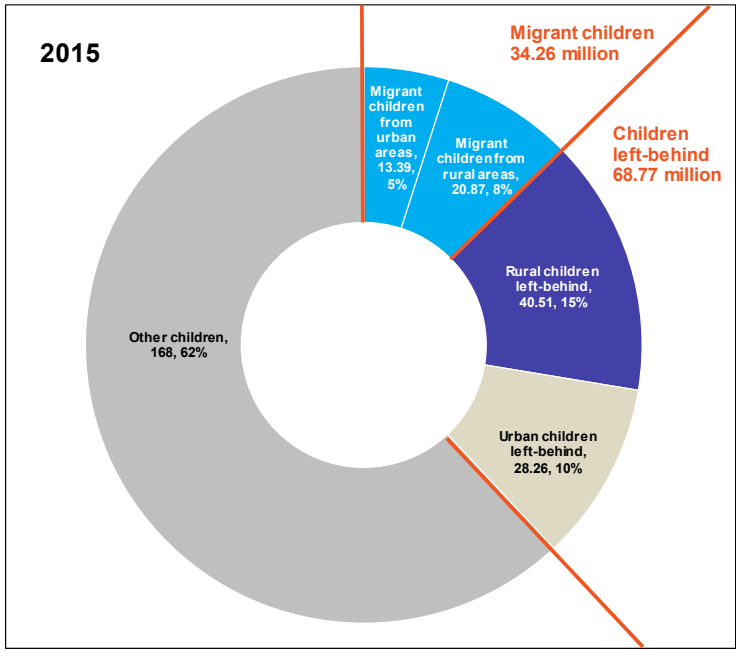
Children left-behind

Of the 68.77 million children left-behind nationwide, 40.51 million lived in rural areas, accounting for 29.4 per cent of all rural children. That is, three out of every 10 children in rural areas were children left-behind. Children left-behind are not able to live with both parents, unable to obtain adequate care from their families, including proper supervision, emotional and learning support, suitable nutrition and health care, and sufficient guidance to prevent child injury. This has had a negative impact on their physical and psychosocial development and well-being.

Although children left-behind in rural areas continue to be the focus of current policies, an increasing number of urban residents have been participating in the migration flow in the past decade. Initially unnoticed, the size of urban children left-behind has grown rapidly and reached 28.26 million in 2015, accounting for 41.1 per cent of the total number of children left-behind. At the same time, due to *in situ* urbanization, some children previously categorized as rural children left-behind are now categorized as urban children left-behind. Consequently, the Government should not only focus on ensuring the rights of rural children left-behind, it should also pay special attention to the issues faced by urban children left-behind when formulating relevant policies.

Figure 10.1

Number of children affected by migration and its share of the total child population, 2015

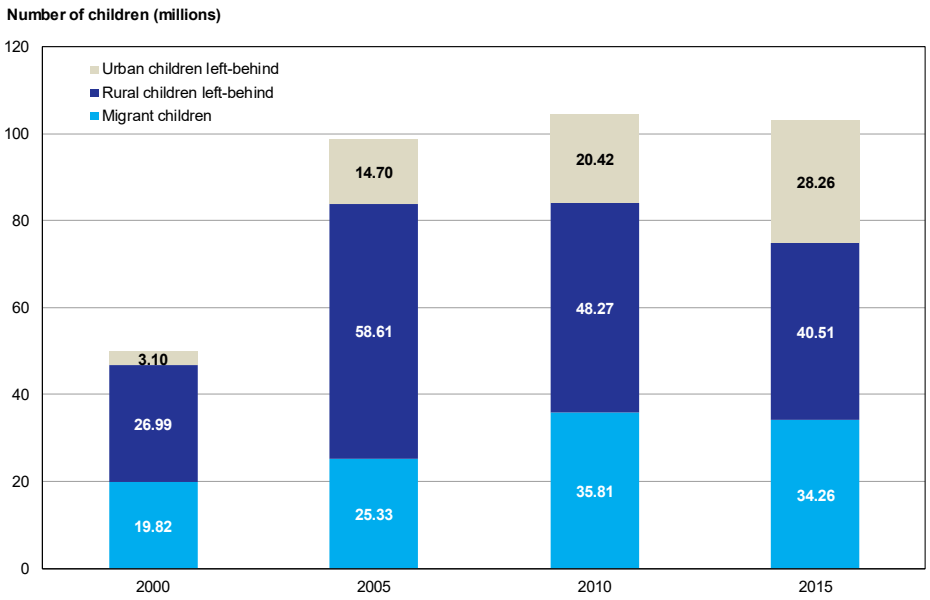


Note: In the doughnut chart the first number refers to the child population in millions; the second refers to its share of the total child population.

Source: National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017

Figure 10.2

Number of children affected by migration, 2000–2015



Source: National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017

Figure 10.1

In 2015, the number of migrant children aged 0–17 years was 34.26 million, and the number of children left-behind was 68.77 million. Adding these two groups together, the total number of children affected by migration reached 103 million, accounting for 38 per cent of the total child population in China.

The majority of children affected by migration came from or lived in rural areas. Of all migrant children nationwide, 60.9 per cent or 20.87 million were from rural areas (*hukou* registered in rural areas). 40.51 million children left-behind were in rural areas, accounting for 58.9 per cent of all children left-behind, and 29.4 per cent of all rural children.

Figure 10.2

Between 2000 and 2015, both the number of migrant children and the number of children left-behind increased significantly. However, compared with figures from 2010, the population of migrant children and rural children left-behind in 2015 were both in decline, while the number of urban children left-behind increased. This is consistent with the overall structural change to the urban and rural populations as a result of urbanization.

Figure 10.3

Number of migrant children, by province, 2015

Source: National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017

Figure 10.4

Number of children left-behind in rural areas, by province, 2015

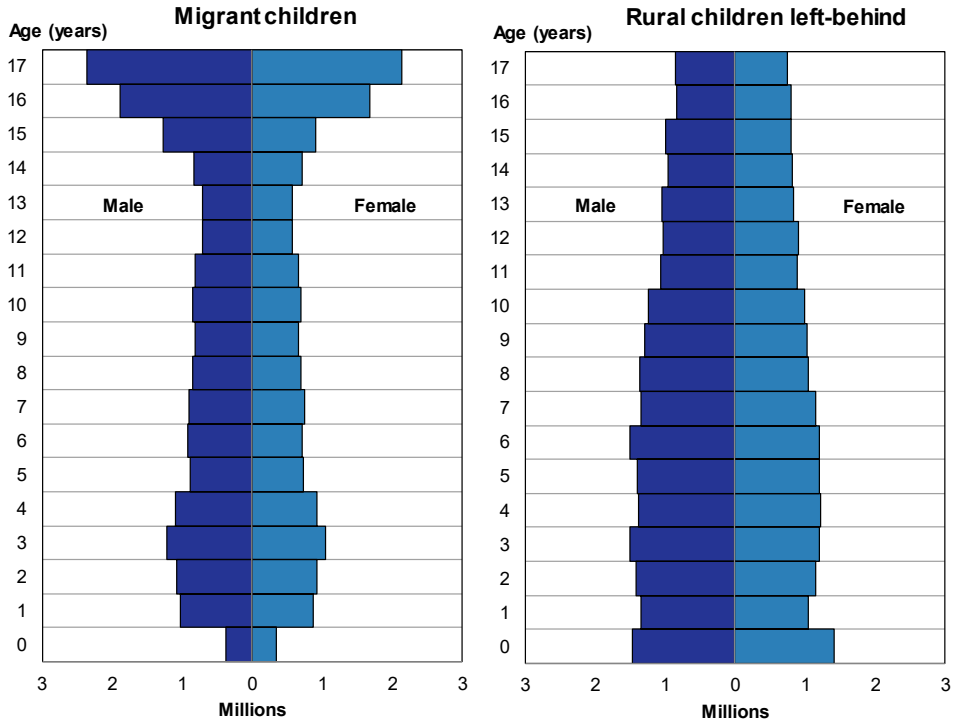
Source: National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017

