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MONGOLIA POVERTY UPDATE 2018

MAIN REPORT OF "HOUSEHOLD SOCIO-ECONOMIC SURVEY 2018"

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MONGOLIA POVERTY UPDATE 2018

MAIN REPORT OF "HOUSEHOLD SOCIO-ECONOMIC SURVEY 2018"

ULAANBAATAR
2020

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FOREWORD

The Agenda for Sustainable Development with 17 goals was jointly approved by countries of the world in 2015 to overcome the challenges that lie ahead, to prevent potential future risks and to improve opportunities for further development with leaving no one behind. In the Sustainable Development Goals (SDG), Goal 1 is "No poverty" and Goal 10 is "Reduced inequalities". The Government of Mongolia joined this global challenge to reduce poverty and inequality. The central concept of the SDG is to leave no one behind. Therefore, it is important to include everyone, especially the poorest and most disadvantaged people. Within the scope of its obligations under the law, the National Statistics Office (NSO) has successfully carried out its work in producing the poverty statistics based on the internationally recognized and temporally comparable methodologies to substantially contribute to effective implementation and monitoring of these goals as well as to further policy and program development.

This poverty update report contains poverty analysis based on the data of 16000 households covered by the 2018 Household Socio-Economic Survey (HSES) as well as a comparative analysis of the changes in the poverty status between 2010 and 2018 together with the factors that affected these changes. With the World Bank's technical support, NSO carried out the HSES which includes quantitative indicators to measure household living standards and poverty level by collecting household consumption data. The HSES is a continuation of the surveys previously carried out by NSO ("Evaluation of the Standard of Living of the Population of Mongolia" 1995, "Standard of Living Survey" 1998 and "Household Income, Expenditure and Living Standard Survey" 2002-2003) and it was entirely integrated with the Household Income and Expenditure Survey conducted since 1966. It is clear that the wellbeing of the population is determined by a number of social and economic factors and cannot be solely measured by monetary measures of poverty. Therefore, the extensive information collected by the HSES will be an important resource for policy- and decision-makers, international organizations, scholars and researchers in their studies of the livelihood of the population from socio-economic aspects and for in-depth researches on poverty and socio-economic issues.

I would like to express my thanks to Mr. Andrei Mikhnev, World Bank Country Manager for Mongolia, Ms. Ikuko Uochi, Economist at World Bank (WB), and the colleagues at the WB Country Office in Mongolia for technical support in the implementation of the study through application of internationally recognized methodologies and their close collaboration at all stages of data analysis and the report writing. Moreover, I extend my sincere appreciation to all interviewers, supervisors, drivers, guides, governors of bags and khoroos, who performed the uneasy task of gathering survey data from households as well as to the staff of the Household Income and Expenditure Survey Unit of the Population and Social Statistics Department of NSO who performed the data processing and analysis in accordance to the international methodologies.

CHAIRPERSON

NATIONAL STATISTICS OFFICE OF MONGOLIA

ARIUNZAYA AYUSH (Ms.)

FOREWORD

The World Bank has been collaborating with National Statistics Office of Mongolia (NSO) in poverty assessment through household surveys since 2002. This poverty report, a joint work between NSO and the World Bank, presents the latest poverty and inequality analysis, drawing on the 2018 Household Socio-Economic Survey (HSES).

Monitoring quality and timely data from the HSES will help us to track our progress to date. The analysis and findings in this report shed light on where support and policy intervention are most needed. Mongolia is one of the youngest countries in terms of the population structure in the region and welcoming a demographic dividend opportunity in the coming years. To absorb new workforce in the labor market, Mongolia will need to create more and better jobs not only in the capital-intensive industries but also across more diversified and productive sectors. At the same time, investment in human capital, especially skill development among children and youth, as well as promoting participation of women and the poor in the labor market are critical for more inclusive growth. Moreover, despite the recent improvement of herders' well-beings, they still remain highly vulnerable against livestock price fluctuations and extreme weather events. More effective and better-targeted social assistance programs could work as a buffer and mitigate negative impacts on the poor and vulnerable from economic downturns and unexpected shocks.

I would like to express my deep appreciation to Ms. Ariunzaya, Chairperson of NSO, for her strong leadership and commitment on this work. I also thank the Population and Social Statistics department of NSO for their dedication and continued collaboration with the World Bank team in the HSES surveys and poverty analysis.

The World Bank is committed to fighting poverty in all its forms. We hope that the information and analyses from the report will support the Government of Mongolia as well as researchers and practitioners in making informed and evidence-based policies for promoting poverty reduction and sustainable and equitable growth to all the people in Mongolia.

COUNTRY MANAGER FOR MONGOLIA

THE WORLD BANK

ANDREI MIKHNEV

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ABBREVIATIONS

EAP	East Asia Pacific
CPI	Consumer Price Index
GDP	Gross Domestic Product
HSES	Household Socio-economic Survey
ICT	Information and Communication Technologies
LFS	Labor Force Survey
NSO	National Statistics Office of Mongolia
PSSD	Population and Social Statistics Department
PSU	Primary Sampling Unit
SDG	Sustainable Development Goal
UB	Ulaanbaatar
UN	United Nations
WDI	World Development Indicators

EXECUTIVE SUMMARY

Mongolia's overall poverty reduction has stagnated despite robust macroeconomic growth between 2016 and 2018.

The national poverty headcount ratio fell slightly from 29.6 percent in 2016 to 28.4 percent in 2018. Based on the 2018 Household Socio-Economic Survey (HSES), 28.4 percent of the total population live under the 2018 official poverty line of 166,580 tugrug per capita per month. In absolute terms, due to high growth in population (2.0 percent YoY), the number of poor decreased by only 2.6 thousand people from 907.5 thousand in 2016 to 904.9 thousand people in 2018. In addition to the poor, a considerable size of the population is clustered just above the national poverty line: a further 14.9 percent of the total population, or 474.8 thousand people live between the poverty line and 1.25 times the poverty line in 2018. If any unanticipated shock hits, these vulnerable households could easily fall into poverty.

The pace of poverty reduction was not commensurate with the robust macroeconomic (GDP) growth. Mongolia is struggling to translate the benefits of macroeconomic growth into an increase in household welfare, especially for the poor. Compared to the 2010-2014 economic boom period, the pace of poverty reduction from GDP growth for 2016-2018 was almost a half: poverty declined by 0.5 percent for every one percent growth in GDP per capita during 2016-2018 while it was 0.9 percent for 2010-2014. During the past 2 years, Mongolia achieved a growth rate of 4.4 percent per annum in per capita GDP and one-third of the GDP growth came from the mining sector, but given its capital-intensive nature, mining sector itself provides jobs to only 6 percent of total workers. It suggests that mining-led growth was not broadly shared with all workers and many of the poor wage workers who are more likely to be engaged in low-skilled or low-end service jobs are missing out on the benefits from growth.

Uneven progress in poverty reduction was seen between urban and rural areas: poverty fell by 4 percentage points in rural but was unchanged in urban areas.

The rural poor achieved the fastest consumption growth while the urban poorest experienced the lowest growth. Rural areas, especially the countryside, experienced strong income and consumption growth compared to other areas of the country. Growth in rural areas was the fastest and favorable to the poor, contributing to reducing rural poverty by 4.1 percentage points from 34.9 percent in 2016 to 30.8 percent in 2018. By contrast, the less-inclusive consumption growth in urban areas was accompanied by stagnation in poverty, leaving the poverty rate unchanged at 27 percent from 2016 to 2018. If growth had been equitably shared and inequality had not worsened in urban areas, the urban poverty headcount rate would have dropped by 2 percentage points rather than prevailing at the same level.

High inflation, especially in food prices, negatively affected welfare of the urban poor but brought gains to rural herders who are net producers of livestock products. Since the consumption share of food is proportionally higher for poorer households, the recent increase in food prices relatively more affected urban poor residents who purchase food items out of their own pockets. In turn, full-time rural herders including those that are poor, who earn cash income from livestock sales and rely on their own production for half of their food consumption, benefitted from the food price increase.

Consequently, poverty concentration is geographically growing in urban areas. The incidence of poverty is still higher in rural areas (30.8 percent) than in urban areas (27.2 percent), but the difference between urban and rural poverty rates has narrowed over time from 15.8 in 2010 to 3.6

percentage points in 2018. With 66 percent of the population living in cities, more than six out of ten poor people (63.5 percent of all the poor) now live in urban areas, particularly in Ulaanbaatar (41.8 percent).

The opposing distributional patterns of consumption growth between urban and rural areas offset effects on inequality. Urban non-inclusive growth led to a slight increase in the urban Gini coefficient, but together with the pro-poor growth from rural areas, the national Gini coefficient remained roughly at the same level (32.7) in 2018.

The lack of progress in poverty reduction in urban areas was driven by stagnant wage growth in the poorest group, while strong growth in farm income, together with the expansion of poverty-targeted social protection programs, contributed to robust poverty reduction in rural areas.

Urban residents in the bottom 20 suffered the most between 2016-2018. Out of all the consumption classes, only the poorest urban quintile experienced negative real income growth (-1.0 percent, YoY) during 2016-2018, which was mainly driven by sluggish wage and business income growth.

The robust poverty reduction in rural areas was driven by farm income growth, especially due to increasing livestock product prices. On average, rural household real income grew by 2.6 percent (YoY) and the poorest rural quintile recorded the highest growth of 3.8 percent. Regardless of differences in households' livestock stock across consumption levels, higher livestock product price, especially the price of cashmere, the most lucrative livestock product, contributed to the increase in herders' income. Growth in farm income alone thus reduced the rural poverty rate by 1.8 percentage points between 2016 and 2018.

Yet, the herders' livestock-dependent livelihood is extremely vulnerable to unexpected shocks. 2016-2018 were good years for almost all rural herders as a result of higher livestock product prices, but this reflects the reality that they are highly vulnerable to livestock price shocks and especially to harsh winters or any other natural disasters which could destroy their livestock herds. Once such a shock hits herder households, without adequate safety nets, their well-being can be significantly deteriorated in all aspects including employment, income and consumption. Moreover, the rapid advance of pastural degradation on the back of increasing demand in livestock products could threaten the sustainability of herders' livestock activities.

In addition to robust farm income growth, the expansion of social transfers led to poverty reduction. Between 2016 and 2018, poverty-targeted food stamp program doubled its coverage and increased its benefit size by 20 percent. A cash benefit targeting mothers with children under the age of 3 was also newly introduced. As a result, social transfers have contributed to reducing poverty both in urban and rural areas and nationally they reduced the proportion of poverty by 1.2 percentage points. At the same time, many other existing social protection programs still remain categorical or universal, leading to broadly same-levels of transfer amount from those non-contributory social protection programs across different consumption levels.

There is a clear distinction between the poor and non-poor in terms of their human, physical and financial capital profiles.

Low-skilled workers, unemployed and inactive individuals have a greater likelihood of being poor.

In 2018, three in five poor workers were engaged in wage activities, which are mostly low-skilled and low-end service jobs. Over the last decade, a number of poor have entered wage employment, but more than 30 percent of the poor wage workers are engaged in elementary-skilled jobs and an additional 40 percent of those are working as handicraft, trade or service workers. By

contrast, only about one in ten non-poor wage workers are working for low-skilled jobs and more than four in ten non poor workers are working for managerial, professional or technical positions, contributing to a wage disparity between the poor and non-poor.

The unemployed and economically inactive individuals are the poorest among the working-age population. The poor, with low levels of human capital, are unlikely to be able to meet the labor market needs for better-paying jobs and often face difficulties in finding a job. Of the working-age population (aged 15 and above), poverty headcount rates for the unemployed and inactive population are 40 and 34 percent respectively, significantly higher than for the wage employees (21 percent), self-employed workers (17 percent) or retired persons (14 percent).

Herders were among the poorest in 2010, but now only one in three herders are estimated to be poor. Herders used to be the poorest group in the nation, with 58 percent of them living below the poverty line in 2010, but increasing livestock product demand and prices, better connectivity to markets, government's subsidies and public transfers have improved herders' wellbeing. At the same time, wage employment is now more common in rural areas and herder households are starting to diversify their employment activities: in addition to 40 percent of full-time herder households, 18 percent of rural households are engaged in both agriculture and wage activities.

Human capital is high in Mongolia but for women, having a university diploma does not necessarily mean that they can obtain a better-paying job.

Mongolia's education attainment level, particularly among the youth, is the highest in the region, yet disparities in the education level are clearly seen between the poor and non-poor. Now, it is very common for a young Mongolian to have a university diploma: nearly half of those aged 25-29 have completed university or equivalent education, 30 percentage points higher than that of those aged between 45-49. Despite the nation-wide improvement in education attainment, poverty is still highly associated with the level of education. Only 10 percent of the poor have completed university-level education. Children from wealthy households, on the other hand, start school earlier and stay longer, and they are much more likely to be exposed to information technology, which could further widen the gap in human capital among the children between the poor and non-poor households.

Seventy percent of young women (aged 25-29) have completed tertiary education, but it does not encourage females to participate in the labor market. Boys, especially in rural areas, tend to leave school earlier to help their family financially, while girls are more likely to study for longer and attain a higher level of education. However, 45 percent of working-age women (aged 15 and over) are still economically inactive and female labor force participation has barely improved over the last decade. Men's labor force participation rate, on the other hand, reached a historical high of 72.1 percent in 2018. The gender gap in the labor force participation rate has been persistent and widening for the last couple of years.

Limited ownership of productive and financial assets and their lower returns keep people in poverty.

Poor families have a weak productive and financial asset base. Wealthier households are more likely to have luxury durables as well as better access to ICT and the financial market. Poor households, by contrast, tend to own a limited number of essential durables and often need to borrow money to cover their daily needs. Among herders, the poor households are more likely to keep livestock for their own consumption rather than for market sale. Limited access to productive and financial assets prevents the poor from earning additional returns and makes them more vulnerable to negative impacts from the many shocks that may happen at any point in their lives. As these assets are passed down to future generations, the disparity in asset ownership could be further deepened.

Important challenges remain in service delivery, particularly with regards to proper sanitation and reliable heating source.

Wide disparities in the access to basic services remain among ger dwellers. In 2018, seven in ten poor people lacked access to one of the basic infrastructure services (improved drinking water, sanitation or sustainable heating source). This is predominantly driven by their dwelling type (gers) and location (remote rural areas or urban ger districts). Even in the richest quintile or in the capital city, around 40-60 percent of individuals suffer from poor sanitation or traditional heating source. There is also substantial variation in the access to these services across aimags, highlighting a profound level of deprivation in the Khangai and Western regions.

Poverty is most prevalent among pre-school children. Harnessing the upcoming demographic opportunity for development, making greater and effective investments in the youth and creating more and better jobs are critical.

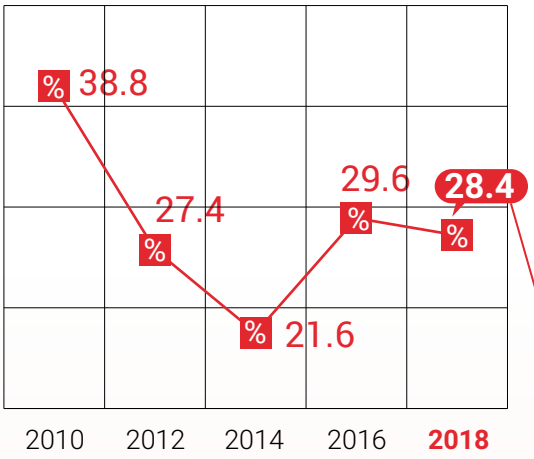
Two in five poor people are children under the age of 15. Poverty is highly associated with the number of children and dependency ratio, reflecting the inadequate number of income earners to support the children at home. Children of all ages and younger adults (aged 30-39) with multiple children at home are more likely to be poor than elderly adults.

Mongolia is welcoming a "demographic dividend" in the coming years. Challenges lie in generating better-skilled youths and job opportunities in a wide range of sectors. In terms of the demographic structure, Mongolia is one of the youngest countries in the region, with one-third of the total population being children. As more of the youth population enter the labor force, the country will need to create a sufficient number of job opportunities in not only the capital-intensive mining sector but in a wide variety of productive sectors in order to absorb these new workforces. At the same time, to take advantage of this opportunity for further economic growth and poverty reduction, investment in children and youth to improve their skillset to meet labor market needs is crucial as is promotion of fair and equitable labor force participation for females.

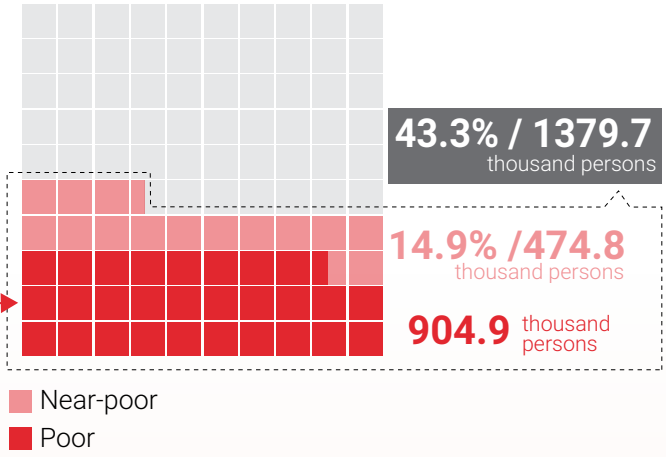
1 CHAPTER

POVERTY AND INEQUALITY

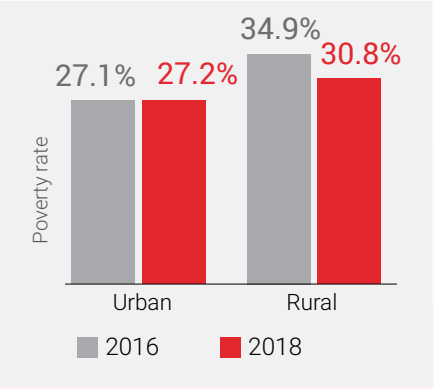
■ 28.4 percent of the population live in poverty in 2018

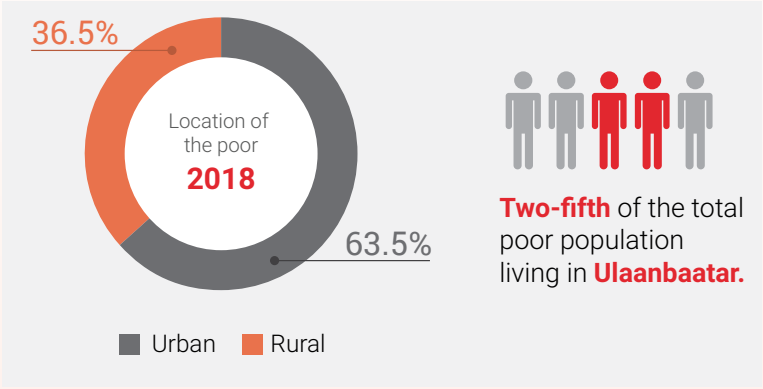


■ Additional 15 percent of people of Mongolia remain vulnerable to falling into poverty.



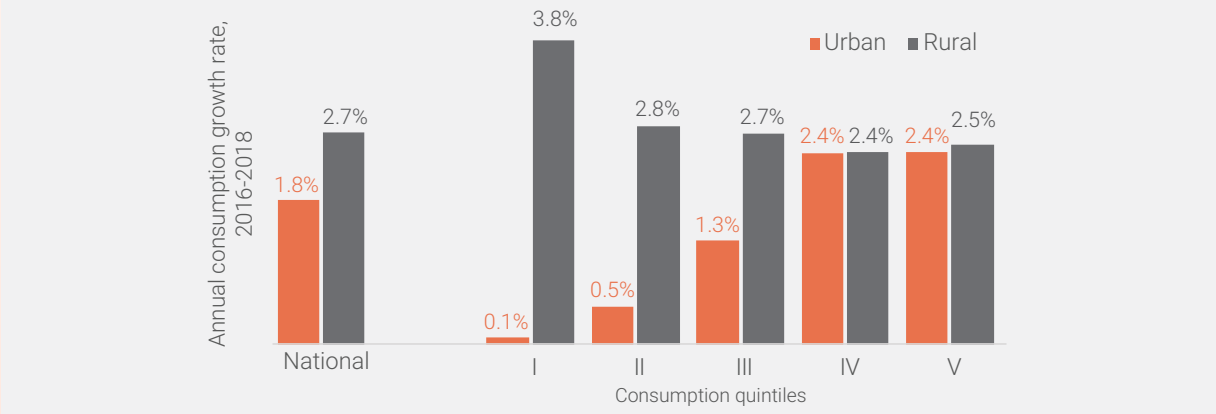
Rural poverty declined but urban poverty was unchanged, resulting in nearly two in three poor people living in urban areas.





Two-fifth of the total poor population living in **Ulaanbaatar.**

The bottom 20 rural households experienced the fastest consumption growth, while the urban bottom 20 grew the least.



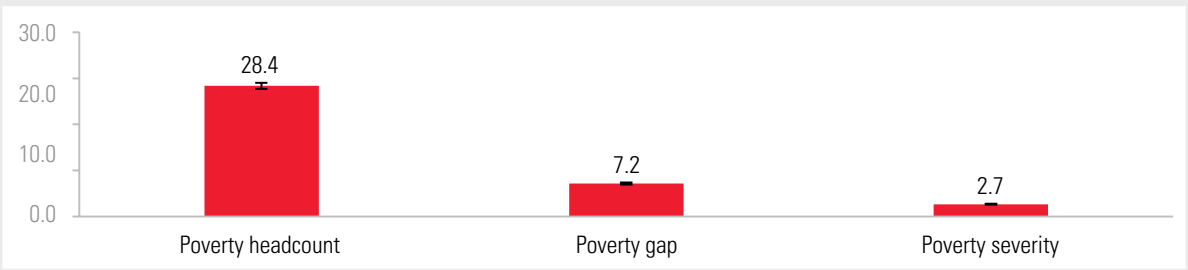
This chapter summarizes the results of the 2018 poverty and inequality measures as well as their trends between 2010 and 2018.

1.1 POVERTY ESTIMATES IN 2018

Mongolia's official poverty headcount rate, based on the Household Socio-economic Survey (HSES) 2018[1], was estimated at 28.4 percent, which means that about 904.9 thousand individuals are living in poverty. In 2018, a person in Mongolia is considered to be poor if her or his monthly consumption is less than 166,580 tugrug[2]. In other words, individuals living below this national poverty line cannot afford to buy essential food and non-food items for their living.

Although this poverty-level estimate is easy to grasp, it does not provide comprehensive information about the distribution of the poor. To complement the poverty headcount measure, two additional poverty measures are used: poverty gap and poverty severity. The poverty gap index captures the average depth of poverty as a percentage of shortfall from the poverty line. In 2018, the national poverty gap was estimated at 7.2 percent, which indicates that the average consumption shortfall of each poor person was 7.2 percent of the poverty line. The poverty severity index is the square of the poverty gap, which puts more weight on the poor who are further away from the poverty line. This means that the index takes into account not only the depth of poverty measured by the poverty gap index but also the inequality among the poor and thus is sensitive to transfers of consumption between the poor. The poverty severity index in 2018 was estimated at 2.7 percent.

Figure 1.1.1 Poverty estimates, national average, in percentages, 2018[3]



Source: HSES 2018

1.2. SENSITIVITY OF POVERTY MEASURES TO THE POVERTY LINE

A substantial number of people are left just above the poverty line, facing a risk of falling into poverty. It is important to understand how sensitive the poverty measures are to the changes in the poverty line. This section looks at how poverty measures change when the poverty line shifts slightly upward or downward. Figure 1.2.1 displays the distribution of per-capita monthly consumption with the official poverty line and 1.25 times the poverty line. In 2018, in addition to the poor that fell below the poverty line (28.4 percent or 904.9 thousand people), a further 474.8 thousand people

1 The survey was conducted nationwide and is representative at the national, urban/rural, 5 regions (Western, Khangai, Central, Eastern and Ulaanbaatar), 4 residential locations (Ulaanbaatar, aimag center, soum center and countryside) and 22 aimag levels. The survey was designed to allow for analysis to be conducted by poverty status and expenditure quintiles.

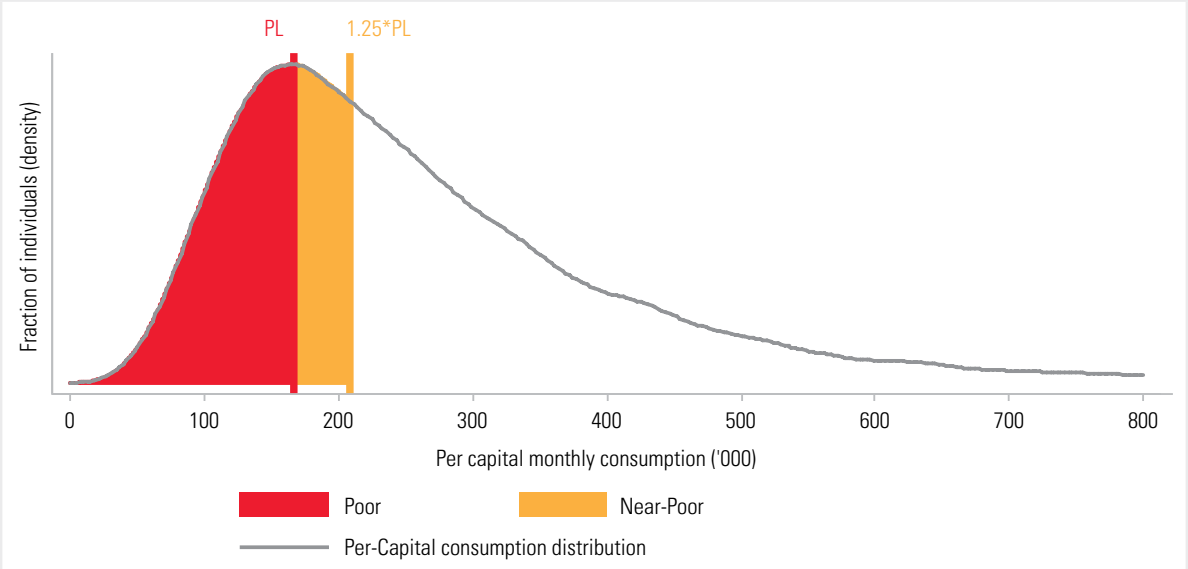
2 Poverty is measured based on per-capita monthly consumption aggregates in Mongolia. The national poverty line in 2018 is equivalent to 166,580 tugrug per capita monthly consumption. For more details, see Annex A and B.

3 Error bars shown in the figures in the report indicate the 95% confidence interval (CI).

(14.9 percent of the total population) fell between the poverty line and 1.25 times the poverty line. These "near-poor" people remain vulnerable to slipping into poverty, especially when they are hit by negative shocks such as increasing prices, unemployment, illness and natural disasters.

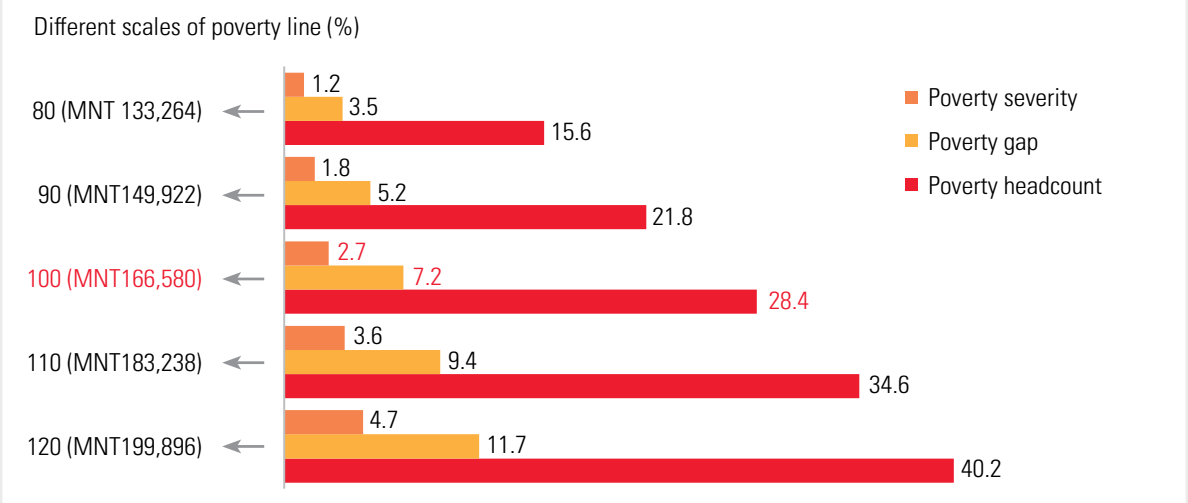
In Mongolia, the poverty line lies very close to the peak of the consumption distribution (Figure 1.2.1). This suggests that a slightest change in the poverty line is likely to increase (or decrease) the poverty incidence substantially. For instance, as illustrated in Figure 1.2.2, if the poverty line increases by 10 percent from 166,580 to 183,238 tugrug, the poverty headcount rate could go up by 6.2 percentage points from 28.4 to 34.6 percent. Alternatively, if the poverty line declines by 10 percent to 149,922 tugrug, changes in poverty could get even larger – the poverty headcount rate could fall by 6.6 percentage points to 21.8 percent.

Figure 1.2.1 Distribution of per capita consumption, 2018



Source: HSES 2018

Figure 1.2.2 Poverty estimates, by different scales of poverty line, 2018

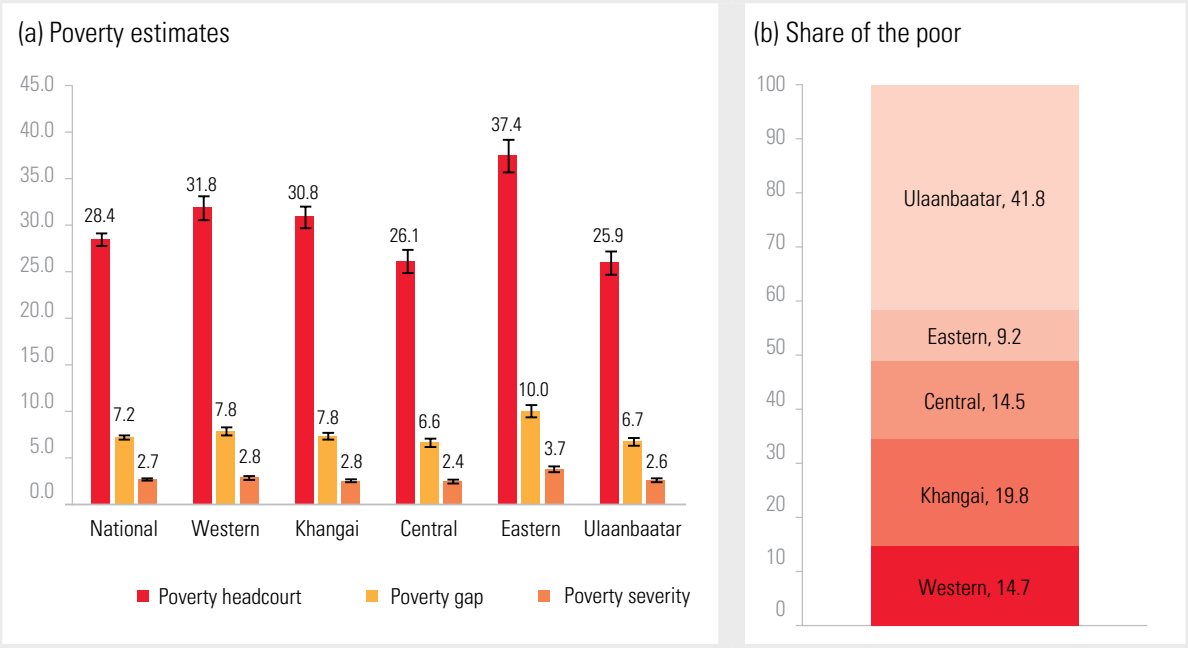


Source: HSES 2018

1.3. GEOGRAPHICAL DISTRIBUTION OF POVERTY

There is considerable regional variation in poverty in Mongolia. Figure 1.3.1 presents the regional poverty indicators for the five regions in Mongolia: Western, Khangai, Central, Eastern and Ulaanbaatar. Ulaanbaatar city and Central region have the lowest incidence of poverty with 25.9-26.1 percent of the population being poor. Western, Khangai and Eastern regions, on the other hand, suffer relatively higher poverty incidence (30.8-37.4 percent). In particular, Eastern region has the highest proportion of the poor in the nation, with nearly two out of five being in poverty. Yet, with its smallest share of the population (7 percent), Eastern region accounts for less than 10 percent of the total poor in the country (Figure 1.3.1).

Figure 1.3.1 Poverty estimates and share of the poor, by region[4], in percentages, 2018

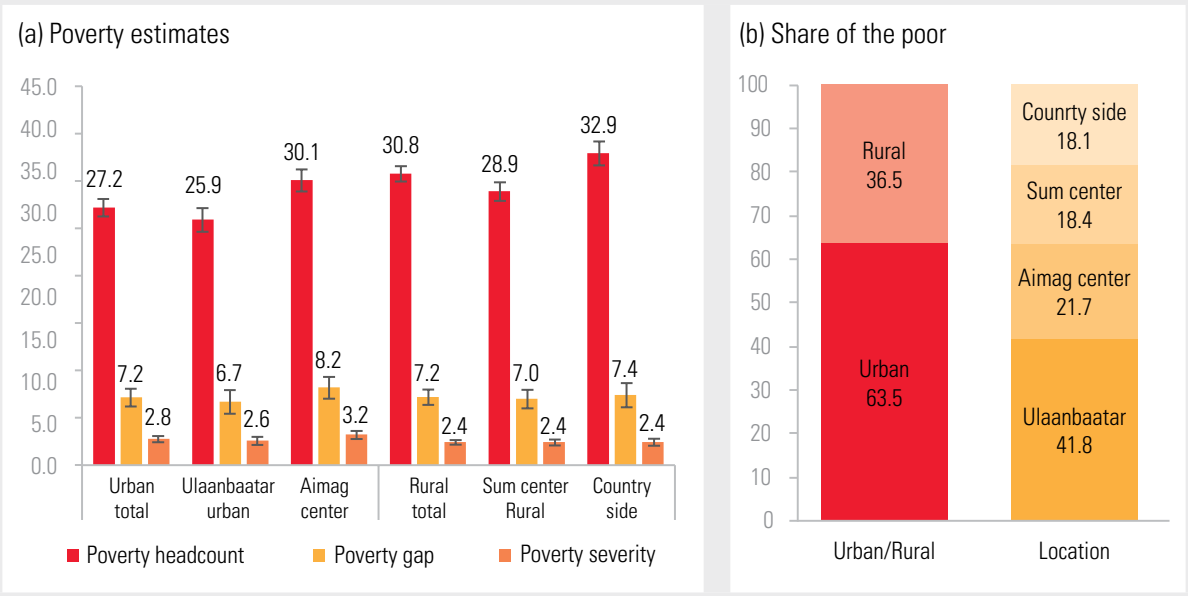


Source: HSES 2018

Poverty incidence is higher in rural areas, but poverty concentration is growing in urban areas. As illustrated in Figure 1.3.2, poverty in urban areas (27.2 percent) is considerably lower than in rural areas where 30.8 percent of the population are poor. Spatial diversity of poverty can be found not just between urban and rural but also at a further geographically disaggregated location-level within the urban and rural areas. In urban areas, incidence of poverty is lower in Ulaanbaatar city than in aimag centers. In the rural areas, soum centers are much better-off than the remote countryside. Despite the higher incidence of poverty in rural areas, with two-thirds of the total population of Mongolia living in urban cities, poverty is concentrated in urban areas. Indeed, in 2018, urban areas accounted for 63.5 percent of the poor, whereas the countryside and soum centers comprised a smaller share, 18.1 and 18.4 percent of the poor respectively.

4 Western region: Bayan-Ulgii, Govi-Altai, Zavkhan, Uvs, Khovd aimags; Khangai region: Arkhangai, Bayankhongor, Bulgan, Uvurkhangai, Khuvsgul, Orkhon aimags; Central region: Dornogovi, Dundgovi, Umnugovi, Govisumber, Selenge, Tuv, Darkhan-Uul aimags; Eastern region: Dornod, Sukhbaatar, Khentii aimags.

Figure 1.3.2 Poverty estimates and share of the poor by rural/urban and location[5], in percentages, 2018



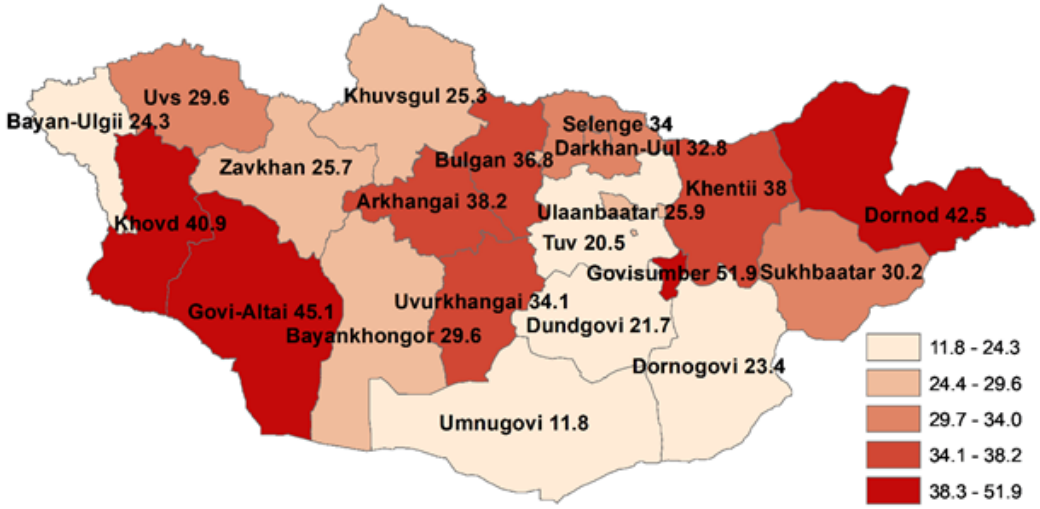
Source: HSES 2018

There are further differences in poverty levels and shares across aimags. Figure 1.3.3 visualizes the poverty headcount rate by aimags. Govisumber aimag has the highest poverty incidence in 2018, with over half of its population (51.9 percent) living in poverty. Aimags located in Eastern and Western regions are more likely to suffer from severe levels of poverty while Ulaanbaatar, its neighbouring aimag (Tuv) and several Central aimags (Umnugovi, Dundgovi and Dornogovi) are more likely to be better off. The lowest poverty rate was found in the southern mining resource rich aimag, Umnugovi, where 11.8 percent of the population is living below the poverty line. In terms of the geographical distribution of the poor, more than four out of ten poor people (378.2 thousand poor) live in Ulaanbaatar city. Although Govisumber has the highest poverty headcount, with its relatively small population size, only 8.2 thousand poor people, or less than 1 percent of the total poor, live in Govisumber aimag.

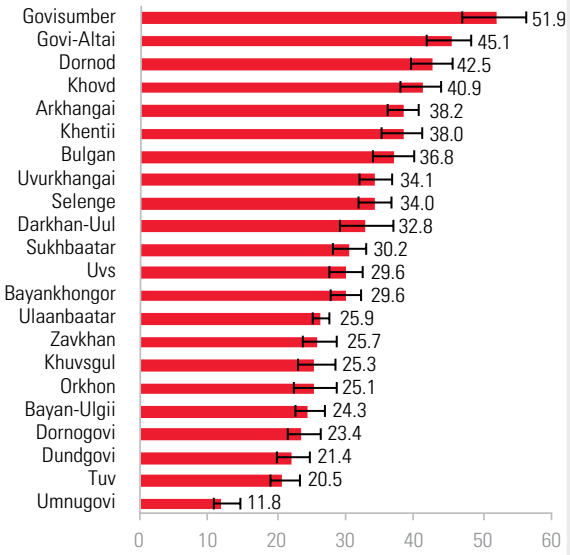
5 Urban and rural areas could be further divided into four locations. Urban could be disaggregated into Ulaanbaatar and Aimag center and rural into soum center and countryside.