Figure 10.3
In 2015, each of nine provinces had migrant child populations of more than 1.5 million, with a total number of 19.32 million children, accounting for 56.3 per cent of migrant children in the country. In terms of the distance of migration, 71.2 per cent of migrant children migrated within their provinces of origin.

Figure 10.4
In 2015, each of nine provinces had more than 2 million children left-behind in rural areas, with a total number of 26.72 million children, accounting for 66 per cent of all rural children left-behind in the country. In some provinces, such as Chongqing, Sichuan and Hubei, the proportion of rural children left-behind was quite high, accounting for more than 40 per cent of the total number of rural children in each province.

Figure 10.5

Age distribution of migrant children and rural children left-behind, 2015

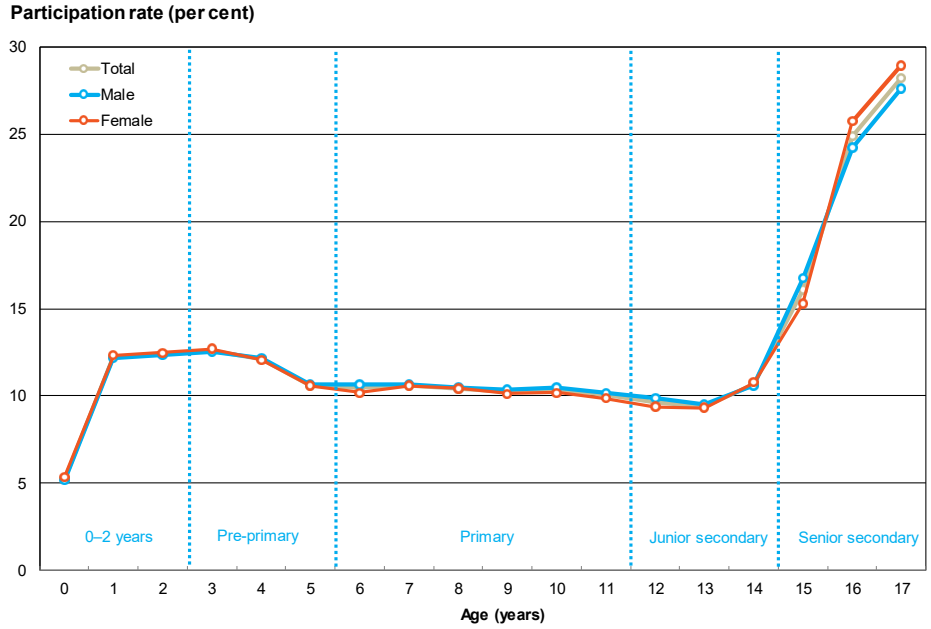


Source: National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017

Figure 10.5
Migrant children were generally either younger or older in age, with fewer migrant children with ages in between. Children left-behind in rural areas were of younger ages, accounting for about three quarters of children in the age group of preschools and primary schools.

Figure 10.6

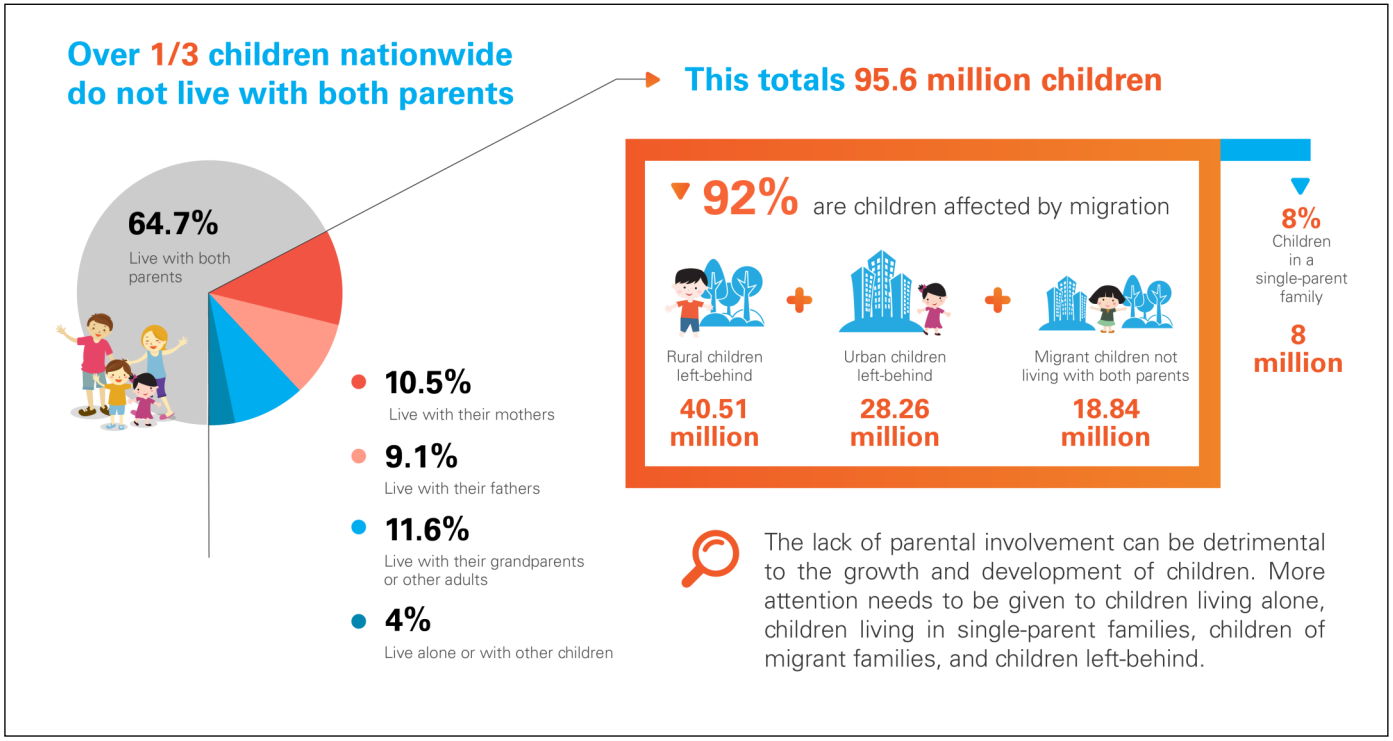
Children's participation rate in migration, by sex and age, 2015



Source: National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017

Figure 10.6
Participation rates in migration among children has a clear age pattern. Children of pre-primary school age are more likely to participate in migration, indicating a high demand for child care services in the receiving areas. The participation rate in migration of school-age children has declined. Particularly, the participation rate in migration of children in junior secondary schools is lower than that in primary schools, indicating the barriers to attend schools and take the college entrance examination in the migration destinations inhibit children from participating in migration. On the other hand, migrant children aged 15–17 years are much more likely to participate in migration. This indicates that once rural children complete their compulsory education, if they do not attend senior secondary school or they drop-out, it is likely they will decide to migrate for work and join the new generation of migrant workers who are faced with a series of challenges, including social inclusion. In terms of gender, the participation rate in migration of girls in all age groups was similar to that of boys, indicating there were equal opportunities for both girls and boys to migrate with their parents and receive better care and benefits through urban resources.