Figure 1.3.3 Poverty headcount and share, by aimags, in percentages, 2018

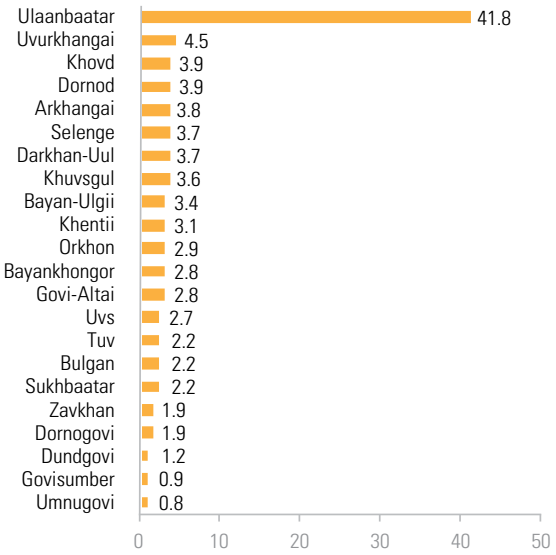
(a) Aimag-level poverty headcount displayed in Map



(b) Poverty headcount



(c) Share of total poor



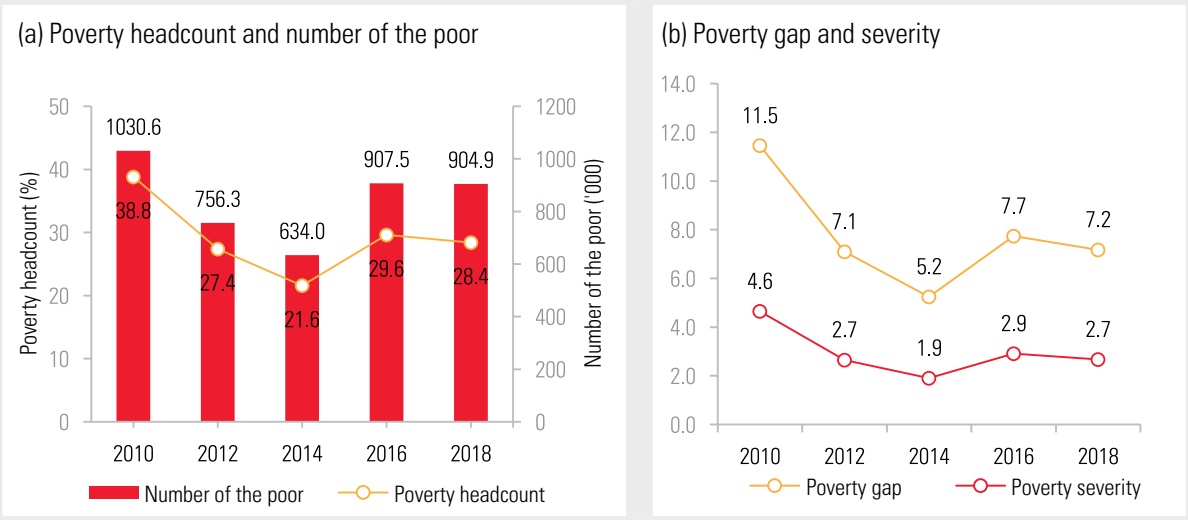
Source: HSES 2018

1.4. POVERTY TRENDS

Mongolia's rapid decline in poverty since 2010 was partly reversed in 2016, and poverty has remained relatively stagnant since. Figure 1.4.1 shows how poverty in Mongolia has changed over the period of 2010-2018. Poverty declined sharply from 38.8 percent to 21.6 percent during the economic boom in 2010-2014, but due to the economic recession, it reversed up to 29.6 percent in 2016. Between 2016 and 2018, poverty headcount rate decreased by 1.2 percentage points to 28.4 percent in 2018, but due to the high population growth rate, the number of people in poverty fell by only 2.6 thousand people between 2016 and 2018. If taking out the effect of population growth, the number of poor could have fallen by 39.0 thousand people during the same period[6].

6 The total residential population of Mongolia for 2016 and 2018 were 3,064 and 3,186 thousand people respectively. In 2016, the number of poor was 907.5 thousand people while it was 904.9 thousand in 2018. 2.6 thousand people thus represent the difference in the number of poor between 2016 and 2018 after taking into account the population growth (on average, 2.0 percent per annum during 2016-2018). If the poverty rate had been unchanged (29.6 percent) from 2016 to 2018, the number of poor in 2018 could have been 943.9 thousand people, implying that the number of poor fell by 39.0 thousand people if taking out the effect of population growth.

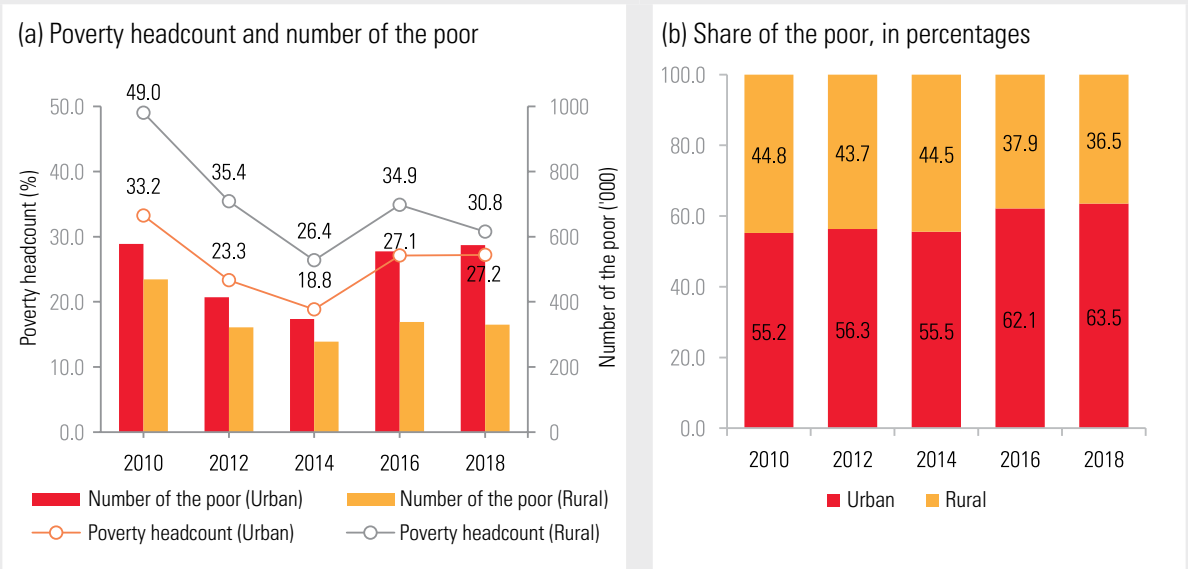
Figure 1.4.1 National poverty trends, 2010-2018



Source: HSES 2010- 2018

Despite the robust decline in rural poverty, urban poverty has remained unchanged between 2016 and 2018. The poverty incidence is much lower in urban areas than in rural areas, but the speed of poverty reduction has been faster in rural areas. As presented in Figure 1.4.2 (a), in 2010, nearly half of the rural population lived in poverty compared to three out of ten in 2018, whereas poverty barely changed in urban areas for the last 2 years. As a result, the urban-rural gap in poverty headcount rate has narrowed over time and poverty has been relatively more concentrated in urban cities. The share of the poor living in urban areas increased from 55.2 percent in 2010 to 63.5 percent in 2018 (Figure 1.4.2(b)).

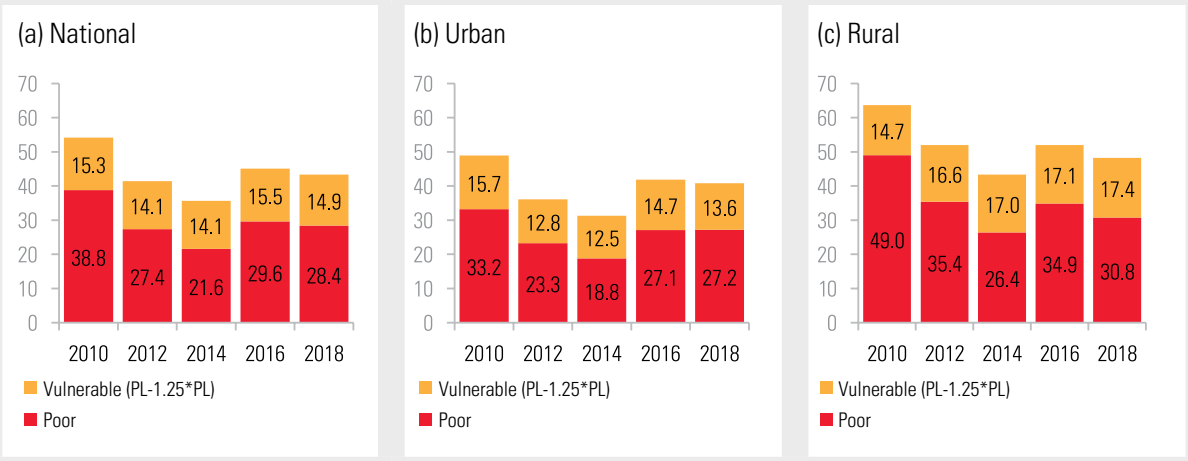
Figure 1.4.2 Poverty trends in urban and rural, 2010-2018



Source: HSES 2010- 2018

About 15 percent of the people in Mongolia persistently remain vulnerable to poverty over time. The vulnerable or near-poor people are defined as those living between the poverty line and 1.25 times the poverty line. As presented in Figure 1.4.3, although the proportion of poor has fluctuated over time, 13-17 percent of the population remain vulnerable in both urban and rural areas. In particular, despite the progress of poverty reduction, one out of four of the non-poor individuals in rural areas remain vulnerable and face high risks of falling into poverty. This is partly because that the density of population around the poverty line in rural areas is higher than in urban areas. The high incidence of vulnerability in Mongolia stresses the importance of efforts for building resilience among the vulnerable people.

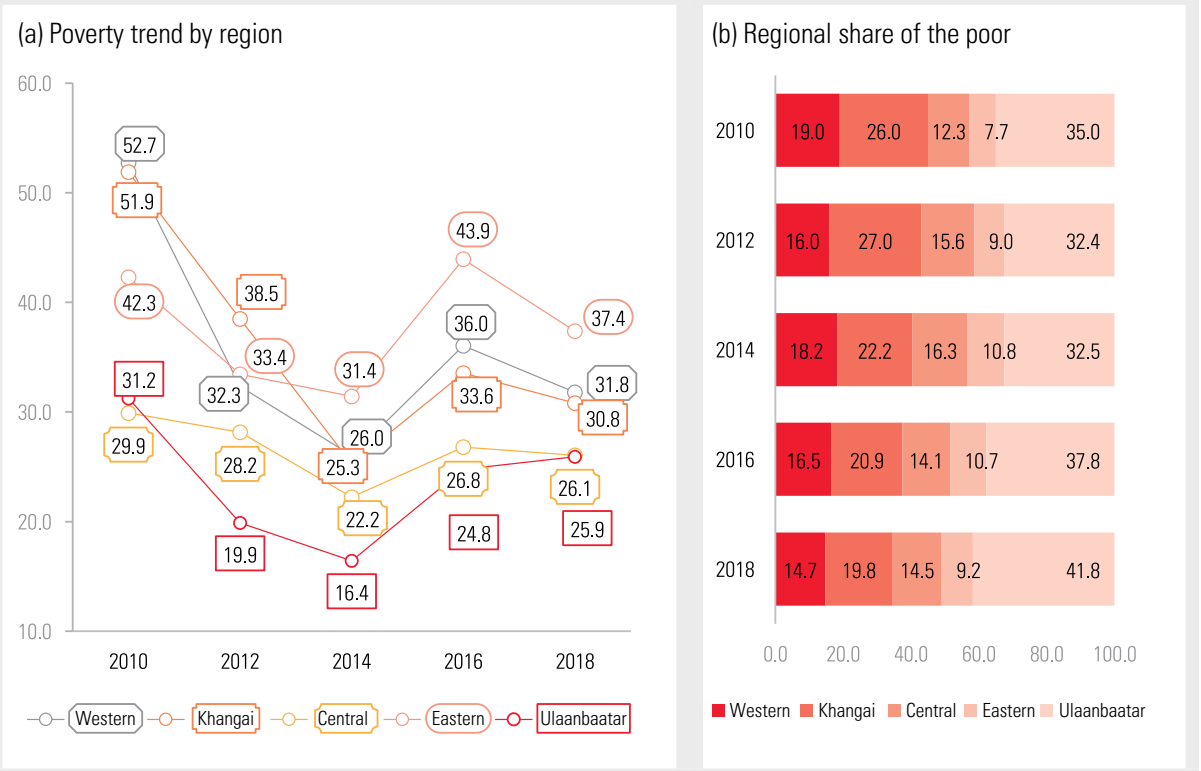
Figure 1.4.3 Headcount of the poor and vulnerable, in percentages, 2010-2018



Sources: HSES 2010-2018

Regional-level poverty trends show unequal progress in poverty reduction. During 2010-2018, the proportion of the poor reduced in Western and Khangai regions significantly (Figure 1.4.4). In these regions, more than 50 percent of the population lived in poverty in 2010 and that figure fell down by about 20 percentage points over the period of 2010-2018. Accompanied by this rapid poverty reduction, the share of the poor from Western and Khangai regions also decreased from 45 percent in 2010 to 35 percent in 2018. On the other hand, the remaining regions (Central, Eastern and Ulaanbaatar) have struggled to reduce their poverty levels. Although the shares of the poor in Central and Eastern regions have been relatively small and consistent over time, poverty reduction has stagnated. Especially, with both Western and Khangai regions having successfully managed to reduce poverty, Eastern region was left with the highest incidence of poverty (37.4 percent) in the nation in 2018. Mainly due to rural-to-urban migration and increased urbanization, the share of the poor in Ulaanbaatar city has significantly increased from 35 percent in 2010 to 42 percent in 2018.

Figure 1.4.4 Poverty headcount and share of the poor, by regions, 2010-2018



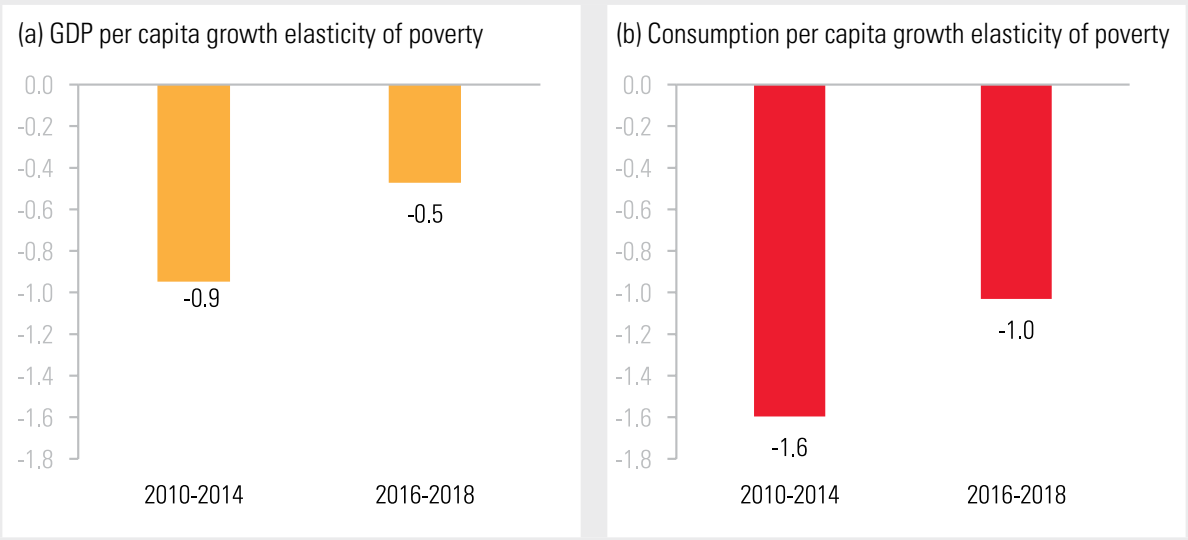
Source: HSES 2010- 2018

1.5. ECONOMIC GROWTH AND POVERTY REDUCTION

The speed of poverty reduction slowed down despite the recent robust GDP growth. The growth elasticity of poverty estimates how effectively GDP or consumption per capita growth translated into poverty reduction. Between 2010 and 2014, a one percent increase in real GDP per capita was associated with reduction in poverty of 0.9 percent. However, between 2016 and 2018, the pace of poverty reduction from GDP growth has almost halved: a one percent increase in real GDP per capita reduced the incidence of poverty by only 0.5 percent (Figure 1.5.1, (a)). A similar pattern was observed in consumption per capita growth elasticity of poverty (Figure 1.5.1, (b)). The elasticity of poverty was -1.0 during 2016-2018 in comparison to -1.6 during 2010-2014. It is not uncommon to find different growth elasticities of poverty from national accounts and household survey data[7], but both results from the analysis nevertheless indicate that benefits of the recent growth did not effectively reach the poor in Mongolia.

7 For example, see Ravallion (2001) and Adams (2004)

Figure 1.5.1 Growth elasticity of poverty reduction, in percentages



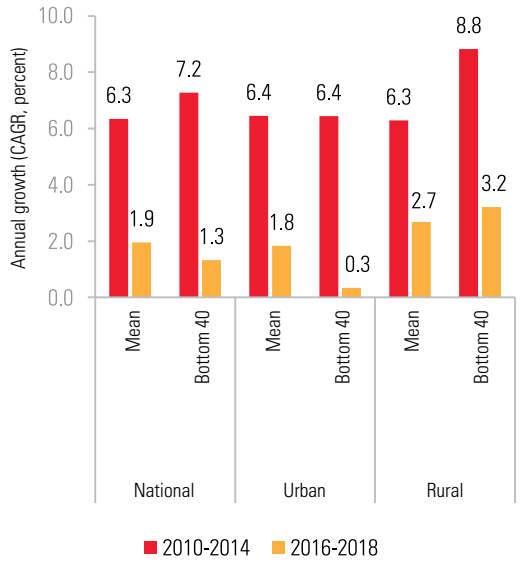
Source: HSES 2010- 2018

1.6. INEQUALITY AND SHARED PROSPERITY

Growth was broadly shared during the economic expansion in the early 2010s, but it turned out to be slower and less inclusive between 2016 and 2018. During 2010-2014, the bottom 40 percent achieved a 7.2 percent annual growth in real per capita household consumption, which is 0.9 percentage points higher than the average consumption growth of all households (Figure 1.6.1 (a)). During this period, the consumption growth was more favorably distributed among the poor and the strong consumption growth accelerated poverty reduction. Between 2016 and 2018, however, the annual per capita consumption growth among the bottom 40 dropped down to 1.3 percent, 0.6 percentage points lower than the average consumption growth. There is also a clear contrast in the growth pattern between urban and rural households. While the top 40 (IV and V) of the urban and rural population experienced the same level of consumption growth, it is clear that a stark difference exists among the bottom 60 (I-III) (Figure 1.6.1 (b)). Per capita consumption for the bottom 20 percent of the rural households grew the fastest (3.8 percent), while it grew the least (0.1 percent) for the urban households in the lowest quintile.

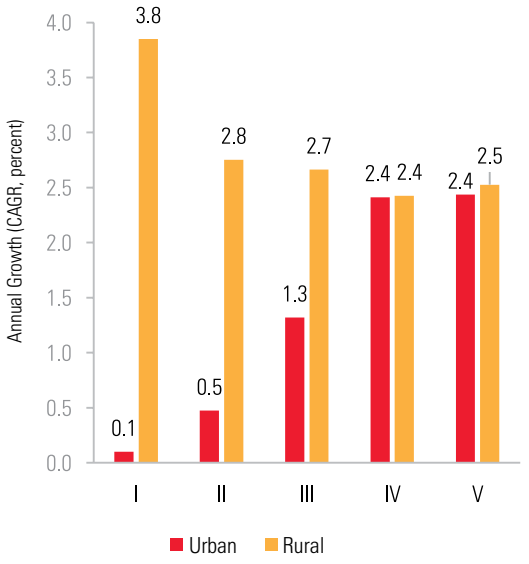
Figure 1.6.1 Per-capita consumption growth, urban and rural, in percentages

(a) Cumulative average annual growth rate (CAGR) of per capita consumption, 2010-2018



Source: HSES 2010- 2018

(b) Growth Incidence by consumption quintiles, 2016-2018



Source: HSES 2016- 2018

Decomposition analysis confirms that poverty reduction during 2016-2018 was stagnant due to the less favorable growth for the urban poor. Growth-inequality decomposition analysis (Datt and Ravallion, 1992) examines whether change in poverty was driven by growth in mean consumption per capita or a more inclusive distribution of consumption. As presented in Table 1.6.1, during 2016-2018, growth in mean consumption in rural areas contributed to poverty reduction by 4.2 percentage points while the distributional effect on poverty is close to zero. This indicates that growth has almost fully translated into poverty reduction in rural areas. Urban areas, by contrast, have struggled to translate consumption growth into poverty reduction. If the welfare distribution had not changed, growth in mean consumption could have reduced urban poverty by 2 percentage points, yet, the analysis shows that the simultaneous increase in inequality pushed poverty levels up by 2.1 percentage points[8], which left the urban poverty incidence unchanged between 2016 and 2018.

Table 1.6.1 Decomposition of poverty changes into growth and distribution effects, in percentage points, 2016-2018

	National	Urban	Rural
Growth	-2.51	-2.05	-4.23
Distribution	1.28	2.12	0.11
Total poverty change	-1.23	0.07	-4.12

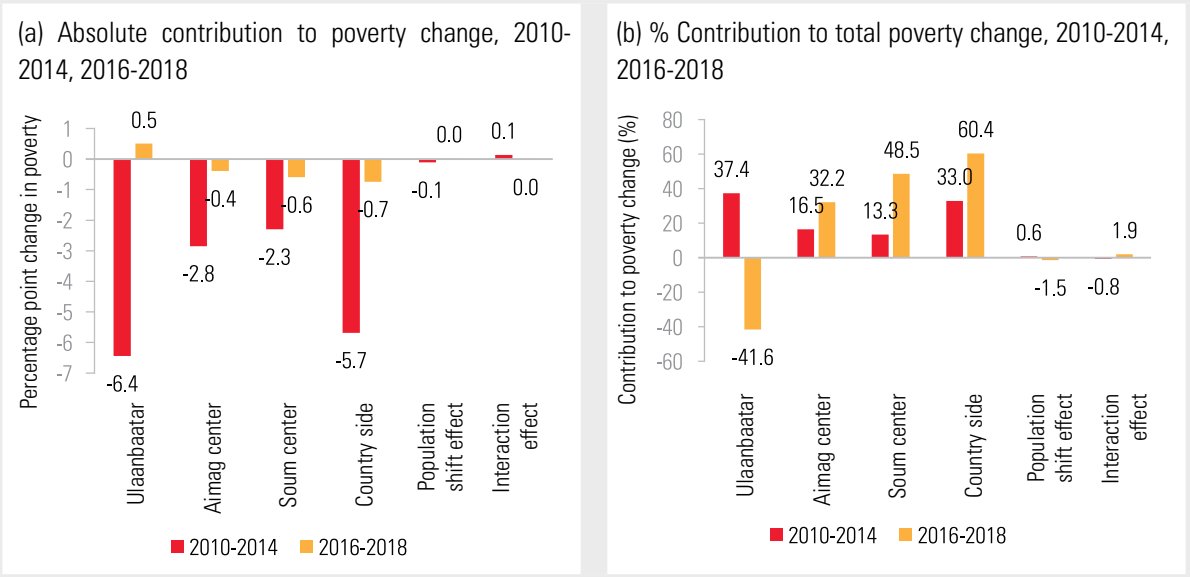
Sources: HSES 2016-2018

Countryside has continued to play a key role in poverty reduction while capital city's stagnation stands out. A geographic decomposition approach (Ravallion and Huppi, 1991) helps us to estimate contributions to poverty changes considering the effect of population shifts between regions. Figure 1.6.2 shows that countryside accounted for one-third and nearly two-thirds of the total

8 Assuming the mean consumption level had remained the same

poverty reduction during 2010-2014 and 2016-2018 respectively, even though its population share is below 20 percent. Although Ulaanbaatar accounted for 37.4 percent of the total poverty reduction between 2010 and 2014, the contribution to poverty reduction from the capital city has stagnated during 2016-2018. For the last two years (2016-2018), the overall decline in the national poverty rate was largely driven by the poorest region, Countryside, where 32.9 percent of the population are still poor in 2018 even after it managed to reduce poverty by 5 percentage points.

Figure 1.6.2 Geographic decomposition of poverty



Sources: HSES 2010-2018

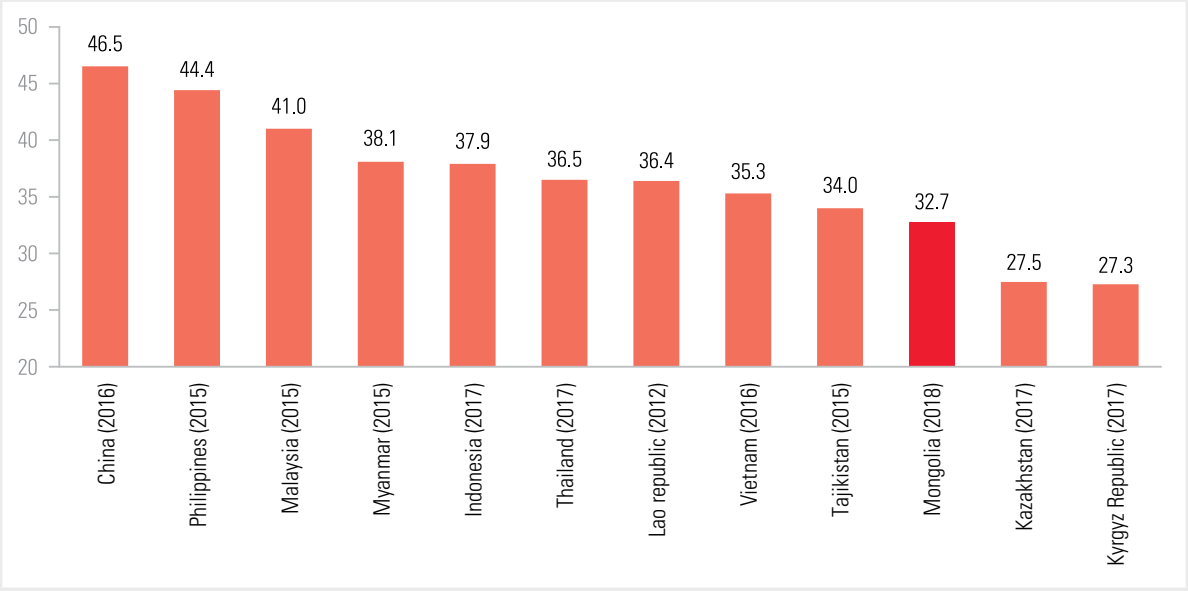
The opposing distributional patterns of growth between urban and rural areas offset effects in inequality, resulting in the national inequality indices to remain relatively stable between 2016 and 2018. As presented in Table 1.6.2, the less inclusive pattern of growth in urban areas has resulted in an increase in the Gini index from 33.1 in 2016 to 34.0 in 2018, whereas inequality in rural areas improved between 2016 and 2018, supported by the robust consumption growth at the very bottom of the distribution. The combination of these growth patterns made the national inequality move up just slightly from 32.3 in 2016 to 32.7 in 2018 and overall, inequality indices in Mongolia have remained stable over time and are relatively lower than that of neighboring countries (Figure 1.6.3).

Table 1.6.2 Inequality trends, 2010-2018

	2010	2012	2014	2016	2018
Gini index					
National	33.0	33.8	32.0	32.3	32.7
Urban	32.9	34.2	32.9	33.1	34.0
Rural	31.7	30.6	28.3	29.6	29.2
Theil-1 index of inequality					
National	19.3	20.0	18.6	19.0	19.2
Urban	19.3	20.6	19.5	20.0	20.6
Rural	17.5	16.2	14.6	15.4	15.1

Source: HSES 2010- 2018

Figure 1.6.3 Gini index in neighboring developing countries[9]



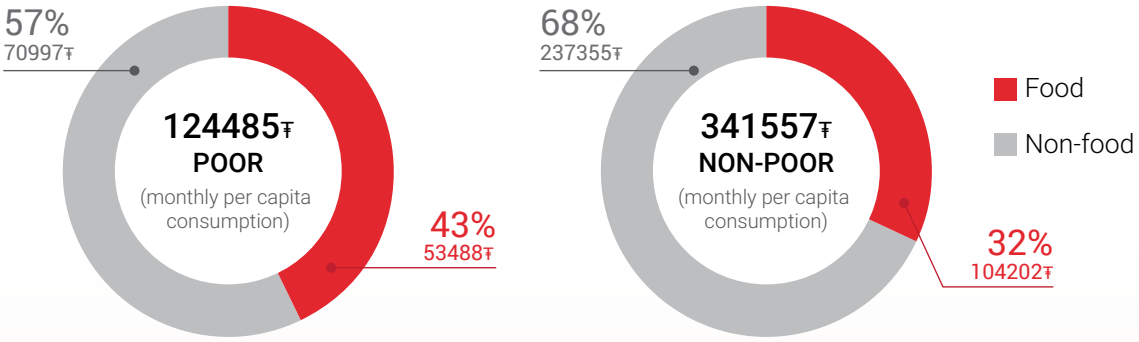
Source: HSES 2018 and WDI

9 Malaysia and Philippines used per capita income to measure Gini coefficient while other countries in the figure used consumption data. Source: World Development Indicators (WDI): https://datacatalog.worldbank.org/dataset/world-development-indicators

2 CHAPTER POVERTY PROFILE

Food and non-food consumption shares by poverty status:

The poor spend more on food (43% of the total consumption).



The **poor** spend ...

1/2 on food

1/4 on education

1/6 on health

1/3 on clothing

1/4 on transportation and communication

than what the non-poor spend.

Who are the poor?

42 % of the total poor are **children** (14 years old or younger).

Half of households with **3 children or more** are poor.

2 in 3 poor people have the **upper secondary level education or less.**

The **unemployed** and **economically inactive** are the poorest among the working-age population.

A majority of poor wage workers are engaged in **low-skilled or low-end service jobs.**

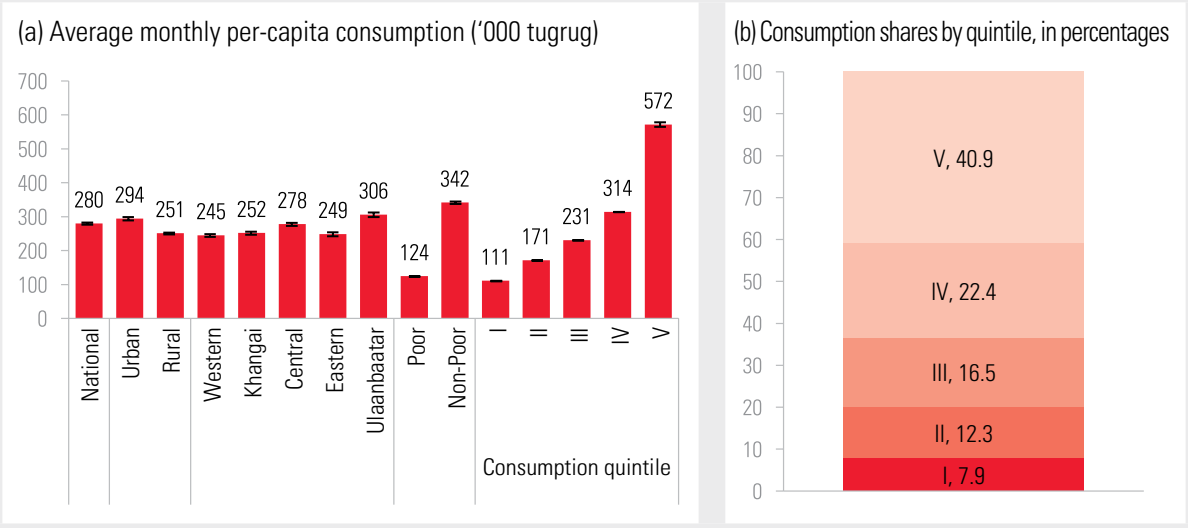
The poor have **limited** access to **productive** and **financial assets.**

This chapter presents the poverty profile of Mongolia in 2018 from the various key aspects such as consumption patterns, education, employment, asset base and basic service delivery.

2.1. CONSUMPTION PATTERNS OF THE POOR

Average per-capita consumption is almost three times higher for the non-poor compared to the poor. According to the 2018 HSES, the average monthly per-capita consumption of the non-poor was estimated at 342 thousand tugrug, while that was only 124 thousand tugrug for the poor, which is equivalent to 4,093 tugrug per day (Figure 2.1.1 (a)). Individuals in the richest quintile spend five times more than the amount spent by the poorest quintile. As a result, the richest quintile disproportionately dominate total consumption, accounting for 41 percent of total consumption, whereas consumption spending by the poorest quintile accounts for only 8 percent of total consumption (Figure 2.1.1(b)).

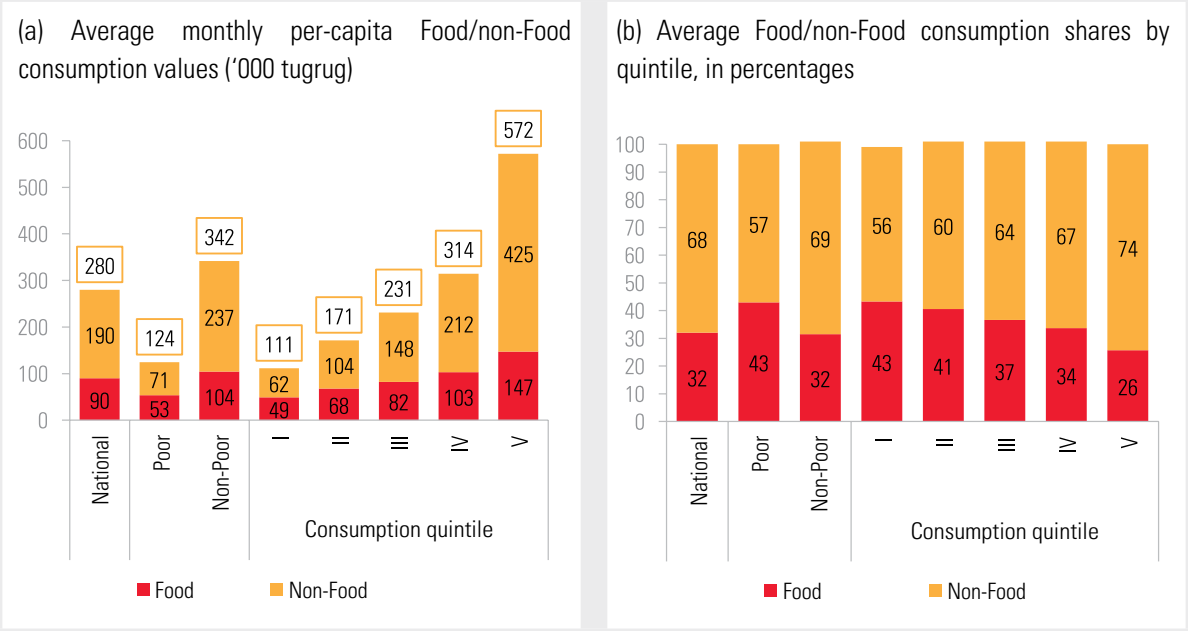
Figure 2.1.1 Average monthly per-capita consumption and consumption shares by quintiles, 2018



Source: HSES 2018

The poor tend to spend a larger share of their consumption on food. The average per-capita food consumption value for the poorest quintile is just one third of what individuals in the richest quintile spent (Figure 2.1.2(a)). In the relative terms, however, the share of food to the total consumption declines gradually as the living standards improve (Figure 2.1.2(b)). Individuals living in the bottom 20 percent of the consumption distribution devoted 43 percent of their total consumption to food while those in the top 20 percent spent about 26 percent.

Figure 2.1.2 Average monthly per-capita consumption and consumption shares by quintiles, 2018

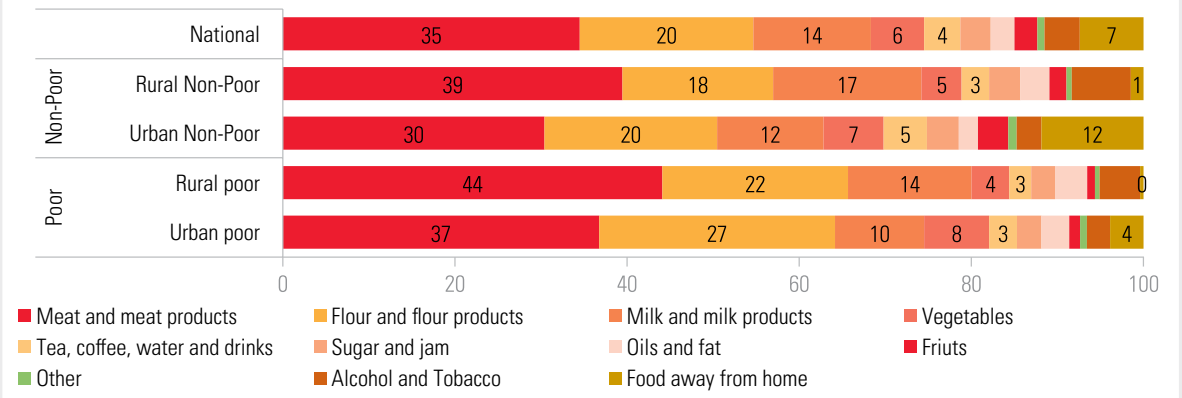


Source: HSES 2018

Note: Alcohol and Tobacco are included in food consumptions

Dietary diversity is limited among the poor, especially for those living in rural areas, where access to a variety of food items is limited. In Mongolia, the main food staples are meat, flour and dairy products. The poor spent nearly 80 percent of their food consumption on these products. The non-poor also spent the majority of their consumption on these staple items but at the same time are more likely to spend on a larger variety of food categories compared to the poor (Figure 2.1.3). The higher share of spending on "food away from home" among the urban non-poor population is likely to be reflecting the differences in lifestyle in urban areas, where more individuals work away from their homes, where restaurants and food stalls are easiliy accessible, and where people tend to spend more money at restaurants and/or on takeout.

Figure 2.1.3 Food consumption composition shares, 2018



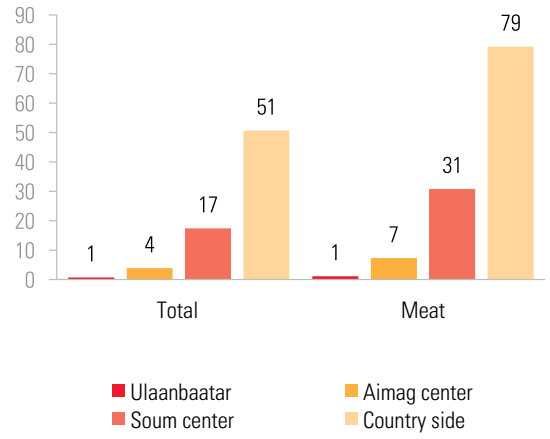
Source: HSES 2018

Note: Other includes fish and other seafood, pulse, and other food items.

The remote rural residents rely on half of their food consumption from their own production while the urban dwellers purchase almost all food items out of their pockets. In countryside, herders secure a large share of food consumption from their own production. For instance, nearly 80 percent of meat consumption comes from their own livestock production (Figure 2.1.4(a)). In contrast, urban residents who receive cash income from wage or business activities pay almost every food item for themselves, implying that they are more exposed to the risk of food price inflation than rural herders. Since 2016, food prices have significantly rebounded (Figure 2.1.4(b)), reaching 12 percent inflation (year-over-year) during the summer of 2018. The increase in food prices disproportionally affects the urban poor net food consumers who spend a greater share of their consumption on food, which is likely to have contributed to the stagnating urban poverty between 2016 and 2018. In turn, full-time rural poor herders, who diversify consumption less and fully depend on livestock activities benefitted from the recent food price increase, but this also means that herders could be extremely vulnerable to livestock price fluctuations. In addition, if a harsh winter (dzud) or any other natural disaster happens, it could have a profound impact on herders' well-being in all aspects including employment, income and consumption behavior. Without adequate safety nets, their welfare could be significantly reduced.

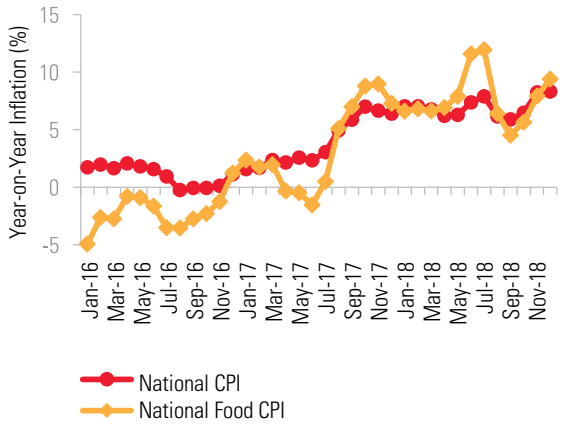
Figure 2.1.4 Own consumption shares in food consumption and food CPI trend

(a) % share of own consumption in household food consumption



Source: HSES 2018

(b) Food CPI inflation trend, 2016-2018



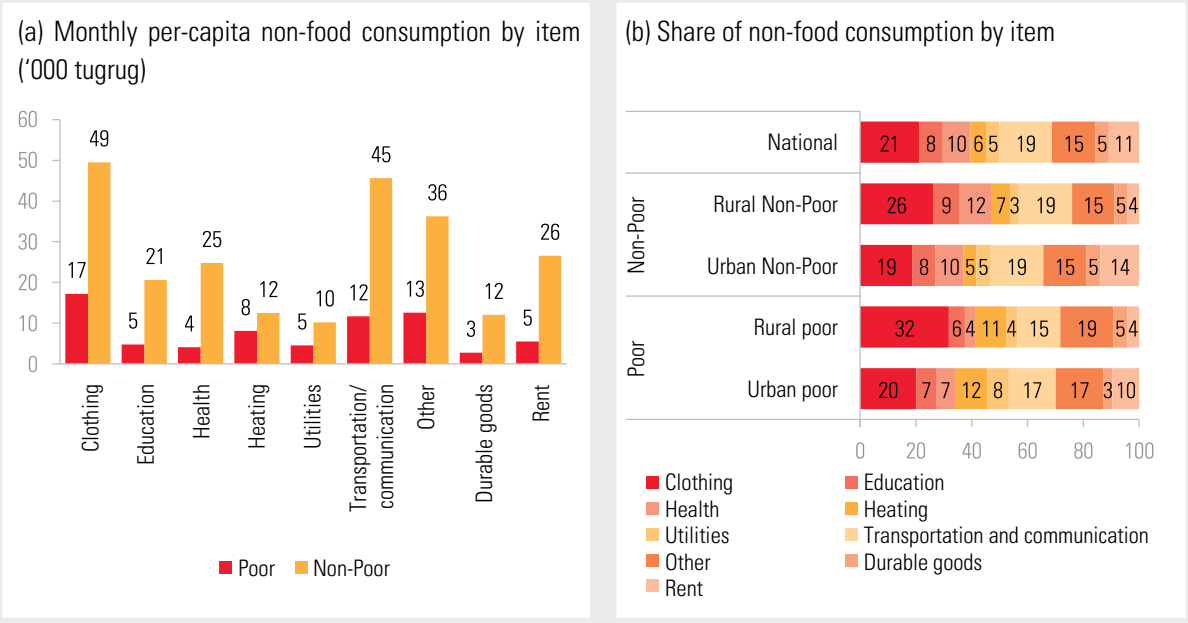
Source: NSO

There is a substantial divide in the amount of non-food consumption spending between the poor and the non-poor[10]. The non-poor spent about 3-6 times more than the poor across almost all non-food item categories, except for heating and utilities (Figure 2.1.5 (a)). Poor households tend to live in a dwelling with insufficient thermal insulation, which requires relatively more heating and utility usage to keep their home warm during the winter months. Indeed, the poor, on average, devoted 18 percent of their monthly non-food consumption toward these heating and utility elements while the non-poor spent 10 percent on these items. In addition, disparities seen in the health care expenditures across consumption quintiles can be attributed to differences in people's behaviour and preferences: when they are ill or injured, the non-poor are more likely to look for healthcare services, prefer private facilities over public and purchase more medicines and vitamins while the poor cannot afford to seek

10 In the 2018 HSES, more than 360 items are included in the non-food consumption module, including expenditures on clothing, transportation and communication, utilities and other non-food items. In addition, expenditures on education, health and heating, imputed rent and durables use values are separately computed from each module.

proper medical care services. As a result, the non-poor spent 6 times more than what the poor did, and the share of non-food expenditures devoted to healthcare exceeded 10 percent for the non-poor, while it dropped to 4-7 percent among the poor (Figure 2.1.5 (b)). Expenditures on other non-food categories such as education, transportation, durables and rent also rise substantially with total consumption. In rural areas, expenditures on clothes dominate for both poor and non-poor households, which is partly because rural households tend to spend more on necessities and do not have access to a wide range of non-food items.

Figure 2.1.5 Non-Food consumption composition, 2018



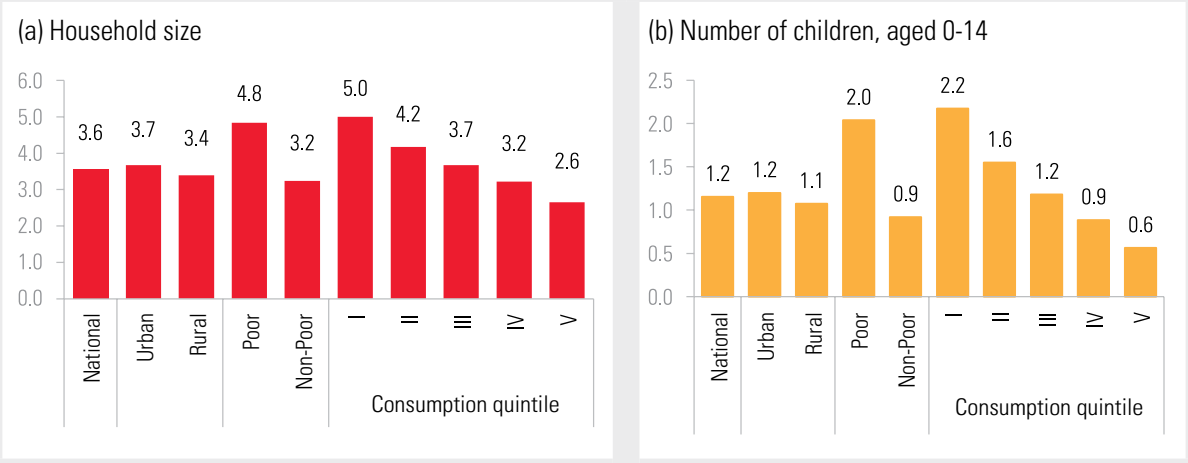
Source: HSES 2018

2.2. HOUSEHOLD DEMOGRAPHIC CHARACTERISTICS

Households with fewer members are more likely to be better off. The average household size for Mongolia in 2018 is about 3.6 people per household. For the poor households, it goes up to 4.8 people, while for the non-poor households it is 3.2 people (Figure 2.2.1 (a)). Household size differs significantly by consumption levels: the average household size of the poorest 20 percent is almost twice the size of the richest 20 percent.

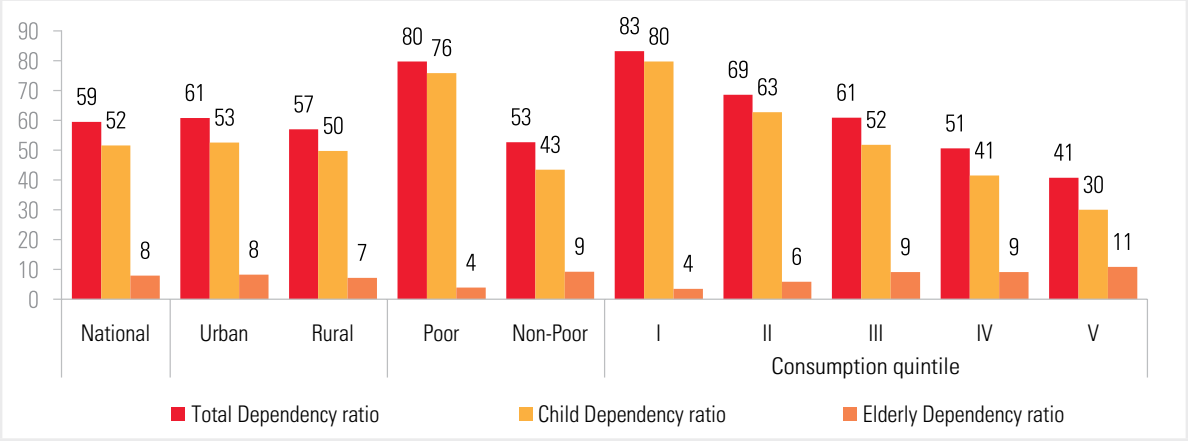
Poverty rises with the number of children and dependency ratio. The age structure of a household is also a key component of explaining poverty. Poor households tend to have more children (Figure 2.2.1(b)), which means that they have higher dependency ratios (Figure 2.2.2). This implies that these poor households are less likely to have adequate number of working-age members to support the dependents, especially children, in the household. With limited earnings and more dependents, they are more likely to have lower levels of per capita consumption compared to the non-poor.

Figure 2.2.1 Average household size, total and children, 2018



Source: HSES 2018

Figure 2.2.2 Dependency ratio, 2018[11]



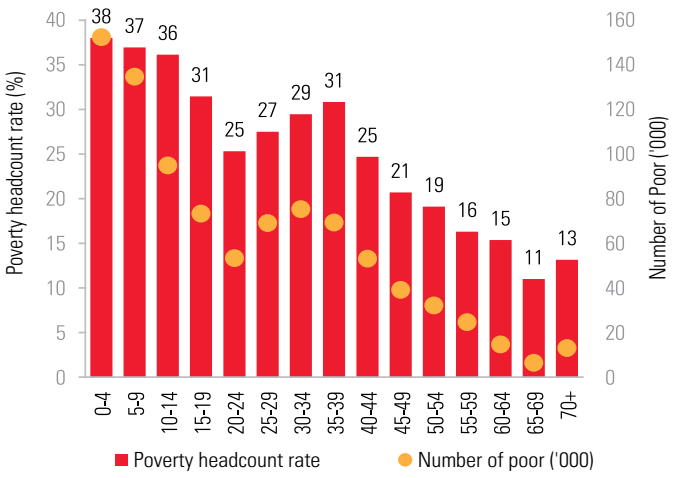
Source: HSES 2018

Consequently, childhood poverty is prevalent, particularly among young children: 42 percent of the total poor in Mongolia are children under the age of 15. Figure 2.2.3(a) shows the poverty headcount rates by age-groups. Children from all ages and younger adults (aged 30-39) are more likely to live in poverty than elderly adults. In particular, poverty rate is highest for children under the age of 5, with their poverty rate reaching 38 percent. Given the youthful demography of Mongolia, this means that one in six poor people in Mongolia are babies, toddlers or pre-school children (aged 0-4). At the household-level, households with multiple children (aged 0-14), especially those with 3 or more children, are much more likely to be in poverty compared to families without any children (Figure 2.3.3(b)). Similarly, households with younger household heads (age 30-39) and multiple children are more likely to struggle in poverty.

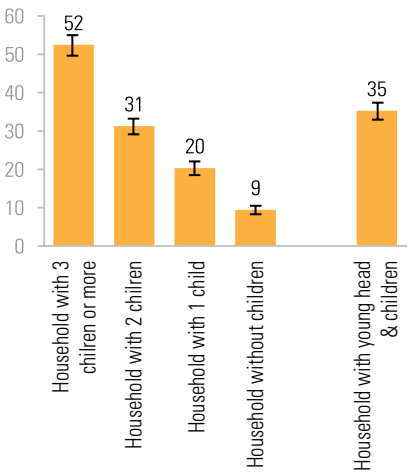
11 Dependency ratios represent the ratio of "dependents" per 100 working-age population. Total dependency ratio = (number of dependents (aged 0-14, 65 and older) / number of working-age member) *100. Child dependency ratio = (number of children (aged 0-14) / number of working-age member) *100. Elderly dependency ratio = (number of elderly (aged 65 and older) / number of working-age member) *100.

Figure 2.2.3 Poverty headcount rates by age-groups and number of children at household, 2018

(a) Poverty rate and number of the poor by age-group, 2018



(b) Poverty rate by number of children (age 0-14) at household, 2018

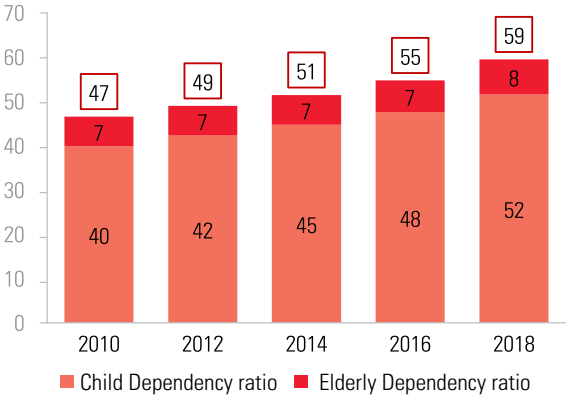


Source: HSES 2018

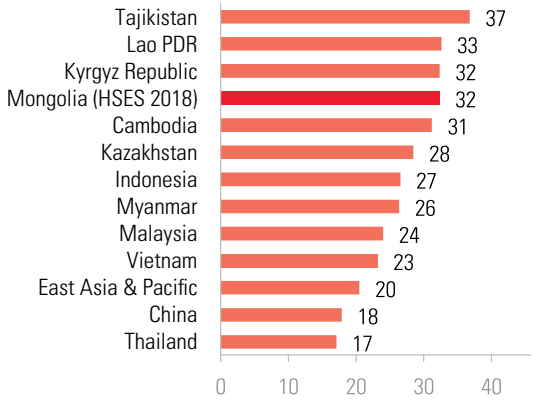
Mongolia has an abundant youth and child population, challenging the country to create more job opportunities and increase labor productivity. According to the HSES 2018, the median age of Mongolia in 2018 was 27 years old. Mongolia is one of the countries that have the highest share of child population to the total population in the region; the child dependency ratio has been continuously growing over time and now children (aged 0-14) make up a third of the population (Figure 2.2.4b). In the future, as more youth enter the labor force, Mongolia will need to create a sufficient number of job opportunities to absorb these new workers. To harness this "demographic dividend" opportunity for economic growth and poverty reduction, investment in the youth, particularly in education and job training to increase labor productivity, is critical.

Figure 2.2.4 Dependency ratios (2010-2018) and child population shares

(a) Dependency ratios, 2010-2018, from HSES



(b) % share of child population (age 0-14) in neighboring countries



Sources: HSES 2010-2018

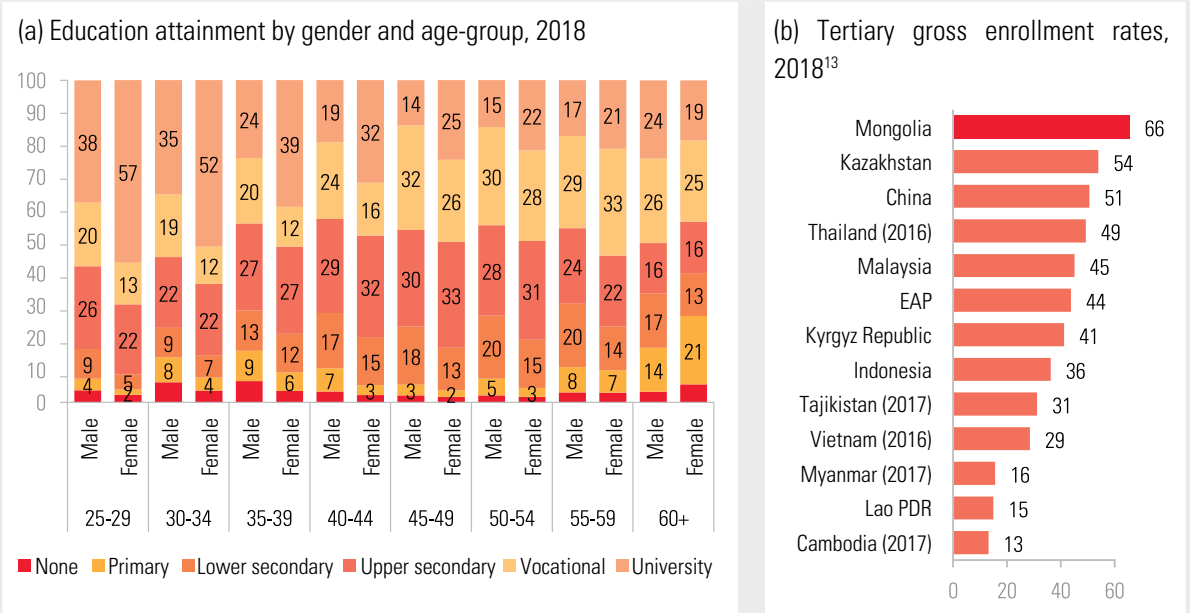
Sources: WDI and HSES 2018

Note: East Asia and Pacific excluded high-income countries

2.3. EDUCATION ATTAINMENT AND SCHOOL ENROLLMENT

Mongolia has achieved great progress in education, marking the highest education level for youth among neighboring countries. Figure 2.3.1(a) presents education attainment level for those aged 25 or older by age-group. For those aged 45 and older, less than a quarter have completed university or equivalent-level education, although the majority of them have completed upper secondary or vocational-level education. For the younger generations, university education is more common and is more relevant in obtaining better-paying jobs in the labor market. In particular, the college completion rate has been improving over the last two decades: in 2018, nearly half of those aged 25-29 have completed university or equivalent education compared to 20 percent for those aged between 45-49. As a result, the country has achieved the highest level of education among the youth in the region: the tertiary gross enrollment rate for Mongolia in 2018 was 66 percent compared to the regional average of about 44 percent[12] (Figure 2.3.1(b)).

Figure 2.3.1 Education attainment by age and gender and regional tertiary gross enrollment rate, 2018



Source: HSES 2018 *Source: WDI*

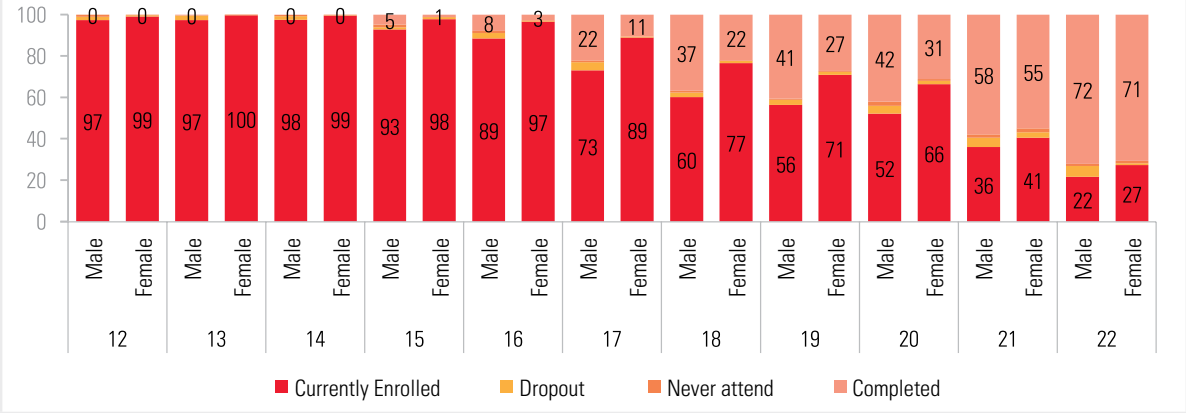
Note: Vocational represents technical vocational school, and University includes college, undergraduate and post-graduate education.

Women are more educated than men, but having a higher education does not promise girls better jobs. The gender gap in education has been more evident among the younger generations (Figure 2.3.1(a)). In 2018, 70 percent of women aged 25-29 completed tertiary education, while it was 58 percent for men. As presented in Figure 2.3.2, girls are more likely to study for longer in school than boys, which is likely to be linked to boys' earlier engagement in the labor market, especially in rural areas where access to post-secondary education is limited and children of herder families are involved in livestock responsibilities from an early age. At the age of 18, after they graduate from upper secondary school, 37 percent of boys consider that they have completed education while 22 percent of girls consider that to be the case. For girls, however, having a higher level of education does not necessarily mean that they have a greater chance of finding a better-paying job in the labor market. Nearly 40 percent of female aged 25 and above are economically inactive in Mongolia (See Section 2.4 for further discussions).

12 Regional EAP figure is based on developing East Asia and Pacific countries (2018).

13 Source: World Development Indicators (WDI): https://datacatalog.worldbank.org/dataset/world-development-indicators

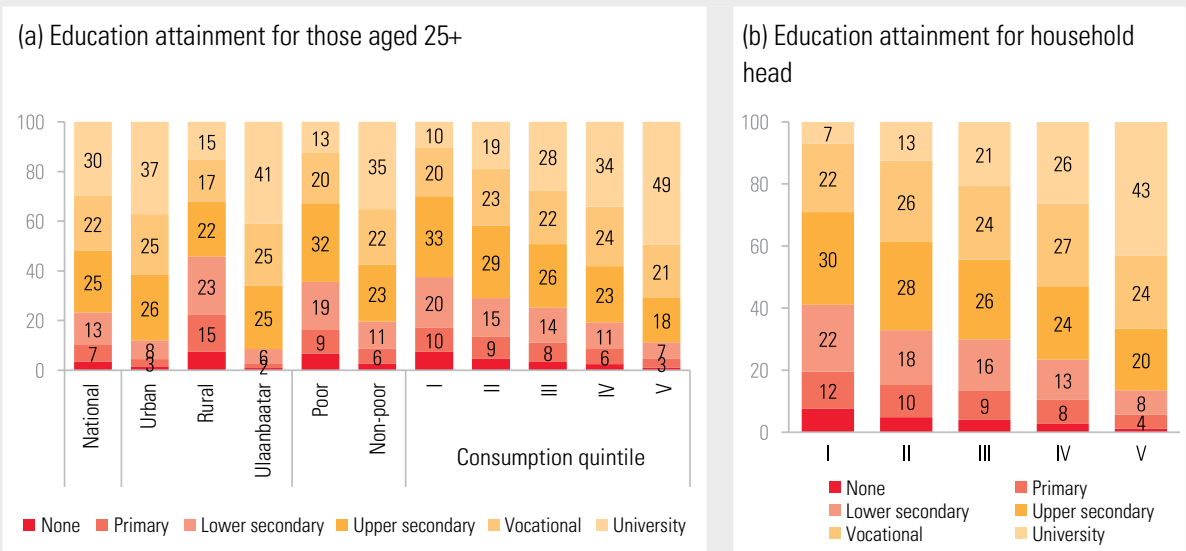
Figure 2.3.2 Share of school-enrollment rate by gender and age (12-22 years old), 2018



Source: HSES 2018

Disparities between the poor and non-poor households in education are clearly observed at the university level. The majority of poor people leave school at or below the upper secondary level and only one out of ten complete university or equivalent education, while nearly half of the population in the wealthiest quintile has a university diploma (Figure 2.3.3 (a)). Similarly, the level of education of the household head is associated with the poverty status of the household (Figure 2.3.3(b)). This is a clear indication that higher education is one of the most important human assets that can make a difference in individuals' income and/or consumption in their later life.

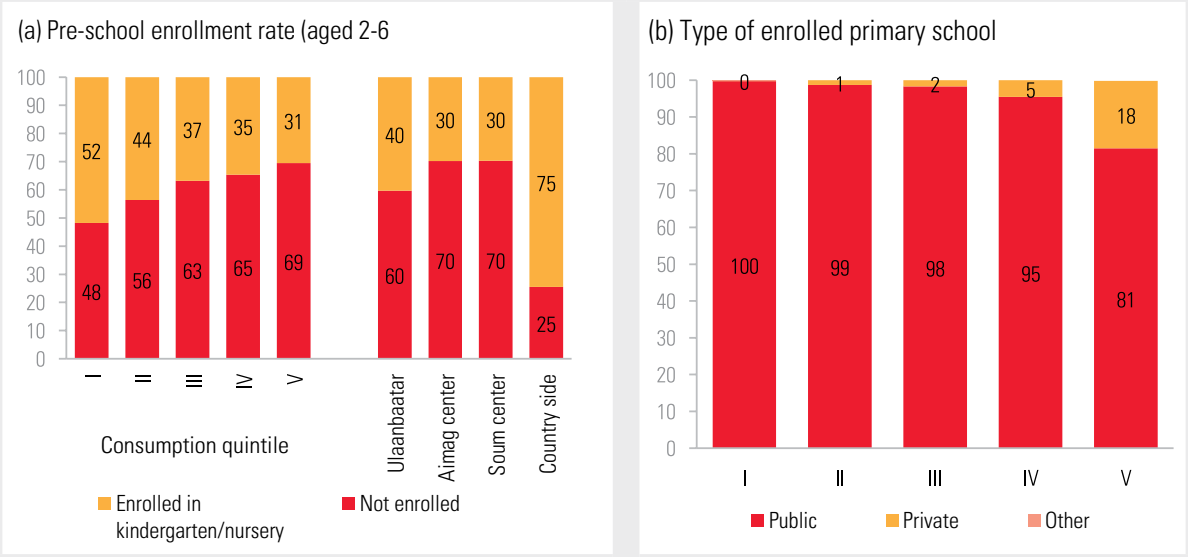
Figure 2.3.3 Education attainment for those aged 25 and above and for household head, in percentages, 2018



Source: HSES 2018

Children from better-off households are more likely to start school earlier and attend private schools. Pre-school enrollment rate for children aged 2-6 for the top 20 percent reached nearly 70 percent while it is less than 50 percent for the bottom 20 (Figure 2.3.4 (a)). Nearly one out of five children from the richest quintile are attending private primary schools (Figure 2.3.4(b)), signalling that wealthier parents pursue higher quality education services at private schools for their children and are starting to out of public education for private provision, despite the fact that most children still go to public schools. At the same time, children in remote rural areas (countryside) have difficulties attending pre-school or private school due to the unavailability of these facilities within commuting distance.

Figure 2.3.4 Pre-school enrollment and type of primary school, in percentages, 2018



Source: HSES 2018

2.4. EMPLOYMENT SECTOR AND STATUS[14]

Agriculture, mostly livestock and animal production, is the main source of employment for the poor in Mongolia. The HSES 2018 estimates that nearly one-third of workers in the poorest consumption quintile are engaged in agriculture as their main job[15], followed by construction (11.7 percent) and wholesale and retail trade (10.7 percent). Of those working in agriculture, 94 percent are engaged in livestock or animal production related jobs. The proportion of individuals engaged in agriculture declines monotonically across the consumption distribution: more than 30 percent of workers in the bottom 40 are working in agriculture as their main job, while less than 15 percent of individuals in the top quintile are engaged in agriculture. As households move up the consumption distribution, individuals are less likely to be engaged in agricultural activities and are more likely to be working in trade, education or other various services sector jobs.

Unsurprisingly, the concentration of agricultural employment varies considerably between urban and rural areas. The vast majority of workers in the countryside (89 percent) are primarily engaged in agricultural activities compared to less than 2 percent of workers in the capital city, where trade, manufacturing, construction and other service sectors dominate employment. Even in rural soum centers (district-level administrative center), 80 percent of workers are engaged in services or industry sector jobs: one in three workers in soum centers are employed in public administration, education or health services, while only one in five individuals are working in agriculture.

14 For official labor market statistics, please refer to those derived from the Labor Force Survey from NSO. The HSES 2018 does not include a sufficient number of questions to construct comparable indicators to the Labor Force Survey. In this report, the HSES employment module is used to show a profile of the poor and other important characteristics from labor market perspectives.

15 Main job in the HSES 2018 indicates the one most important job that individuals (aged 15 or older) worked for the past 7 days prior to the survey or the job that individuals worked in the last 12 months if she or he did not work in the past 7 days but worked in the last 12 months.

Table 2.4.1 Individual main sectoral participation by consumption quintile and location, in percentages, 2018

	National	Consumption quintiles					Location			
		I	II	III	IV	V	Ulaan-baatar	Aimag center	Soum center	Country side
Agriculture	24.0	32.5	30.2	25.8	22.4	14.3	1.7	8.0	20.1	88.8
Mining	5.8	5.3	5.1	5.6	5.9	6.6	5.7	8.8	8.2	1.2
Manufacturing	7.6	8.9	8.1	7.4	7.1	7.0	11.2	8.5	5.8	0.7
Electricity/water	1.9	2.0	1.6	2.0	2.0	1.9	1.7	3.8	2.4	0.1
Construction	7.4	11.7	8.0	7.1	6.2	5.8	11.2	8.7	4.1	1.2
Trade	13.5	10.7	10.8	11.6	15.5	17.1	19.7	16.4	9.4	1.4
Hotels, restaurants	3.6	4.9	3.9	3.9	3.0	3.0	5.2	4.1	2.9	0.5
Transportation	5.8	4.1	5.7	5.6	6.2	6.8	7.6	7.4	5.5	1.0
Financial, real estate	2.2	0.8	1.3	2.2	2.7	3.4	3.2	2.0	2.3	0.4
Public administration	7.2	5.2	6.6	7.6	6.9	8.7	7.4	9.5	10.9	1.5
Education	9.2	5.6	9.2	10.3	9.3	10.4	8.5	10.8	18.2	1.9
Health	4.0	2.2	3.1	4.4	4.7	4.6	4.4	5.1	5.4	0.9
Other	7.8	6.1	6.3	6.6	8.1	10.5	12.6	7.0	5.0	0.6
Agriculture	24.0	32.5	30.2	25.8	22.4	14.3	1.7	8.0	20.1	88.8
Industry	22.7	27.9	22.9	22.1	21.1	21.3	29.7	29.8	20.5	3.2
Service	53.4	39.6	46.9	52.1	56.5	64.5	68.6	62.2	59.5	8.0

Source: HSES 2018

There are stark gender differences in industry and services sector employment. Women are more likely to be engaged in wholesale and retail trade, hotels, restaurants, education and health sectors while men are far more likely to be engaged in physical labor-intensive industries such as mining, construction and transportation. As a result, women account for 75 percent and 81 percent of all workers in education and health sectors respectively, and more than 80 percent of all workers in mining, construction and transportation sectors are occupied by men[16].

Older workers are more likely to work in agriculture while younger workers are attracted by mining and construction jobs. Nearly one-third of workers aged 50 years old or over are engaged in agriculture compared to 23 percent for those aged 15-29. Meanwhile, compared to elderly workers, younger workers are more likely to work in mining or construction where it often involves heavy manual labor and young males can start a job relatively easily without a higher education diploma. 7 and 9 percent of those aged 15 to 29 are engaged in mining and construction sectors respectively, and 30 percent of all workers in mining and construction belong to this age group[17].

16 For the detailed results, see Annex D.

17 For the detailed results, see Annex D.

Table 2.4.2 Individual main sectoral participation by gender and age groups, in percentages, 2018

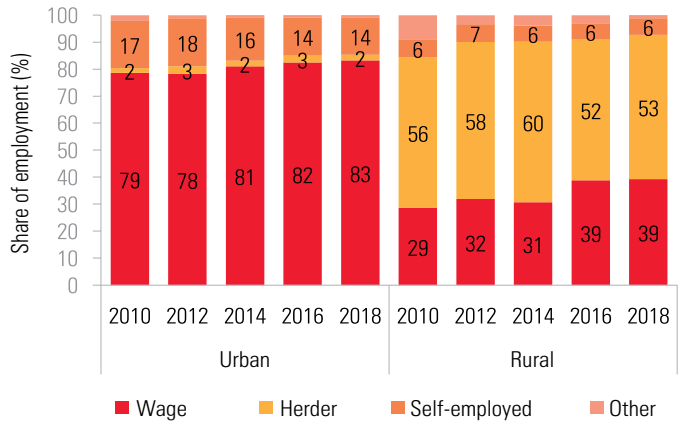
	National	Gender		Age group			
		Male	Female	15-29	30-39	40-49	50+
Agriculture	24.0	26.3	21.3	22.8	20.5	23.4	32.7
Mining	5.8	9.1	2.0	7.1	6.6	5.0	3.7
Manufacturing	7.6	7.1	8.2	7.8	8.3	7.7	5.9
Electricity/water	1.9	2.4	1.3	1.3	1.8	2.2	2.3
Construction	7.4	11.6	2.7	9.1	7.7	7.1	5.2
Trade	13.5	11.0	16.5	13.3	13.0	14.3	13.5
Hotels, restaurants	3.6	1.3	6.3	4.6	3.9	3.2	2.5
Transportation	5.8	8.8	2.4	4.1	6.5	6.9	5.3
Financial, real estate	2.2	1.7	2.9	3.3	2.9	1.2	1.0
Public administration	7.2	7.6	6.7	7.2	8.0	7.2	5.7
Education	9.2	4.4	14.8	7.4	9.6	10.4	9.2
Health	4.0	1.4	6.9	3.8	3.5	4.0	4.8
Other	7.8	7.5	8.1	8.1	7.6	7.4	8.1
Agriculture	24.0	26.3	21.3	22.8	20.5	23.4	32.7
Industry	22.7	30.2	14.2	25.3	24.5	22.0	17.1
Services	53.4	43.6	64.5	51.9	55.1	54.7	50.3

Source: HSES 2018

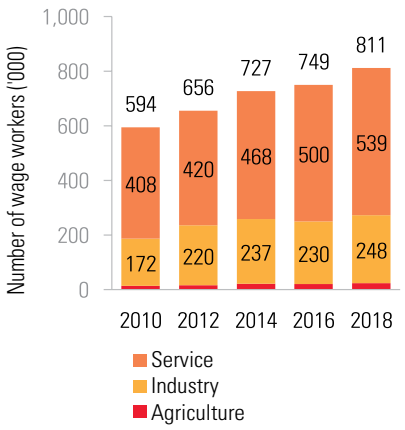
Between 2010 and 2018, the structure of labor market gradually changed with a rise in wage employment. A number of workers entered into wage employment between 2010 and 2018: the share of workforce who declared wage jobs as their primary type of employment has increased by 8 percentage points and in particular, the fraction of rural wage workers increased by 10 percentage points from 29 percent in 2010 to 39 percent in 2018 (Figure 2.4.1(a)). The rise of wage workers was mainly driven by new job opportunities in the services sector (Figure 2.4.2(b)). While sectoral shares of wage employment have little changed, services sector has absorbed additional 131 thousand wage workers (in net) between 2010 and 2018. Particularly, trade and public sectors accounted for about 40 percent of the newly added wage workforce during this period.

Figure 2.4.1 Individual's employment type and number of wage workers, in percentages, 2010-2018

(a) Share of employment type, 2010-2018



(b) Number of wage workers by sector ('000), 2010-2018



Sources: HSES 2010-2018

A considerable share of the poor relied on wage employment, but they are prone to being engaged in low-skilled jobs. About 60 percent of poor workers are working for wage employment in the non-farm sector (Table 2.4.3). In addition, 4 percent of those individuals are working as an agricultural laborer[18]. There is a gradual increase in the share of wage workers towards the top quintile, where 70 percent of workers are engaged in wage activities. Further looking at the occupation level among wage employees, there is a clear signal that the poor are more likely to work in low-skilled or low-end service jobs while close to two-thirds of employees in the top quintile are working for professional and technical positions (Figure 2.4.2 (a)). This is reflected in their average annual wage outcomes: 3,755 thousand tugrug for the bottom quintile compared to 8,781 thousand tugrug for the top quintile[19] (Figure 2.4.2 (b)).

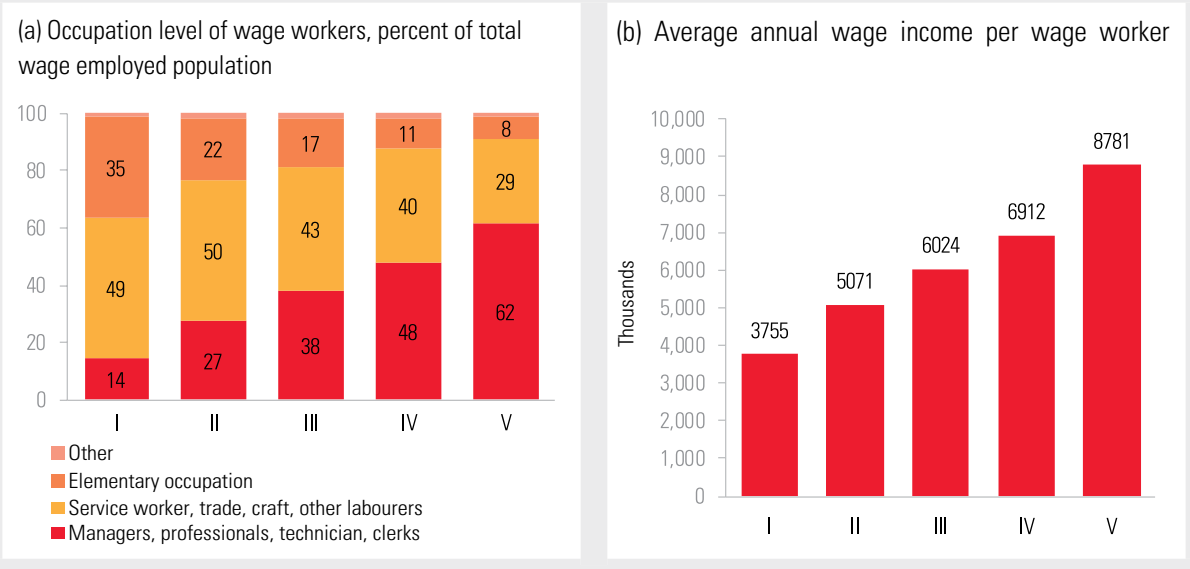
Table 2.4.3 Type of employment, in percentages, 2018[20]

	National	Consumption quintiles					Poverty Status	
		I	II	III	IV	V	Poor	Non- poor
wage	64.7	59.2	61.7	64.3	64.4	70.8	59.1	66.3
agricultural laborer	2.0	4.9	2.0	1.6	1.5	0.9	4.1	1.4
herder	21.4	26.9	27.8	23.7	20.4	12.6	27.7	19.6
self-employed	11.0	8.2	8.0	9.6	12.7	14.4	8.3	11.7
other	1.0	1.0	0.5	0.9	1.0	1.3	0.8	1.0

Source: HSES 2018

Note: Wage workers are divided into two types: (i) wage worker engaged in non-agricultural sector (wage) and (ii) wage workers engaged in agricultural sector (agricultural laborer). Other includes unpaid workers and self-employed crop farmers

Figure 2.4.2 Type of occupation-level among wage workers, average wage income, 2018



Source: HSES 2018

18 Wage workers in agricultural sector

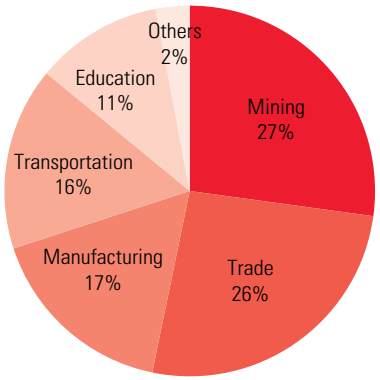
19 Annual wage represents a total monetary value of wage salaries, bonus and benefits (both in cash and in kind) from all wage jobs that an individual was engaged for the last 12 months prior to the survey. Note that some individuals have worked only for a certain period of time in the past 12 months.

20 Employment type is based on individual work type in the last 7-day reference period

Mining sector created a large number of jobs for 2016-2018 but given its capital-intensive nature, growth from mining was not broadly shared across other workers. Mining sector, the largest export sector in Mongolia, drove the recent economic growth, accounting for 33 percent of GDP growth for 2016-2018. During this period, of the 62 thousand new wage-paying jobs[21], 27 percent (17 thousand jobs) were created from the mining sector (Figure 2.4.3(a)). However, since mining projects tend to be capital-intensive, especially after its construction phase, it is less likely to continue to generate abundant job opportunities. In fact, the employment share of mining to the total employed population changed little over time, ranging between 4-6 percent for 2010-2018 (Figure 2.4.3(b)). From the occupation level perspectives, the majority of the mining employees are working for professional or plant operator jobs while only 17 percent are engaged in the low-skilled jobs (Figure 2.4.3(c)). It thus appears that growth from mining benefited a limited number of mining workers and were not widely shared among other poorer workers, whose wage income, on average, has been stagnant for the last 2 years.

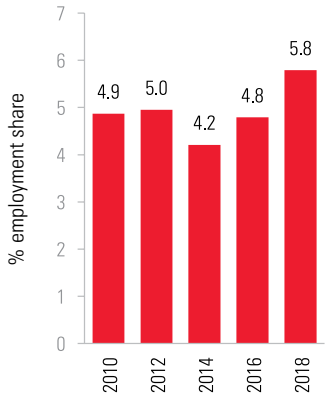
Figure 2.4.3 Job creation, employment share and occupation level in mining sector

(a) Sectoral shares of new wage employment during 2016-2018, in percentages



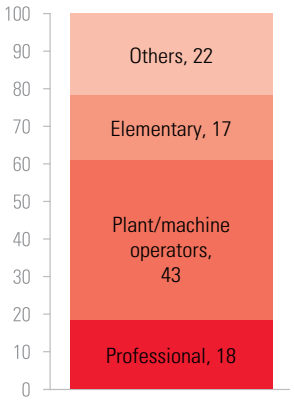
Sources: HSES 2016-2018

(b) Employment share of mining sector, in percentages, 2010-2018



Sources: HSES 2010-2018

(c) Occupation level of mining workers



Source: HSES 2018

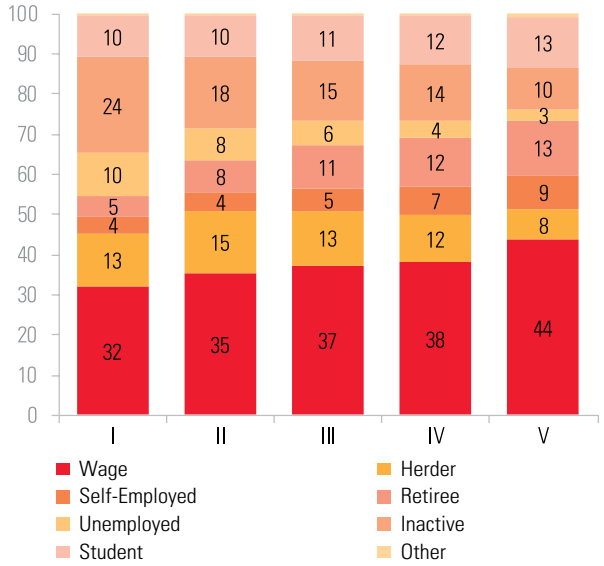
Note: Mining wage workers in 2018: N=1,222

Unemployed and economically inactive individuals have a greater likelihood of being poor. There is a notable difference in unemployment rate across the consumption distribution (Figure 2.4.4 (a), Table 2.4.4): unemployment rates are significantly lower in the top compared to the bottom quintile, 4.4 percent for the former compared to 17.3 percent for the latter. Similarly, the share of the individuals who are economically inactive except for retirees and students are disproportionally higher to the lowest consumption quintile. The poor, with low levels of human capital, are unlikely to be able to meet labor market needs for better-paying jobs and often face difficulties in finding a job. Being unemployed or economically inactive means no labor income, translating into lower consumption and greater chance for staying in poverty. In fact, of the working-age population (aged 15 and above), poverty headcount rates for the unemployed and inactive population are 40 and 34 percent respectively, significantly higher than that for the employed or retired persons (Figure 2.4.4 (b)).

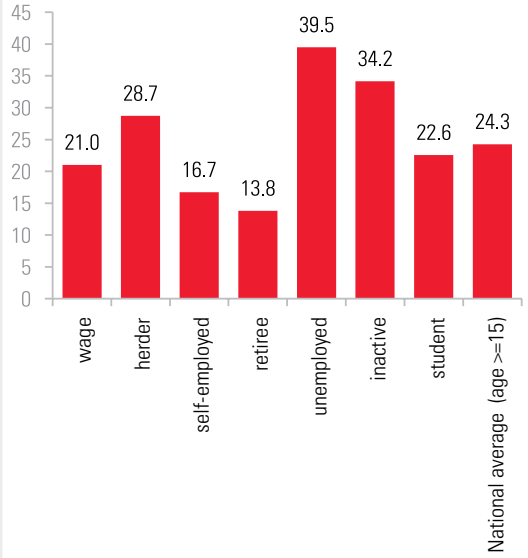
21 Net figure. The number of wage employment increased by 62 thousand persons between 2016 and 2018.

Figure 2.4.4 Poverty headcount rate by employment status, in percentages, those aged 15 and over

(a) Distribution of employment status by quintile for those aged 15+, in percentages, 2018



(b) Poverty headcount rate by employment status for those aged 15+, in percentages, 2018



Source: HSES 2018

Note: Retirees are those who are economically inactive and aged 60 and over. Students are those of aged 15 and over and being economically inactive but currently enrolled in school. Inactive are those who are economically inactive but not classified as retirees or students. National average represents a poverty headcount rate for the working-age population (aged 15 and above).