Figure 10.7
Family support for children, 2015



Source: National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017

Figure 10.7
In 2015, over one third of children in China, estimated at 95.6 million, did not live with both parents for varying reasons. The majority of children not living with both parents were those affected by migration, including 40.51 million rural children left-behind, 28.26 million urban children left-behind and 18.84 million migrant children who did not live with both parents, which together accounted for more than 90 per cent of the total. In addition, over one fourth of children aged 0–2 years were taken care of by caregivers other than their mothers. The absence of parents, especially mothers, have a negative effect on children's early development, and has been found to be one of the key factors contributing to cognitive delays.

Children Affected by Migration

Data sources and references

[1] State Council, *National New Urbanization Plan (2014–2020)*, 16 March 2014, http://www.gov.cn/zhengce/2014-03/16/content_2640075.htm, accessed August 2018.

[2] Data about migrant children and children left-behind used in this chapter are estimated by Professor Duan Chengrong and the team of Renmin University of China, based on the National Population Censuses in 2000 and 2010, and 1% National Population Sample Survey in 2005 and 2015 conducted by the National Bureau of Statistics of China. The results of the most recent data analysis for the 2015 survey are published through: National Bureau of Statistics, UNICEF China, UNFPA China, 'Population Status of Children in China in 2015: Facts and Figures', 2017 (http://www.unicef.cn/en/publications/comprehensive/3210.html); Lyu Lidan, et al., 'Changing Patterns and Development Challenges of Child Population in China', *Population Research*, vol.42, no. 3, 2018, pp. 65–78.

[3] **Migrant children** – Refer to members of the migrant population who are aged 0–17 years. The migrant population refers to persons whose place of residence is different from the location (e.g. town/township or street committee) of their household registration (*hukou*), and who have left the location of their household registration for more than six months. It excludes the population whose current place of residence is different from that of their *hukou* registration, but is within the same city-level administration.

[4] **Children left-behind** – Refer to children who live in their original domicile, but do not live together with their parents, as either one parent or both parents have migrated. Rural children left-behind refer to children left-behind whose household registration locations are in rural areas. Urban children left-behind refer to children left-behind whose household registration locations are in urban areas.

[5] In February 2016, the State Council issued the *Opinions on Strengthening Care and Protection of Rural Children Left-behind*. Subsequently, the Ministry of Civil Affairs carried out a national survey and reported the number of rural children left-behind in the country was 9.02 million. It is important to note that the definition used by the Ministry of Civil Affairs during the survey states that 'both parents are migrant workers, or one parent is a migrant worker and the other parent lacks child supervision ability, and the child is under the age of 16', different from the definition used in this Atlas which states that 'at least one parent is a migrant worker, and the child is under the age of 18'.

11

CHILDREN WITH DISABILITIES

OVERVIEW

Global estimate

According to the *World Disability Report* released by the WHO in 2011, at a time marked by continued population growth and aging population trends, the number of persons with disabilities worldwide was on the rise. Disabilities are closely linked to health, economic and environmental factors, and can result from road traffic injuries, humanitarian crisis, and violence. It is estimated that about 15 per cent of the world's population have disabilities. Among children aged 0–14, it is estimated that 5.1 per cent (about 93 million children) have disabilities, and 0.7 per cent (about 13 million children) have severe disabilities.[1] Due to narrower disability classification criteria used in China, the incidence of disabilities is lower than the global estimates.

Convention on the Rights of Persons with Disabilities

In 2006, the UN adopted the *Convention on the Rights of Persons with Disabilities* (*CRPD*), which aims to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and promote respect for their inherent dignity. China played an active role as advocate and participant during the negotiation process and the drafting of the *CRPD*. The Government of China signed the Convention in 2007 and ratified it on 1 August 2008. In August 2010, China submitted its Initial Report on the implementation of the *CRPD*.

In order to align China's national legislation with international standards on disability and promote the rights and well-being of persons with disabilities, the Government started a parallel process in 2006 to revise the *Law of the People's Republic of China on the Protection of Persons with Disabilities*, which was enacted in 1990. New provisions for children with disabilities were included in the revised law, which entered into force on 1 July 2008.

Statistics on persons with disabilities

Data and research on the status of persons with disabilities has provided important evidence for policy development. China conducted the first and second National Sample Survey on Disability in 1987 and 2006, respectively. The 2006 survey,[2] conducted in 31 provinces, autonomous regions and municipalities of mainland China, sampled around 772,000 households and 2.53 million people, including approximately 620,000 children aged 0–17. The survey found that the total number of persons with disabilities in 2006 was 82.96 million, accounting for 6.3 per cent[3] of China's total population. About 6.1 per cent of all persons with disabilities were children, in other words, about five million children have some type of disability, accounting for 1.6 per cent of the total number of children in the country. This survey provided nationally representative data and reflected the overall situation of children with disabilities.

In order to further monitor the situation of persons with disabilities after the 2006 National Sample Survey on Disability, the China Disabled Persons' Federation (CDPF) continued to monitor the situation nationwide for eight consecutive years from 2007 to 2014, and regularly issued the *Monitoring Reports on Disabled People's Situation and Well-off Progress in China*.

Since 2008, the CDPF has combined the issuance of the second-generation *People's Republic of China Disability Card* with the collection and management of basic population information of persons with disabilities in possession of the Disability Card. Additionally, through the Ministry of Public Security's National Citizenship Information Service System, CDPF oversaw identity authentication and established the National Basic Population Database of Persons with Disabilities.[4] By the end of 2017, the database had basic information on more than 34 million persons with disabilities in possession of the Disability Card, including 1.22 million children with disabilities aged 0–17. Possessing the Disability Card will increase children's access to targeted social services and government support.

At the beginning of 2015, the State Council Working Committee on Disability organized the National Special Survey on the Status and Needs of Basic Services for Persons with Disabilities (2015 Special Survey),[5] specifically gathering information on persons with disabilities registered in the Population Database. Subsequent annual updates were conducted, which provided rich data for in-depth analysis of the situation of persons with disabilities, including children with disabilities.