Geographically, higher participation rate in the labor force with low unemployment rate is observed in the herder-dominated countryside. In Countryside where the majority of workers are traditional self-employed herders or agricultural laborers, they work throughout the year to take care of livestock animals. Also, women can more easily combine domestic chores and livestock work at home. As a result, the unemployment rate is considerably lower and labor force participation is significantly higher in the countryside, whereas labor force participation and unemployment rates show little variation across the other three residential locations (Table 2.4.4).

Table 2.4.4 Labor force participation by consumption quintiles and locations (for those aged 15 and over), 2018[22]

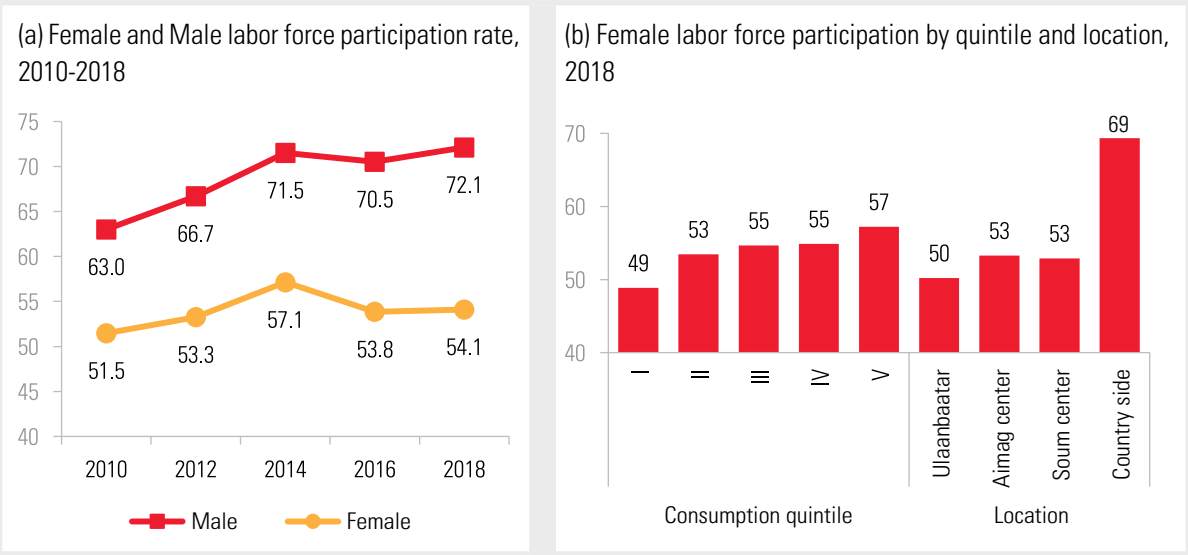
	National	Consumption quintiles					Location			
		I	II	III	IV	V	Ulaanbaatar	Aimag center	Soum center	Country side
Unemployment rate	9.5	17.3	12.2	9.8	6.7	4.4	9.6	12.8	12.4	3.4
Labor force participation rate	62.6	60.4	63.4	63.1	61.9	63.5	59.2	61.0	60.9	76.1
Employment to population ratio	56.6	50.0	55.7	56.9	57.7	60.7	53.6	53.2	53.3	73.5

Source: HSES 2018

22 The working-age population is those aged 15 and over. The labor force comprises those who are employed and those who are unemployed during the recall period (last 7 days). Inactive persons are not considered as part of the labor force. Labor force participation rate represents a fraction of the population participating in the labor force. Unemployment rate is derived by dividing the number of unemployed persons by the total population participating in the labor force. Employment to population ratio is computed by dividing the number of employed individuals by the total working-age population.

There has been a persistent and substantial gender gap in labor force participation. In 2018, according to the HSES, female labor force participation was 54 percent compared to 72 percent for males (Figure 2.4.5 (a)). A similar trend was seen in the national labor force survey, where male labor force participation rate was at a historic high of 69.5 percent in 2018 but female labor force participation has remained at around 54 percent for the last 2-3 years. Lower labor participation rates reflect in part a trade-off between household and market work: women in Mongolia are the primary caregiver for children as well as the primary household member responsible for other domestic work. Gender norms related to household work typically reduce the amount of time that women can devote to labor market activities and impact the type of labor market activity that they can be involved in (World Bank, 2018)[23]. It appears that wealthier females are more likely to participate in labor force, partly because female workers from the better-off households can more easily afford childcare services and their high education and skillset can meet the labor market needs for better-paying jobs (Figure 2.4.5 (b)). Likewise, in the countryside, female participation tends to be high since they can do agricultural work and meet family responsibilities at home. In contrast, in the urban cities where industry and services sectors dominate, female participation is lower, in part because many services and industry-sector jobs are located away from home and are difficult to combine with family responsibilities. Even when women can find a job, they are more likely to be engaged in low-paying service jobs, typically in trade and public sectors. The average annual wage income that female workers can earn (5,900 thousand tugrugs) is 18 percent lower than what the male receives (7,000 thousand tugrugs).

Figure 2.4.5 Female and Male labor force participation rate, in percentages



Source: HSES 2010- 2018

Source: HSES 2018

2.5. LIVESTOCK FOR HERDER FAMILIES

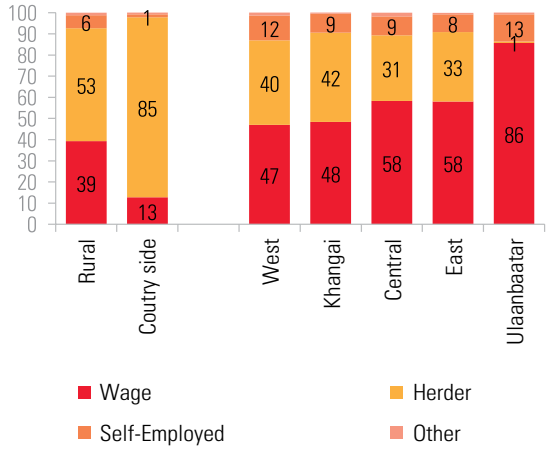
Livestock is an important form of asset accumulation for herders. Livestock plays multiple roles in the livelihood of rural herders. For instance, it could be a source of employment and income and used for their own consumption as well as a buffer or insurance when a household is unexpectedly hit by a shock. According to HSES 2018, in Mongolia, one in two rural workers are involved in some form of livestock activities, with most of the herders living in the countryside. Overall, livestock-related activities are prevalent across all regions, except for the capital city (Figure 2.5.1(a)).

23 World Bank (2018) "Perceptions of precariousness: a qualitative study of constraints underlying gender disparities in Mongolia's labor market"

Herder families used to be the poorest, but now a third of them live in poverty. In 2010, 58.4 percent of individuals in households whose head is a herder were poor, but increasing livestock product demand and prices, better connectivity to markets, government subsidies and public transfers improved herders' welfare. Consequently, the poverty headcount rate for those in the herder households reduced to 33.2 percent in 2018 and the gap to the national poverty rate narrowed significantly by 14.8 percentage points between 2010 and 2018 (Figure 2.5.1 (b)).

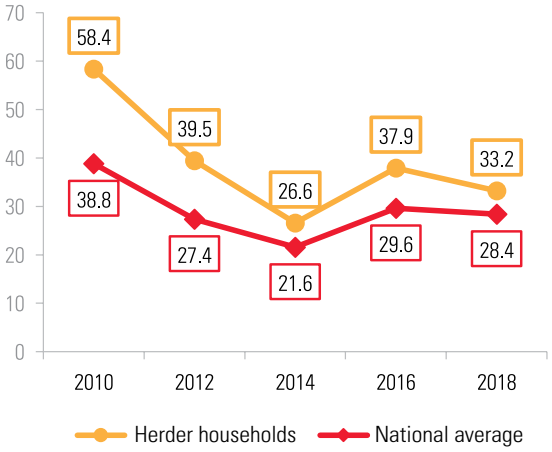
Figure 2.5.1 Herders' employment and poverty rate, in percentages

(a) Share of herders by location and region, percentage of total employed population



Source: HSES 2018

(b) Poverty headcount rate for those whose household head is herder, in percentages, 2010-2018



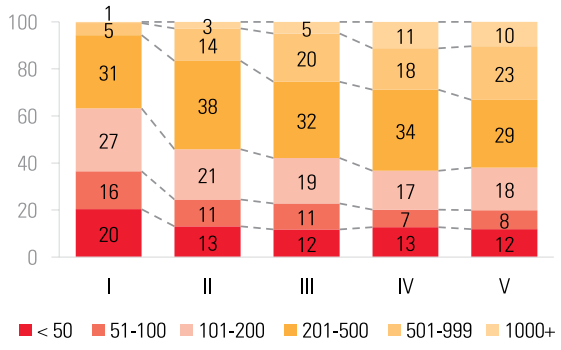
Sources: HSES 2010-2018

The size of livestock herds is associated with the household's welfare level. As presented in Figure 2.5.2 (a), a clear distinction in the number of animal holding can be seen across the consumption distribution: 63 percent of the poorest herder households own less than 200 heads of livestock animals while that figure goes down to 45 percent and 38 percent in the second poorest quintile (II) and top quintile (V) respectively, and wealthier households are more likely to manage large-scale livestock farming, with one in three herder households in the top 20 owning more than 500 livestock animals. According to Mongolia's previous livestock study (World Bank, 2009), herders with 500 or more animals are more integrated in the market and can manage production capacity relatively quickly and easily respond to market needs, whereas herders with fewer than 200 animals have limited access to market sales and are highly vulnerable to harsh winters (dzud).

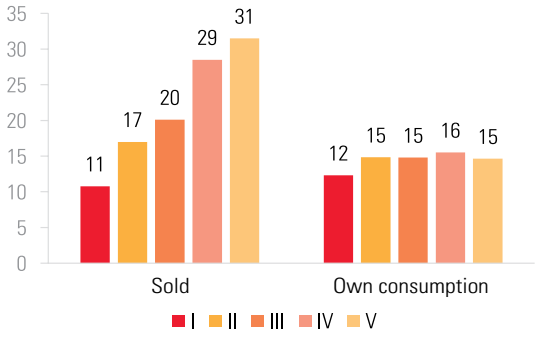
For poorer households, livestock is more likely to be kept for their own consumption and less likely for market sale. Herder households in the bottom quintile slaughter slightly smaller amounts of their livestock animals for their own consumption compared to households in other quintiles, but the number of animals that the poorest herder households sold was much fewer than others, selling just a third of what those in the richest quintile sold (Figure 2.5.2 (b)). This indicates that the poorest smallholder households do not own a sufficient number of livestock for trade and many of the livestock are devoted to their own consumption rather than earning cash income from sale.

Figure 2.5.2 Livestock ownership and sales/consumption among herder households, 2018

(a) Number of household livestock animals' ownership by quintile, 2018



(b) Average annual number of livestock sold or consumed by quintile, 2018



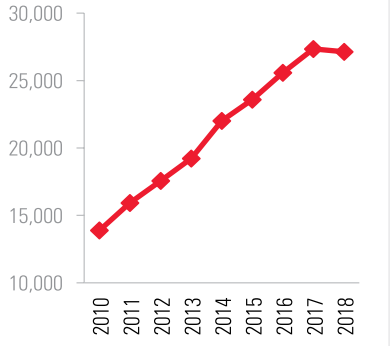
Source: HSES 2018

Note: Include households who own at least one livestock animal.

Cashmere is the most important source of income from animal production and its increasing market price has brought income growth for rural herders. Raw cashmere is one of the nation's largest export products after mineral products[24], and the number of goats is fast-growing, reflecting an increasing global demand for cashmere. (Figure 2.5.3 (a)). Herder households, on average, receive 71 percent of their household animal production income from cashmere production[25]. In 2018, there was a huge price increase in cashmere: the national average cashmere price reached 90,000 tugrug per kg at the peak of cashmere harvest in the spring of 2018 and the annual average price went up to 78,000 tugrug per kg, which is more than 95 percent higher than the average price in 2016 (Figure 2.5.3 (b)). Despite the production capacity differences that exist between consumption classes (Figure 2.5.3 (c)), it appears that this cashmere price increase benefited all cashmere producers, driving the robust poverty reduction in rural areas between 2016 and 2018. On the back of increasing global demand in cashmere, however, rapidly growing goat herds could advance the degradation of pastures, which might negatively affect the sustainability of herders' livestock activities and welfare.

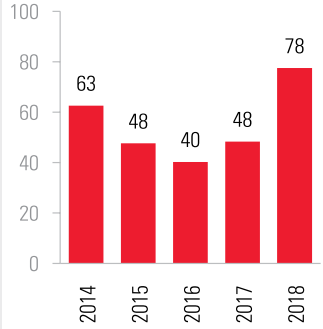
Figure 2.5.3 Trend of cashmere price and production

(a) Total number of goat, 2010-2018



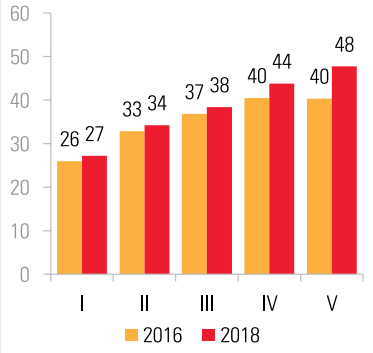
Source: NSO, Livestock Census

(b) Average national cashmere price ('000 tugrug per kg), 2014-2018



Source: NSO, Livestock Census

(c) Average annual household production of cashmere (kg) by quintile, 2016 and 2018



Sources: HSES 2016-2018

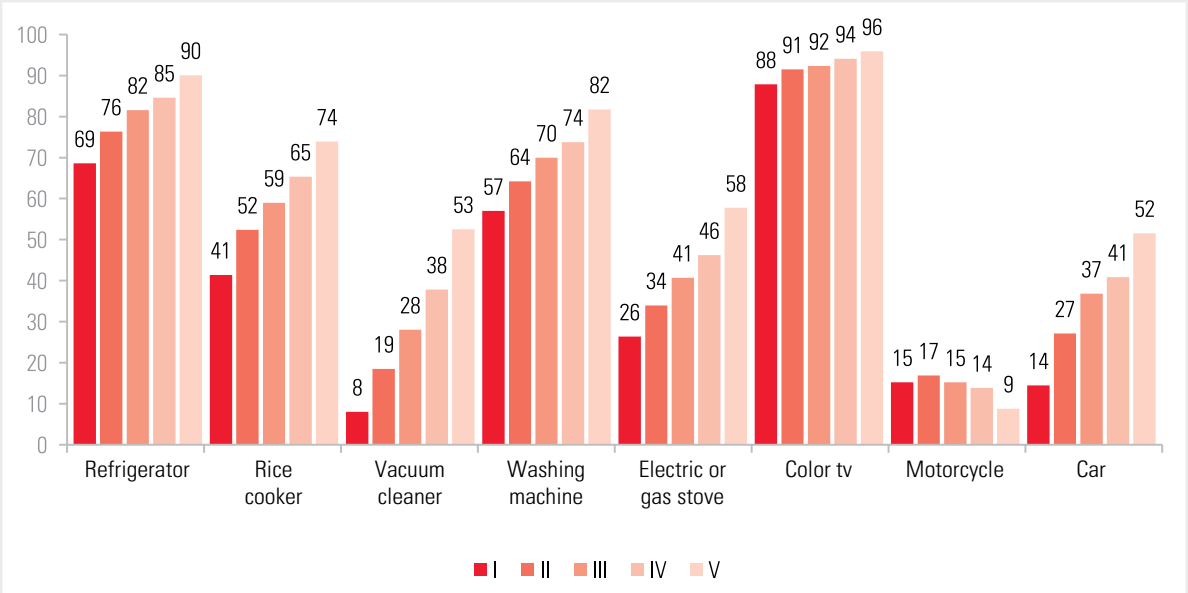
24 Source: Ministry of Finance, export revenue in 2018. Cashmere is ranked after coal, copper ore, crude oil, and iron ore.

25 Household animal production income is total gross sales values of animal products such as wool, cashmere, hair, skins and dairy products and it excludes own consumption values.

2.6. HOUSEHOLD DURABLES AND FINANCIAL ASSETS

Better-off households are starting to have more luxury home amenities and vehicles while the poor only own a limited number of basic durables. The ownership rate of electric home amenities is increasing with consumption level, mirroring their high connection rate to public grid electricity. The vast majority of households in the richest quintile own a refrigerator, washing machine and rice cooker and more than half of them own at least one car at home, reflecting their larger spending of disposable incomes on durables; the value (use value) of durables in consumption aggregates for the non-poor is, on average, five times higher than that of the poor. By contrast, many of the poor only own durables that are considered more essential such as color tv and basic furniture. In particular, the ownership of motorcycles and cars among the poor is low (only 15 percent and 14 percent, respectively), which indicates that most of the poor have to rely on public transportation.

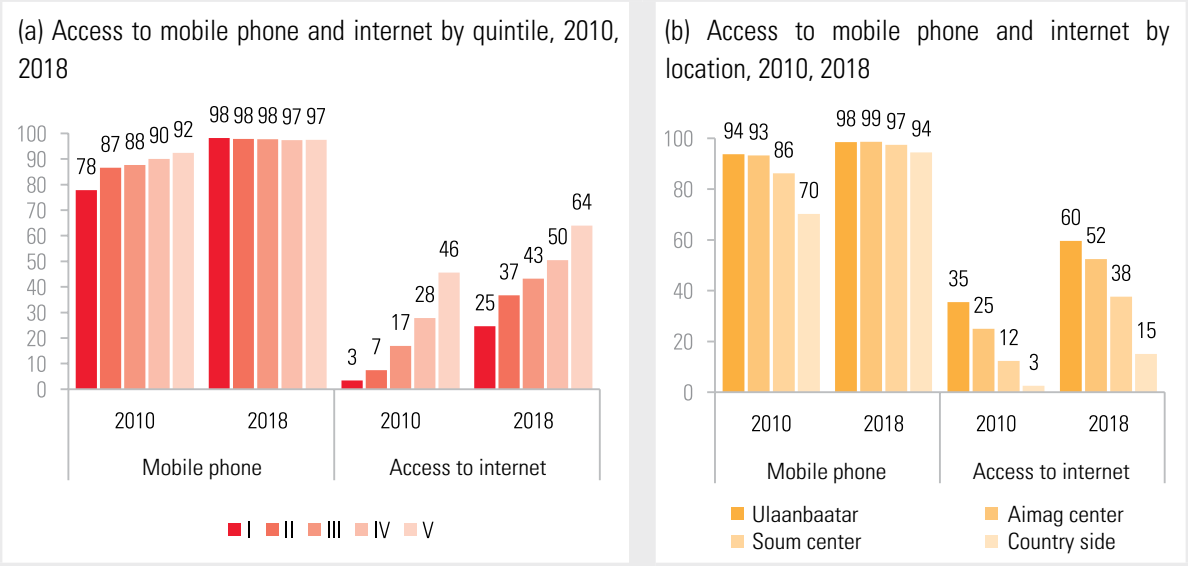
Figure 2.6.1 Ownership of household durables by quintile, in percentage of households, 2018



Source: HSES 2018

Richer households also have increasing access to more sophisicated technology and information, while the poor and those living in remote rural areas continue to struggle with accessing the internet. Between 2010 and 2018, mobile phone ownership among the poor and those living in the countryside improved (Figure 2.6.2): in 2010, access to mobile phones for the poorest quintile and those living in the remote rural areas (countryside) were lagging from others, but in 2018, almost every household including the poor and rural residents in Mongolia has at least one mobile phone at home. Yet, access to the internet and computers are still uncommon among the poor and rural households: in 2018, only one out of four households in the bottom quintile have access to the internet while nearly two-thirds of the richest households are connected to the internet. At the same time, residents in the countryside are significantly lagging from other areas in the internet access. The digital divide might prevent poor and rural children from gaining exposure to ICTs and opportunities for learning, connecting, and sharing information.

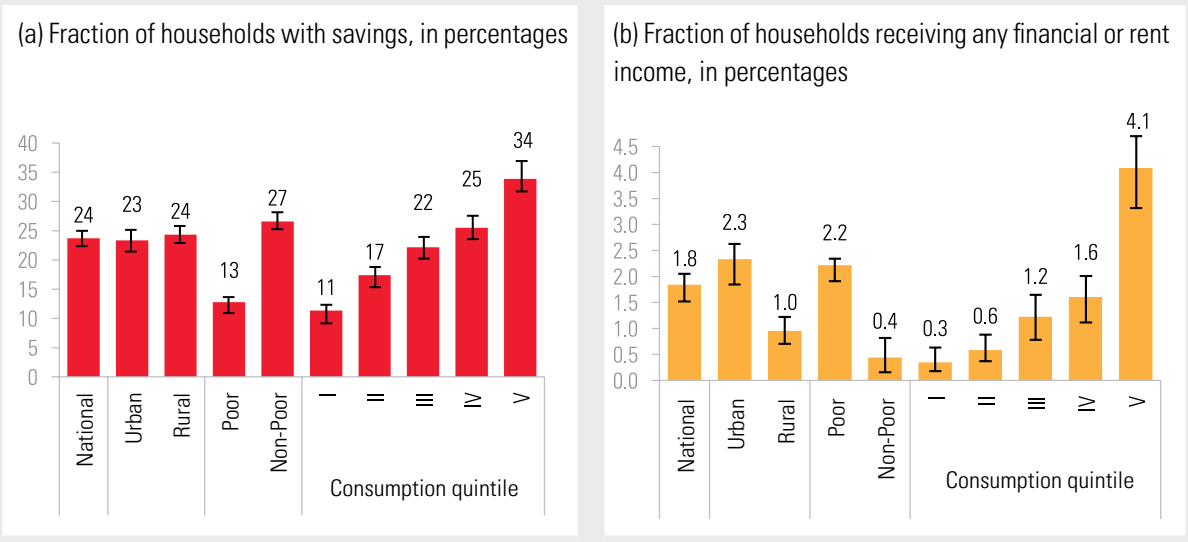
Figure 2.6.2 Access to technology and information, in percentage of households, 2010 and 2018



Source: HSES 2010, 2018

Wealthier households have better access to financial markets, earning interest and other investment returns. According to the HSES 2018, in Mongolia, one in four households have some sort of savings[26]. Households in the highest quintile are three times more likely to have savings compared to those in the bottom quintile (Figure 2.6.3 (a)). There are also significant differences in the amount deposited by quintiles: for households that have made at least one deposit in the last 12 months, households in the richest quintile deposited 2,348 thousand tugrug, on average, which is nearly double the amount deposited by the poorest households (1,217 thousands tugrug). Also, there is a limited number of households who make financial investments in Mongolia. Only a few wealthy households (4.1 percent in the top quintile) earned financial or investment returns for the last 12 motnhs (Figure 2.6.3 (b)).

Figure 2.6.3 Share of the households with savings and any financial income, 2018



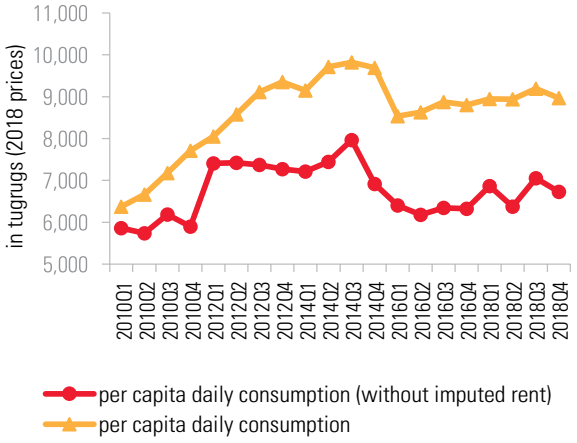
Source: HSES 2018

26 The HSES 2018 asked whether households have any savings but did not ask whether households have a savings account at financial institutions

In order to cover their daily needs, the poor tend to be in need of additional money from others. Figure 2.6.4 (a) shows the quarterly trend of daily per-capita income and consumption. The consumption level has continued to move in the same direction as income, especially after the economic recession hit in 2016. Looking at the consumption-to-income ratio by consumption classes (Figure 2.6.4 (b)), the wealthier households, on average, spent 60 percent of their total income on consumption, meaning that they would be able to save the rest if they own a house without any mortgage left. Also, they appear to be able to smooth their consumption over time, even in the face of economic downturns. By contrast, households in the bottom 20 percent with little ownership of marketable assets and limited access to financial services are less likely to be able to cover their daily consumption with their earnings, implying that the poor is in need of extra money to be obtained from borrowing or other sources.

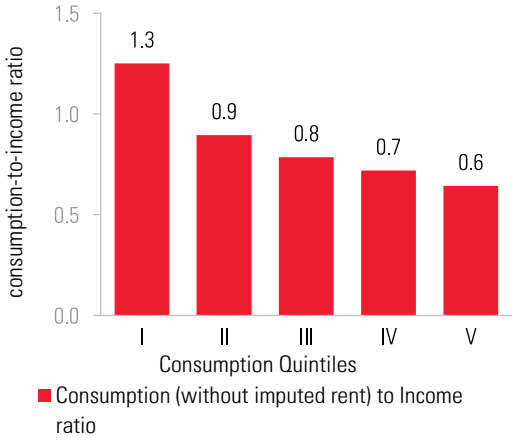
Figure 2.6.4 Comparison of consumption and income[27]

(a) Average per capita daily consumption and income (in 2018 prices) for 2010-2018



Source: HSES 2010-2018

(b) Consumption to Income ratio by consumption quintiles, 2018



Source: HSES 2018

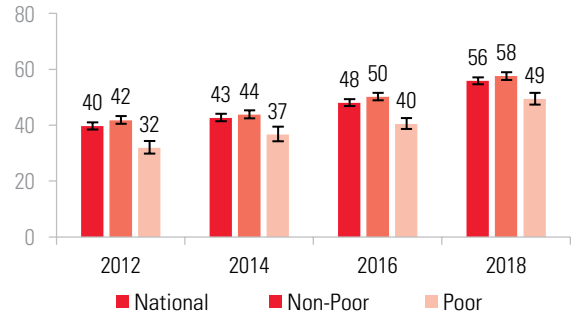
Loans are becoming increasingly available for all households, including the poor. The proportion of households who have a loan has been increasing over time, particularly since 2012 when the subsidized mortgage program was introduced by the Bank of Mongolia (Figure 2.6.5 (a)). Following the mortgage boom, several stimulus measures on loans were introduced, contributing to the robust growth of non-mortgage consumer credit for the last couple of years[28]. According to the HSES, in 2012, only one in three poor households were able to get loans, but that figure increased up to nearly half of the poor in 2018, and the majority of them received loans from formal financial institutions (Figure 2.6.5 (b)).

27 Since nearly 98 percent of total households in Mongolia own their dwellings, consumption excluding the imputed dwelling values is used in this consumption-to-income comparison analysis. Durables use value is included in consumption aggregates but if excluding it, the consumption to income ratio for the lowest quintile could be 1.1. Own consumption is included in both income and consumption aggregates. Components of Income aggregates are described in more details in Chapter 3.

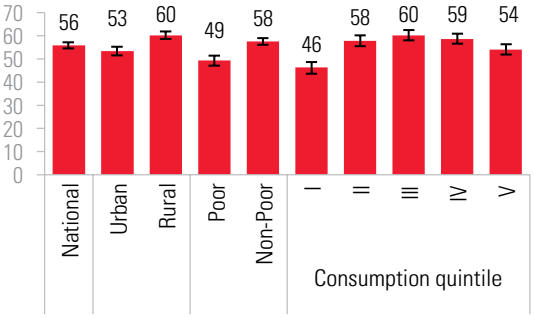
28 For example, interest rate ceiling for pension loan was set below market rates to reduce burdens on the elderly. See more details in World Bank (2020), "Mongolia Economic Update"

Figure 2.6.5 Access to loans

(a) Fraction of households with loan for 2012-2018



(b) Fraction of households with loan in 2018, in percentages



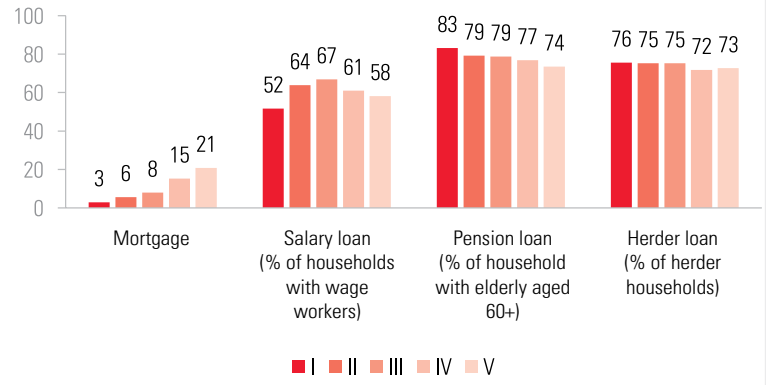
Source: HSES 2012- 2018

Source: HSES 2018

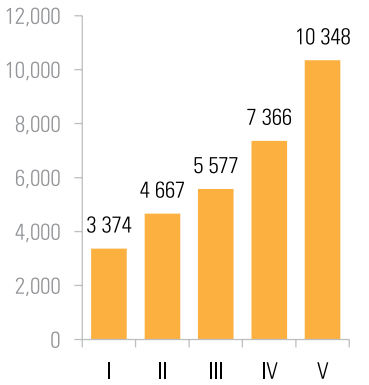
Despite the improved loan access to all households, the types of loans available and size of these loans differ by consumption levels. Pension, herder and salary[29] loans are the most popular types of loans (Figure 2.6.6 (a)): about 74-83 percent of households with elderly members (aged 60 or more) have pension loans, more than 70 percent of herder households receive herder loans, and more than half of households with wage workers get salary loans. These types of loans are broadly popular regardless of household welfare level. By contrast, mortgage loans are more likely to be accessible to the non-poor who have a longer credit history and collaterals: 21 percent of the richest quintile have mortgage loans whereas this figure is only 3 percent for the poorest households. The purposes of taking out loans are also different between the poor and non-poor. The poor households are more likely to seek loans for smoothing their household consumption while the non-poor tend to use loans for purchasing marketable or productive assets such as houses, durables, and cars. The size of the loans that households have received during the last 12 months appears to reflect the difference in these credit statuses and loan uses: the average amount of loans received by households in the top quintile is about three times larger than what the poorest households received (Figure 2.6.6 (b)).

Figure 2.6.6 Loan ownership and the average loan amount

(a) Loan ownership by type, in percentage of households, 2018



(b) Average amount of loan received in the past 12 months, in '000 tugrug, 2018



Source: HSES 2018

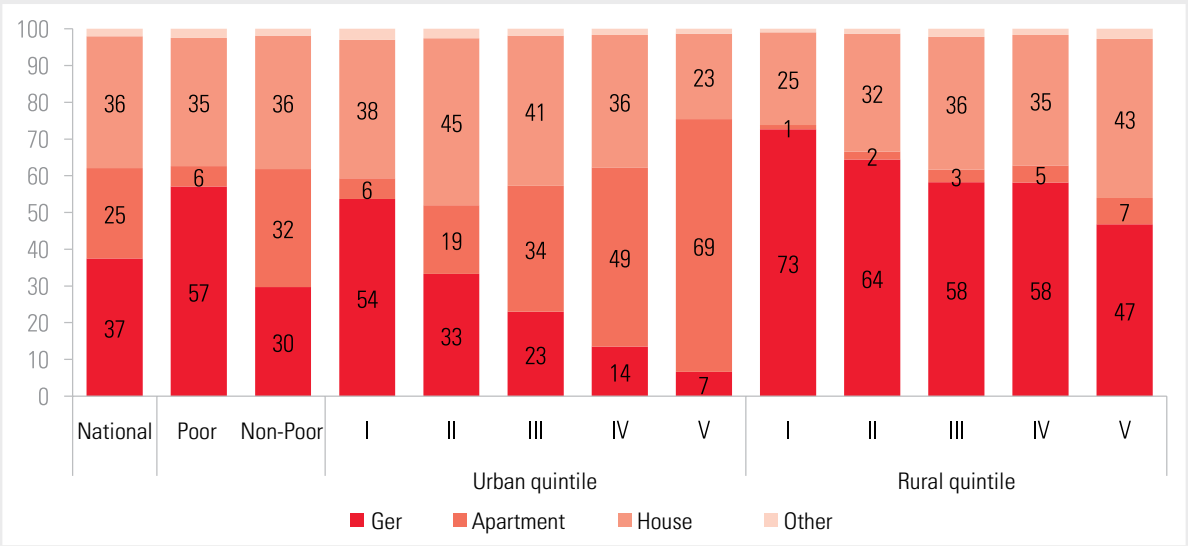
29 Pension loan is a consumer loan by commercial banks to pensioners collateralized by their future pensions. Salary loan is a loan that employees with salary account can obtain quick and temporary cash advance and repay through salary deductions.

2.7. HOUSING AND ACCESS TO BASIC SERVICES

Dwelling is one of the important factors in determining the primary environment of individuals encompassing basic human needs, healthy and safe living, and is one of the key indicators of people's well-being.

While considerable geographic differences exist in household dwelling types, the majority of poor people, both in rural and urban areas, live in gers. In Mongolia, the ownership rate of the dwelling exceeded more than 98 precent. In the urban areas, as presented in Figure 2.7.1, most of the poor live in gers or detached houses which are poorly insulated. However, people are starting to live in apartments with better thermal insulation as they get wealthier: in the top urban consumption quintile, nealy 7 out of 10 people live in an apartment, compared with only 6 percent of the poorest quintile. By contrast, in the rural areas, most of households live in either gers or houses, depending on the remoteness of their residential location and occupation, and the proportion of households who live in a house increases as consumption rises.

Figure 2.7.1 Share of Housing type, in percentage of total population, 2018



Source: HSES 2018

Quality of life improves with the provision of basic infrastructure services such as safe water sources, improved sanitation and reliable energy source. Unsafe water and sanitation facilities could increase the risk of disease outbreaks which negatively affects household welfare. Likewise, unstable and non-reliable supply of electricity could limit children's study and adults' work time at home past sunset. In addition to these three core services, clean and reliable heating source is one of the most important elements for quality of life during the cold winters in Mongolia. Better access to these basic services thus could provide a solid foundation for a safe and healthy life as well as improve household members' opportunities in education and employment. Table 2.7.1 summarizes the definition of these indicators used in the report.

Table 2.7.1 Definition of indicators for basic infrastructure services[30]

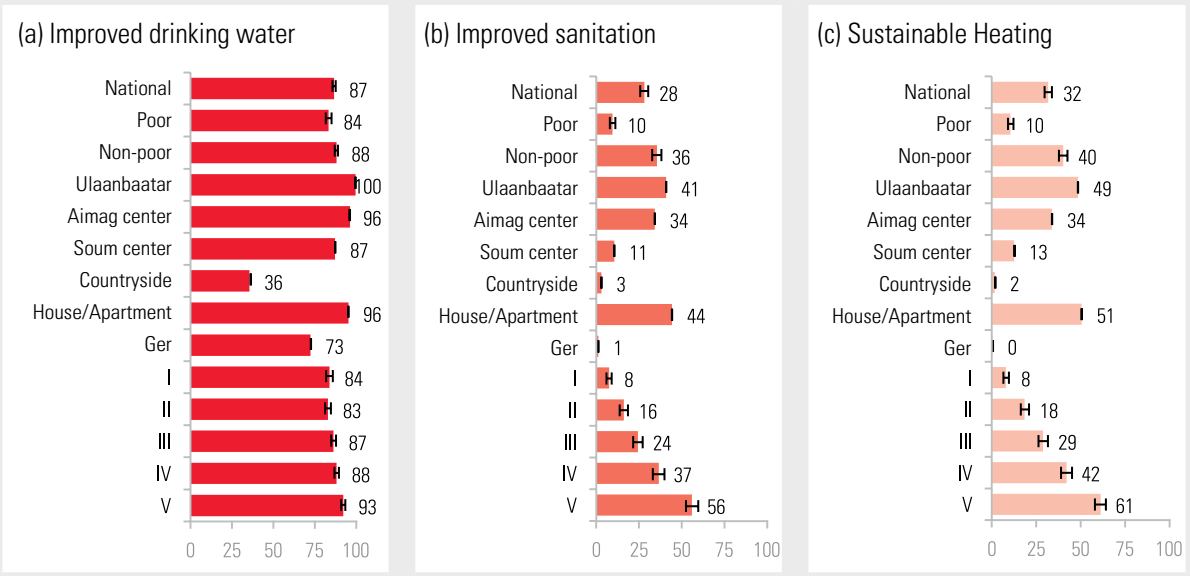
Indicator	Definition
Improved drinking water source	Households use centralized water system connected to water supply pipelines, protected wells, protected springs, portable water service, rainwater or bottled water
Improved sanitation	Households use toilets connected to sewer systems, improved pit latrine, bio toilet, septic tank, or borehole (suction).
Access to electricity	Households are connected to electricity through central grid system, diesel, solar, wind system or generators
Sustainable heating source	Households use heating source from central, private boiler or electrical heater system

In 2018, nine in ten poor people lack access to one of the basic infrastructure services (improved drinking water, sanitation or sustainable heating source) in Mongolia. Despite achieving universal access to electricity (99.8 percent), 9 out of 10 poor individuals do not use or do not have access to proper sanitation and reliable heating system in Mongolia (Figure 2.7.2). This is predominantly driven by their dwelling type (gers) and location (remote rural areas or urban ger districts). Even in the richest quintile, around 40 percent of individuals still have to rely on poor sanitation or traditional heating source. This implies that even the economically secured households are not able to meet some elements needed for quality housing and adequate basic services delivery in Mongolia.

The challenges lie in improving access to sustainable heating and proper sanitation, especially among the households living in gers. Between 2010 and 2018, access to safe water source was gradually improved, but traditional toilet facilities and heating sources continue to be heavily used among those living in gers. According to the HSES 2018, as shown in Figure 2.7.2, almost all individuals living in gers have no access to the centralized heating and sewage systems; they use unimproved pit latrines or boreholes for toilets as well as firewood, coal, or dung for heating. In particualr, in Ulannbaatar, where about 350 thousand persons live in the crowded ger areas, air pollution caused by the unrefined coal burning from gers during winter months has worsened as there has been a large influx of migrants from the countryside into the city in the last two decades. Subsequently, Ulaanbaatar's residents, particularly young children under 5 years old, are more likely to be exposed to the risk of serious respiratory diseases. To protect vulnerable young children from air pollution, some wealthy parents send their children to live with grandparents or relatives in the countryside during the winter months.

30 The HSES 2018 does not include a full set of questions to be able to construct indicators defined by Sustainable Development Goals (SDGs), but could assess several concepts of SDGs based on the indicators used in the report.

Figure 2.7.2 Access to basic infrastructure services, in percentages of the population, 2018



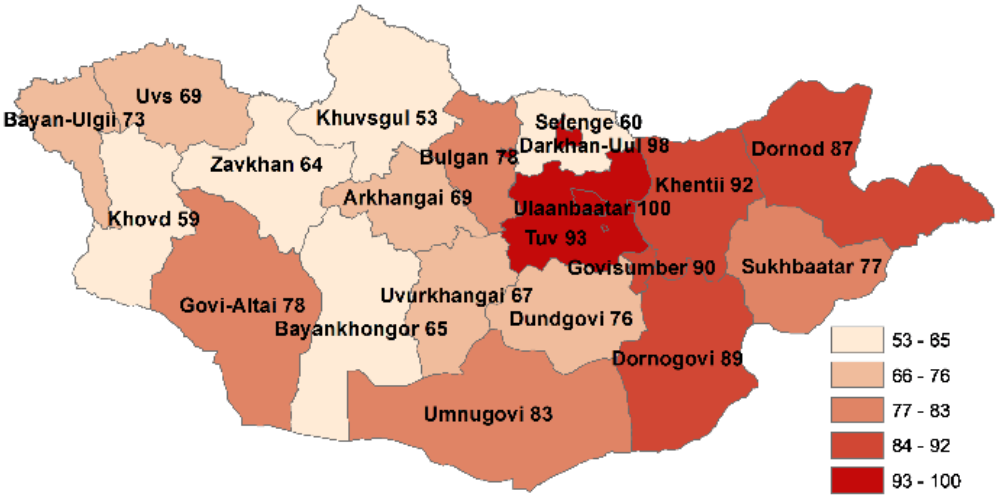
Source: HSES 2018

Note: House/Apartment indicates households living in a house, apartment or other type of dwellings, and Ger indicates households living in a Ger

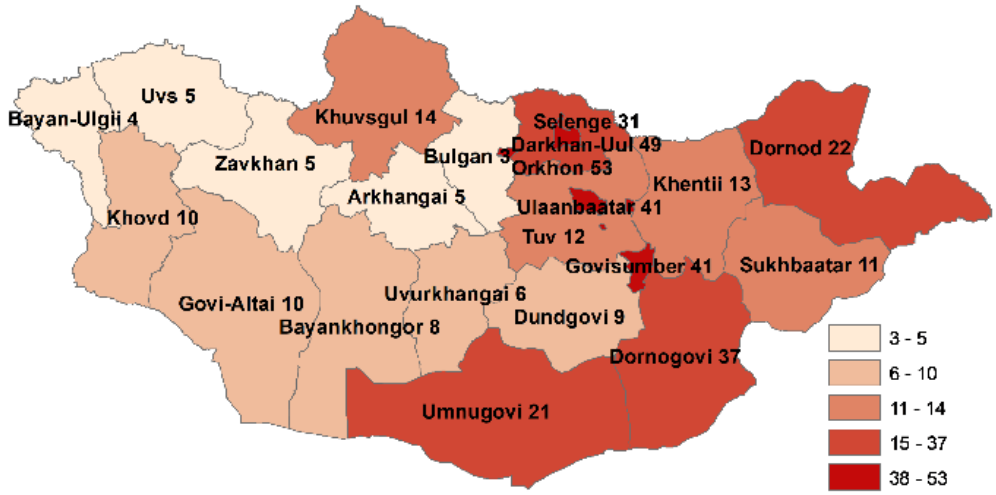
There are substantial spatial variations across aimags in terms of access to basic infrastructure services. Figure 2.7.3 visualizes access to basic infrastructure services by aimags. Quality housing in Figure 2.7.3 (d) is a composite index indicating the share of the population living in households connected to all three services, namely improved drinking water source, improved sanitation and sustainable clean heating source. Some parts of the country, especially aimags in the Khangai and Western regions are lagging from others. These outcomes are likely to be linked to the share of herders or ger residents in each aimag, given that the vast majority of herders and ger residents have limited access to basic infrastructure services.