Social protection for children with disabilities

After decades of hard work, China's social protection system for persons with disabilities has been gradually improved and standardized. The comprehensive system includes five key components: social insurance, social assistance, social welfare, care services and special assistance, promoting the active integration of persons with disabilities in society. The *Opinions of the State Council on Establishing a Full-Scale System of Living Subsidies for Disabled Persons with Financial Difficulties and Nursing Subsidies for Persons with Serious Disabilities*, issued in 2015, mentions the establishment of a comprehensive system for the two subsidies. This is the first time that China has established a special welfare system for persons with disabilities at the national level. This system has also been effectively linked to other systems such as *dibao*, filling the previous gap for persons with disabilities in the welfare system.[6]

As a key target group in the social protection system for persons with disabilities, children with disabilities enjoy various social assistance[7] and welfare subsidies.[8]

According to relevant surveys, there are almost no gender differences among children with disabilities in terms of access to social assistance and welfare subsidies. A higher proportion of children with more severe disabilities enjoy access to *dibao* and the two subsidies. The proportion of rural children with disabilities accessing medical and educational assistance and welfare subsidies is lower than that of urban children with disabilities.

Rehabilitation for children with disabilities

In the 1980s, the concept of rehabilitation（rehabilitation and habilitation are closely linked in China, and thus will be referred to hereafter as rehabilitation) was introduced in China, marking the beginning of the development of corresponding services for persons with disabilities. Habilitation and rehabilitation are important for children with disabilities to improve or regain skills, abilities and knowledge "to attain and maintain maximum independence, full physical, mental, social and vocational ability, and full inclusion and participation in all aspects of life" (*CRPD*, article 26). In recent years, the Government has highlighted the issue of rehabilitation for children with disabilities. Specifically, improving rehabilitation services for children with disabilities aged 0–6 is outlined as a major objective in the *National Programme of Action for Children (2011–2020)*. In addition, the *Thirteenth Five-Year Plan on Accelerating the Process of Persons with Disabilities Toward a Comparatively Well-Off Life*, the *National Action Plan on Disability Prevention (2016–2020)*, and the *Regulations on Disability Prevention and Rehabilitation* all emphasize the need to strengthen rehabilitation services.

Compared to the 2006 National Sample Survey, children with disabilities today have improved access to rehabilitation services, however the demand for these services have not been fully met. According to results from the 2015 Special Survey, of the 26 million people and children with disabilities, in possession of a Disability Card, 59.6 per cent required rehabilitation services, but less than 20 per cent received rehabilitation services.[9] The newly released *Opinions of the State Council on Establishing a System of Providing Rehabilitation Assistance to Children with Disabilities* announces the implementation of a rehabilitation assistance system for children with disabilities from 1 October 2018, with a focus on services not covered by the existing social protection system, and emphasis on effective linkages with basic medical insurance and temporary assistance, ultimately to achieve universal access to rehabilitation services for children with disabilities aged 0–6 by 2025.[10]

Children with disabilities and education

Education serves as the foundation for equal participation and inclusive development of children with disabilities. China's *Law on Compulsory Education* stipulates that school-age children with disabilities have the right to receive compulsory education. Moreover, different forms of education should be provided to meet the individual needs of children with disabilities, so they can attend regular and special education classes of regular schools or enroll in special education schools. The Government has vowed to further improve the education system for children with disabilities during the Thirteenth FYP period, by strengthening the foundation for special education development, actively promoting inclusive education, and ensuring 95 per cent of school-age children with hearing, visual and intellectual disabilities are enrolled in compulsory education by 2020.[11] In 2017, the newly revised *Regulations on the Education of Persons with Disabilities* further encourages local governments to provide free pre-school and senior secondary education to students with disabilities facing financial difficulties, and gradually realize free senior secondary education for students with disabilities.[12]

In recent years, the education development for persons with disabilities has accelerated. In 2017, the enrolment ratio in compulsory education among children with visual, hearing and intellectual disabilities was over 90 per cent, with more than 50 per cent of students with disabilities attending regular classes in regular schools.[13] At present, universal access to compulsory education has been achieved in China, and universal access to senior secondary education will soon be achieved. However, the participation of children with disabilities in compulsory education still needs improvement, and their universal access to senior secondary education still has a long way to go.

Challenges

- While existing disability statistics play an important role in understanding the status and needs of persons with disabilities and supporting policy decisions relevant to the development of persons with disabilities, there is a lack of comprehensive, accurate and consistent information to ensure persons with disabilities can access preferential policies and welfare protection services that they are eligible for and in need of.[14]

- There are still some children with disabilities in China, especially infants (age 0), who are not enrolled in any form of health insurance and have limited access to assistance and subsidies schemes. When considering the enormous cost of medical expenses for children with disabilities, the limited number of assistance and subsidies schemes is alarming. Additional efforts are needed to increase

social assistance for children with disabilities in rural areas and young children with disabilities, including improving standards of medical assistance, increasing living subsidies for persons with disabilities facing financial difficulties and nursing subsidies for persons with serious disabilities.

- Rehabilitation services for children with disabilities not only reduce the severity of the disability and prevent complications and onset of secondary disabilities, they also greatly compensate for physical and intellectual disabilities, contributing to the full inclusion and participation of children with disabilities in all aspects of life. However, the current system in China cannot fully meet the needs of all children with disabilities. The Government should continuously improve and perfect the rehabilitation assistance system for children with disabilities, establish a working mechanism for early prevention, early screening, early referral, early treatment and early rehabilitation, and enhance the coverage and standards of rehabilitation services, ensuring children with disabilities have universal access to basic rehabilitation services and grow to their full potential. Moreover, further development of a social model of disability,[15] exemplified by the *CRPD*, is required.

- The participation rates of children with disabilities in compulsory education can be further improved. Children with varying types and severity of disabilities should have access to appropriate forms of education according to the specific needs based on their physical and psychological characteristics. Particularly, as a main goal, the government should strengthen the construction of a barrier-free environment in regular schools and actively promote inclusive education, ensuring children with disabilities are able to attend regular schools. Moreover, other options should be provided to meet children's needs depending on the nature and extent of their disabilities. Sometimes, special education schools can be a better option for some students. In other cases, the expansion of home-based educational support and distance education can be considered to ensure children with severe disabilities also enjoy access to education.

- A certain degree of prejudice and discrimination against persons with disabilities still exist in society. In particular, caring for children with disabilities can be unduly demanding in contexts where infrastructure and access to services and support are inadequate or non-existent, which may result in the children being abandoned or sent to child welfare institutions. In the formulation of relevant laws, policies and plans, priority should be given to the rights and needs of children with disabilities. Specifically, the Government should optimize resource allocation in living assistance, medical care, rehabilitation, education and other areas, advocate the public to respect the right to survival, protection, development and participation of children with disabilities, address the physical, attitudinal, communication and social barriers faced by persons with disabilities, and prevent the marginalization of children with disabilities.

Figure 11.1
Children with disabilities as a percentage of total child population, 2006

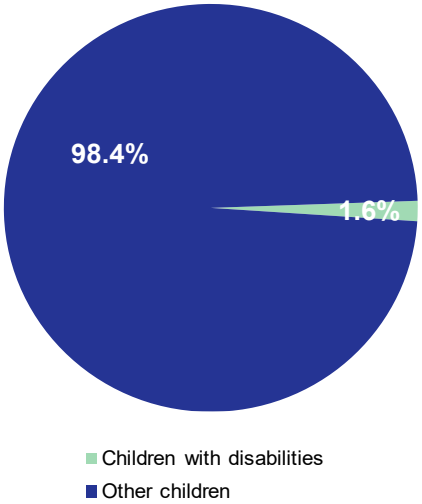
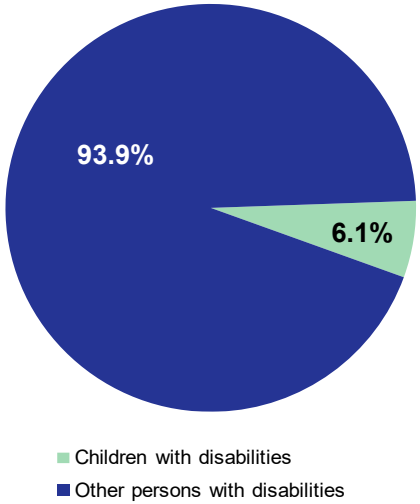
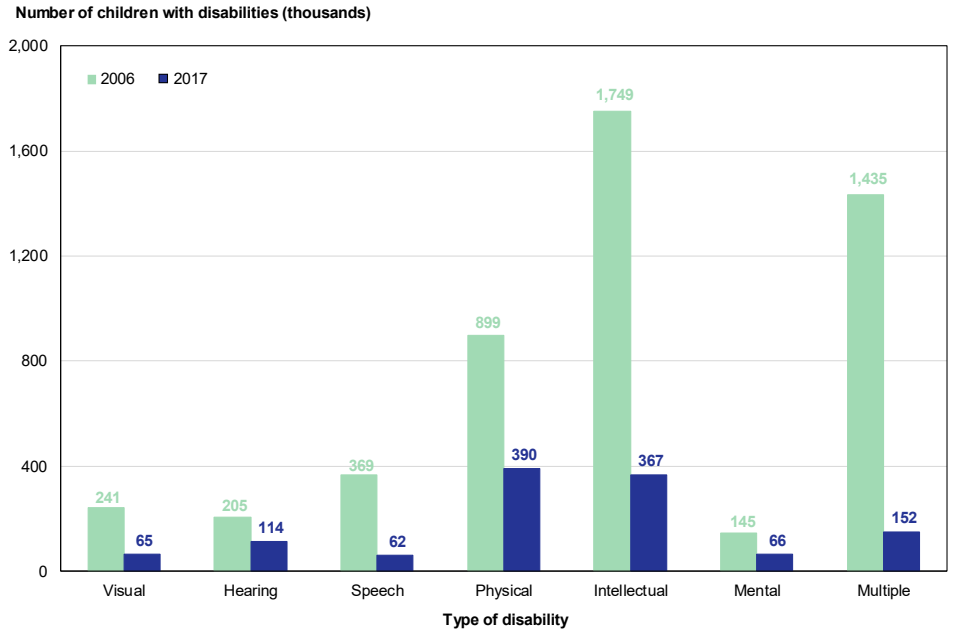


Figure 11.2
Children with disabilities as a percentage of all persons with disabilities, 2006



Source: China Disabled Persons' Federation, *The Status Analysis and Strategies Study of Children with Disabilities in China*, 2008

Figure 11.3
Number of children with disabilities, by type of disability, comparing children in possession of Disability Card in 2017 and all children with disabilities in 2006



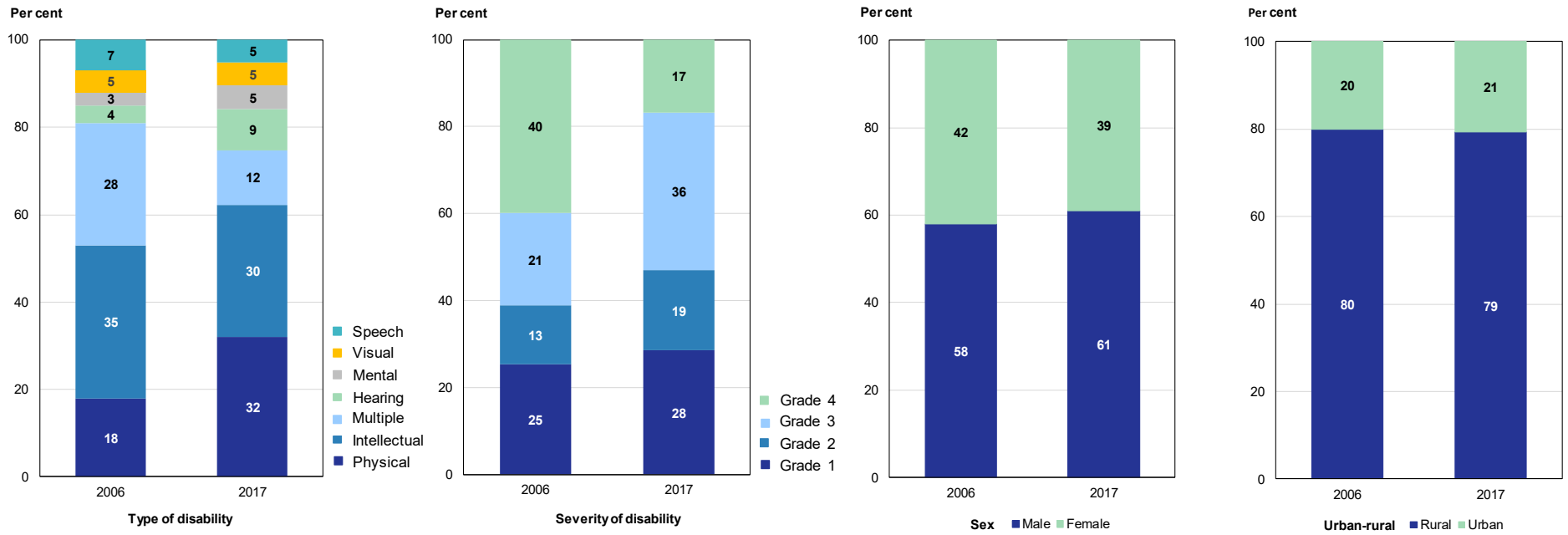
Sources: China Disabled Persons' Federation, *The Status Analysis and Strategies Study of Children with Disabilities in China*, 2008; (Derived from) China Disabled Persons' Federation, Database of Persons with Disabilities, 2017

Figure 11.1 and 11.2
According to the Second National Sample Survey on Disability conducted in 2006, China has an estimated 5.04 million children with disabilities who represent 1.6 per cent of all children in the country and 6.1 per cent of all persons with disabilities. Although the total population of the country has increased in the past decade, the total child population has been steadily decreasing. The Government has actively adopted measures including prevention of birth defects and child injuries to reduce the incidence of disability among children. However, as the risk factors for disability are on the rise, the current size and population of children with disabilities is similar to the 2006 National Sample Survey, with about 5 million children.