Figure 2.7.3 Access to basic infrastructure services by aimags, in percentages of the population, 2018

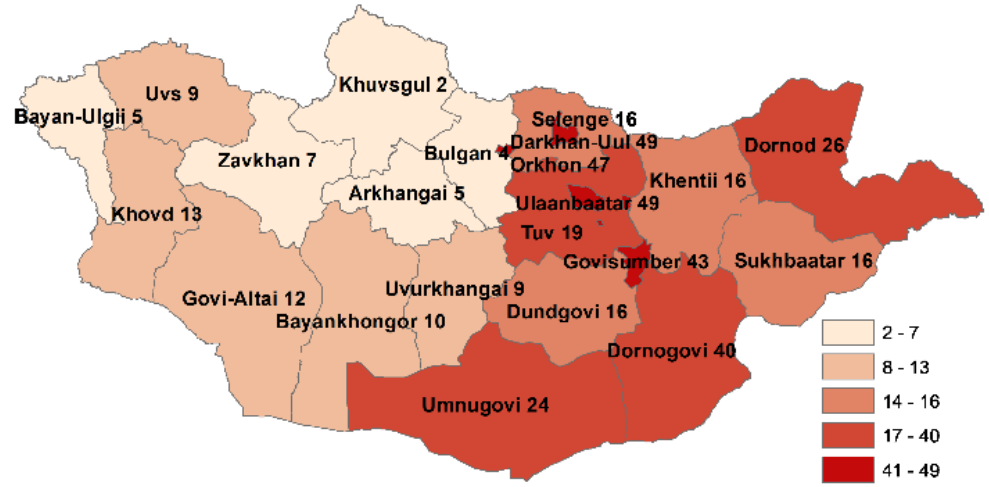
(a) Improved drinking water source



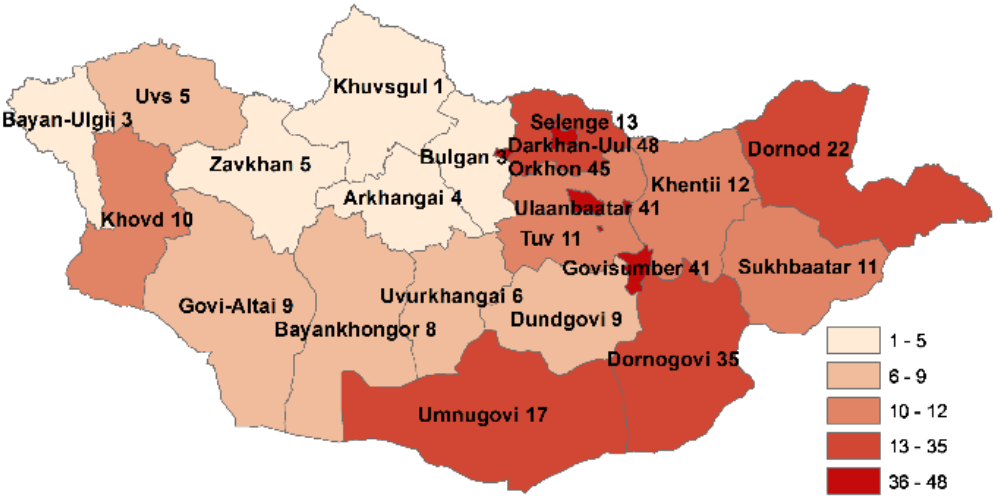
(b) Improved sanitation



(c) Sustainable heating



(d) Quality housing



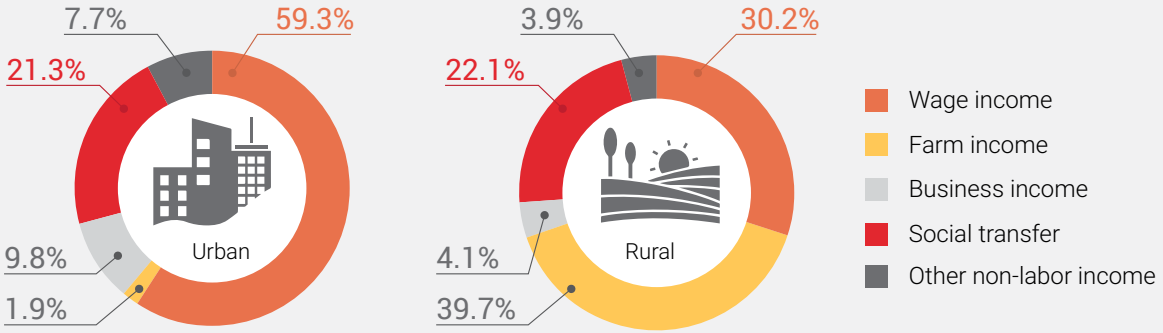
Source: HSES 2018

Note: Quality housing indicates households with all three quality housing elements (improved water source, improved sanitation and sustainable heating). In Mongolia, more than 99 percent of the population have access to electricity.

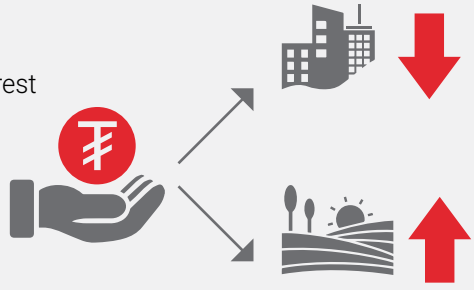
3 CHAPTER

INCOME AND DRIVER OF POVERTY CHANGES

Significant urban-rural disparities in the sources of income.



Between 2016 and 2018, the poorest **urban** households experienced **negative** real income annual growth (-1.0%) while the poorest **rural** households recorded the **highest growth** (3.8%).



-1.0%

Urban households suffered from sluggish wage and business income.

3.8%

Rural households' income grew fast supported by rising livestock prices.

All income components contributed to rapid poverty reduction during 2010-2014, but only farm income, social transfer and remittance contributed to poverty reduction during 2016-2018.

Decomposition of poverty changes by income components

	2010-2014		2016-2018	
	Percentage point	Change	Percentage point	Change
Wage income	-7.4	↓	0.5	↑
Farm income	-5.7	↓	-0.8	↓
Business income	-1.1	↓	0.1	↑
Social transfer	-3.4	↓	-1.3	↓
Capital income	-0.1	↓	0.8	↑
Remittance	-0.1	↓	-0.2	↓

This chapter focuses on the various factors that drive changes in poverty through the lens of household income sources. HSES collected extensive data on the components of household income over time. These data provide an opportunity to get a better insight of income generating activities of households and how each income component has contributed to poverty reduction over time in Mongolia.

3.1. INCOME AGGREGATES AND TREND

Household income aggregates from HSES are disaggregated into six mutually exclusive categories (Table 3.1.1): (1) wage, (2) farm income, (3) non-farm self-employment (business) income[31], (4) public social transfer, (5) capital income, and (6) remittance. Wage, farm and business incomes are generated through household members' employment activities. Wage includes all salaries, bonus and benefits earned in the last 12 months in both cash and in-kind forms. Farm income is computed as net values by aggregating the values of sales and own consumptions[32] and then subtracting input material, equipment and labor costs. Self-employment business income is also calculated as a net of costs from all business inputs. While these three forms of labor income sources are mutually exclusive, household members can be engaged in multiple forms of work in the reference period. Non-labor income consists of capital income, remittance and social transfer benefits. All incomes generated in the past 12 months prior to the survey are aggregated at the household level.

Table 3.1.1 Components of income aggregates

Income category		Description
Labor income	Wage Income	Total of wages, salaries, bonuses and other compensations from all employed activities of household members
	Farm income	Net household income from livestock, livestock products and agricultural products. Reported sales income and own home consumptions of livestock and agricultural products are included.
	Business income	Net household income from non-farm household enterprises
Non-labor income	Social Transfer	Pension, unemployment benefits, child money, maternity benefits and other public transfers
	Capital income	Income from rent of own assets, saving interests, stock dividends and bond returns
	Remittance	Private money transfer and gift from non-household members

Significant urban-rural disparities in the sources of income persists, yet the number of wage earners are increasing in rural areas. In 2018, more than seven out of ten households in urban areas receive income from wage labor activities whereas about two in five in rural areas receive wage income. Nearly two-thirds of the rural households earn income from livestock or other agriculture activities while only less than one in ten urban households receive farm income (Figure 3.1.1(a)). However, this income source disparity has narrowed down over the years, mainly due to the increasing number of rural households engaged in wage employment (Figure 3.1.1 (b)). In 2010, the share of rural households receiving wage income was only 35 percent, but that figure has increased over time, reaching to 44 percent in 2018. Similarly, 75 percent of rural households received farm income in 2010, but that went down to 63 percent in 2018. This is a clear reflection of how more households are now entering into wage employment in rural areas.

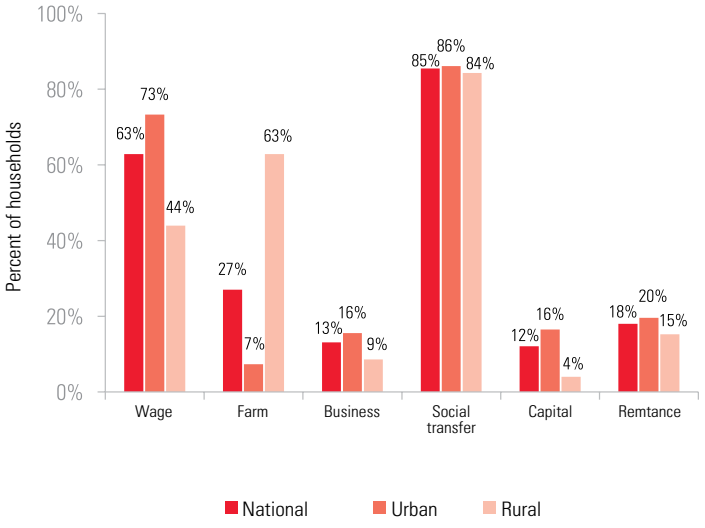
31 Purchases and sales of durable goods, inheritances and wedding presents, investments, gambling and lottery gains are excluded from household income aggregates since they do not recur regularly.

32 Unit value of own consumption is imputed with the median unit price at the aimag-level or median unit price at the national level if there are less than six observations of a price for this item at the aimag-level.

Social transfer has reached most of the urban and rural households. In Mongolia, a considerable share of the national budget has been allocated to social transfer programs: the government spent about 2 percent of GDP on social assistance programs and another 2 percent of GDP in social insurance programs in 2018[33]. While there has been some progress in expanding the coverage and size of the poverty-targeted programs, many of the existing social protection programs still remain categorical or universal. Therefore, although the amount that households received is different across consumption levels, nationally, 85 percent of households receive at least some money from social transfer programs (Figure 3.1.1 (a)).

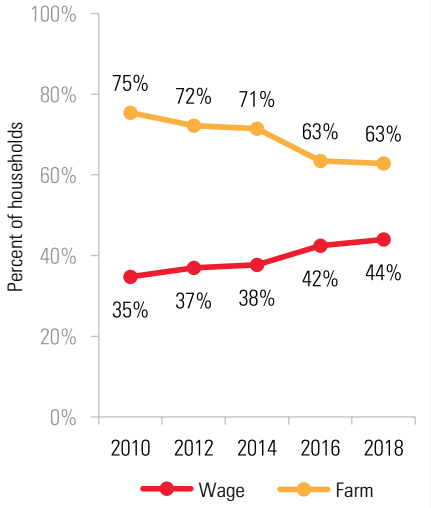
Figure 3.1.1 Incidence of households receiving income, in percentages

(a) Fraction of households receiving each income source by national, urban and rural, 2018



Source: HSES 2018

(b) Fraction of rural households receiving wages or farm income, 2010-2018



Sources: HSES 2010-2018

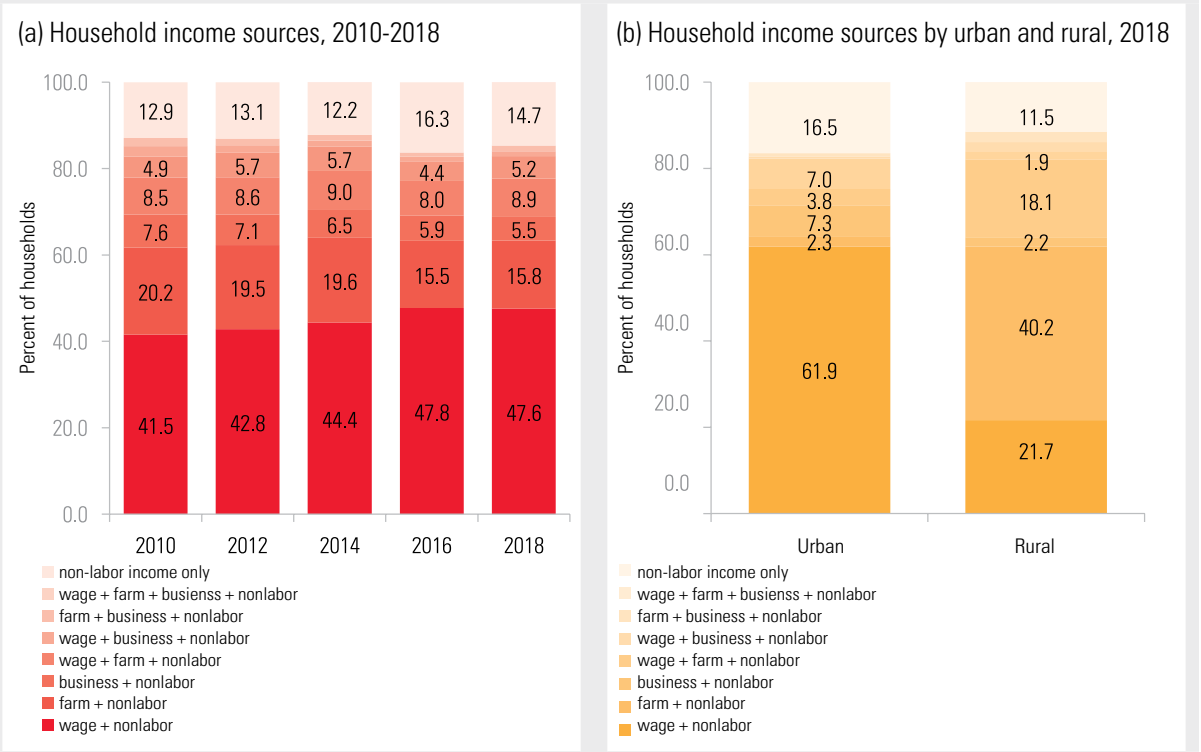
Mongolia's household income generating activities are not widely diversified, albeit with some exceptions seen in rural areas. Figure 3.1.2 illustrates how many income sources households have received within the last 12 months[34]. In Mongolia, households who relied on a single labor income activity source (either wage, self-employed farm or business) account for around 70 percent of the total households, which has been consistent over time (Figure 3.1.2 (a)). In 2018, nearly half of the households rely on labor income solely from wage employment, 15.8 percent of households from farm jobs and 5.5 percent of households from self-employment businesses. Overall, only 16.4 percent of the households receive labor income from multiple labor engagements (i.e. a combination of wage, farm and business), and this pattern of income diversification is mostly consistent across the different consumption quintiles. Rural households, however, are more likely to generate income from multiple employment activities. 18.1 percent of the rural households generate income both from farming and wage jobs (Figure 3.1.2 (b)), reflecting that 12 percent of rural herder households have at least one wage worker in the same household. In addition, at the national level, 14.7 percent of the households' income came solely from non-labor income source which included remittance, capital

33 Social assistance programs include child money, maternity benefits and other social protection benefits and compensations. Social insurance programs include state pension, unemployment and sickness benefits etc.

34 Individuals might have been engaged in multiple wage jobs or worked across multiple sectors over the course of a year, however, the structure of questions on the employment module in the 2018 HSES does not allow us to analyze job diversification within the wage job activities. In this report, household-level job diversification is measured by the following three labor income activity types: (i) wage, (ii) self-employed farming (livestock, animal husbandry and crop farming), and (iii) self-employed business activities.

income, pension and other social transfers. The share of the households who rely only on non-labor income slightly increases from the bottom quintile (13 percent) to the top quintile (17 percent).

Figure 3.1.2 Household income sources, in percentages

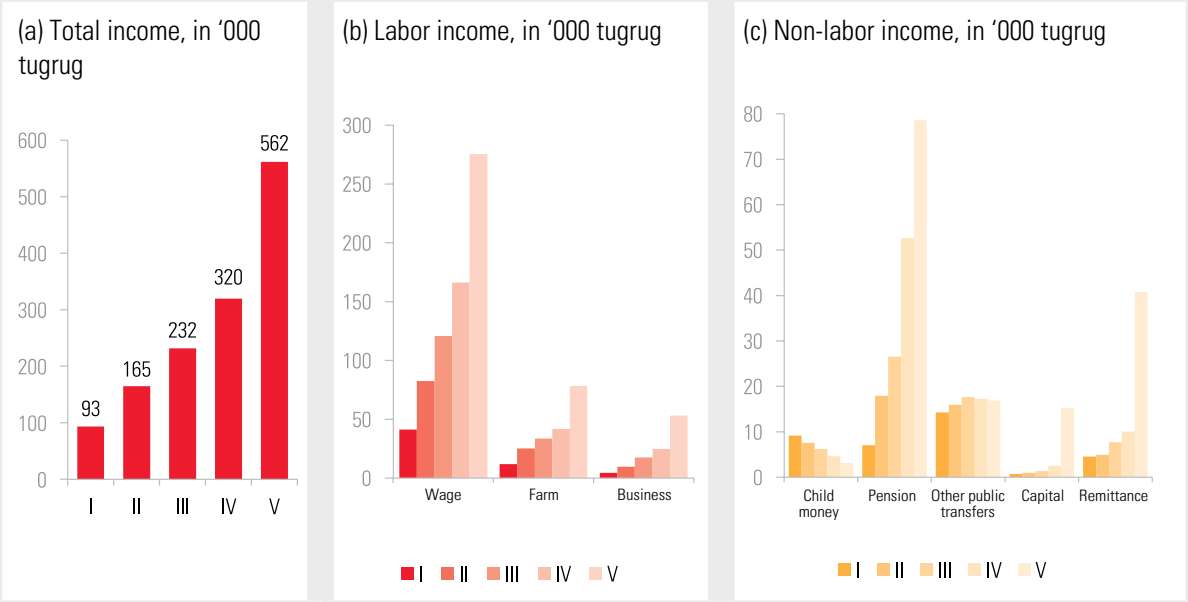


Sources: HSES 2010-2018 *Source: HSES 2018*

Note: Non-labor income represents any combinations of non-labor income sources including social transfer, remittance, capital and other non-labor incomes

Both labor and non-labor income amount substantially vary across the consumption quintiles. Per capita monthly income in the top quintile is six times higher than that in the bottom quintile. This also means that more than 40 percent of the total income in the nation belongs to the top 20 percent of the population while income of the bottom 20 percent accounts for only 7 percent. The top quintile receives significantly higher levels of income compared to the rest in all income components except for social transfer income. In this analysis, social transfers can be disaggregated into 3 components: child money, pension and other public transfers. Disaggregation allows us to note that poorer households receive higher levels of income from the child money program as less wealthier households tend to have more children, while, given the larger number of elderly members who are eligible to receive pension as well as smaller household size, the average per-capita pension amount that the top 20 percent households receive is much higher than what the poor receive (Figure 3.1.3 (c)). Since the better-off households are more likely to own financial assets and have better access to investment opportunities, the top 20 percent of the households receive profits from capital investments while the rest are less likely to have money left for such investment. Similarly, households in the richest quintile receive more private transfers (remittance) compared to the rest of the households.

Figure 3.1.3 Average per capita monthly income by consumption quintiles, 2018



Source: HSES 2018

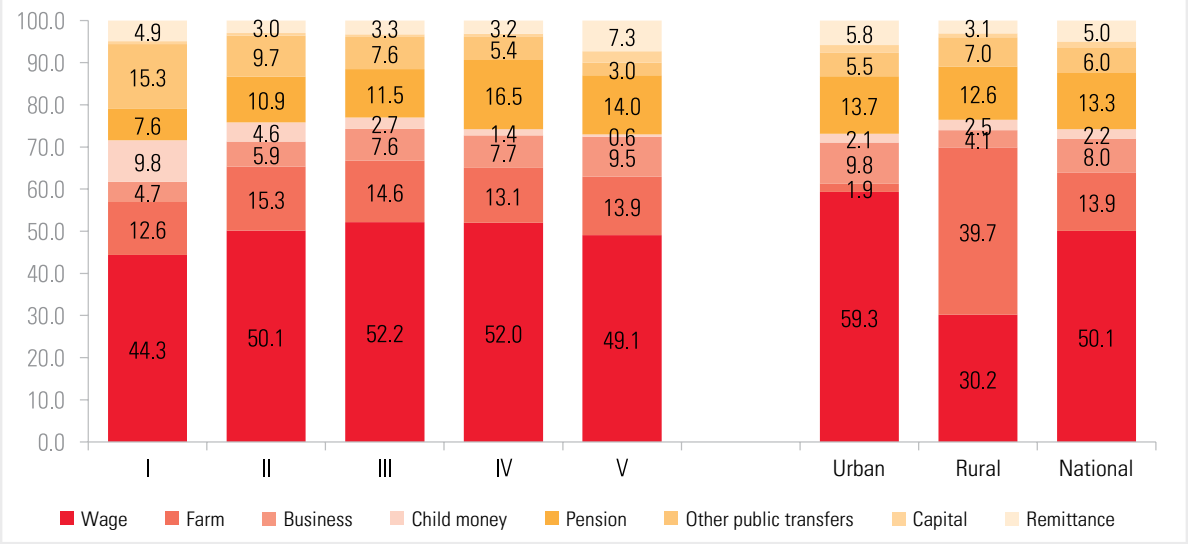
Note: exclude households with no earning in each income component from the average calculation

When considering the share of income from different sources, 40 percent of rural household income come from farm and associated activities while nearly 60 percent of urban households' income are from wage jobs[35] (Figure 3.1.4). In Mongolia, labor income accounts for more than 70 percent of total household income both in rural and urban areas. As expected, the share of farm income in rural areas is significantly higher (40 percent of the total income) than in urban areas (2 percent), where wage income is the most important source of income and it accounts for nearly 60 percent of their total income. The share of income from non-farming businesses is higher in urban areas than in rural areas, reflecting that nearly 80 percent of individuals employed in self-business live in urban areas.

While labor income is the main source of income, social transfers have substantially contributed to household income over time, particularly among the poor. In 2018, social transfer income of the poor, on average, accounted for one-third of the total household income, which is 15 percentage points higher than the average share observed for the top 20 percent of the population. This does not indicate that the poor households receive significantly larger amounts of social transfers, rather, the average amount received from non-contributory social transfer programs (i.e., sum of child money and other public transfers) is similar across all consumption classes (Figure 3.1.3 (c)). As poor households' total incomes are much smaller than that of the better-off households (Figure 3.1.3 (a)), in relative terms, these non-contributory social transfers accounts for a greater share of the total income for the poorest quintile (25 percent) than for the richest quintile (4 percent).

35 Note that the household share of income comes from dividing the average income of each component by the average total income.

Figure 3.1.4 Average income shares at households, 2018



Source: HSES 2018

There are clear differences in the levels and patterns of income growth between 2010-2014 and 2016-2018. As presented in Table 3.1.2, during 2010-2014, the level of income growth was significantly higher than it was between 2016-2018. Both wage and farm income have contributed to the total income growth. In particular, rural households from all consumption classes achieved a double-digit growth in total income during 2010-2014. The growth of social protection during this period was mainly driven by the social protection program expansion which took place between 2010 and 2012. By contrast, during 2016-2018, income growth was limited and not inclusive, especially in the urban areas where those living in the bottom 20 percent suffered the most. In the rural areas, the level of growth is much lower compared to the 2010-2014 period, yet rural residents appear to have secured relatively robust and inclusive growth in most of the income components for the past 2 years.

Table 3.1.2 Compound annual growth rate (CAGR) of income per capita by urban and rural consumption quintiles

(a) Annual income growth by urban consumption quintiles

Urban quintile	2010-2014					2016-2018				
	Total income	Wage	Farm	Business	Social transfer	Total income	Wage	Farm	Business	Social transfer
I	4.5	7.3	na	-11.8	5.1	-1.0	-0.2	na	-6.4	2.9
II	6.0	7.9	na	-2.0	6.7	1.6	4.4	na	-15.2	3.0
III	9.2	10.2	na	6.6	6.7	1.7	0.8	na	-1.0	2.5
IV	8.5	11.3	na	-2.3	8.4	1.8	-1.5	na	12.3	3.1
V	6.2	12.1	na	-9.4	7.1	1.7	-3.1	na	10.1	4.0
Urban	**7.0**	**10.5**	**na**	**-5.2**	**6.9**	**1.4**	**-0.8**	**na**	**4.5**	**3.2**

(b) Annual income growth by rural consumption quintiles

Rural quintile	2010-2014					2016-2018				
	Total income	Wage	Farm	Business	Social transfer	Total income	Wage	Farm	Business	Social transfer
I	10.2	16.5	12.0	-2.0	2.8	3.8	5.4	3.6	13.3	8.1
II	11.8	23.0	12.3	1.4	2.7	3.4	7.9	0.2	-9.6	7.9
III	11.2	10.7	14.9	-1.0	6.2	3.7	4.5	0.5	0.7	11.3
IV	11.7	8.1	16.7	1.1	7.2	3.2	-4.7	8.5	5.3	6.6
V	11.7	4.9	22.2	0.2	11.6	1.0	-3.7	7.8	-6.5	2.2
Rural	**11.5**	**9.5**	**16.7**	**0.2**	**6.8**	**2.6**	**-0.2**	**4.8**	**-2.2**	**6.5**

Sources: HSES 2010-2018

Note: Urban farm income growth rate is not displayed due to the limited number of households who were engaged in farming activities in urban areas

3.2. DRIVERS OF POVERTY CHANGES

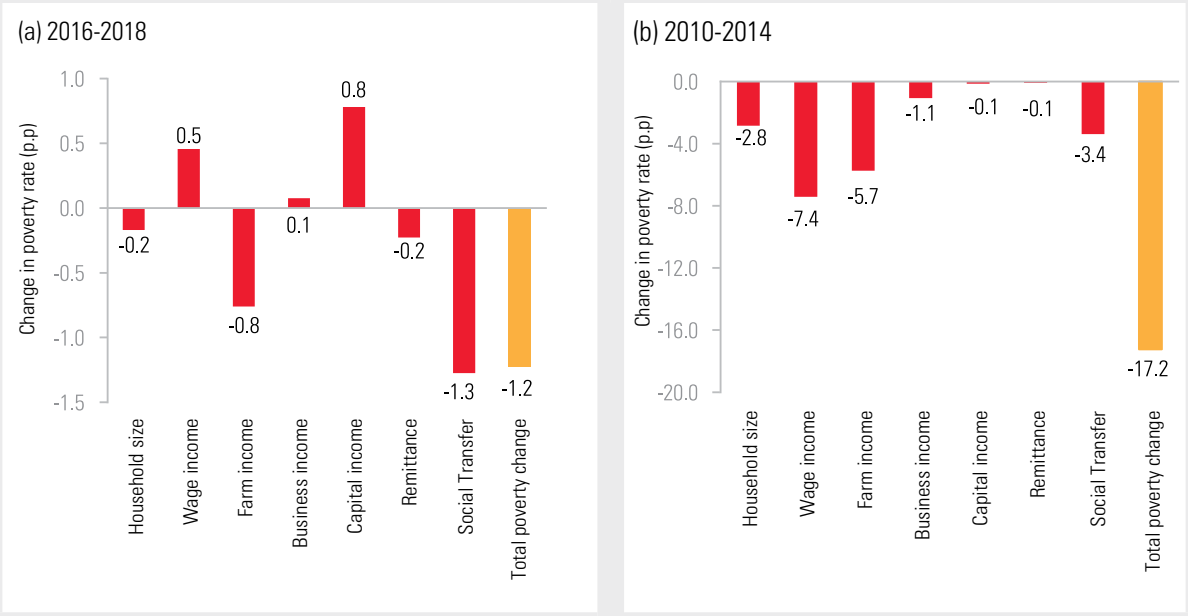
Income decomposition analysis of poverty changes helps us understand which income source is driving the reduction in poverty[36]. This section analyzes the relative contributions made by each income component from labor and non-labor incomes to poverty reduction. The analysis focuses on the decomposition results for the two periods when poverty reduction has advanced (2010-2014 and 2016-2018) and compares the differences in the underlying factors of changes in poverty between these two periods.

During the period of 2016-2018, social transfer and farm income growth drove poverty reduction while decreases in wage, business and capital incomes increased poverty. Between 2016 and 2018, introducing new cash social welfare benefits and increasing the benefit size of existing social protection programs have contributed the most to reducing poverty. For instance, the poverty-targeted food stamp program doubled its coverage and increased its benefit size by 20 percent between 2016 and 2018. The cash benefit targeting mothers with children under the age of 3 was also newly introduced. As a result, social transfer alone reduced the proportion of poverty by 1.3 percentage points (Figure 3.2.1 (a)). Increase in farm income, especially in rural areas, was another

36 Decomposition analysis of changes in poverty in this report follows the methodology developed by Barros et al (2006) and Azevedo et al. (2013). This method creates entire counterfactual distributions, allowing us to quantify the contributions to poverty reduction from changes in demographics, labor incomes (labor earnings from wage jobs and both farm and non-farm self-employed business) and non-labor incomes (social transfer, remittance and capital incomes etc.) by changing each one of these elements at a time, while keeping other elements constant. To avoid path dependence, this approach calculates the Shapley-Sharrock's estimates of each component to estimate its contribution to changes in poverty. For further details of the decomposition methodology, see Azevedo et al. (2013) and Inchausti et al. (2014).

driver of poverty reduction for 2016-2018, which reduced poverty by 0.8 percentage points. These two components of income sources together reduced the poverty rate by 2.1 percentage points. Wage, business and capital incomes, on the other hand, have struggled. In particular, despite its small share to the total income, a significant decline in capital income among the poorer households had the largest negative impact on poverty. In addition, since wage comprises the majority of the total income, its negative real growth (-1.1 percent YoY) was another driver to increase the proportion of poverty, with the poverty rate increasing by 0.5 percentage points. As a result, their negative contribution to poverty has offset the improvements made by social transfers and farm income growth, thus poverty incidence only fell slightly between 2016 and 2018.

Figure 3.2.1 Decomposition of poverty changes by income components



Sources: HSES 2010-2018

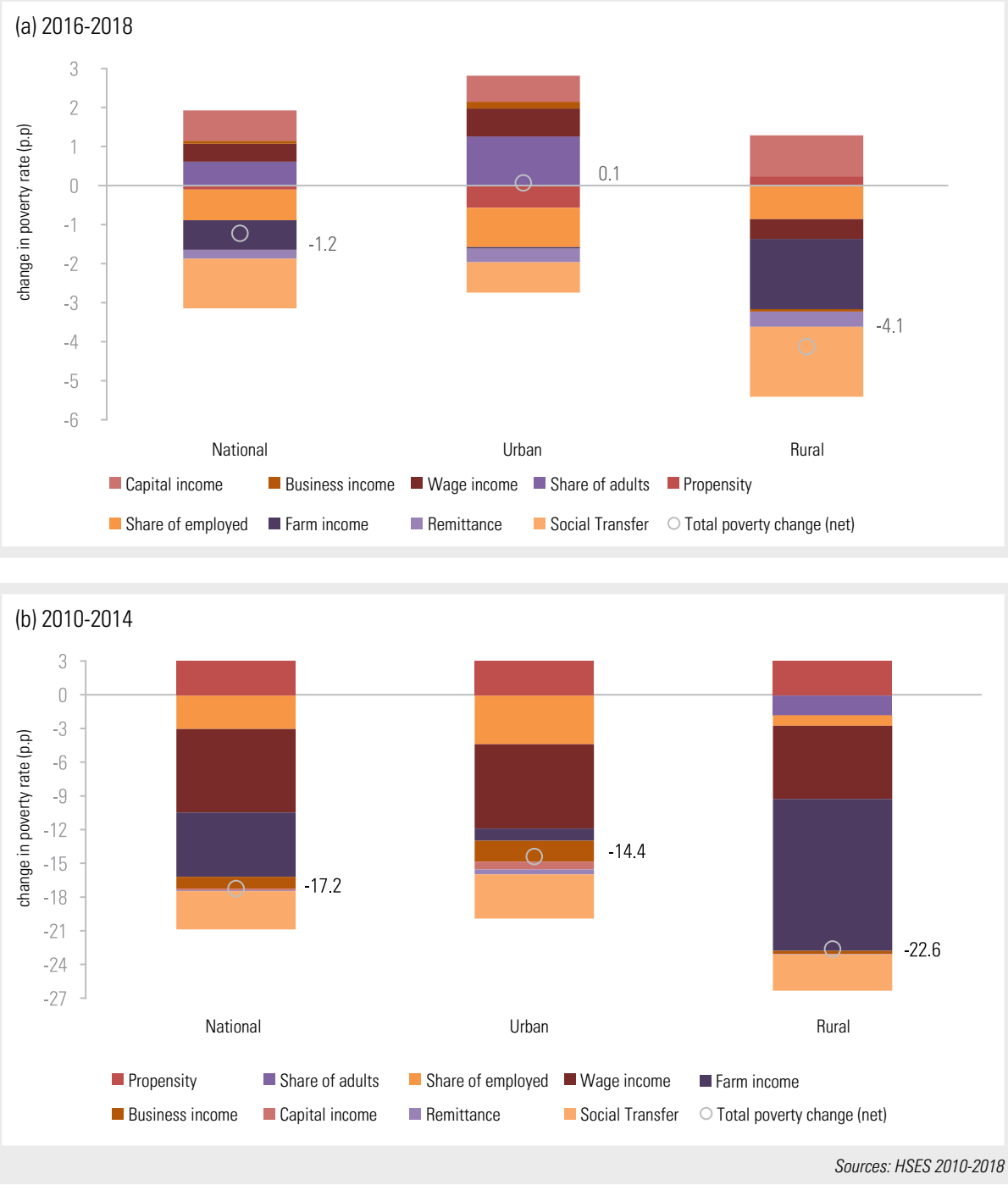
Note: Residual effects related to the relationship between the consumption and income aggregates are not displayed in the figure (-0.1 and 3.4 percentage points for 2016-2018 and 2010-2014, respectively). Household size indicates the net effect of the share of the working-age population and the share of employed adult per household on poverty.

By contrast, in the early 2010s, wage income growth was the key driver of poverty reduction, followed by farm income and social transfers. Quite different decomposition results were found during the period of 2010-2014 (Figure 3.2.1 (b)). During this period, poverty declined remarkably by 17.2 percentage points and all components including demographics, labor and non-labor incomes contributed to reducing poverty. In particular, in contrast to the 2016-2018 period, wage income was the biggest driver, which alone reduced the incidence of poverty by 7.4 percentage points between 2010 and 2014. Farm income and social transfers were the second and third largest drivers of poverty reduction, which reduced poverty by 5.7 and 3.4 percentage points respectively.

There is an urban-rural disparity regarding which income sources are responsible for driving poverty reduction. As presented in Figure 3.2.2 (a), during the 2016-2018 period, in the rural areas, both farm income and social transfer reduced the incidence of poverty by 1.8 percentage points, and with the additional effect of increase in wage and remittance, rural poverty declined by 4.1 percentage points. Conversely, in the urban areas, sluggish labor incomes had a negative effect on poverty reduction and only social transfer and remittance reduced poverty slightly by 0.3 and 0.8 percentage points respectively. During the 2010-2014 period (Figure 3.2.2 (b)), on the other hand, it is clear that wage growth contributed significantly to the decline in urban poverty, whereas farm income

growth was the key driver of rural poverty reduction. Despite the rapid expansion of social transfer programs during this period, wage and farm income made a larger contribution to poverty reduction than social transfer programs. These results are in line with the income growth rates found during this period in Table 3.1.2.

Figure 3.2.2 Decomposition of poverty changes by income components by national, urban and rural, 2016-2018, 2010-2014



Sources: HSES 2010-2018

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ANNEX A. OVERVIEW OF THE HOUSEHOLD SOCIO-ECONOMIC SURVEY

This annex provides an overview of the Household Socio-Economic Survey (HSES) 2018, sample design and additional information about the data processing.

A.1 AN OVERVIEW OF HSES

The HSES is a nationally representative survey that aims to estimate and monitor the level of poverty of the country and people's living standards. It aims to update consumption weights for the Consumer Price Index baskets and estimate private consumption expenditure for the national accounts (GDP). Before HSES, Household Income and Expenditure Survey (HIES) was a main survey and then since 2007, instead of HIES, HSES has been implemented in the current form. The data is collected over 12 months and the main comprehensive form of the survey for poverty estimation has been implemented biennially since 2012. A short-form survey is conducted once every two years when the main comprehensive survey is not conducted. As for the data collection method, HSES has adapted computer-assisted personal interviewing (CAPI) method since 2014.

SURVEY QUESTIONNAIRE

The 2018 HSES was conducted in the comprehensive form, consisting of two sub-questionnaires with 12 modules in total. These include:

- Household socio-economic questionnaire (HSES-1): The questionnaire HSES-1 aims to collect general information about the household characteristics, education, health, employment, livestock breeding and crop farming, non-agricultural manufacturing, trade, services, savings, loans, dwelling and energy, durable goods, and non-food expenditure data.
- Household food consumption questionnaire (HSES-2a, HSES-2b): A combination of both a household diary and a recall methods are used to measure food consumption in the HSES survey. A thirty day diary (HSES-2a) compiled by an enumerator every 10 days, for three times during a single month is used to capture food consumption of hosueholds in Ulaanbataar and Aimag centers. A 7 day recall period questionnaire (HSES-2b) is used to capture food consumption in Soum Centers and the countryside.

A.2 SAMPLING

The HSES is representative of the nation, region, urban/rural areas, residential location and aimags. It was enumerated in 320 soums and 9 districts of Mongolia. In total 16,488 households were randomly selected for the HSES 2018.

SAMPLING FRAME

The list of all households of Mongolia or the list of households registered in the population and households' database at NSO was used for HSES as a sampling frame.

SAMPLE SIZE

The sample size is estimated at 95 percent confidence level; the probability of error is 1.5 percent, key parameter P = 0.33, and the design effect is deff = 3, and the sample size was taken proportionally throughout the 12-month period of the survey.

$$n = \frac{deff * P * (1-P) - 1.96^2}{e^2}$$

For the HSES 2018, the sample size is 16,488 households, of which 1374 households were surveyed each month.

SAMLING DESIGN

The HSES's sampling strata or geographic domains of estimation were decided to the level of four residential location zones: Ulaanbaatar, Aimag center, Soum center, and Countryside.

Households were selected using two stages of probability sampling. In the first stage, Primary Sampling Unit (PSU) was selected, using probability proportional to estimated size, and then in the second stage, households are selected in the selected PSUs using simple random sampling.

In the HSES, Primary sampling units (PSUs) are kheseg in Ulaanbaatar, and bagh in aimag, soum centers and countryside.

In Ulaanbaatar city:

- 360 PSUs were selected out of total khesegs of UB city
- 10 households were selected from each selected khesegs.

In aimag centers:

- 24 PSUs were selected from each aimag center. Taking into account the number of households, 12 PSUs were selected from Govisumber aimag, 36 PSUs from Darkhan-Uul aimag, 60 PSUs from Orkhon aimag, respectively.
- 10 households were selected from each PSUs.

In soum centers and countryside:

- 48 baghs (24 baghs each from soum centers and the countryside) were selected from each aimag as PSUs. For Govisumber and Darkhan-Uul aimags, 24 baghs (12 baghs each from soum centers and the countryside) were selected. For Uvurkhangai and Khuvsgul aimags, 60 bagsh (24 bagsh from soum centers and 36 baghs from the countryside) were selected as PSUs.
- 8 households were selected from each PSUs.

SAMPLING DISTRIBUTION

The sample size is distributed using proportional probability sampling techniques. Sampling distribution is made to be proportional to each domain, taking into account the number of households of aimags.

Table A.1 HSES Sampling distribution, 2018

Aimags	Primary Sampling Units (PSUs)					Number of selected households				
	Ulaan-baatar	Aimag center	Soum center	Country side	National total	Ulaan-baatar	Aimag center	Soum center	Country side	National total
Ulaanbaatar	360				360	3600				3600
Dornod		24	24	24	72		240	192	192	624
Suhbaatar		24	24	24	72		240	192	192	624
Khentii		24	24	24	72		240	192	192	624
Tuv		24	24	24	72		240	192	192	624
Govisumber		12	12	12	36		120	96	96	312
Selenge		24	24	24	72		240	192	192	624
Dornogovi		24	24	24	72		240	192	192	624
Darkhan-Uul		36	12	12	60		360	96	96	552
Umnugovi		24	24	24	72		240	192	192	624
Dundgovi		24	24	24	72		240	192	192	624
Orkhon		60			60		600			600
Uvurkhangai		24	24	36	84		240	192	288	720
Bulgan		24	24	24	72		240	192	192	624
Bayankhongor		24	24	24	72		240	192	192	624
Arkhangai		24	24	24	72		240	192	192	624
Khuvsgul		24	24	36	84		240	192	288	720
Zavkhan		24	24	24	72		240	192	192	624
Govi-Altai		24	24	24	72		240	192	192	624
Bayan-Ulgii		24	24	24	72		240	192	192	624
Khovd		24	24	24	72		240	192	192	624
Uvs		24	24	24	72		240	192	192	624
	360	540	456	480	1476	3600	5400	3648	3840	16488

Source: HSES 2018

SAMPLING WEIGHTS

The sampling weight applied for each sample household is equal to the inverse of its probability of selection:

$$p_{hi} = \frac{n_h \times M_{hi}}{M_h} \times \frac{m_{hi}}{M'_{hi}},$$

where:

P_{hi} = *h* probability of household of i[th] PSU to be selected from h group

n_h = *h* n-number of PSUs to be selected from h group

M_{hi} = *h* number of households identified in ith PSU sampling frame selected from h group

M_h = *h* number of households identified in all PSUs sampling frame in h group)

m_{hi} = *h* number of households identified in i[th] PSU selected from h group, in urban-10, in rural-8 households

M'_{hi} = *h* number of households included in ith PSUs list selected from h group, can be $M'_{hi} = M_{hi}$

In the 2018 HSES, 99.8 percent of the selected hosueholds, or 16454 households have participated in the survey. The households in Ulaanbaatar and aimag centers were selected based on their residing addresses. Additionally, two supplementary households were selected for each PSUs as a reserve. In case a selected household declined to participate, a reserve household was interviewed.