Figure 11.3
The 2006 Second National Sample Survey on Disability collected data from a nationally representative sample to reflect the overall situation of persons with disabilities in the country. It grouped children with disabilities according to seven disability categories[16] and estimated the population of children with disabilities aged 0–17 to be 5.04 million in 2006. The three most common types of disability were intellectual disability, multiple disabilities, and physical disability. In total, 1.22 million children with disabilities in possession of a Disability Card were registered in the National Basic Population Database of Persons with Disabilities, covering nearly a quarter of the total number of children with disabilities.

Figure 11.4

Composition of children with disabilities, by type, severity of disability, sex and urban-rural, comparing children in possession of Disability Card in 2017 and all children with disabilities in 2006



Sources: China Disabled Persons' Federation, *The Status Analysis and Strategies Study of Children with Disabilities in China*, 2008; (Derived from) China Disabled Persons' Federation, Database of Persons with Disabilities, 2017

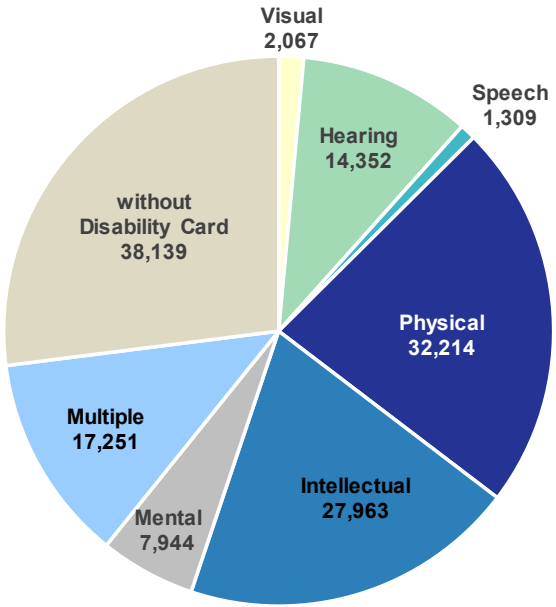
Figure 11.4

Compared with the demographic composition of children with disabilities in 2006, of the children with disabilities currently registered in the National Basic Population Database of Persons with Disabilities, there is a higher proportion with physical, hearing and visual disabilities and more severe (Grade one and Grade two) disabilities. [a] Moreover, there is a higher proportion of registered boys with disabilities. This demographic composition constitutes a selection bias, which is linked to the economic capacity of families of children with disabilities, the guardians' awareness of the rights of their children, the specific needs of children with disabilities to the assistance and whether possession of the Disability Card is helpful for an individual child in need to obtain the necessary support. Efforts should be made to encourage caregivers of children with disabilities who meet the necessary conditions to apply for the Disability Card, which will increase their access to government support to a certain extent.

[a] Each type of disability is classified into four grades according to the severity of the condition: Grade one is profound, Grade two is severe, Grade three is moderate and Grade four is mild.

Figure 11.5

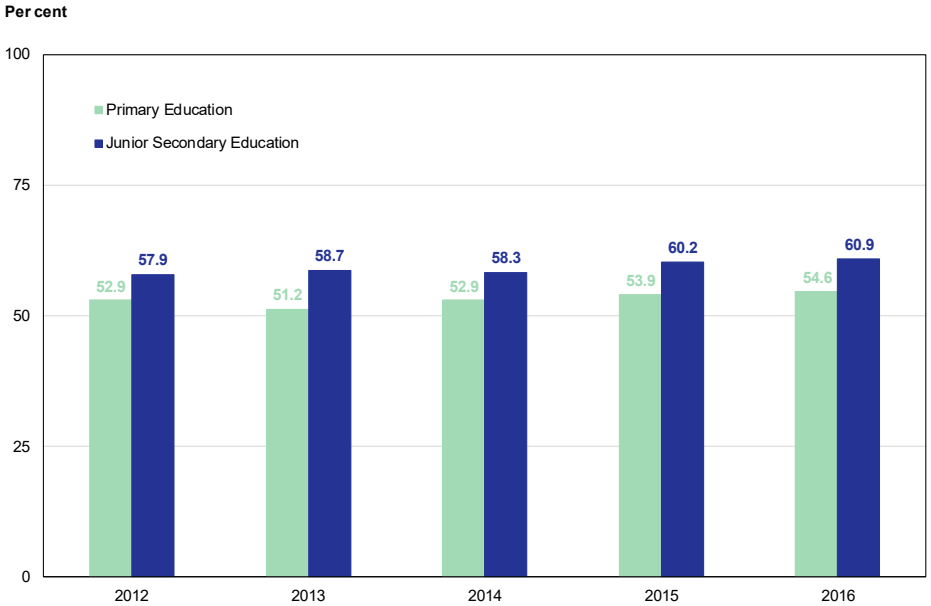
Number of children with disabilities aged 0–6 receiving basic rehabilitation services, by type of disability, 2017



Source: National Bureau of Statistics,
Statistics on Women and Children in China, 2018

Figure 11.6

Proportion of students with disabilities attending regular and special education classes of regular schools to the total number of students with disabilities enrolled, 2012–2016



Sources: Ministry of Education, *Essential Statistical Analysis of Education Development in China*, 2013–2017

Figure 11.5
In 2017, more than 140,000 children with disabilities aged 0–6 received basic rehabilitation services,[17] of which 27 per cent were not in possession of the Disability Card. It is known that rehabilitation exercises can lead to significant positive effects among younger children, with a higher chance of these children living their lives with minimal disabilities. However, the demand for rehabilitation services is not fully met, and these services continue to be in short supply.

Figure 11.6
In 2016, the total number of students with disabilities enrolled in primary education was 358,000, of which 54.6 per cent were attending regular and special education classes of regular schools. The total number of students with disabilities enrolled in junior secondary education was 123,000, of which 60.9 per cent were attending regular and special education classes of regular schools. Encouraging regular class attendance is the preferred method to promote inclusive education and improve the education level of children with disabilities.

Children with Disabilities

Data sources and references

[1] WHO, *World Disability Report*, 2011, http://www.who.int/disabilities/world_report/2011/en/, accessed August 2018.

[2] The Second National Sample Survey on Disability of 2006 used the 'Criteria of Disabilities for the Second National Sample Survey on Disability', which were designed on the basis of the WHO's International Classification of Diseases (ICD) and the International Criteria of Functions, Disabilities and Health (ICFDH). Disabilities were accordingly divided into seven categories: visual, hearing, speech, physical, intellectual, mental and multiple.

[3] China Disabled Persons' Federation, 'Main Data Bulletin on the 2006 National Sample Survey on Disability (No. 1)', 7 April 2008, http://www.cdpf.org.cn/sjzx/Cjrgk/200804/t20080407_387580.shtml, accessed August 2018.

[4] ZHANG Jun, 'Data Analysis Based on National Basic Population Database of Persons with Disabilities', *Disability Research*, no.3, 2013.

[5] The survey included information on the status and needs of basic services for persons with disabilities, including living assistance, social protection, rehabilitation services, assistive device services, access to education, employment support, care, poverty alleviation, housing security, barrier-free conversion, and rights protection.

[6] LING Kang, et al., *Report on the Development for Persons with Disabilities in China 2006-2015*, 2017, pp. 70.

[7] The most common forms of social assistance include *dibao*, as well as special assistance for education, natural disasters and other areas.