The sampling weights are used to ensure accurate representativeness of each group and the nation. This means, the 16454 participating households must represent the entire households of Mongolia, including the region and aimags as well.

Table A.2 HSES coverage, by PSUs and by interview months, 2018

	Ulaanbaatar	Aimag center	Rural	National total
January	298	450	624	1 372
February	300	449	624	1 373
March	296	450	624	1 370
April	295	449	623	1 367
May	297	450	624	1 371
June	295	450	623	1 368
July	296	449	623	1 368
August	299	450	624	1 373
September	298	450	624	1 372
October	299	449	624	1 372
November	300	450	624	1 374
December	300	450	624	1 374
Total	3 573	5 396	7 485	16 454

Source: HSES 2018

ANNEX B. METHODOLOGY FOR POVERTY ANALYSIS[37]

This annex describes the methodology used for estimating poverty in Mongolia, which includes the selection of welfare measures, construction of consumption aggregates and poverty line as well as estimations of poverty measures.

B.1 SELECTION OF WELFARE INDICATORS

Poverty is a multidimensional concept, encompassing multiple dimensions of deprivation, such as poor health, low education level, deterioration of mental and physical abilities, malnutrition, lack of goods and services, limited access to infrastructure, inability to express political views or profess religious beliefs, etc. Each of the dimensions deserve separate attention as they refer to different components of welfare, and indeed may help policy makers to focus on the various facets of poverty.

Although all deprivations are important aspects of what it means to be poor, monetary deprivation is one of the key components of what it means to be poor. Given this, one of the key debates is whether income or consumption more accurately represents the monetary deprivation, therefore the welfare of the population. Both consumption and income can be approximations to utility, even though they are different concepts[38]. Consumption measures what individuals have actually acquired, while income, together with assets, measures the potential claims of a person. If we are to assess an individual's living standards in the long run, as in a lifetime, both consumption and income can be used as welfare indicators. However, in estimating poverty from the 12-month period survey, consumption is the preferred welfare measure under the context of Mongolia for several reasons.

First, household income is more likely to fluctuate in the short run while consumption tends to remain stable. Consumption is less affected by seasonal patterns than income, for example; in agricultural economies, income is more volatile and is affected by growing and harvest seasons, hence relying on that indicator might significantly overestimate or underestimate the true living standards.

Second, on top of the severe under-reporting issue, incomes from agriculture, self-employed business and informal activities are difficult to observe and measure. Consumption is generally an easier concept than income for the respondents to grasp, especially if they are engaged in self-employment or own business activities. For instance, workers in formal sectors of the economy will have no problem in accurately reporting their main source of income, i.e. their wage or salary. However, self-employed people working in informal sectors or in the agriculture sector will have a harder time coming up with a precise measure of their income. It is often the case that household and business transactions are intertwined. Households are less reluctant to share information on consumption than on income. They may fear that income data is being collected for different purposes such as taxes, or they may just regard income questions as too intrusive. It is also likely that household members can accurately recall or record what their household members have consumed than the level and sources of household income.

37 This annex section draws heavily on a number of previous poverty measurement documents, such as Ravallion (1994), and Deaton and Zaidi (2002). For approaches chosen for Mongolia's national poverty measurement, see more details in the poverty methodology technical note from NSO and the World Bank (2015).

38 See Deaton and Zaidi (2002)

B.2 CONSTRUCTION OF CONSUMPTION AGGREGATE

Constructing a consumption aggregate is also guided by theoretical and practical considerations. First, it must be as comprehensive as possible given the available information. Omitting some components from consumption aggregates assumes that they do not contribute to people's welfare, or that they do not affect the rankings of individuals in poverty measurement. Second, market and non-market transactions are to be included, which means that purchase is not the sole component of the indicator. Third, expenditure is not always the same as consumption. For perishable goods (mostly food), it is usual to assume that all purchases are consumed immediately. However, for other goods and services, such as housing or durable goods, corrections to expenditures on these items have to be made. Finally, the consumption aggregate is comprised of five main components: food, non-food, housing, durable goods and energy. The specific items included in each component, and the methodology used to assign a consumption value to each of these items are outlined below.

FOOD COMPONENT

The food component can be readily constructed by simply adding up consumption per food item, previously normalized to a uniform reference period, and then aggregating all food items per household. The HSES 2018 collects data on food consumption at the household level for 130 items that are organized in the following 14 categories: flour and flour products; meat and meat products; fish and seafood; dairy products; eggs; oils and fat; fruits and berries; sugar and jam; other foods; tea and coffee; mineral water and soft drinks; alcoholic beverages; and, tobacco and cigarettes.

A combination of both household diary and recall method is used to measure consumption in the HSES. In urban areas (capital and in aimag centers), the food consumption data is collected through a daily diary, which is compiled by an enumerator every ten days, three times during a month. This means that the reference period for the collection of data on food consumption from urban households is one month.

In rural areas (soum centers and countryside), a recall period of the last one week is used. There are at least three reasons for this different approach adapted for the rural households. First, the HSES enumerators live in aimag centers, which are often at a considerable distance from rural areas. It is impractical to visit rural households every ten-days to monitor their daily diary. Second, herder households move frequently even during a short survey period - sometimes they move just after enumerator's first visit. It is therefore difficult to find herders' dwelling at the same place when the one-month diary method is used. Lastly, people in rural areas make bulk purchases and thus have more problems filling out the diary daily compared to those living in urban areas.

A few general principles are applied in the construction of food component. First, all possible sources of food consumption are included. This means that the food component consists of not only expenditures on market purchases or on meals eaten away from home, but also food that was home-produced or received as gifts. Second, only food that was actually consumed was entered into the consumption aggregate, contrary to totaling food purchases or home-productions. Third, own-consumption and in-kind consumption were included in consumption aggregates. We took the quantity reported by the households and then apply the unit values calculated from households in the survey for these items. If the household did not make any purchase but consumed a particular food item, the average unit price from the increasingly larger geographic levels of aggregation (e.g. PSU that household belongs) was used to estimate consumption for that food item.

NON-FOOD COMPONENT

Compared to the food consumption, non-food consumption estimation is relatively simple and straightforward. Again, all related sources of nonfood consumption that are adjusted and compiled

to a common reference period should be included. Data on an extensive range of non-food items is collected in the HSES: 371 non-food items are classified in 38 different groups, such as clothing and footwear for men, women and children, jewelry and souvenirs, textiles, education, health, recreation, beauty and toiletry products and services, cultural expenses, household goods, durable goods, housing expenditures, transportation, communication, insurance and taxes. The HSES does not gather information on quantities consumed because most non-food items are too heterogeneous and thus very difficult to calculate the unit price accurately. This subsection covers the consumption of all the non-food items, excluding durable goods, housing and energy, which will be discussed later.

The rule of thumb for the choices of non-food items to include is that only items that contribute to the consumption are to be included. For instance, clothing, footwear, beauty articles, goods and recreation are included. On the other hand, several non-food items were excluded either because they represent an investment with the expectation of a future welfare increase, represent a large but infrequent expenditure, or their expenditures do not reflect an increase in household welfare. These excluded non-food items are capital transactions (e.g. acquisition of financial assets, payment of debt and interest), taxes, insurance, lumpy infrequent expenditures (like marriages, dowries, births and funeral expenses) and payment for domestic help. In addition, remittances sent to other households are better excluded. The rationale for this is to avoid double counting because these transfers are almost certainly already reflected in the consumption of the recipients. Hence including them would artificially increase living standards.

Two non-food categories, namely education and health deserve a special attention. In the case of education, there are three issues to consider. First, some argue that if education is an investment, it should be treated as savings and not as consumption. Returns on education are distributed not simply during the school period, but during all years thereafter. Second, there are life-cycle considerations: educational expenses are concentrated in a particular time period of one's life. Say that we compare two individuals who will pay the same amount for their education, but one is still studying while the other finished several years ago. The current student might seem as better-off, but that result is just related to age and not to true differences in welfare levels. The most appropriate way to deal with this issue would be to smooth these expenses over the life period. Third, we must consider the coverage of public education. If all people can benefit from free or heavily subsidized education as it happens to be the case in Mongolia and the decision of studying in private schools is driven by quality factors, this implies that differences in expenditures can be associated with differences in welfare levels and hence education should be included in the consumption aggregate in Mongolia.

Health expenses share some of the same features as education. As with education, expenditures on preventive health care could be considered as investment rather than consumption. Differences in access to publicly provided services may distort comparisons across households. If some sections of the population have access to free or significantly subsidized health services, whereas others have to rely on private services due to a lack of public healthcare, differences in expenditures do not correspond to differences in welfare. However, there are other factors to take into account. First, health expenditures are habitually infrequent and lumpy over the reference period. Second, health may be seen as a "regrettable necessity", i.e. by counting the expenditures incurred by a household member that was sick, the welfare of that household is seen increased when in fact, the opposite has happened. Third, health insurance can also distort comparisons. While an insured household member incur less expenditures during sickness, an uninsured member will incur higher expenditures. It was decided to include health expenses in the non-food component, because their exclusion would imply making no distinction between two households, both facing the same health problems, but only one is capable of paying.

The next challenge regarding non-food consumption is related to the choice of the recall period. The key aspect to consider is the relationship between recall periods and the frequency of purchases. Many non-food items are not purchased frequently enough to justify a weekly or a monthly recall period, exceptions being for instance, toiletry, beauty articles and payment of utilities. Hence generally, recall periods are the last month or the last year. The HSES collects nonfood consumption information with two reference periods: last month and last 12 months. Which recall period is chosen can have significant implications for the consumption aggregate. The use of last month data was discarded because households do not usually buy non-food items every month, and it is likely that many families will not report any expenditure at all. Although, last month data could provide an appropriate estimation of the average consumption, for the purposes of poverty analysis, those households that did not buy anything will have their consumption significantly biased downwards and will be more likely to be considered poor. Using the last 12 months as the reference period, thus, certainly overcomes these reference period issues. However, a trade-off appears when the reference period is extended. More households are likely to report expenditures, but the resulting average expenditure will be lower than that for expenditures with a shorter reference period. Hence, a third option that can be seen as a compromise between these two choices, which is to combine the information from both recall periods. In this approach, information was taken from the last month if available, and if the household did not purchase anything in the last month, information on the last 12 months will be considered.

DURABLE GOODS

Ownership of durable goods could be an important determinant of the welfare of households. Given that these goods typically last for many years, the expenditure on purchases is not the proper indicator to consider. The right measure to use, for consumption purposes, is the stream of services that households derive from all durable goods in their possession over the relevant reference period. This flow of utility is unobservable, but it can be assumed to be proportional to the value of the goods, which can be determined by depreciation rates. A usual procedure involves calculating depreciation rates for each type of goods based on their current value and age, which in this case is provided by the HSES, along with the number of durables owned by the household[39].

The estimation of durable goods involved three steps. The first step is selection of durable goods to be included for consumption aggregate. The HSES supplies data on 44 durable goods, ranging from domestic appliances, electronic goods and furniture, to vehicles and other transportation goods. However, one third of them were excluded since they were used for household businesses or fell under dwelling, "others," or residential categories. As a result, 30 durables are included. Second, the implicit depreciation rate (δi) is obtained by running a median regression of the log of the current value of the durable on a constant and its age. A quintile rather than an OLS regression is used to minimize the excessive influence of outliers. This method of calculating the depreciation rate was preferred to other formulas assuming a fixed lifespan of the asset because it captures more systematically how the value of the asset changes over time. These alternatives produced significantly lower predicted flows of consumption from durables owned. Finally, the stream of consumption was computed by multiplying the estimated value of the good a year ago by its depreciation rate, and aggregating use values of all selected durables to the household level.

39 Further refinements can be made using the inflation rate and nominal interest rate.

HOUSING

Housing is considered to be an essential part of determining living standards. Nonetheless, in most developing countries, limited or nonexistent housing rental markets pose a difficult challenge for the estimation and inclusion of this component in the consumption aggregate. As in the case of durable goods, the objective is to try to measure the utilities derived by the household from its living quarter. For households renting, the utility of the rented accommodation can be expressed as the actual amount of rent the households pay. In Mongolia, the value of dwellings that households reside in cannot be determined based upon the rental market information because about 98 percent of households own their dwellings. However, the HSES asked households for estimates of how much they would rent their living quarter for (hypothetical value) and how much their dwelling could be sold. Implicit rent values can, in principle, be used in the consumption aggregate whenever actual rents are not reported. Since these estimates are hypothetical, they may not be credible. An additional complication is that almost 40 percent of the population in Mongolia lives in gers, for which establishing a rental value is even more difficult.

The imputations for those owning their dwellings are conducted by estimating a hedonic model of the log of self-reported value of the dwelling on its characteristics such as the main material for floor, walls and roof, number of rooms, access to water, electricity, heating, location, etc. We then use this to predict the value of the dwelling and apply a straight-line depreciation rate to the predicted value assuming a fixed lifespan of 17 years for gers and 33 years for houses and apartments. The value of the dwelling is reported in the durables section but as an average for those owning more than one type of dwelling. The regression is therefore restricted only to cases where one of each type of dwelling is owned so that the reported value is specific to a single dwelling for each type. Where households own multiple types of dwellings (own both a ger and flat), the dwelling type that matches the characteristics reported in the housing module is used in the hedonic model. The hedonic model is estimated by running quintile regressions separately for gers and houses/apartments.

FUEL AND ENERGY

The non-food component that deserves another special attention is energy, the expenditures on heating and electricity. Mongolia is a country that endures extreme weather conditions, with temperatures dropping to -40 degrees Celsius in the winter and reaching up to +30 degrees Celsius in the summer. While summer may pose fewer inconveniences, winter is indeed a serious matter. Winters are long and last six months on average, during which temperatures are usually below zero. For instance, average temperature in January and February in Mongolia is -25 degrees Celsius. This means that heating and fuel are regarded as one of the vital household essentials all over the country, and in some cases, it constitutes a large and important component of their consumption.

The HSES requested households to self-record all their purchased, self-prepared (fuels fetched for free) fuels and energy services for data collection purposes. When there is no information available regarding prices of fuel items that households collected and prepared themselves and are obtained free of charge, it is impossible to assign monetary values to their energy consumption. In this case, imputations are made for free heating fuel, from their own collected sources, with quantities consumed valued at median prices in the primary unit. If purchase of fuels was not made within a particular primary unit, we used a median price belonging to the higher administrative level (soum, aimag, region and settlement strata).

B.3 PRICE ADJUSTMENTS

Mongolia shows remarkable seasonal differences in food prices. For instance, food prices are usually higher during spring compared to all the other seasons. At the same time, there are also regional price differences. Prices in Ulaanbaatar in particular are higher than they are in the rest of the country. Therefore, in order to accurately measure living standards, expenditure values need to be spatially and temporally corrected for such differences using price indices. In Mongolia's poverty measurement, the nominal consumption aggregate generated from the steps outlined above is adjusted for spatial and within survey price differences using the Paasche price index. A Paasche price index at the PSU level was constructed combining information from the HSES and the national consumer price index.

The Paasche price index is given by:

$$p_i^P = \left[\sum_{k=1}^{n} w_{ik} \left(\frac{p_{ik}}{p_{0k}} \right)^{-1} \right]^{-1}$$

Where W_{ik} - is the proportion of good k in the budget/consumption of primary sampling unit i;
P_{ik} - is the median price of good k in the primary sampling unit i; and
P_{0k} - is the national median price of good k

In the case of food, average budget shares for each food item were matched with the average prices paid, both of which were collected by the HSES. In the case of non-food items, the average budget share was provided by the HSES, whereas the average price was provided by the national non-food consumer price index. This means that all non-food items were bundled together, and it was assumed that they experienced the same inflation rates. Overall, the final price index adjusts for temporal aspects for both food and non-food items, but spatial adjustment was made for food portion only.

The average values and total price indices for food items are shown by stratum and by the months of the interview in Table B.1. Indices confirm that the cost of living in Ulaanbaatar is the highest in the country and that there are seasonal fluctuations in prices.

Table B.1 Cluster Paasche indices, by stratum and months of the interview

	Food paasche Indices				Total paasche Indices			
	Ulaanbaatar	Aimag center	Rural	National	Ulaanbaatar	Aimag center	Rural	National
2018								
January	0.98	0.95	0.86	0.93	0.99	0.98	0.93	0.96
February	1.01	0.96	0.91	0.96	1.00	0.98	0.95	0.97
March	1.04	0.98	0.90	0.98	1.01	0.99	0.95	0.98
April	1.05	1.01	0.94	1.00	1.01	0.99	0.96	0.99
May	1.06	1.03	0.95	1.02	1.01	1.01	0.97	1.00
June	1.10	1.05	0.98	1.05	1.03	1.01	0.98	1.01
July	1.09	1.04	0.97	1.03	1.03	1.01	0.97	1.00
August	1.03	1.00	0.92	0.99	1.02	1.01	0.96	1.00
September	1.04	0.99	0.93	0.99	1.03	1.01	0.97	1.00
October	1.05	1.01	0.92	1.00	1.04	1.02	0.98	1.01
November	1.05	1.01	0.97	1.02	1.05	1.04	1.01	1.04
December	1.09	1.03	0.96	1.03	1.07	1.04	1.00	1.04
Total	1.05	1.01	0.93	1.00	1.02	1.01	0.97	1.00

Source: HSES 2018

B.4 HOUSEHOLD COMPOSITION ADJUSTMENT

The final step in constructing a welfare indicator involves transforming measures of living standards from the household level to the per-capita level. The ultimate goal is to make comparisons across individuals and not across households. Since consumption data other than health and education expenses are collected at the household level, an individual welfare measure is estimated by dividing the total household consumption by the number of people in the household, and the value are assigned to each household member. A common practice when doing this is to assume that consumption is equally shared by household members.

B.5 POVERTY LINE

The poverty line can be defined as the monetary cost to a given person, at a given place and time, of a reference level of welfare (Ravallion, 1998). If a person does not attain that minimum level of standard of living, he or she will be considered as poor.

In collaboration with the World Bank, the poverty line in Mongolia is derived using the cost of basic needs approach. In this approach, poverty line is the cost of a bundle of goods deemed to be sufficient for basic needs and is comprised of two components: food and non-food. The current poverty line was derived from the HSES 2010. The food poverty line is set at the cost of acquiring a required food consumption bundle that provides 2100 calories per person per day and the non-food component takes into account the necessary non-food expenditures.

FOOD POVERTY LINE

The first step in setting food poverty line is to determine the nutritional requirements deemed appropriate for being healthy and able to participate in society. The calorie benchmark used in Mongolia is 2,100 calories per person per day. Next, we calculate a food consumption basket in quantities. To define a basket of foods, we use the bottom 40 percent of the population ranked in terms of real per-capita consumption as a reference group and calculate the average quantity consumed of each food item by the reference group. Third, unit caloric values were applied to convert the basket of quantities into caloric values. These unit caloric values are based on the recommendations from the Public Health Institute of the Ministry of Health of Mongolia. In calculating calorie intakes, a few things should be noted. Tobacco and liquors are not necessities. Further, it is very difficult to approximate caloric intakes for the meals eaten outside the household. Therefore, tobacco, liquors and meals eaten outside the household were excluded from the calculation. Fourth, the average cost per calorie were derived from the reference group and then a food poverty line was calculated by multiplying the computed average cost per calorie by 2100.

NON- FOOD POVERTY LINE

The non-food poverty line is calculated as an average of an upper non-food poverty line and a lower-nonfood poverty line. The upper non-food poverty line is the average non-food expenditure among people whose "food" expenditures are within 10 percent of the food poverty line while the lower non-food poverty line is the average non-food expenditure among people whose "total" expenditures are within 10 percent of the food poverty line. For both the upper and lower non-food poverty lines, 10 different averages are calculated by first taking the average non-food consumption of people within ±1% of the food poverty line (or total expenditure for the lower non-food poverty line), then the average of those within ±2%, repeating the process sequentially up to those within ±10% and calculating the average of these 10 different averages.

The total poverty line is given by the food poverty line plus the average of the upper and lower non-food poverty lines.

UPDATING THE POVERTY LINE

Once the poverty line is established, it is important to update it correctly for the new time period. The current national poverty line for Mongolia was based on living conditions in 2010 (derived from the 2010 HSES). The poverty line is updated only for changes in price levels between surveys. In Mongolia, both the food and non-food poverty lines are adjusted using Food and Non-food Consumer Price Indices, respectively. Table B.2 displays the computed poverty lines for 2018. The moderate poverty line is used for poverty estimates throughout the report, but poverty estimates with the lower and upper poverty lines are also presented in Annex C.

Table B.2 Poverty line per person per month, 2018

	Lower poverty line		Moderate poverty line		Upper poverty line	
	Tugrug	%	Tugrug	%	Tugrug	%
Food	84 993	67	84 993	51	84 993	39
Non-Food	42 731	33	81 587	49	133 621	61
Total	127 724	100	166 580	100	218 614	100

Source: HSES 2018

B.6 POVERTY MEASURES

The literature on poverty measurement is extensive, but attention will be given to the class of poverty measures proposed by Foster, Greer and Thorbecke (1984). This family of measures can be summarized by the following equation:

$$P_\alpha = (1/n)\sum_{i=1}^{q}\left(\frac{z - y_i}{z}\right)^\alpha$$

Where,
α-is some non-negative parameter,
z – is the poverty line,
y – denotes consumption,
i - represents individuals,
n –is the total number of individuals in the population,
q- is the number of individuals with consumption below the poverty line.

The headcount index (α=0) gives the share of the poor in the total population, i.e. it measures the percentage of population whose consumption is below the poverty line. This is the most widely used poverty measure mainly because it is very simple to understand and easy to interpret. However, it has some limitations. It fails to take into account neither how close or far the consumption levels of the poor are with respect to the poverty line nor the distribution among the poor. The poverty gap (α=1) is the average consumption shortfall of the population relative to the poverty line. Since the greater the shortfall and the wider the gap, the higher the chance for this measure pass over the first limitation of the headcount index. Finally, the severity of poverty (α=2) is sensitive to the distribution of consumption among the poor, meaning that although a transfer from a poor person to somebody less poor may leave the headcount or the poverty gap measures unaffected, but it will increase the severity of poverty.

ANNEX C. LOWER AND UPPER POVERTY ESTIMATES

Table C.1. Poverty lines per person per month, 2016 and 2018

	2016		2018	
	Tugrug	(%)	Tugrug	(%)
Lower				
Food	75 034	67	84 993	67
Non-food	37 244	33	42 731	33
Total	112 278	100	127 724	100
Moderate				
Food	75 034	51	84 993	51
Non-food	71 111	49	81 587	49
Total	146 145	100	166 580	100
Upper				
Food	75 034	39	84 993	39
Non-food	116 463	61	133 621	61
Total	191 497	100	218 614	100

Note: Poverty line estimates based on 2010 index

Sources: HSES 2016 and 2018

Table C.2. Poverty estimates based on the lower poverty line, 2016 and 2018

	2016				2018			
	Poverty			Share below the poverty line (%)	Poverty			Share below the poverty line (%)
	Headcount	Gap	Severity		Headcount	Gap	Severity	
National	15.2	3.4	1.1	100.0	13.9	3.0	1.0	100.0
Urban/Rural								
Urban	14.0	3.2	1.1	62.2	13.9	3.2	1.1	66.1
Rural	17.9	3.6	1.1	37.8	14.0	2.6	0.8	33.9
Location								
Ulaanbaatar	12.3	2.8	1.0	36.5	12.9	3.0	1.0	42.6
Aimag center	17.3	4.0	1.3	25.7	15.9	3.8	1.3	23.5
Soum center	17.5	3.6	1.1	20.1	13.4	2.7	0.8	17.5
Countryside	18.4	3.6	1.1	17.7	14.6	2.6	0.7	16.4
Region								
Western	20.3	4.3	1.4	18.1	15.3	3.2	1.0	14.4
Khangai	16.8	3.3	1.0	20.3	14.1	2.7	0.8	18.5
Central	13.1	3.1	1.1	13.4	12.6	2.8	0.9	14.3
Eastern	24.7	5.5	1.8	11.7	20.3	4.3	1.4	10.2

Sources: HSES 2016 and 2018

Table C.3. Poverty estimates based on the upper poverty line, 2016 and 2018

	2016				2018			
	Poverty			Share below the poverty line (%)	Poverty			Share below the poverty line (%)
	Headcount	Gap	Severity		Headcount	Gap	Severity	
National	48.5	15.3	6.5	100.0	46.5	14.4	6.1	100.0
Urban/Rural								
Urban	45.1	14.1	6.1	63.1	43.8	13.9	6.1	62.6
Rural	55.6	17.6	7.4	36.9	51.6	15.4	6.2	37.4
Location								
Ulaanbaatar	42.2	12.9	5.5	39.4	41.8	13.2	5.7	41.3
Aimag center	50.9	16.6	7.3	23.7	48.3	15.7	6.9	21.3
Soum center	51.6	16.5	7.1	18.6	49.5	14.8	6.0	19.3
Countryside	60.5	18.9	7.8	18.3	54.1	16.2	6.4	18.1
Region								
Western	58.6	18.8	8.1	16.4	53.4	16.3	6.7	15.1
Khangai	54.4	16.9	7.0	20.7	51.8	15.6	6.3	20.4
Central	44.0	13.7	5.9	14.1	44.0	13.4	5.6	14.9
Eastern	63.5	22.3	10.1	9.4	55.3	18.8	8.3	8.3

Sources: HSES 2016 and 2018

ANNEX D. ADDITIONAL STATISTICAL TABLES

Table D.1. Poverty rates on different scales of poverty line, 2018

Poverty line	Poverty		
	Headcount	Gap	Severity
150%	55.7	19.0	8.6
140%	51.0	16.6	7.3
130%	46.0	14.1	6.0
120%	40.2	11.7	4.7
110%	34.6	9.4	3.6
100%	28.4	7.2	2.7
90%	21.8	5.2	1.8
80%	15.6	3.5	1.2
70%	10.4	2.1	0.7
60%	6.0	1.1	0.3
50%	2.9	0.5	0.1

Source: HSES 2018

Table D.2. Poverty and vulnerability trend

	2010	2012	2014	2016	2018
% headcount rate under national poverty line					
National	38.8	27.4	21.6	29.6	28.4
Urban	33.2	23.3	18.8	27.1	27.2
Rural	49.0	35.4	26.4	34.9	30.8
% headcount rate under 1.25 * national poverty line					
National	54.2	41.5	35.7	45.1	43.3
Urban	48.9	36.1	31.3	41.9	40.8
Rural	63.7	52.0	43.3	52.0	48.2

Sources: HSES 2010-2018

Table D.3. Poverty indicators, by region, 2018

	National	Western	Khangai	Central	Eastern	Ulaanbaatar
Poverty headcount	28.4	31.8	30.8	26.1	37.4	25.9
	(0.7)	(1.3)	(1.2)	(1.3)	(1.8)	(1.2)
Poverty gap	7.2	7.8	7.3	6.6	10.0	6.7
	(0.2)	(0.4)	(0.4)	(0.4)	(0.6)	(0.4)
Severity	2.7	2.8	2.5	2.4	3.7	2.6
	(0.1)	(0.2)	(0.2)	(0.2)	(0.3)	(0.2)
Memorandum items:						
Population share (%)	100.0	13.2	18.3	15.8	6.9	45.8
Population ('000)	3 186.4	407.2	600.4	511.5	222.6	1 444.7
Share in poor (%)	100.0	14.7	19.9	14.5	9.2	41.8
Poor ('000)	904.9	133.2	179.6	131.0	82.8	378.2
Household size	3.6	3.9	3.3	3.3	3.3	3.8
Children (% household size)	25.3	26.7	22.8	24.1	24.8	26.6
Age of household head	46.6	46.6	47.2	46.2	46.7	46.4
Male-headed households (%)	75.5	82.6	77.7	74.8	73.9	73.0
Urbanization (%)	66.3	32.4	40.6	38.8	38.7	100.0

Note: Population data is based on administrative data and refers to the estimated population at the end 2018 in Mongolia.
Standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.4. Poverty indicators, by location, 2018

	National	Urban			Rural		
		Total	Ulaan-baatar	Aimag center	Total	Soum center	Country side
Poverty headcount	28.4	27.2	25.9	30.1	30.8	28.9	32.9
	(0.7)	(0.9)	(1.2)	(1.2)	(0.8)	(1.0)	(1.3)
Poverty gap	7.2	7.2	6.7	8.2	7.2	7.0	7.4
	(0.2)	(0.3)	(0.4)	(0.4)	(0.2)	(0.3)	(0.4)
Severity	2.7	2.8	2.6	3.2	2.4	2.4	2.4
	(0.1)	(0.2)	(0.2)	(0.2)	(0.1)	(0.1)	(0.2)
Memorandum items:							
Population share (%)	100.0	66.3	45.8	20.5	33.7	18.1	15.6
Population ('000)	3 186.4	2 147.4	1 444.7	702.7	1 039.0	558.0	481.0
Share in poor (%)	100.0	63.5	41.8	21.7	36.5	18.4	18.1
Poor ('000)	904.9	574.6	378.2	196.4	330.3	166.5	163.8
Household size	3.6	3.7	3.8	3.5	3.4	3.3	3.5
Children (% household size)	26.5	27.4	27.7	26.7	24.8	25.1	24.4
Age of household head	46.6	46.5	46.4	46.8	46.6	47.6	45.5
Male-headed households (%)	75.5	72.9	73.0	72.5	80.2	76.2	85.0

Note: Population data is based on administrative data and refers to the estimated population at the end 2018 in Mongolia.
Standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.5. Poverty indicators, by aimag, 2018

	Poverty headcount		Poverty gap		Poverty severity	
	Estimation	SE	Estimation	SE	Estimation	SE
National average	28.4	0.7	7.2	0.2	2.7	0.1
Western	31.8	1.3	7.8	0.4	2.8	0.2
Bayan-Ulgii	24.3	2.2	5.2	0.6	1.8	0.3
Govi-Altai	45.1	3.3	13.4	1.3	5.1	0.6
Zavkhan	25.7	2.5	5.0	0.8	1.8	0.4
Uvs	29.6	2.5	7.2	0.8	2.5	0.3
Khovd	40.9	3.0	10.9	1.1	4.1	0.5
Khangai	30.8	1.2	7.3	0.4	2.5	0.2
Arkhangai	38.2	2.3	9.9	0.9	3.5	0.4
Bayankhongor	29.6	2.3	4.3	0.5	1.1	0.2
Bulgan	36.8	3.1	11.3	1.2	4.4	0.6
Orkhon	25.1	3.2	6.5	1.0	2.5	0.5
Uvurkhangai	34.1	2.4	7.6	0.7	2.4	0.3
Khuvsgul	25.3	2.8	6.1	0.8	2.1	0.3
Central	26.1	1.3	6.6	0.4	2.4	0.2
Govisumber	51.9	4.8	12.2	1.9	4.2	1.0
Darkhan-Uul	32.8	4.0	9.6	1.7	4.1	0.9
Dornogovi	23.4	2.5	5.2	0.7	1.7	0.3
Dundgovi	21.7	2.5	6.3	0.8	2.5	0.4
Umnugovi	11.8	2.0	2.2	0.4	0.7	0.2
Selenge	34.0	2.5	7.9	0.8	2.7	0.4
Tuv	20.5	2.2	5.4	0.6	2.0	0.3
Eastern	37.4	1.8	10.0	0.6	3.7	0.3
Dornod	42.5	3.1	12.0	1.2	4.6	0.6
Sukhbaatar	30.2	2.5	6.6	0.8	2.4	0.4
Khentii	38.0	3.1	10.8	1.1	4.0	0.5
Ulaanbaatar	25.9	1.2	6.7	0.4	2.6	0.2

Source: HSES 2018

Table D.6. Poverty indicators, by aimag, 2016 and 2018

	2016					2018				
	Poverty			Population share (%)	Share below the poverty line (%)	Poverty			Population share (%)	Share below the poverty line (%)
	Headcount	Gap	Severity			Headcount	Gap	Severity		
National	29.6	7.7	2.9	100.0	100.0	28.4	7.2	2.7	100.0	100.0
Urban/Rural										
Urban	27.1	7.2	2.8	67.8	62.1	27.2	7.2	2.8	66.3	63.5
Rural	34.9	8.8	3.2	32.2	37.9	30.8	7.2	2.4	33.7	36.5
Location										
Ulaanbaatar	24.8	6.4	2.5	45.2	37.8	25.9	6.7	2.6	45.8	41.8
Aimag center	31.8	8.8	3.4	22.6	24.3	30.1	8.2	3.2	20.5	21.7
Soum center	32.3	8.5	3.2	17.5	19.1	28.9	7.0	2.4	18.1	18.4
Countryside	38.0	9.2	3.2	14.6	18.8	32.9	7.4	2.4	15.6	18.1
Region										
Western	36.0	9.7	3.7	13.6	16.5	31.8	7.8	2.8	13.2	14.7
Khangai	33.6	8.2	2.9	18.4	20.9	30.8	7.3	2.5	18.3	19.8
Central	26.8	7.0	2.7	15.5	14.1	26.1	6.6	2.4	15.8	14.5
Eastern	43.9	12.5	4.8	7.2	10.7	37.4	10.0	3.7	6.9	9.2

Source: HSES 2016 and 2018

Table D.7. Inequality indicators and average per capita consumption, 2016 and 2018

	Theil of GE(1)		Gini		GE(2)		Per capita average consumption per month		
	2016	2018	2016	2018	2016	2018	2016	2018	Change
National	0.19	0.19	0.32	0.33	0.28	0.28	269 328	279 912	3.9
Urban/Rural									
Urban	0.20	0.21	0.33	0.34	0.30	0.30	283 934	294 377	3.7
Rural	0.15	0.15	0.30	0.29	0.21	0.21	238 520	251 438	5.4
Location									
Ulaanbaatar	0.21	0.21	0.34	0.34	0.32	0.32	298 437	306 373	2.7
Aimag center	0.17	0.18	0.31	0.32	0.23	0.25	254 967	267 551	4.9
Soum center	0.16	0.15	0.30	0.30	0.20	0.21	249 889	257 564	3.1
Countryside	0.15	0.15	0.28	0.29	0.22	0.21	224 914	244 330	8.6
Region									
Western	0.14	0.15	0.28	0.29	0.18	0.20	226 325	245 355	8.4
Khangai	0.15	0.16	0.30	0.30	0.20	0.23	243 769	251 806	3.3
Central	0.18	0.17	0.32	0.31	0.24	0.23	279 637	278 150	-0.5
Eastern	0.15	0.19	0.29	0.33	0.23	0.27	211 121	248 860	17.9

Source: HSES 2016 and 2018.

Table D.8. Inequality indicators and average consumption, by aimag and capital, 2018

	Theil index	Gini coefficient	GE(2)	Per capita average consumption per month (tugrug)
National	0.19	0.33	0.28	279 912
Western	0.15	0.29	0.20	245 355
Bayan-Ulgii	0.15	0.30	0.20	284 004
Govi-Altai	0.16	0.29	0.23	200 508
Zavkhan	0.11	0.25	0.13	257 491
Uvs	0.14	0.28	0.19	238 951
Khovd	0.14	0.28	0.19	214 673
Khangai	0.16	0.30	0.23	251 806
Arkhangai	0.13	0.28	0.16	217 024
Bayankhongor	0.16	0.28	0.28	256 438
Bulgan	0.12	0.27	0.13	211 286
Orkhon	0.21	0.34	0.33	299 278
Uvurkhangai	0.13	0.28	0.16	236 884
Khuvsgul	0.13	0.28	0.14	266 439
Central	0.17	0.31	0.23	278 150
Govisumber	0.09	0.23	0.11	182 132
Darkhan-Uul	0.16	0.31	0.18	249 623
Dornogovi	0.15	0.29	0.18	284 353
Dundgovi	0.17	0.31	0.21	302 939
Umnugovi	0.13	0.27	0.16	310 862
Selenge	0.14	0.29	0.17	240 174
Tuv	0.20	0.33	0.32	322 332
Eastern	0.19	0.33	0.27	248 860
Dornod	0.16	0.30	0.22	217 771
Sukhbaatar	0.18	0.33	0.23	289 887
Khentii	0.20	0.33	0.32	247 310
Ulaanbaatar	0.21	0.34	0.32	306 373

Source: HSES 2018

Table D.9. Decomposition of poverty changes into growth and inequality components, 2016-2018

	Poverty		
	Headcount	Gap	Severity
National			
Change in poverty	-1.2	-0.6	-0.2
Growth component	-2.5	-0.8	-0.4
Inequality component	1.3	0.3	0.1
Urban			
Change in poverty	0.1	-0.1	0.0
Growth component	-2.1	-0.7	-0.3
Inequality component	2.1	0.7	0.3
Rural			
Change in poverty	-4.1	-1.6	-0.8
Growth component	-4.2	-1.3	-0.5
Inequality component	0.1	-0.3	-0.2
Ulaanbaatar			
Change in poverty	1.1	0.3	0.1
Growth component	-1.2	-0.5	-0.2
Inequality component	2.3	0.8	0.4
Aimag center			
Change in poverty	-1.7	-0.6	-0.2
Growth component	-3.1	-1.1	-0.5
Inequality component	1.4	0.5	0.3
Soum center			
Change in poverty	-3.4	-1.5	-0.7
Growth component	-2.2	-0.7	-0.3
Inequality component	-1.2	-0.8	-0.4
Country side			
Change in poverty	-5.1	-1.8	-0.8
Growth component	-7.1	-2.2	-0.9
Inequality component	2.0	0.4	0.1
Western			
Change in poverty	-4.3	-1.9	-0.9
Growth component	-6.3	-2.0	-0.9
Inequality component	2.1	0.1	0.0
Khangai			
Change in poverty	-2.7	-0.9	-0.4
Growth component	-3.0	-0.8	-0.3
Inequality component	0.2	-0.1	-0.1
Central			
Change in poverty	-0.7	-0.3	-0.2
Growth component	0.3	0.1	0.0
Inequality component	-1.0	-0.5	-0.3
Eastern			
Change in poverty	-6.6	-2.5	-1.0
Growth component	-10.6	-4.9	-2.3
Inequality component	4.1	2.4	1.3

Source: HSES 2016 and 2018.