[8] Welfare subsidies include living subsidies for persons with disabilities facing financial difficulties and nursing subsidies for persons with serious disabilities, as well as disability allowance, transportation and communication subsidies, and other forms of welfare subsidies implemented in some areas.

[9] China Disabled Persons' Federation, 'Zhang Haidi: Rehabilitation is the Most Urgent Need for Persons with Disabilities to Live a Well-off Life', 8 March 2016, http://www.cdpf.org.cn/yw/201603/t20160309_543404.shtml, access August 2018.

[10] State Council, 'Opinions of the State Council on Establishing a System of Providing Rehabilitation Assistance to Children with Disabilities', 10 July 2018, http://www.gov.cn/zhengce/content/2018-07/10/content_5305296.htm, accessed September 2018.

[11] State Council, *The Thirteenth Five-Year Plan on Accelerating the Process of Persons with Disabilities Toward a Comparatively Well-Off Life*, 3 August 2016, http://www.gov.cn/zhengce/content/2016-08/17/content_5100132.htm, accessed August 2018.

[12] China Disabled Persons' Federation, *The Regulations on the Education of Persons with Disabilities*, 1 February 2017, http://www.cdpf.org.cn/ywzz/jyjyb/jy_254/gzdt_255/201703/t20170308_584228.shtml, accessed August 2018.

[13] China Disabled Persons' Federation, 'China News Network – Pension Insurance Participation Rate Among China's Disabled Urban and Rural Residents Exceeds 80 per cent', 14 September 2018, http://www.cdpf.org.cn/ywzz/xcwh_263/Gzdt_264/201809/t20180914_637045.shtml, accessed September 2018.

[14] CHENG Zhaowen, et al., 'Progress, Problems and Challenges in Disability Statistics in China', *Disability Research*, no.4, 2016, pp. 75–79.

[15] The social model of disability contrasts with what is called the medical model of disability. The social model sees 'disability' as the result of the interaction between people living with impairments and an environment filled with physical, attitudinal, communication and social barriers. It therefore carries the implication that the physical, attitudinal, communication and social environment must change to enable people living with impairments to participate in society on an equal basis with others. The social model of disability is now the internationally recognised way to view and address 'disability'. The *CRPD* marks the official paradigm shift in attitudes towards people with disability and approaches to disability concerns. (People with Disability Australia, https://pwd.org.au/resources/social-model-of-disability/, accessed September 2018)

[16] **Visual disability** refers to a low vision of both eyes caused by various reasons that cannot be corrected, or the failure or constriction of vision that affects the daily life and social participation of the person. Visual disability includes both blindness and poor sight.

Hearing disability refers to the different extents of permanent hearing impairment in the ears caused by various reasons, so as to prevent the person from hearing or hearing clearly ambient sounds or speech sounds around him/her and affect the daily life and social participation of the person.

Speech disability refers to the speech impairment of different extents caused by various reasons, which is not cured after treatment of more than one year, or persists for over two years without treatment, so as to prevent or make it difficult for the person to conduct regular conversations and affect the daily life and social participation of the person. It includes aphasia, motor dysarthria, deformity dysarthria, articulation impediment, delayed speech development of children, speech impairment caused by hearing impairment, and stammering/stuttering. A person with speech impairment below three years old will not be considered as having a speech disability.

Physical disability refers to the loss of the physical motor functions and limited mobility or social participation to different extents caused by missing and injured limbs, paralysis and deformity of the torso due to structural and functional damage in the motor system of the person. It includes: (I) Missing and deformed upper and lower limbs and functional disorder of the upper and lower limbs due to injury, illness or abnormal development of the limbs, (II) Deformity or functional disorder of spinal cord due to injury, illness or abnormal development of the spinal cord, (III) Functional disorder of the torso or limbs caused by injury, illness or abnormal development of the central and peripheral nervous systems.

Intellectual disability is markedly lower intellect than that of the general population and may be accompanied by a behavioural adaptability disorder. Such disability is caused by structural and functional disorders of the nervous system that limit one's mobility and social participation and requires an environment that simultaneously provides pervasive, extensive, limited or intermittent support. Intellectual disability includes retardation caused by different factors during intellectual development (before 18 years old) or damage/ deterioration caused by different factors after intellectual maturity.

Mental disability refers to the mental disorder that has lasted more than one year and has not been cured due to cognitive, emotional and behavioural disorders that affect the daily life and social participation of the person.

Multiple disabilities refer to a person having two or more disabilities, including visual disability, hearing disability, speech disability, physical disability, intellectual disability and mental disability.

(General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China, Standardization Administration of the People's Republic of China, *Classification and Grading Criteria of Disability,* National Standard GB/T 26341-2010, http://www.cdpf.org.cn/ywzz/jyjyb/jy_254/jyzcfg/201703/P020170314345928864808.pdf, 2011)

[17] China Disabled Persons' Federation, '2017 Statistical Communiqué on the Development for Persons with Disabilities in China', 26 April 2018, http://www.cdpf.org.cn/zcwj/zxwj/201804/t20180426_625574.shtml, accessed August 2018.

ANNEX 1: Introduction to the Sustainable Development Goals (SDGs)

SDG goals and targets

The SDGs are a UN initiative, formally adopted by Member States at the UN General Assembly on 25 September 2015, in a resolution entitled *Transforming our world: the 2030 Agenda for Sustainable Development*.[1] The SDGs build on and succeed the Millennium Development Goals (MDG).

The SDGs include 17 Goals and 169 targets over the period of 2016–2030 for 15 years, with the aim to address the global challenges we face, including those related to poverty, inequality, climate change, environmental degradation, prosperity, peace and justice. The 17 Goals[2] are interlinked and integrated in order to leave no one behind:

Goal 1. End poverty in all its forms everywhere
Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Goal 3. Ensure healthy lives and promote well-being for all at all ages
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 5. Achieve gender equality and empower all women and girls
Goal 6. Ensure availability and sustainable management of water and sanitation for all
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
Goal 10. Reduce inequality within and among countries
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable
Goal 12. Ensure sustainable consumption and production patterns
Goal 13. Take urgent action to combat climate change and its impacts
Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

The SDGs are unique in that they call for action by all countries to promote prosperity, peace and partnership, while protecting the planet. They recognize that ending poverty must go hand-in-hand with strategies that build economic growth and address a range of social needs including education, health, social protection, and job opportunities, while tackling climate change and environmental protection.[3]

SDG indicators

A robust follow-up and review mechanism for the implementation of the 2030 Agenda for Sustainable Development requires a solid framework of indicators and statistical data to monitor progress, inform policy and ensure accountability of all stakeholders.[4] The global indicator framework was developed by the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs), and adopted by the UN General Assembly on 6 July 2017 and is contained in the *Resolution adopted by the General Assembly on Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development (A/RES/71/313)*.[5] Annual refinements of indicators will be included in the indicator list as they occur, for example, the most recent list that includes 232 indicators has reflected refinements agreed by the Statistical Commission at its 49th session in March 2018 (E/CN.3/2018/2, Annex II).[6]

A tier classification[7] for the SDG indicators was developed by the IAEG-SDGs to facilitate the implementation of the global indicator framework. Global reporting is currently based on Tier I and a few Tier II indicators, while methodological work is taking place on Tier III indicators.

Addressing inequalities and committing to the progressive reduction of equity gaps over time has been a major focus of the SDGs. This means that SDG indicators "should be disaggregated, where relevant, by income, sex, age, race, ethnicity, migratory status, disability and geographic location, or other characteristics".[8]

National ownership and a country-led process are the key principles for SDG monitoring. Global indicators are thus complemented by national indicators, for which the decisions for selection are driven by national priorities, while being aligned with the global indicators to the extent possible. SDGs are integrated into various national development plans and frameworks which are integrated into national monitoring, built on existing platforms and processes.

Monitoring SDG progress for children

The SDGs can only be achieved through investment in all people from the beginning of their lives, and monitoring progress for children is crucial to know which investments to make. How our children are faring – in terms of health and nutrition, welfare and education, and the environment in which they grow up – is a direct predictor of what the future will look like. Systematically monitoring the well-being of children by indicators not only gives an accurate picture of the life of a child today, but also provides a window into the future for all of us.[9]

Across the 17 Goals, UNICEF identified 44 global indicators directly concerning children in the 2030 Agenda, covering five dimensions of child rights – survive and thrive, learning, protection, environment, and fair chance. A global assessment conducted by UNICEF based on these 44 indicators reveals that most countries have insufficient data to assess whether they are on track to achieve each of these SDG targets.[10]

SDGs in China

China is committed to implement the 2030 Agenda for Sustainable Development and promote national development in a more efficient, fair, and sustainable manner. The Government of China has developed a blue print for SDG implementation encapsulated in the *National Plan on Implementation of the 2030 Agenda for Sustainable Development*[11] released on September 2016. Efforts have been made to link the 2030 Agenda with national medium- and long-term development strategies such as the *Thirteenth Five-Year Plan.*

In addition, the government has established a domestic coordination mechanism, comprising of 43 government departments for consolidated efforts to support SDG implementation. Significant efforts have also been made to publicize the 2030 Agenda nationwide in order to mobilize domestic resources and raise public awareness. The first volume of *China's Progress Report on Implementation of the 2030 Agenda for Sustainable Development*[12] *was released on 21 August 2017, which was prepared by the newly established China Center for International Knowledge on Development under the delegation and coordination of the Ministry of Foreign Affairs.*

Although China is a data rich country where both the National Bureau of Statistics and line ministries are tasked with data collection through various systems, like in many other countries, significant data gaps exist for SDG monitoring which is very broad in scope and requires great level of data disaggregation. Roughly, official data is available for just around 30 per cent of SDG indicators in China, not considering required level of disaggregation.

This Atlas has made efforts to link data to the SDG targets and indicators wherever appropriate, providing a basis for understanding the implementation, progress and major challenges faced in achieving the SDGs in China.

Introduction to the Sustainable Development Goals (SDGs)

Data sources and references

[1] http://undocs.org/en/A/RES/70/1, accessed October 2018.

[2] https://www.un.org/sustainabledevelopment/sustainable-development-goals/, accessed October 2018.

[3] https://www.un.org/sustainabledevelopment/development-agenda/, accessed October 2018.

[4] https://unstats.un.org/sdgs/, accessed October 2018.

[5] https://undocs.org/A/RES/71/313, accessed October 2018.

[6] https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%20refinement_Eng.pdf, accessed October 2018.

[7] Tier Classification Criteria/Definitions: Tier I: Indicator is conceptually clear, has an internationally established methodology and standards are available, and data are regularly produced by countries for at least 50 per cent of countries and of the population in every region where the indicator is relevant; Tier II: Indicator is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries; Tier III: No internationally established methodology or standards are yet available for the indicator, but methodology/standards are being (or will be) developed or tested. (https://unstats.un.org/sdgs/iaeg-sdgs/tier-classification/, accessed October 2018)

[8] United Nations, 'Global Indicator Framework for the Sustainable Development Goals and Targets of the 2030 Agenda for Sustainable Development', https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%20refinement_Eng.pdf, accessed October 2018.

[9] UNICEF, 'A Post-2015 World Fit for Children – Issue Brief: Monitoring, follow up and review of the SDGs', https://www.unicef.org/agenda2030/files/FollowUpReview.pdf, accessed October 2018.

[10] UNICEF, 'Progress for Every Child in the SDG Era', https://data.unicef.org/resources/progress-for-every-child-2018/, accessed October 2018.

[11] Ministry of Foreign Affairs, *National Plan on Implementation of the 2030 Agenda for Sustainable Development*, https://www.fmprc.gov.cn/web/ziliao_674904/zt_674979/dnzt_674981/qtzt/2030kcxfzyc_686343/P020170414689023442403.pdf, accessed October 2018.

[12] Ministry of Foreign Affairs, *China's Progress Report on Implementation of the 2030 Agenda for Sustainable Development,* https://www.fmprc.gov.cn/web/ziliao_674904/zt_674979/dnzt_674981/qtzt/2030kcxfzyc_686343/P020170824650025885740.pdf, accessed October 2018.

ANNEX 2: Acronyms

BCG	Bacilli Calmette-Guérin vaccine
CDCs	Centers for Disease Control and Prevention
CDPF	China Disabled Persons' Federation
CEDAW	The Convention on the Elimination of All Forms of Discrimination against Women
China CDC	Chinese Center for Disease Control and Prevention
CNHS	China Nutrition and Health Surveillance
CRC	The Convention on the Rights of the Child
CRPD	The Convention on the Rights of Persons with Disabilities
DPT	Diphtheria, Pertussis and Tetanus Vaccine
ECD	Early Childhood Development
EENC	Early Essential Newborn Care
EPI	Expanded Programme on Immunization
FYP	Five-Year Plan
GDP	Gross Domestic Product
GNI	Gross National Income
HIV	Human Immunodeficiency Virus
IAEG-SDGs	Inter-Agency and Expert Group on SDG Indicators
IDD	Iodine Deficiency Disorders
IMR	Infant Mortality Rate
IPV	Inactivated Polio Vaccine
JMP	WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene
MCH	Maternal and Child Health
MDGs	Millennium Development Goals
MICS	Multiple Indicator Cluster Surveys
MMR	Maternal Mortality Ratio
MODA	Multiple Overlapping Deprivation Analysis
NBS	National Bureau of Statistics
NHSS	National Health Services Survey
NIP	National Immunization Programme
NMR	Neonatal Mortality Rate
NPA	National Programme of Action
NWCCW	National Working Committee for Children and Women
OHCHR	The Office of the High Commissioner for Human Rights
OPV	Oral Polio Vaccine
PMTCT	Prevention of Mother-to-Child Transmission
PPP	Purchasing Power Parity
RCMS	Rural Cooperative Medical Scheme
SDGs	Sustainable Development Goals
SIA	Supplementary Immunization Activity
SRB	Sex Ratio at Birth
TFR	Total Fertility Rate
U5MR	Under-Five Mortality Rate
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children’s Fund
UNPD	United Nations Population Division
UNSD	United National Statistical Division
USI	Universal Salt Iodization
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

Children in China: An Atlas of Social Indicators 2018