Table D.10. Poverty indicators by quarter, 2018

	National	I quarter (Jan-Mar, 2018)	II quarter (Apr-Jun, 2018)	III quarter (Jul-Sep, 2018)	IV quarter (Oct-Dec, 2018)
Poverty headcount	28.4	28.6	29.7	27.1	28.1
	(0.7)	(1.3)	(1.3)	(1.4)	(1.3)
Poverty gap	7.2	7.5	7.5	6.8	6.9
	(0.2)	(0.5)	(0.5)	(0.5)	(0.4)
Poverty severity	2.7	2.9	2.8	2.5	2.5
	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)
Memorandum items:					
Population share (%)	100.0	25.2	25.1	24.7	25.0
Share in poor (%)	100.0	25.4	26.3	23.5	24.8
Household size	3.6	3.6	3.6	3.5	3.6
Children (% household size)	26.5	26.5	26.5	26.1	26.7
Age of household head	46.6	46.3	46.5	46.9	46.5
Male-headed households (%)	75.5	75.1	75.2	75.1	76.4

Note: Standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.11. Poverty indicators by household size, 2018

	National	Household size							
		1	2	3	4	5	6	7	8-above
Poverty headcount	28.4	2.0	6.7	13.7	23.2	33.7	45.9	55.0	68.9
	(0.7)	(0.4)	(0.6)	(0.7)	(0.9)	(1.2)	(1.8)	(2.8)	(3.3)
Poverty gap	7.2	0.3	1.2	2.6	5.1	7.9	11.8	16.7	24.7
	(0.2)	(0.1)	(0.2)	(0.2)	(0.2)	(0.4)	(0.6)	(1.2)	(1.7)
Poverty severity	2.7	0.1	0.4	0.7	1.7	2.7	4.4	7.1	11.5
	(0.1)	(0.0)	(0.1)	(0.1)	(0.1)	(0.2)	(0.3)	(0.7)	(1.0)
Memorandum items:									
Population share (%)	100.0	3.6	9.5	16.3	25.6	21.8	13.2	5.6	4.4
Share in poor (%)	100.0	0.3	2.2	7.8	20.9	25.9	21.3	10.9	10.7
Children (% household size)	26.5	0.0	6.1	21.5	36.0	42.0	43.9	41.9	39.6
Age of household head	46.6	53.8	54.7	45.1	41.3	42.3	44.0	46.5	50.7
Male-headed households (%)	75.5	46.4	66.1	75.4	85.1	87.8	87.6	81.7	77.8

Note: Standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.12. Poverty indicators by age of household head, 2018

	National	<30	30 - 39	40 - 49	50 - 59	60+
Poverty headcount	28.4	25.7	33.9	28.5	27.2	20.1
	(0.7)	(1.4)	(1.1)	(1.1)	(1.3)	(1.3)
Poverty gap	7.2	5.4	8.5	7.7	7.0	4.8
	(0.2)	(0.4)	(0.4)	(0.4)	(0.5)	(0.4)
Poverty severity	2.7	1.8	3.1	3.0	2.7	1.8
	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Memorandum items:						
Population share (%)	100.0	10.0	29.0	27.7	19.7	13.6
Share in poor (%)	100.0	9.1	34.6	27.8	18.9	9.6
Household size	3.6	3.2	4.2	4.1	3.3	2.6
Children (% household size)	26.5	33.0	45.0	27.0	11.6	7.8
Age of household head	46.6	26.1	34.5	44.3	54.4	68.8
Male-headed households (%)	75.5	84.9	85.5	80.6	69.6	56.5

Note: Standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.13. Poverty indicators by gender of the household head, 2018

	National		Urban		Rural	
	Female	Male	Female	Male	Female	Male
Poverty headcount	31.7	27.6	32.4	25.7	29.4	31.0
	(1.4)	(0.7)	(1.7)	(0.9)	(1.6)	(0.9)
Poverty gap	9.0	6.7	9.5	6.5	7.4	7.2
	(0.5)	(0.2)	(0.7)	(0.3)	(0.6)	(0.3)
Poverty severity	3.6	2.5	3.9	2.5	2.7	2.4
	(0.3)	(0.1)	(0.3)	(0.2)	(0.3)	(0.1)
Memorandum items:						
Population share (%)	19.3	80.7	22.1	77.9	13.7	86.3
Share in poor (%)	21.5	78.5	26.3	73.7	13.1	86.9
Household size	2.8	3.8	3.0	3.9	2.3	3.6
Children (% household size)	19.9	27.1	21.3	28.1	16.4	25.3
Age of household head	52.9	44.5	51.8	44.6	55.6	44.4
Married, living together (%)	15.3	93.4	16.5	93.9	11.2	92.4
Separated, divorced, widowed (%)	72.9	4.1	72.3	4.0	75.0	4.1

Note: Standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.14. Poverty indicators, by the level of education attainment of household head, 2018

	National	None	Primary	Lower secondary	Higher secondary	Vocational	University
Poverty headcount	28.4	51.7	41.6	41.1	33.0	26.8	10.1
	(0.7)	(2.3)	(1.7)	(1.3)	(1.2)	(1.2)	(0.8)
Poverty gap	7.2	14.7	11.0	11.0	8.6	6.4	2.0
	(0.2)	(1.0)	(0.6)	(0.5)	(0.4)	(0.4)	(0.2)
Poverty severity	2.7	5.8	4.1	4.2	3.3	2.3	0.6
	(0.1)	(0.6)	(0.3)	(0.3)	(0.2)	(0.2)	(0.1)
Memorandum items:							
Population share (%)	100.0	3.6	7.5	14.0	25.6	25.2	24.1
Share in poor (%)	100.0	6.5	11.0	20.3	29.8	23.8	8.6
Household size	3.6	3.5	3.3	3.5	3.7	3.7	3.5
Children (% household size)	25.3	26.8	20.3	21.8	26.6	24.2	28.6
Age of household head	46.6	47.9	54.5	48.8	44.5	48.1	43.0
Male-headed households (%)	75.5	71.6	68.5	78.5	75.7	77.4	74.4

Note: Standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.15. Poverty indicators by the sector of employment of household head, 2018

	National	Employed				Unemployed	Out of the labor force
		Total	Agriculture	Industry	Services		
Poverty headcount	28.4	27.0	35.9	30.0	20.9	44.9	29.3
	(0.7)	(0.7)	(1.2)	(1.3)	(0.9)	2.6	1.2
Poverty gap	7.2	6.5	8.4	7.7	4.9	13.3	8.1
	(0.2)	(0.2)	(0.4)	(0.4)	(0.3)	1.1	0.5
Poverty severity	2.7	2.3	2.8	2.8	1.7	5.7	3.2
	(0.1)	(0.1)	(0.2)	(0.2)	(0.1)	0.7	0.2
Memorandum items:							
Population share (%)	100.0	72.9	17.6	20.4	34.9	4.8	22.3
Share in poor (%)	100.0	69.4	22.2	21.6	25.6	7.6	23.0
Household size	3.6	3.8	3.7	4.0	3.8	3.9	2.9
Children (% household size)	25.3	30.1	26.1	32.8	30.6	24.7	13.2
Age of household head	46.6	41.1	43.0	39.4	41.0	44.3	60.9
Male-headed households (%)	75.5	83.5	90.3	89.5	76.7	83.8	53.7

Note: Standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.16. Poverty indicators, by the employment status of household head, 2018

	National	Employed				Unem-ployed	Pensioner
		Herder	Private	Public	State		
Poverty headcount	28.4	33.3	27.5	21.2	14.9	44.9	29.3
	(0.7)	(1.3)	(1.0)	(1.3)	(2.4)	(2.6)	(1.2)
Poverty gap	7.2	7.2	7.1	4.2	3.8	13.3	8.1
	(0.2)	(0.4)	(0.3)	(0.3)	(0.9)	(1.1)	(0.5)
Poverty severity	2.7	2.3	2.7	1.2	1.4	5.7	3.2
	(0.1)	(0.1)	(0.2)	(0.1)	(0.4)	(0.7)	(0.2)
Memorandum items:							
Population share (%)	100.0	15.1	42.4	12.1	3.3	4.8	22.3
Share in poor (%)	100.0	17.7	41.0	9.0	1.7	7.6	23.0
Household size	3.6	3.7	3.8	3.7	3.9	3.9	2.9
Children (% household size)	25.3	26.0	31.3	30.8	31.8	24.7	13.2
Age of household head	46.6	43.2	40.4	40.8	40.4	44.3	60.9
Male-headed households (%)	75.5	90.3	83.1	75.2	87.9	83.8	53.7

Note: A pensioner refers to a household head who receive any pension or benefit from the state

Source: HSES 2018

Table D.17. Livestock holdings, 2018

	Cattle		Horses		Camels		Sheeps		Goats		Bods	
	Holders (%)	Average number (in bod)	Holders (%)	Average number (in bod)	Holders (%)	Average number (in bod)	Holders (%)	Average number (in bod)	Holders (%)	Average number (in bod)	Holders (%)	Average number (in bod)
National	21.7	5.5	17.6	5.8	2.4	7.1	21.4	38.5	21.8	32.6	26.6	17.8
Urban/Rural												
Urban	4.8	4.0	2.6	4.9	0.2	2.8	3.9	24.7	3.9	23.2	6.6	9.1
Rural	55.1	5.7	47.1	6.0	6.9	7.3	55.8	40.4	57.2	33.9	66.1	19.5
Location												
Ulaanbaatar	2.4	4.7	1.0	5.3	0.0	1.3	1.1	24.7	0.9	15.4	3.1	7.6
Aimag center	10.1	3.7	6.1	4.8	0.4	3.1	10.0	24.7	10.6	24.7	14.4	9.8
Soum center	37.0	3.7	25.6	4.1	2.3	3.7	33.7	20.0	35.4	18.7	45.5	9.9
Countryside	76.1	6.9	72.0	6.7	12.2	8.1	81.6	50.1	82.4	41.4	89.9	25.2
Region												
Western	48.7	3.5	41.3	3.2	8.1	3.3	48.6	28.7	51.4	28.1	59.4	12.7
Khangai	40.2	6.6	33.4	5.7	2.2	10.9	42.4	36.0	42.6	30.3	49.5	18.4
Central	26.1	5.5	20.5	6.6	4.6	12.5	26.3	47.5	27.2	42.7	34.1	21.0
Eastern	39.3	7.4	33.9	11.2	3.4	2.0	36.8	58.7	37.1	37.2	42.6	28.6
Poverty status												
Non-poor	22.2	6.2	17.8	6.9	2.6	8.6	21.4	45.8	21.6	37.4	26.7	21.0
Poor	20.5	3.4	17.0	3.0	1.9	1.9	21.2	19.8	22.4	21.0	26.5	9.6

Note: The bod scale was used to estimate the size of the herd. These factors tarnsform catlle, camels, sheep and goats into equivalent horses. One horse is assumed to have the same value as one cattle, 0.67 camels, 6 sheeps or eight goats. Cattle includes cows and yaks. Average number of livestock (in bod) was based on households having this type of livestock

Source: HSES 2018

Table D.18. Poverty indicators by livestock holding, 2018

	National		Urban		Rural	
	With livestock	Without livestock	With livestock	Without livestock	With livestock	Without livestock
Poverty headcount	28.2	28.5	23.2	27.5	29.2	33.8
	(0.9)	(0.8)	(2.0)	(1.0)	(1.0)	(1.2)
Poverty gap	6.1	7.6	5.8	7.3	6.2	9.1
	(0.3)	(0.3)	(0.9)	(0.3)	(0.3)	(0.4)
Poverty severity	2.0	2.9	2.3	2.8	1.9	3.4
	(0.1)	(0.1)	(0.6)	(0.2)	(0.1)	(0.2)
Memorandum items:						
Population share (%)	26.6	73.4	6.6	93.4	66.1	33.9
Share in poor (%)	26.5	73.5	5.6	94.4	62.8	37.2
Household size	3.7	3.5	3.9	3.7	3.6	3.0
Children (% household size)	24.9	25.4	27.1	26.2	24.5	22.0
Age of household head	45.9	46.8	46.3	46.6	45.8	47.9
Male-headed households (%)	86.1	71.8	84.7	72.1	86.3	70.5

Note: Standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.19. Poverty indicators, by ownership of land, 2018

	National		Urban		Rural	
	With land	Without land	With land	Without land	With land	Without land
Poverty headcount	26.8	29.9	28.1	26.3	24.5	37.3
	(0.8)	(0.9)	(1.1)	(1.2)	(1.0)	(1.2)
Poverty gap	6.4	8.0	6.9	7.4	5.3	9.2
	(0.3)	(0.3)	(0.4)	(0.4)	(0.3)	(0.4)
Poverty severity	2.3	3.1	2.6	3.0	1.7	3.2
	(0.1)	(0.2)	(0.2)	(0.2)	(0.1)	(0.2)
Memorandum items:						
Population share (%)	50.0	50.0	49.3	50.7	51.3	48.7
Share in poor (%)	47.2	52.8	50.9	49.1	40.8	59.2
Household size	3.8	3.4	3.8	3.5	3.7	3.1
Children (% household size)	25.3	25.3	25.6	26.8	24.6	22.6
Age of household head	47.9	45.4	48.3	45.0	47.4	46.0
Male-headed households (%)	78.6	72.7	75.8	70.2	83.6	77.1

Note: Standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.20. Poverty indicators by possession of savings, 2018

	National		Urban		Rural	
	With saving	Without saving	With saving	Without saving	With saving	Without saving
Poverty headcount	14.5	33.0	11.5	32.1	19.8	34.8
	(0.8)	(0.7)	(1.0)	(1.0)	(1.2)	(0.9)
Poverty gap	3.0	8.6	2.5	8.6	3.7	8.5
	(0.2)	(0.3)	(0.3)	(0.4)	(0.3)	(0.3)
Poverty severity	0.9	3.2	0.8	3.4	1.1	2.9
	(0.1)	(0.1)	(0.1)	(0.2)	(0.1)	(0.1)
Memorandum items:						
Population share (%)	24.8	75.2	23.7	76.3	27.0	73.0
Share in poor (%)	12.7	87.3	10.0	90.0	17.4	82.6
Household size	3.7	3.5	3.7	3.7	3.8	3.3
Children (% household size)	29.4	24.0	29.5	25.3	29.1	21.7
Age of household head	43.9	47.4	44.2	47.3	43.3	47.7
Male-headed households (%)	81.0	73.7	78.3	71.2	85.7	78.4

Note: Standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.21. Poverty indicators by type of loans, 2018

	National	Type of loans								No loan
		with any loan	Salary	Pension	Mortgage	Household consumption	Herders	Business	Other	
Poverty headcount	28.4	24.5	20.2	29.0	8.1	28.3	30.3	14.2	24.9	34.2
	(0.7)	(0.7)	(0.9)	(1.4)	(1.3)	(2.7)	(1.5)	(2.2)	(1.6)	(1.0)
Poverty gap	7.2	5.5	4.3	7.3	1.3	7.7	5.7	2.6	5.4	9.6
	(0.2)	(0.2)	(0.3)	(0.5)	(0.3)	(1.0)	(0.4)	(0.6)	(0.4)	(0.4)
Poverty severity	2.7	1.9	1.4	2.6	0.4	3.0	1.7	0.8	1.8	3.8
	(0.1)	(0.1)	(0.1)	(0.2)	(0.1)	(0.6)	(0.2)	(0.3)	(0.2)	(0.2)
Memorandum items:										
Population share (%)	100.0	59.7	43.7	21.2	12.4	7.6	15.2	4.7	17.1	40.3
Share in poor (%)	100.0	51.5	36.1	25.1	4.1	8.8	18.8	2.7	17.3	48.5
Household size	3.6	3.8	4.1	3.1	3.9	4.2	4.1	4.2	4.2	3.3
Children (% household size)	25.3	27.0	31.7	11.5	34.8	32.0	29.5	29.1	33.6	23.1
Age of household head	46.6	46.2	41.8	60.2	39.6	43.1	43.1	44.7	42.6	47.1
Male-headed households (%)	75.5	78.9	84.6	60.3	85.0	81.6	92.2	82.0	81.6	71.1

Note: Standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.22. Poverty indicators by type of dwelling, 2018

	National				Urban				Rural			
	Ger	Apartment	House	Other	Ger	Apartment	House	Other	Ger	Apartment	House	Other
Poverty headcount	43.2	6.4	27.6	35.0	51.3	6.2	29.3	42.6	36.3	10.2	24.0	17.7
	(0.9)	(0.7)	(0.9)	(3.7)	(1.5)	(0.7)	(1.2)	(4.6)	(1.1)	(2.0)	(1.3)	(4.2)
Poverty gap	11.9	1.1	6.3	8.5	15.6	1.1	6.8	10.3	8.7	1.9	5.2	4.6
	(0.4)	(0.2)	(0.3)	(1.2)	(0.7)	(0.2)	(0.4)	(1.5)	(0.3)	(0.5)	(0.3)	(1.5)
Poverty severity	4.6	0.3	2.2	3.0	6.5	0.3	2.5	3.5	3.0	0.5	1.7	1.8
	(0.2)	(0.1)	(0.1)	(0.6)	(0.4)	(0.1)	(0.2)	(0.8)	(0.2)	(0.2)	(0.1)	(0.7)
Memorandum items:												
Population share (%)	37.5	24.6	35.9	2.0	26.0	35.2	36.7	2.1	60.1	3.7	34.4	1.8
Share in poor (%)	57.1	5.6	34.9	2.4	49.1	8.1	39.5	3.3	70.9	1.2	26.8	1.1
Household size	3.5	3.4	3.8	3.6	3.7	3.5	3.9	3.7	3.3	3.2	3.6	3.3
Children (% household size)	24.8	26.3	25.2	25.5	27.2	26.3	25.6	25.0	22.9	25.8	24.4	26.4
Age of household head	46.1	45.2	48.3	44.9	46.1	45.2	48.3	46.3	46.1	44.1	48.1	41.8
Male-headed households (%)	74.8	72.8	78.6	69.0	68.1	72.3	77.4	65.7	79.9	80.5	81.0	75.5

Note: Other includes student residences, company dormitoris and any other building designed not to be inhabited by households standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.23. Poverty indicators, by type of infrastructure services, 2018

	Water sources		Sanitation		Electricity		All three	
	Yes	No	Yes	No	Yes	No	Yes	No
Poverty headcount	27.3	35.8	9.6	35.8	28.4	42.6	9.5	35.7
	(0.7)	(1.4)	(0.7)	(0.7)	(0.7)	(8.5)	(0.7)	(0.7)
Poverty gap	7.0	8.3	1.9	9.2	7.2	12.4	1.9	9.2
	(0.3)	(0.4)	(0.2)	(0.3)	(0.2)	(3.2)	(0.2)	(0.3)
Poverty severity	2.6	2.8	0.6	3.5	2.7	4.4	0.6	3.5
	(0.1)	(0.2)	(0.1)	(0.1)	(0.1)	(1.3)	(0.1)	(0.1)
Memorandum items:								
Population share (%)	87.0	13.0	28.2	71.8	99.8	0.2	28.0	72.0
Share in poor (%)	83.6	16.4	9.6	90.4	99.8	0.2	9.3	90.7
Household size	3.6	3.4	3.4	3.6	3.6	1.8	3.4	3.6
Children (% household size)	25.7	22.8	26.2	24.9	25.3	11.1	26.2	24.9
Age of household head	46.7	46.1	45.4	47.1	46.6	52.7	45.4	47.1
Male-headed households (%)	74.3	83.0	73.1	76.4	75.5	63.1	73.2	76.4

a/ Improved water sources: Households use centralized water system connected to water supply pipelines, protected wells, protected springs, portable water service, rainwater or bottled water.
b/ Improved sanitation: Households use toilets connected to sewer systems, improved pit latrine, bio toilet, septic tank, or borehole (suction).
Standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.24. Poverty indicators, by type of infrastructure services, urban and rural, 2018

	Water sources				Sanitation				Electricity				All three			
	Urban		Rural		Urban		Rural		Urban		Rural		Urban		Rural	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Poverty headcount	27.0	46.5	28.2	35.1	8.7	39.0	19.9	31.6	27.2	60.1	30.7	39.7	8.7	39.0	19.1	31.6
	(0.9)	(4.4)	(0.9)	(1.4)	(0.8)	(1.0)	(2.6)	(0.8)	(0.9)	(18.0)	(0.8)	(9.5)	(0.8)	(1.0)	(2.8)	(0.8)
Poverty gap	7.1	12.2	6.7	8.1	1.7	10.6	3.8	7.5	7.2	22.7	7.2	10.6	1.7	10.6	3.5	7.4
	(0.3)	(1.8)	(0.3)	(0.4)	(0.2)	(0.4)	(0.6)	(0.3)	(0.3)	(8.1)	(0.2)	(3.4)	(0.2)	(0.4)	(0.6)	(0.3)
Poverty severity	2.8	4.7	2.3	2.7	0.6	4.2	1.0	2.5	2.8	9.5	2.4	3.6	0.6	4.2	0.9	2.5
	(0.2)	(1.0)	(0.1)	(0.2)	(0.1)	(0.2)	(0.2)	(0.1)	(0.2)	(3.6)	(0.1)	(1.3)	(0.1)	(0.2)	(0.2)	(0.1)
Memorandum items:																
Population share (%)	98.9	1.1	63.5	36.5	39.0	61.0	7.1	92.9	100.0	0.0	99.6	0.4	38.9	61.1	6.4	93.6
Share in poor (%)	98.1	1.9	58.3	41.7	12.5	87.5	4.6	95.4	99.9	0.1	99.5	0.5	12.4	87.6	4.0	96.0
Household size	3.7	3.5	3.4	3.4	3.5	3.8	3.2	3.4	3.7	1.6	3.4	1.9	3.5	3.8	3.2	3.4
Children (% household size)	26.3	23.5	24.0	22.7	26.3	26.2	24.5	23.5	26.3	3.0	23.6	12.7	26.3	26.2	24.9	23.4
Age of household head	46.5	49.2	47.0	45.9	45.4	47.4	45.6	46.7	46.5	49.5	46.6	53.4	45.4	47.4	45.5	46.7
Male-headed households (%)	72.8	76.5	78.4	83.4	72.5	73.1	78.9	80.3	72.9	43.3	80.3	67.0	72.5	73.1	80.2	80.2

a/ Improved water sources: Households use centralized water system connected to water supply pipelines, protected wells, protected springs, portable water service, rainwater or bottled water.
b/ Improved sanitation: Households use toilets connected to sewer systems, improved pit latrine, bio toilet, septic tank, or borehole (suction).
Standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.25. Transfers and remittances received by households, 2018

	% of Households who received this transfer	% of Population living in households who received this transfer	Among those receiving		
			Average transfer per household (Togrog per month)	Share of consumption (%)	Share of total transfers (%)
Total	87.9	92.6	294 144	39.7	100.0
Social protection pension and allowances	85.4	91.2	245 810	34.8	81.2
Social insurance fund					
Pension	30.1	25.6	434 097	63.2	50.5
Disability pension	6.4	6.9	258 019	36.0	6.3
Survivor's benefit for children	1.7	2.0	205 222	27.2	1.4
Temporary incapacity benefits	0.4	0.4	105 368	11.8	0.2
Maternity benefits	2.9	3.9	141 153	12.8	1.6
Unemployment benefit	0.2	0.3	129 687	13.0	0.1
Other	0.7	0.8	217 286	16.6	0.6
Social welfare fund					
Disability pension	6.4	7.3	156 191	25.0	3.9
Social welfare pension for seniors, children under 18 who lost the bread winner, single mother/father and dwarf persons aged 16+	2.9	3.2	200 702	34.5	2.3
Maternity benefits and taking care of a child under 3 years of age.	18.0	24.9	27 836	3.5	1.9
Allowance for taking care of elderly, disabiled persons etc.	5.3	6.0	63 071	8.6	1.3
Food and nutrition support (food stamps)	4.4	6.7	39 094	6.4	0.7
Child money	59.0	74.3	37 109	4.5	8.5
Allowance to mothers who gave birth to and raised many children	25.6	29.0	11 246	1.7	1.1
Other	77.7	86.8	2 922	0.4	0.9
Gifts and remittance	18.0	16.4	269 136	28.7	18.8
Family and friend	16.9	15.2	270 838	29.0	17.7
Other	1.4	1.5	184 637	18.9	1.0
From abroad	2.3	2.0	524 464	42.9	4.7
From within the country	16.0	14.6	227 447	26.1	14.1

Source: HSES 2018

Table D.26. Poverty indicators, by receipt of private and public transfers, 2018

	Private				Public			
	Urban		Rural		Urban		Rural	
	Yes	No	Yes	No	Yes	No	Yes	No
Poverty headcount	23.0	28.1	26.1	31.5	29.3	5.3	32.9	9.4
	(1.5)	(1.0)	(1.6)	(0.9)	(1.0)	(0.9)	(0.9)	(1.2)
Poverty gap	6.0	7.4	5.9	7.4	7.7	1.1	7.7	1.7
	(0.5)	(0.4)	(0.5)	(0.3)	(0.3)	(0.2)	(0.3)	(0.3)
Poverty severity	2.3	2.9	2.0	2.5	3.0	0.3	2.6	0.5
	(0.3)	(0.2)	(0.2)	(0.1)	(0.2)	(0.1)	(0.1)	(0.1)
Memorandum items:								
Population share (%)	17.4	82.6	14.2	85.8	91.3	8.7	91.0	9.0
Share in poor (%)	14.8	85.2	12.0	88.0	98.3	1.7	97.3	2.7
Household size	3.3	3.8	3.2	3.4	3.9	2.3	3.7	1.9
Children (% household size)	25.5	26.5	22.2	23.8	29.5	6.4	27.0	5.0
Age of household head	47.0	46.4	47.1	46.5	47.3	42.1	47.5	41.9
Male-headed households (%)	58.4	76.4	72.5	81.6	72.8	73.5	78.7	88.2

Note: Standard errors taking into account the survey design are shown in parentheses.

Source: HSES 2018

Table D.27. Average consumption per capita per month by main consumption categories (in tugrugs)

	National	Urban	Rural	Location				Region			
				Ulaanbaatar	Aimag center	Soum center	Countryside	Western	Khangai	Central	Eastern
Consumption											
Food	86 123	86 051	86 264	89 558	78 209	83 853	89 062	75 927	80 786	88 762	90 832
Alchohol and tobacco	3 677	2 529	5 937	2 812	1 894	5 628	6 295	3 925	3 868	5 259	4 808
Education	16 050	16 921	14 336	17 650	15 290	15 433	13 063	17 303	15 350	13 347	11 108
Health	18 842	19 830	16 898	19 797	19 902	19 186	14 244	18 988	16 712	19 045	17 420
Durable goods 1/	9 362	10 194	7 724	11 034	8 315	7 688	7 767	7 157	8 011	8 732	7 498
Rent 2/	20 530	27 624	6 566	32 200	17 394	9 168	3 546	6 659	10 104	14 522	10 935
Heating 3/	11 192	11 056	11 461	10 384	12 558	12 510	10 243	14 548	10 916	11 345	10 553
Utilities 4/	8 581	10 471	4 860	10 874	9 570	7 542	1 749	5 639	5 699	8 421	6 982
Clothing	40 228	38 879	42 883	36 502	44 197	42 259	43 608	41 997	46 563	43 002	38 479
Transportation,comunication	35 867	38 962	29 773	42 661	30 692	28 174	31 628	29 308	27 645	35 841	25 193
Other 5/	29 460	31 860	24 736	32 901	29 530	26 123	23 125	23 904	26 152	29 874	25 052
Total	279 912	294 377	251 438	306 373	267 551	257 564	244 330	245 355	251 806	278 150	248 860
Shares											
Food	30.8	29.2	34.3	29.2	29.2	32.6	36.5	31.0	32.1	31.9	36.5
Alchohol and tobacco	1.3	0.9	2.4	0.9	0.7	2.2	2.6	1.6	1.5	1.9	1.9
Education	5.7	5.7	5.7	5.8	5.7	6.0	5.3	7.1	6.1	4.8	4.5
Health	6.7	6.7	6.7	6.5	7.5	7.4	5.8	7.7	6.6	6.9	7.0
Durable goods 1/	3.4	3.5	3.1	3.6	3.1	3.0	3.2	2.9	3.2	3.1	3.0
Rent 2/	7.3	9.4	2.6	10.5	6.5	3.6	1.5	2.7	4.0	5.2	4.4
Heating 3/	4.0	3.8	4.6	3.4	4.7	4.9	4.2	5.9	4.3	4.1	4.2
Utilities 4/	3.1	3.6	1.9	3.6	3.6	2.9	0.7	2.3	2.3	3.0	2.8
Clothing	14.4	13.2	17.1	11.9	16.5	16.4	17.8	17.1	18.5	15.5	15.5
Transportation,comunication	12.8	13.2	11.8	13.9	11.5	10.9	12.9	12.0	11.0	12.9	10.1
Other 5/	10.5	10.8	9.8	10.7	11.0	10.1	9.5	9.7	10.4	10.7	10.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/ Estimated monetary value of the consumption derived from the use of durable goods
2/ Estimated monetory value of the consumption derived from occupying the dwelling. If the household leases its dwelling, the actual rental was used for estimation in lieu of imputed rents.
3/ Includes central and local heating, firewood, coal and animal dung'
4/ Includes water, electricity and lighting, but not telephone usage
5/ Includes reccreational and entertainment expenditure expenditure, beuty, toiletry items and household products

Source: HSES 2018

Table D.28. Average Consumption per capita per month by main consumption categories and by poverty status in urban and rural areas

	Total		Urban		Rural	
	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor
Consumption						
Food	99 816	51 598	100 342	47 794	98 728	58 216
Alchohol and tobacco	4 385	1 890	2 981	1 318	7 292	2 886
Education	20 526	4 764	21 247	5 338	19 034	3 765
Health	24 712	4 042	25 431	4 835	23 224	2 663
Durable goods 1/	11 984	2 751	13 094	2 430	9 686	3 310
Rent 2/	26 497	5 486	35 326	7 006	8 221	2 840
Heating 3/	12 439	8 049	11 993	8 548	13 363	7 181
Utilities 4/	10 182	4 544	12 278	5 633	5 844	2 648
Clothing	49 379	17 157	47 861	14 835	52 520	21 197
Transportation,comunication	45 473	11 646	48 870	12 438	38 441	10 267
Other 5/	36 163	12 559	39 089	12 507	30 107	12 649
Total	341 556	124 486	358 512	122 682	306 460	127 622
Shares						
Food	29.2	41.4	28.0	39.0	32.2	45.6
Alchohol and tobacco	1.3	1.5	0.8	1.1	2.4	2.3
Education	6.0	3.8	5.9	4.3	6.2	3.0
Health	7.2	3.2	7.1	3.9	7.6	2.1
Durable goods 1/	3.5	2.2	3.7	2.0	3.2	2.6
Rent 2/	7.8	4.4	9.9	5.7	2.7	2.2
Heating 3/	3.6	6.5	3.3	7.0	4.4	5.6
Utilities 4/	3.0	3.7	3.4	4.6	1.9	2.1
Clothing	14.5	13.8	13.4	12.1	17.1	16.6
Transportation,comunication	13.3	9.4	13.6	10.1	12.5	8.0
Other 5/	10.6	10.1	10.9	10.2	9.8	9.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

1/ Estimated monetary value of the consumption derived from the use of durable goods
2/ Estimated monetory value of the consumption derived from occupying the dwelling. If the household leases its dwelling, the actual rental was used for estimation in lieu of imputed rents.
3/ Includes central and local heating, firewood, coal and animal dung'
4/ Includes water, electricity and lighting, but not telephone usage
5/ Includes reccreational and entertainment expenditure expenditure, beuty, toiletry items and household products

Source: HSES 2018

Table D.29. Per capita average monthly consumption by poverty status and location

	Total		Ulaanbaatar		Aimag center		Soum center		Country side	
	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor
Consumption, tugrug										
Food	99 816	51 598	104 495	46 836	90 502	49 637	94 922	56 624	103 410	59 838
Alcohol and tobacco	4 385	1 890	3 278	1 480	2 276	1 004	6 741	2 890	7 970	2 882
Education	20 526	4 764	21 918	5 444	19 659	5 134	20 173	3 773	17 633	3 757
Health	24 712	4 042	24 896	5 215	26 700	4 101	25 904	2 659	19 927	2 667
Durable goods 1/	11 984	2 751	14 025	2 479	10 888	2 336	9 620	2 934	9 766	3 694
Rent 2/	26 497	5 486	40 735	7 789	22 511	5 499	11 413	3 644	4 295	2 022
Heating 3/	12 439	8 049	11 016	8 577	14 308	8 491	14 518	7 572	11 942	6 782
Utilities 4/	10 182	4 544	12 606	5 919	11 500	5 083	8 853	4 318	2 142	947
Clothing	49 379	17 157	44 704	13 041	55 343	18 290	51 318	19 975	54 000	22 441
Transportation and communication	45 473	11 646	52 639	14 121	39 940	9 198	36 002	8 918	41 440	11 642
Others 5/	36 163	12 559	40 015	12 554	36 893	12 418	31 513	12 864	28 376	12 429
Total	341 556	124 486	370 327	123 455	330 520	121 191	310 977	126 171	300 901	129 101
Shares										
Food	29.2	41.4	28.2	37.9	27.4	41.0	30.5	44.9	34.4	46.3
Alcohol and tobacco	1.3	1.5	0.9	1.2	0.7	0.8	2.2	2.3	2.7	2.2
Education	6.0	3.8	5.9	4.4	5.9	4.2	6.5	3.0	5.9	2.9
Health	7.2	3.2	6.7	4.2	8.1	3.4	8.3	2.1	6.6	2.1
Durable goods 1/	3.5	2.2	3.8	2.0	3.3	1.9	3.1	2.3	3.2	2.9
Rent 2/	7.8	4.4	11.0	6.3	6.8	4.5	3.7	2.9	1.4	1.6
Heating 3/	3.6	6.5	3.0	7.0	4.3	7.0	4.7	6.0	4.0	5.3
Utilities 4/	3.0	3.7	3.4	4.8	3.5	4.2	2.8	3.4	0.7	0.7
Clothing	14.5	13.8	12.1	10.6	16.7	15.1	16.5	15.8	17.9	17.4
Transportation and communication	13.3	9.4	14.2	11.4	12.1	7.6	11.6	7.1	13.8	9.0
Others 5/	10.6	10.1	10.8	10.2	11.2	10.3	10.1	10.2	9.4	9.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/ Estimation of the monetary value of the consumption derived from the use of durable goods.
2/ Estimation of the monetary velue of the consumption derived from occupying the dwelling. If the household rents its dwelling, the actual rent will be included instead of the imputed rent.
3/ Includes central and local heating, firewood, coal and dung.
4/ Includes water, electricity and lighting. It excludes telephone.
5/ Includes recreation, entertainment, beauty and toilet articles, and household utensils.

Source: HSES 2018

Table D.30. Per capita average monthly consumption by poverty status and region

	Total		Western		Khangai		Central		Eastern		Ulaanbaatar	
	Non-Poor	Poor	Non-Poor	Poor	Non-Poor	Poor	Non-Poor	Poor	Non-Poor	Poor	Non-Poor	Poor
Consumption, tugrug												
Food	99 816	51 598	85 668	55 024	91 784	56 082	101 776	51 841	110 600	57 719	104 495	46 836
Alcohol and tobacco	4 385	1 890	4 764	2 123	4 462	2 533	6 485	1 783	6 388	2 162	3 278	1 480
Education	20 526	4 764	23 568	3 860	20 276	4 286	16 322	4 908	15 399	3 920	21 918	5 444
Health	24 712	4 042	26 124	3 672	22 851	2 923	24 582	3 335	26 134	2 823	24 896	5 215
Durable goods 1/	11 984	2 751	8 930	3 351	10 214	3 065	10 901	2 576	10 405	2 628	14 025	2 479
Rent 2/	26 497	5 486	8 311	3 116	13 291	2 948	17 769	5 312	14 740	4 560	40 735	7 789
Heating 3/	12 439	8 049	17 152	8 958	12 587	7 161	12 606	7 768	12 946	6 544	11 016	8 577
Utilities 4/	10 182	4 544	6 738	3 282	6 938	2 916	9 804	4 496	8 825	3 896	12 606	5 919
Clothing	49 379	17 157	52 678	19 075	57 200	22 670	51 566	18 705	50 429	18 462	44 704	13 041
Transportation and communication	45 473	11 646	38 150	10 333	35 453	10 108	44 695	10 724	35 906	7 247	52 639	14 121
Others 5/	36 163	12 559	29 100	12 753	32 275	12 401	35 858	12 899	32 800	12 075	40 015	12 554
Total	341 556	124 486	301 183	125 547	307 331	127 093	332 364	124 347	324 572	122 036	370 327	123 455
Shares												
Food	29.2	41.4	28.4	43.8	29.9	44.1	30.6	41.7	34.1	47.3	28.2	37.9
Alcohol and tobacco	1.3	1.5	1.6	1.7	1.5	2.0	2.0	1.4	2.0	1.8	0.9	1.2
Education	6.0	3.8	7.8	3.1	6.6	3.4	4.9	4.0	4.7	3.2	5.9	4.4
Health	7.2	3.2	8.7	2.9	7.4	2.3	7.4	2.7	8.1	2.3	6.7	4.2
Durable goods 1/	3.5	2.2	3.0	2.7	3.3	2.4	3.3	2.1	3.2	2.2	3.8	2.0
Rent 2/	7.8	4.4	2.7	2.5	4.3	2.3	5.3	4.3	4.5	3.7	11.0	6.3
Heating 3/	3.6	6.5	5.7	7.1	4.1	5.6	3.8	6.2	4.0	5.4	3.0	7.0
Utilities 4/	3.0	3.7	2.2	2.6	2.3	2.3	3.0	3.6	2.7	3.2	3.4	4.8
Clothing	14.5	13.8	17.5	15.2	18.6	17.8	15.5	15.0	15.5	15.1	12.1	10.6
Transportation and communication	13.3	9.4	12.7	8.2	11.5	8.0	13.4	8.6	11.1	5.9	14.2	11.4
Others 5/	10.6	10.1	9.7	10.2	10.5	9.8	10.8	10.4	10.1	9.9	10.8	10.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/ Estimation of the monetary value of the consumption derived from the use of durable goods.
2/ Estimation of the monetary velue of the consumption derived from occupying the dwelling. If the household rents its dwelling, the actual rent will be included instead of the imputed rent.
3/ Includes central and local heating, firewood, coal and dung.
4/ Includes water, electricity and lighting. It excludes telephone.
5/ Includes recreation, entertainment, beauty and toilet articles, and household utensils.

Source: HSES 2018

Table D.31. Per capita average monthly consumption by decile

	National	Urban	Rural	Location				Region			
				Ulaanbaatar	Aimag center	Soum center	Country side	Western	Khangai	Central	Eastern
I	91 587	89 288	96 410	91 342	85 557	95 626	97 290	91 385	95 085	93 246	85 021
II	130 897	131 576	130 034	134 856	124 438	131 507	128 433	126 973	129 943	135 100	115 415
III	158 083	160 950	153 603	164 950	153 354	156 070	151 412	151 519	153 258	163 919	139 005
IV	184 871	190 624	176 045	196 547	179 295	181 142	171 115	173 349	174 905	192 218	161 498
V	214 022	222 806	200 560	230 721	207 739	206 195	193 859	195 558	200 072	221 281	186 990
VI	247 528	260 492	227 815	269 493	240 882	233 428	221 110	222 973	227 674	251 703	218 166
VII	287 783	302 765	259 122	313 298	280 705	264 141	252 709	255 828	259 823	290 579	253 036
VIII	340 872	360 834	306 626	376 684	330 031	312 095	300 653	300 415	308 535	342 820	304 391
IX	425 130	450 263	372 933	470 042	405 082	384 222	360 781	362 488	371 495	421 526	377 998
X	718 553	774 984	591 737	817 167	669 338	611 816	567 626	573 971	598 654	669 760	648 164
Total	279 912	294 377	251 438	306 373	267 551	257 564	244 330	245 355	251 806	278 150	248 860

Note: Deciles were constructed separately for each domain. They comprise 10% of the population of the respective region.

Source: HSES 2018

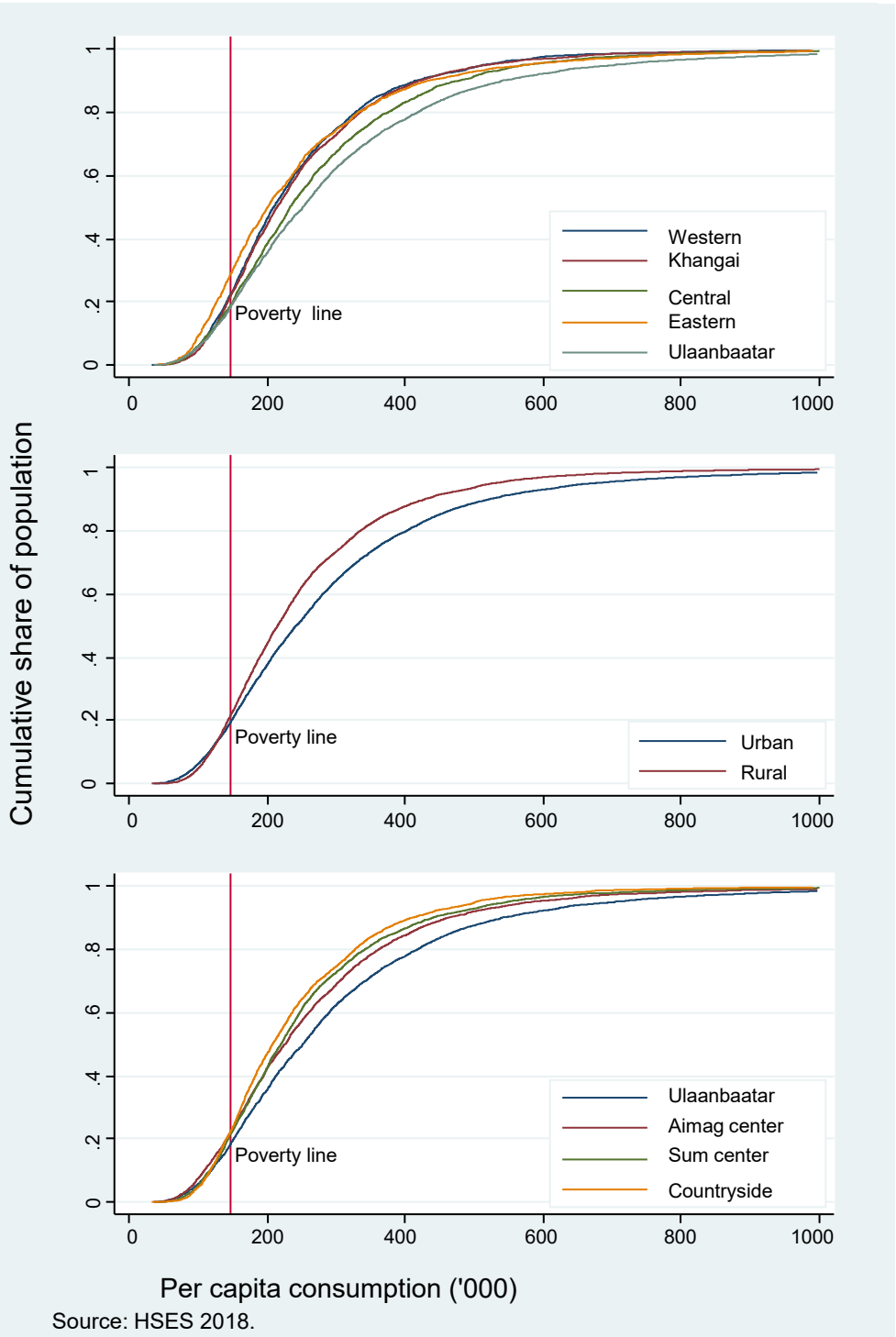
Table D.32. Share of total consumption by decile

	National	Urban	Rural	Location				Region			
				Ulaanbaatar	Aimag center	Soum center	Country side	Western	Khangai	Central	Eastern
I	3.3	3.0	3.8	3.0	3.2	3.7	4.0	3.7	3.8	3.3	3.4
II	4.7	4.4	5.2	4.4	4.6	5.1	5.3	5.2	5.1	4.9	4.6
III	5.6	5.5	6.1	5.4	5.7	6.1	6.2	6.2	6.1	5.9	5.6
IV	6.6	6.5	7.0	6.4	6.7	7.0	7.0	7.1	7.0	6.9	6.5
V	7.6	7.6	8.0	7.5	7.8	8.0	7.9	8.0	7.9	8.0	7.5
VI	8.8	8.8	9.1	8.8	9.0	9.1	9.0	9.1	9.1	9.0	8.8
VII	10.3	10.3	10.3	10.2	10.5	10.2	10.3	10.4	10.3	10.5	10.2
VIII	12.2	12.3	12.2	12.3	12.4	12.1	12.3	12.2	12.2	12.3	12.3
IX	15.2	15.3	14.8	15.4	15.1	14.9	14.9	14.7	14.8	15.1	15.1
X	25.7	26.3	23.5	26.6	25.0	23.8	23.1	23.4	23.7	24.1	26.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Deciles were constructed separately for each domain. They comprise 10% of the population of the respective region.

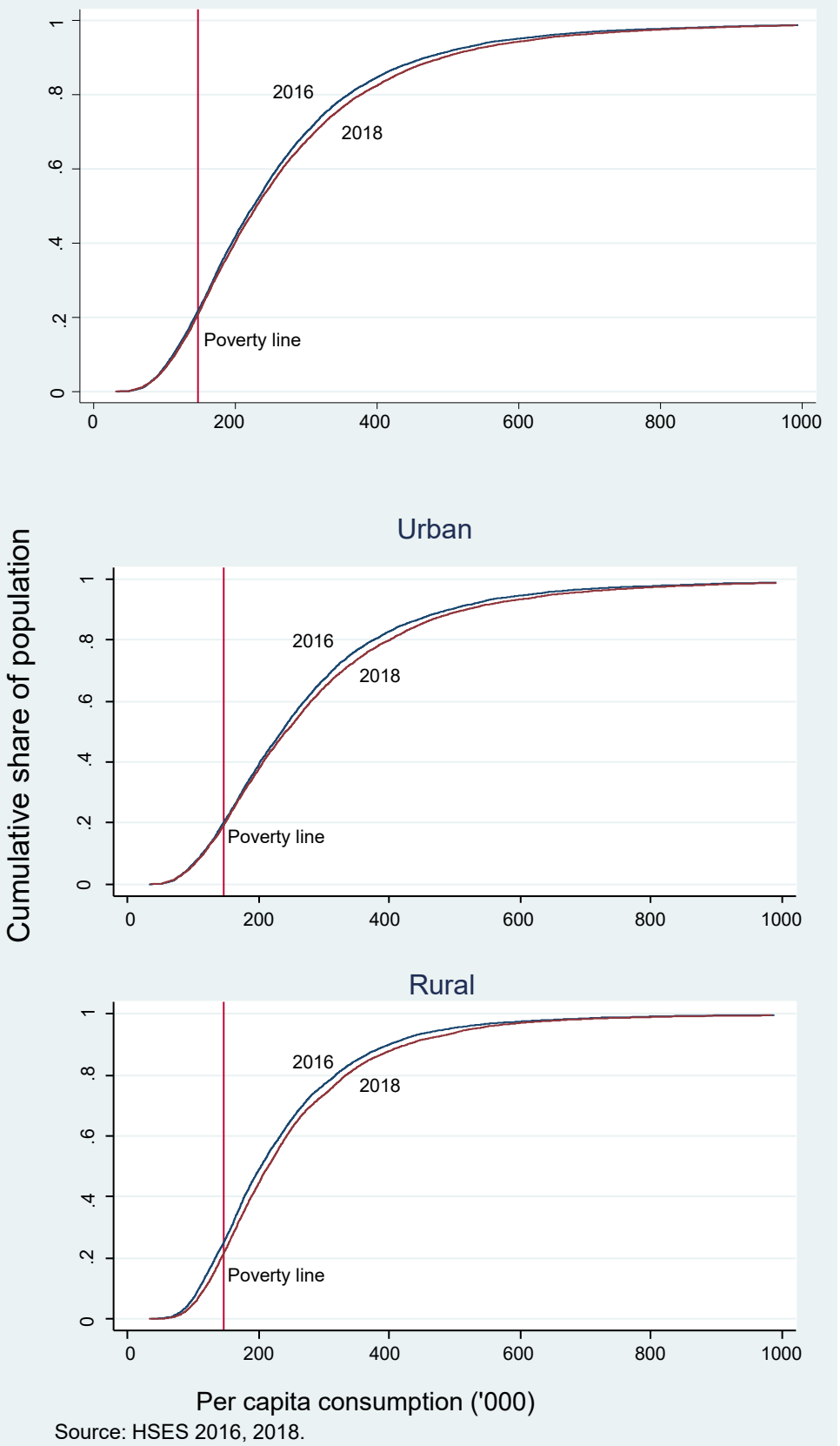
Source: HSES 2018

Figure D.1. First-order stochastic ordinance: Cumulative distribution of per capita per month consumption



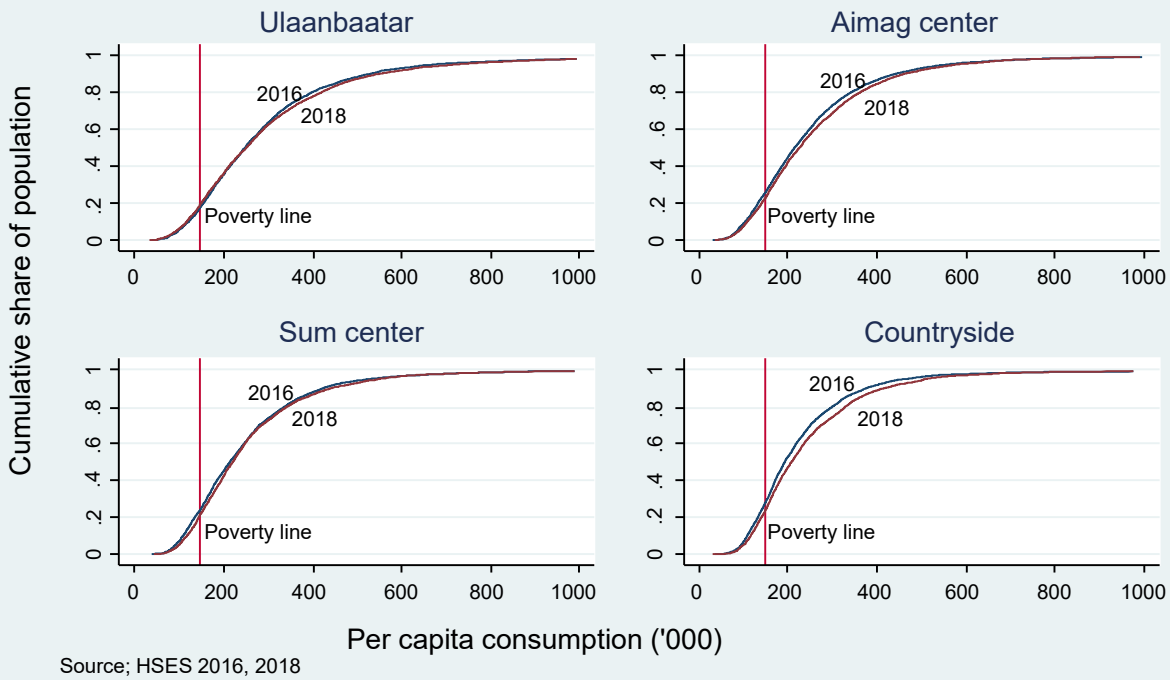
Source: HSES 2018.

Figure D.2. First-order stochastic dominance: Cumulative distribution of per capita consumption by urban and rural, 2016 and 2018



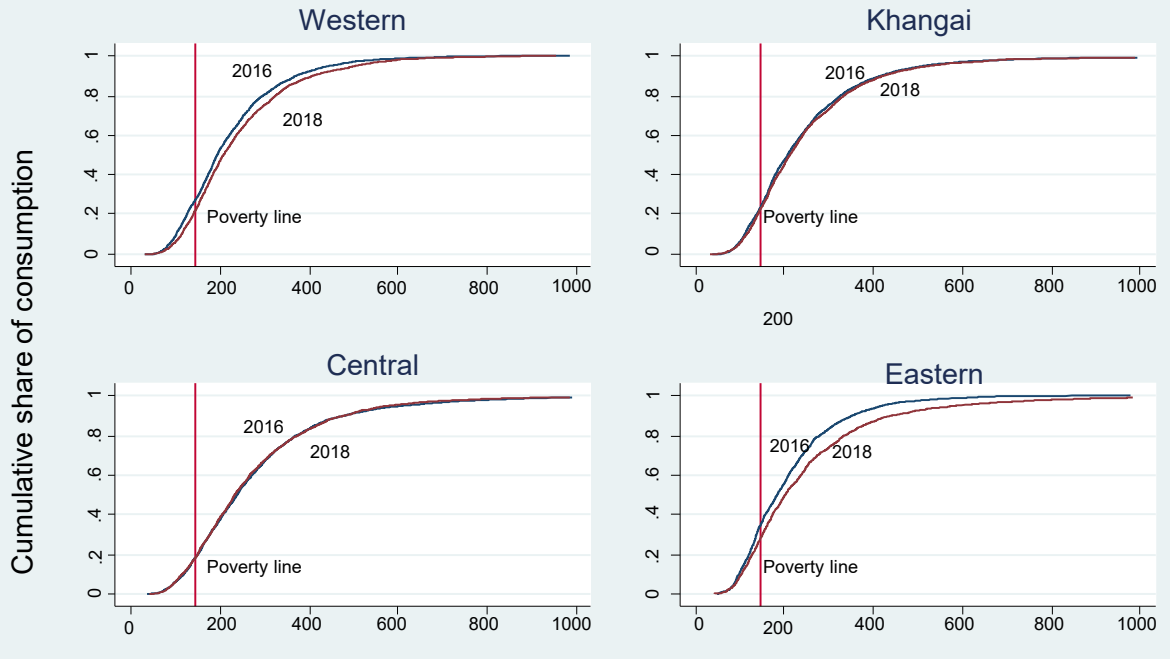
Source: HSES 2016, 2018.

Figure D.3. First-order stochastic dominance: Cumulative distribution of per capita consumption by location, 2016 and 2018



Source; HSES 2016, 2018

Figure D.4. First-order stochastic dominance: Cumulative distribution of per capita consumption by region, 2016 and 2018



Source: HSES 2016, 2018

Table D.33. Poverty profile by characteristics of the household head by urban and rural

	Poverty headcount			Share of population			Share of poor		
	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural
Total	28.4	27.2	30.8	100.0	100.0	100.0	100.0	100.0	100.0
Gender									
Male	27.6	25.7	31.0	80.7	77.9	86.3	78.5	73.7	86.9
Female	31.7	32.4	29.4	19.3	22.1	13.7	21.5	26.3	13.1
Age									
<30	25.7	23.6	29.2	10.0	9.6	10.8	9.1	8.4	10.2
30-39	33.9	30.9	39.8	29.0	29.0	29.0	34.6	32.9	37.6
40-49	28.5	27.5	30.4	27.7	27.1	28.8	27.8	27.3	28.5
50-59	27.2	27.1	27.4	19.7	19.8	19.5	18.9	19.8	17.4
60<	20.1	21.7	16.3	13.6	14.5	11.9	9.6	11.6	6.3
Educational attainment									
None	51.7	64.8	47.2	3.6	1.4	7.8	6.5	3.3	12.0
Primary	41.6	45.6	40.2	7.5	3.1	16.3	11.0	5.1	21.3
Lower secondary	41.1	50.0	35.4	14.0	8.3	25.4	20.3	15.2	29.2
Higher secondary	33.0	34.5	29.2	25.6	27.9	21.1	29.8	35.3	20.1
Vocational	26.8	28.7	21.2	25.2	28.6	18.5	23.8	30.2	12.7
University	10.1	9.6	13.3	24.1	30.8	10.9	8.6	10.8	4.7
Employment									
Labor force participation									
Employed	27.0	24.7	31.2	72.9	69.6	79.5	69.4	63.1	80.5
Unemployed	44.9	45.5	43.7	4.8	5.0	4.3	7.6	8.4	6.2
Out of the labor force	29.3	30.6	25.4	22.3	25.4	16.2	23.0	28.5	13.3
Among those employed,									
Economic activity									
Agriculture	35.9	42.7	35.1	17.6	3.0	46.2	22.2	4.7	52.7
Industry	30.0	29.9	30.4	20.4	25.1	11.2	21.6	27.6	11.0
Services	20.9	20.2	23.4	34.9	41.5	22.1	25.6	30.8	16.8
Sector of employment									
Herders	33.3	33.6	33.2	15.1	1.7	41.6	17.7	2.0	44.9
Private	27.5	26.2	33.1	42.4	52.1	23.2	41.0	50.2	25.0
Public	21.2	20.0	23.4	12.1	11.8	12.6	9.0	8.7	9.6
State	14.9	14.9	14.8	3.3	4.0	2.1	1.7	2.2	1.0

Source: HSES 2018

Table D.34. Poverty profile by characteristics of the dwelling by urban and rural

	Poverty headcount			Share of population			Share of poor		
	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural
Total	28.4	27.2	30.8	100.0	100.0	100.0	100.0	100.0	100.0
Dwelling									
Ger	43.2	51.3	36.3	37.5	26.0	60.1	57.1	49.1	70.9
Apartment	6.4	6.2	10.2	24.6	35.2	3.7	5.6	8.1	(1.2)
House	27.6	29.3	24.0	35.9	36.7	34.4	34.9	39.5	26.8
Other 1/	35.0	42.6	17.7	2.0	2.1	1.8	2.5	(3.3)	(*)
Water supply									
Central network	7.7	7.6	10.0	26.6	37.7	4.6	7.2	10.5	1.5
Water kiosk	38.7	39.9	29.8	36.9	48.9	13.3	50.4	71.9	12.9
Protected well/ springs	31.6	34.7	30.3	17.3	7.9	35.8	19.3	10.1	35.3
Tanker trucks 2/	31.3	35.3	27.6	5.8	4.3	8.9	6.4	5.6	8.0
Unprotected well/ springs	36.9	48.3	35.6	5.9	0.9	15.8	7.7	1.7	18.2
Other 3/	34.4	(34.1)	34.4	7.4	(0.2)	21.6	9.0	(*)	24.1
Improved water source 4/									
No	35.8	46.5	35.1	13.0	1.1	36.5	16.4	1.9	41.7
Yes	27.3	27.0	28.2	87.0	98.9	63.5	83.6	98.1	58.3
Improved sanitation 5/									
No	35.8	39.0	31.6	71.8	61.0	92.9	90.4	87.5	95.4
Yes	9.6	8.7	19.9	28.2	39.0	7.1	9.6	12.5	4.6
Heating									
Central	8.2	8.0	10.2	26.6	37.5	5.0	7.6	11.1	(1.7)
Sample unit 6/	37.3	41.4	32.4	68.2	55.9	92.4	89.5	85.1	97.3
Other 7/	15.4	16.1	12.3	5.2	6.6	2.6	2.8	(3.9)	(*)
Electricity									
Central	27.6	27.2	29.1	86.5	99.4	61.2	84.1	99.2	57.9
Local	44.8	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Solar	33.3	38.4	33.2	13.1	0.4	37.9	15.3	(0.6)	40.9
Other 8/	31.0	(*)	(36.6)	0.3	(*)	(0.6)	(*)	(*)	(*)
None	(48.3)	(*)	(44.2)	(.1)	(*)	(0.3)	(*)	(*)	(*)

1/ Other includes student residences, company dormitories and any other building designed not to be inhabited by households.
2/ Includes also water storage sites.
3/ Spring, river, snow, ice, others
4/ It refers to the percentage of the population with access to an improved water source such as household connection, public standpipe or protected well or spring. Unimproved sources include vendors, tanker trucks, water storage sites and unprotected wells and springs.
5/ Sanitation refers to the percentage of the population with access to improved sanitation facilities such as adequate excreta disposal facilities (private or shared but not public). They can arrange from simple but protected pit latrines to flush toilets with sewerage connection.
6/ Simple heating units fueled by firewood, coal or dung.
7/ Electric heating unit, private low pressure stove, others.
8/ Wind systems, small gen-sets, others.
()- sample size is 25-49
(*)- sample size is less than 25

Source: HSES 2018

Table D.35. Poverty profile by characteristics of the dwelling by location

	Poverty headcount				Share of population				Share of poor			
	Ulaan-baatar	Aimag center	Soum center	Country side	Ulaan-baatar	Aimag center	Soum center	Country side	Ulaan-baatar	Aimag center	Soum center	Country side
Total	25.9	30.1	28.9	32.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dwelling												
Ger	52.3	49.7	39.7	34.3	24.0	30.6	42.7	80.2	48.4	50.5	58.6	83.4
Apartment	5.3	9.5	9.7	13.6	39.2	26.3	6.0	1.1	(7.9)	8.3	(2.0)	(*)
House	29.8	28.4	22.5	28.5	34.7	41.0	48.4	18.2	39.9	38.7	37.7	15.8
Other 1/	45.7	35.7	16.8	(*)	2.1	2.1	2.9	(*)	(*)	(*)	(*)	(*)
Water supply												
Central network	6.5	10.7	9.7	12.0	40.6	31.3	7.5	1.2	10.2	11.1	(2.5)	(*)
Water kiosk	40.0	39.9	29.2	35.0	56.8	31.4	22.0	3.2	87.6	41.7	22.2	(3.4)
Protected well/ springs	17.2	38.5	30.9	28.9	2.1	21.0	45.6	24.5	(*)	26.9	48.8	21.5
Tanker trucks 2/	(*)	35.0	26.9	29.5	(*)	12.7	12.4	4.8	(*)	14.8	11.5	(4.3)
Unprotected well/ springs	(*)	48.5	39.0	34.4	(*)	2.9	7.3	25.6	(*)	4.8	9.9	26.7
Other 3/	(*)	(37.7)	28.1	35.3	(*)	(0.6)	5.2	40.6	na	(*)	(5.0)	43.5
Improved water source 4/												
No	(*)	46.8	34.5	35.3	(*)	3.6	12.5	64.3	(*)	5.5	14.9	69.0
Yes	25.9	29.5	28.1	28.7	100.0	96.4	87.5	35.7	99.9	94.5	85.1	31.0
Improved sanitation 5/												
No	39.3	38.4	29.9	33.5	59.0	65.6	89.5	97.0	89.4	83.9	92.4	98.5
Yes	6.7	14.1	20.8	16.1	41.0	34.4	10.5	3.0	10.6	16.1	7.6	(*)
Heating												
Central	7.0	11.1	9.9	12.6	40.6	30.7	8.3	1.2	11.0	11.3	(2.9)	(*)
Sample unit 6/	42.3	39.8	31.5	33.3	51.4	66.1	87.4	98.3	83.8	87.4	95.2	99.5
Other 7/	16.9	11.6	13.1	(*)	8.0	3.3	4.4	(*)	(5.2)	(*)	(*)	(*)
Electricity												
Central	25.9	30.0	28.6	31.6	100.0	98.1	95.9	20.9	99.9	97.9	95.0	20.0
Local	na	(*)	100.0	(*)	na	(*)	0.1	(*)	na	(*)	(*)	0.0
Solar	na	38.4	33.7	33.2	na	1.4	3.7	77.5	na	(1.8)	(4.3)	78.1
Other 8/	na	(*)	34.3	(37.1)	na	(*)	0.2	(1.1)	na	(*)	(*)	(*)
None	(*)	(*)	44.9	(44.0)	(*)	(*)	0.1	(0.5)	(*)	(*)	(*)	(*)

1/ Other includes student residences, company dormitories and any other building designed not to be inhabited by households.
2/ Includes also water storage sites.
3/ Spring, river, snow, ice, others
4/ It refers to the percentage of the population with access to an improved water source such as household connection, public standpipe or protected well or spring. Unimproved sources include vendors, tanker trucks, water storage sites and unprotected wells and springs.
5/ Sanitation refers to the percentage of the population with access to improved sanitation facilities such as adequate excreta disposal facilities (private or shared but not public). They can arrange from simple but protected pit latrines to flush toilets with sewerage connection.
6/ Simple heating units fueled by firewood, coal or dung.
7/ Electric heating unit, private low pressure stove, others.
8/ Wind systems, small gen-sets, others.
na-not applicable
()- sample size is 25-49
(*)- sample size is less than 25

Source: HSES 2018

Table D.36 Poverty profile by characteristics of the dwelling by region

	Poverty headcount					Share of population					Share of poor				
	Western	Khangai	Central	Eastern	Ulaan-baatar	Western	Khangai	Central	Eastern	Ulaan-baatar	Western	Khangai	Central	Eastern	Ulaan-baatar
Total	31.8	30.8	26.1	37.4	25.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dwelling															
Ger	39.5	41.8	32.3	47.1	52.3	51.6	52.9	42.5	47.8	24.0	64.2	71.8	52.7	60.2	48.4
Apartment	11.7	4.2	11.8	12.3	5.3	4.9	10.6	20.0	13.1	39.2	(*)	(*)	9.1	(*)	7.9
House	24.7	22.5	28.0	32.5	29.8	42.9	36.0	33.9	35.1	34.7	33.4	26.3	36.4	30.5	39.9
Other 1/	(*)	(28.0)	13.2	46.3	45.7	(*)	(0.6)	3.6	4.1	2.1	(*)	(*)	(*)	(*)	(*)
Water supply															
Central network	12.4	4.0	12.7	14.1	6.5	6.6	11.7	24.5	15.8	40.6	(2.6)	(*)	12.0	(*)	10.2
Water kiosk	43.7	31.3	37.6	44.8	40.0	3.5	32.8	15.1	29.9	56.8	4.8	33.3	21.8	35.8	87.6
Protected well/ springs	31.3	35.2	24.6	43.1	17.2	49.8	20.4	23.1	35.0	2.1	49.1	23.3	21.8	40.4	(*)
Tanker trucks 2/	28.0	28.5	32.3	34.4	(*)	6.8	5.6	21.1	5.0	(*)	6.0	5.2	26.1	(*)	(*)
Unprotected well/ springs	40.1	44.1	29.0	36.0	(*)	9.8	9.3	12.6	13.3	(*)	12.4	13.4	14.1	12.9	(*)
Other 3/	34.1	35.6	31.1	(*)	(*)	23.4	20.2	3.6	(*)	(*)	25.1	23.3	(*)	(*)	0.0
Improved water source 4/															
No	36.7	38.3	29.6	(*)	(*)	31.3	29.3	16.2	(*)	(*)	36.2	36.4	18.3	13.2	(*)
Yes	29.6	27.7	25.4	37.8	25.9	68.7	70.7	83.8	85.8	100.0	63.8	63.6	81.7	86.8	99.9
Improved sanitation 5/															
No	33.1	33.6	30.1	41.8	39.3	93.6	83.9	71.3	84.1	59.0	97.6	91.4	82.3	94.0	89.4
Yes	12.0	16.4	16.1	14.1	6.7	6.4	16.1	28.7	15.9	41.0	(*)	8.6	17.7	(*)	10.6
Heating															
Central	12.5	5.0	12.6	15.2	7.0	6.4	11.6	24.5	16.2	40.6	(*)	(*)	11.8	(*)	11.0
Sample unit 6/	33.6	34.8	31.5	42.8	42.3	91.3	86.6	71.2	80.3	51.4	96.6	97.8	86.1	91.9	83.8
Other 7/	12.7	6.5	12.7	16.2	16.9	2.3	1.7	4.3	3.5	8.0	(*)	(*)	(*)	(*)	(*)
Electricity															
Central	30.3	27.7	27.1	38.5	25.9	70.7	71.3	81.8	78.6	100.0	67.4	64.2	84.9	81.0	99.9
Local	(*)	(*)	(*)	(*)	na	(*)	(*)	(*)	(*)	na	(*)	na	na	(*)	na
Solar	35.4	38.2	21.7	32.6	na	28.7	28.0	17.5	20.3	na	31.9	34.7	14.5	17.7	na
Other 8/	(*)	(*)	(*)	(*)	na	(*)	(*)	(*)	(*)	na	(*)	(*)	(*)	(*)	na
None	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)

1/ Other includes student residences, company dormitories and any other building designed not to be inhabited by households.
2/ Includes also water storage sites.
3/ Spring, river, snow, ice, others
4/ It refers to the percentage of the population with access to an improved water source such as household connection, public standpipe or protected well or spring. Unimproved sources include vendors, tanker trucks, water storage sites and unprotected wells and springs.
5/ Sanitation refers to the percentage of the population with access to improved sanitation facilities such as adequate excreta disposal facilities (private or shared but not public). They can arrange from simple but protected pit latrines to flush toilets with sewerage connection.
6/ Simple heating units fueled by firewood, coal or dung.
7/ Electric heating unit, private low pressure stove, others.
8/ Wind systems, small gen-sets, others.
na-not applicable
()- sample size is 25-49
(*)- sample size is less than 25

Source: HSES 2018

Table D.37. Highest educational attainment of the population 18 years and older (%)

	None	Primary	Lower secondary	Higher secondary	Vocational	University	Total
National	3.3	6.1	12.2	29.4	20.6	28.5	100.0
Location							
Urban	1.4	2.7	7.2	30.6	22.8	35.4	100.0
Rural	7.0	12.8	21.9	27.0	16.2	15.1	100.0
Ulaanbaatar	0.9	1.8	5.6	30.0	23.0	38.8	100.0
Aimag center	2.8	4.6	10.7	31.9	22.3	27.7	100.0
Soum center	4.1	8.8	17.1	28.8	18.8	22.4	100.0
Countryside	10.3	17.5	27.5	24.9	13.2	6.6	100.0
Western	7.6	11.8	14.7	29.5	15.2	21.4	100.0
Khangai	5.0	11.5	18.7	31.4	15.0	18.4	100.0
Central	3.9	6.2	16.6	25.0	26.6	21.7	100.0
Eastern	5.9	9.3	22.8	29.8	15.7	16.5	100.0
Gender							
Male	3.8	6.5	13.9	29.2	23.0	23.6	100.0
Female	2.9	5.7	10.7	29.5	18.5	32.8	100.0
Consumption quintiles							
I	6.8	8.5	19.8	34.7	19.9	10.3	100.0
II	4.6	7.9	14.6	32.0	22.1	18.9	100.0
III	3.3	6.8	13.1	30.0	20.4	26.4	100.0
IV	2.3	5.4	10.2	27.7	21.7	32.7	100.0
V	1.0	3.1	6.1	24.7	18.9	46.1	100.0
Poverty							
Non-poor	2.4	5.4	10.2	28.0	20.6	33.4	100.0
Poor	6.3	8.4	18.7	33.9	20.3	12.5	100.0

Source: HSES 2018

Table D.38. Population 18 years and older by highest educational attainment (%)

	None	Primary	Lower secondary	Higher secondary	Vocational	University	Total
National	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Location							
Urban	28.8	28.8	39.0	68.9	73.4	82.2	66.2
Rural	71.3	71.2	61.0	31.1	26.6	17.9	33.8
Ulaanbaatar	11.8	13.4	21.1	46.8	51.3	62.3	45.8
Aimag center	17.0	15.5	17.9	22.2	22.1	19.8	20.4
Soum center	22.5	26.1	25.6	17.8	16.6	14.3	18.1
Countryside	48.8	45.0	35.5	13.3	10.0	3.6	15.6
Western	28.9	24.4	15.3	12.7	9.3	9.5	12.7
Khangai	28.3	35.5	29.0	20.1	13.7	12.2	18.8
Central	18.8	16.1	21.6	13.4	20.4	12.0	15.8
Eastern	12.3	10.6	13.0	7.0	5.3	4.0	6.9
Gender							
Male	53.4	49.8	53.1	46.3	52.0	38.5	46.5
Female	46.6	50.2	46.9	53.7	48.0	61.5	53.5
Quintile							
I	32.9	22.6	26.2	19.1	15.6	5.8	16.1
II	25.2	23.8	22.0	19.9	19.7	12.1	18.3
III	19.7	22.5	21.7	20.5	19.9	18.7	20.1
IV	14.8	19.1	18.1	20.4	22.9	24.8	21.6
V	7.5	12.0	12.0	20.1	21.9	38.6	23.8
Poverty							
Non-poor	55.7	67.7	64.0	72.9	76.8	89.7	76.5
Poor	44.3	32.3	36.0	27.1	23.2	10.3	23.5

Source: HSES 2018

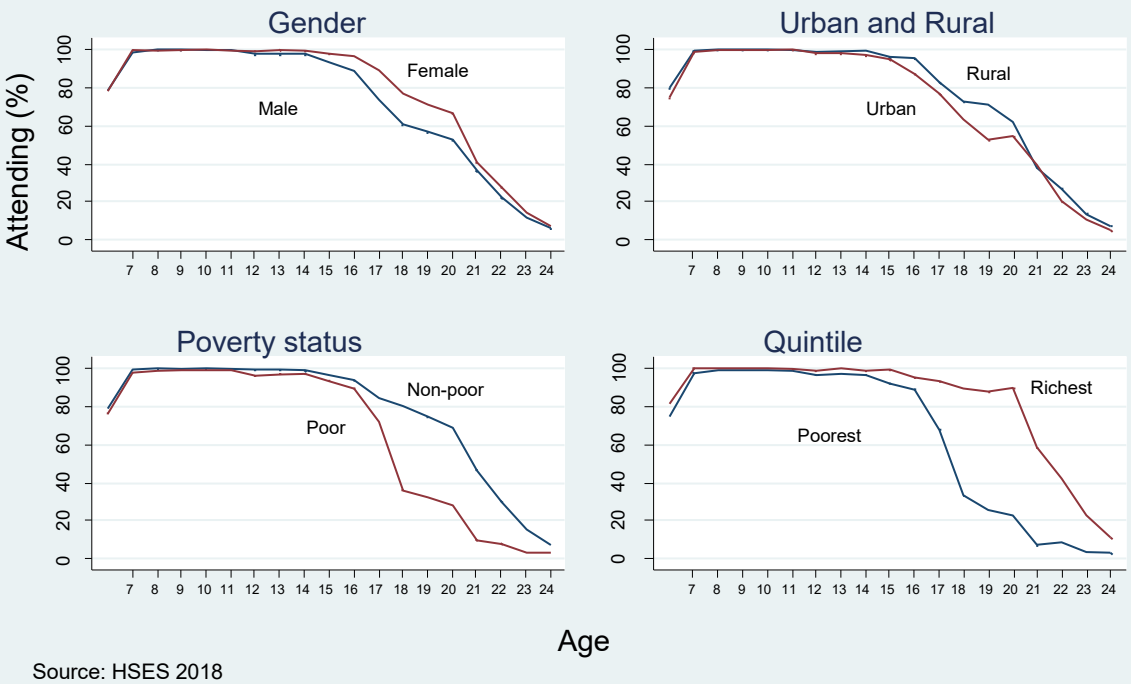
Table D.39. Enrollment rates for primary and lower and higher secondary education (%)

	Net enrollment rates									Gross enrollment rates								
	Primary			Lower secondary			Higher secondary			Primary			Lower secondary			Higher secondary		
	Total	Non-Poor	Poor	Total	Non-Poor	Poor	Total	Non-Poor	Poor	Total	Non-Poor	Poor	Total	Non-Poor	Poor	Total	Non-Poor	Poor
National	92.5	92.5	92.6	88.6	90.0	86.2	62.0	63.6	58.9	97.9	96.9	99.5	100.9	101.8	99.1	69.5	72.8	63.5
Location																		
Urban	93.1	93.1	93.1	88.5	90.3	85.3	61.7	63.8	58.1	98.2	97.0	100.6	99.9	100.8	98.2	70.1	74.5	62.3
Rural	91.4	91.1	91.9	88.8	89.5	87.6	62.4	63.4	60.4	97.1	96.7	97.6	102.6	103.8	100.7	68.5	70.0	65.5
Ulaanbaatar	93.3	93.4	93.1	88.9	90.2	86.2	59.5	61.3	56.3	97.8	96.8	100.2	99.6	100.5	97.8	67.4	72.6	58.2
Aimag center	92.5	92.2	93.0	87.9	90.4	83.7	66.4	69.1	61.9	99.1	97.7	101.3	100.4	101.3	98.7	75.6	78.6	70.7
Soum center	92.8	92.7	92.9	90.3	90.3	90.2	64.7	66.3	61.3	97.2	97.4	96.9	104.1	104.7	103.0	70.5	72.9	65.1
Countryside	89.7	88.9	90.6	87.3	88.7	85.1	60.1	60.4	59.7	96.9	95.7	98.5	101.2	102.9	98.5	66.6	67.0	65.9
Western	91.7	92.3	90.8	87.4	87.6	86.9	65.5	65.9	64.7	98.3	99.6	96.4	102.9	102.4	103.7	75.7	76.3	74.5
Khangai	92.3	91.6	93.4	87.7	89.1	85.4	67.0	66.6	67.7	98.7	97.3	100.9	101.1	103.2	97.8	72.8	72.3	73.9
Central	91.5	91.2	92.0	89.2	91.1	85.0	59.3	62.1	53.6	97.1	96.0	99.0	100.8	102.3	97.7	65.5	68.8	58.8
Eastern	91.7	90.3	93.2	91.4	94.0	88.3	61.0	67.4	50.8	96.7	93.9	99.8	103.3	104.9	101.4	67.4	76.0	53.9
Gender																		
Male	92.6	92.6	92.8	87.6	88.7	85.6	57.1	60.2	51.1	97.9	97.5	98.6	98.9	99.4	98.0	64.3	69.9	53.8
Female	92.4	92.3	92.4	89.8	91.5	86.8	67.3	67.4	67.2	97.8	96.3	100.4	103.0	104.5	100.4	75.1	75.9	73.6

Note:The net enrollment rate for a particular level is defined as the ratio of the number of students in the relevant age group attending that level with respect to the number of children in the relevant age group for that level. The gross enrollment rate for a certain level is the ratio of the number of students attending that level irrespective of their age with respect to the total number of children in the relevant age group for that level.
The age group for primary age children aged 6 to 10, while for lower secondary are those aged 11 to 14 and higher secondary are those aged 15 to 17.

Source: HSES 2018

Figure D.5. School enrollment rate by age



Source: HSES 2018

Table D.40. Population reporting health complaints

	National	Urban	Rural	Location				Region			
				Ulaan-baatar	Aimag center	Soun center	Country side	Western	Khangai	Central	Eastern
Complaints (% population)	9.1	9.9	7.6	10.1	9.4	7.9	7.2	8.6	7.6	7.7	10.6
Among those with complaints (%)											
Type of health complaint a/											
Respiratory system	35.1	37.0	30.2	37.8	35.2	31.8	28.2	31.5	35.0	33.6	26.7
Digestive system	10.2	9.3	12.6	8.4	11.3	10.9	14.9	12.4	10.7	15.0	9.3
Urinary/sexual organ	6.2	5.7	7.6	5.0	7.2	6.9	8.4	12.5	5.9	(4.5)	7.4
Blood circulation	19.2	17.5	23.4	15.6	22.1	23.9	22.9	21.5	23.9	19.1	29.2
Damage/intoxication by external impact	14.3	13.1	17.5	13.8	11.4	16.4	18.8	11.9	11.0	15.4	25.6
Other	22.3	24.0	18.0	25.5	20.5	17.8	18.1	23.8	19.0	19.5	11.2
Sought treatment (%)	78.9	79.9	76.1	80.1	79.6	82.5	68.0	67.3	74.6	88.3	81.6
Among them, place of treatment was											
Central hospital or clinic	20.6	22.7	15.0	26.6	13.1	15.1	14.9	8.7	15.2	19.1	10.5
Aimag or district clinic	30.9	34.7	20.6	26.6	54.1	17.8	25.0	40.8	33.4	33.1	36.2
Sum center family clinic	35.6	28.6	54.5	32.6	18.8	58.8	47.9	38.1	38.1	36.5	44.8
Private	12.5	13.6	9.4	13.7	13.5	8.2	11.3	11.5	12.5	11.3	(8.4)
Abroad	(*)	(*)	(*)	na	(*)	na	(*)	(*)	(*)	na	na
Other, private hospital	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	na	na
Not sought treatment (%)	21.1	20.1	23.9	19.9	20.4	17.5	32.0	32.7	25.4	11.7	18.4
Reasons for not seeking											
Not serious enough	57.4	57.0	58.4	51.7	69.5	59.5	57.6	68.6	76.9	(43.3)	(30.4)
Treated myself	29.3	34.2	18.7	40.7	18.9	26.3	(13.5)	(10.3)	(8.9)	38.9	47.0
Lack of budget	(2.3)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Other	11.0	(7.1)	19.4	(*)	(*)	(*)	26.3	(16.4)	(12.2)	(*)	(*)

a/ Combines up to two responses.
na-not applicable
()- sample size is 25-49
(*)- sample size is less than 25

Source: HSES 2018

Table D.41. Population reporting health complaints by urban and rural areas and poverty status

	National		Urban		Rural	
	Non-Poor	Poor	Non-Poor	Poor	Non-Poor	Poor
Complaints (% population)	10.5	5.5	11.2	6.4	9.2	3.9
Among those with complaints (%)						
Type of health complaint a/						
Respiratory system	34.4	38.6	36.2	40.7	29.8	32.4
Digestive system	10.3	9.9	9.2	9.5	12.9	(11.2)
Urinary/sexual organ	6.2	6.1	5.7	(5.7)	7.7	(*)
Blood circulation	19.8	16.3	18.1	14.7	23.9	20.7
Damage/intoxication by external impact	14.1	15.2	12.7	14.9	17.7	16.2
Other	22.7	20.3	25.0	19.5	17.1	22.4
Sought treatment (%)	79.8	74.3	80.7	76.4	77.6	68.3
Among them, place of treatment was						
Central hospital or clinic	21.9	13.7	24.0	16.3	16.6	(*)
Aimag or district clinic	30.3	33.6	34.0	38.0	20.8	(19.4)
Sum center family clinic	33.5	46.6	26.6	38.5	51.6	72.3
Private	13.8	(5.8)	15.0	(6.7)	10.5	(*)
Abroad	(*)	na	(*)	na	(*)	na
Other, private hospital	(*)	(*)	(*)	(*)	(*)	na
Not sought treatment (%)	20.2	25.7	19.3	23.6	22.4	31.7
Reasons for not seeking						
Not serious enough	56.1	62.4	54.7	65.9	59.2	55.1
Treated myself	32.1	(18.7)	38.2	(18.9)	18.9	(*)
Lack of budget	(*)	(6.6)	(*)	(*)	(*)	(*)
Other	10.6	(12.2)	(6.2)	(*)	20.4	(*)

a/ Combines up to two responses.
na-not applicable
()- sample size is 25-49
(*)- sample size is less than 25

Source: HSES 2018

Table D.42. Population reporting health complaints by gender and poverty status

	National		Male		Female	
	Male	Female	Non-poor	Poor	Non-poor	Poor
Complaints (% population)	8.1	10.1	9.1	5.4	11.8	5.6
Among those with complaints (%)						
Type of health complaint a/						
Respiratory system	39.2	32.1	38.4	42.6	31.5	35.0
Digestive system	9.2	(11.0)	9.1	9.6	11.2	10.2
Urinary/sexual organ	4.8	7.3	5.0	(*)	7.1	(8.2)
Blood circulation	15.7	21.8	16.4	12.3	22.2	19.8
Damage/intoxication by external impact	15.6	13.3	15.4	16.8	13.2	13.8
Other	21.6	22.8	22.0	20.1	23.3	20.4
Sought treatment (%)	76.0	81.0	77.6	69.4	81.4	78.7
Among them, place of treatment was						
Central hospital or clinic	21.5	20.0	23.2	(13.3)	21.0	(14.1)
Aimag or district clinic	31.3	30.6	31.4	30.5	29.6	36.1
Sum center family clinic	35.4	35.8	32.6	48.8	34.1	44.8
Private	11.6	13.1	12.4	(*)	14.7	4.5
Abroad	(*)	(*)	(*)	na	(*)	na
Other, private hospital	(*)	(*)	(*)	na	(*)	(*)
Not sought treatment (%)	24.0	19.0	22.4	30.6	18.6	21.3
Reasons for not seeking						
Not serious enough	54.0	60.7	51.3	62.6	60.3	62.2
Treated myself	30.5	28.2	34.1	(18.8)	30.3	(*)
Lack of budget	(*)	(*)	(*)	(*)	(*)	(*)
Other	12.5	9.5	12.5	(*)	(9.0)	(*)

a/ Combines up to two responses.
na-not applicable
()- sample size is 25-49
(*)- sample size is less than 25

Source: HSES 2018

Table D.43. Disabilities for aged 18 and older

	National	Urban	Rural	Location				Region			
				Ulaan-baatar	Aimag center	Soum center	Country side	Western	Khangai	Central	East
% of population with any disabilities	5.8	5.4	6.7	5.4	5.4	6.8	6.6	5.9	5.8	6.2	7.6
% of population by type of disabilities											
Sight	1.4	1.4	1.4	1.4	1.2	1.4	1.3	1.1	1.1	1.4	1.8
Speaking	1.1	1.0	1.1	1.1	0.9	1.2	1.0	0.9	1.0	1.1	1.5
Hearing	2.6	2.4	3.0	2.4	2.4	3.1	2.8	3.0	2.5	2.7	3.2
Physical	1.3	1.2	1.7	1.1	1.2	1.6	1.8	1.3	1.5	1.5	1.9
Mental	1.0	0.9	1.1	0.9	1.1	1.3	0.9	0.8	1.2	1.1	(1.2)
Other	1.1	1.0	1.3	1.0	1.0	1.3	1.3	1.1	1.2	1.3	(1.2)

()- sample size is 25-49

Source: HSES 2018

Table D.44. Disabilities for aged 18 and older by urban and rural and poverty status

	National		Urban		Rural	
	Non-Poor	Poor	Non-Poor	Poor	Non-Poor	Poor
% of population with any disabilities	5.5	6.8	4.9	6.9	6.7	6.6
% of population by type of disabilities						
Sight	1.3	1.4	1.3	1.6	1.4	(1.1)
Speaking	1.0	1.3	1.0	1.3	1.1	1.4
Hearing	2.6	2.6	2.3	2.7	3.1	2.4
Physical	1.2	1.7	1.1	1.5	1.5	2.1
Mental	1.0	1.0	1.0	(.9)	1.1	(1.1)
Other	1.0	1.5	0.9	1.4	1.2	1.6

()- sample size is 25-49

Source: HSES 2018

Table D.45. Disabilities for aged 18 and older by gender and poverty status

	National		Male		Female	
	Male	Female	Non-Poor	Poor	Non-Poor	Poor
% of population with any disabilities	6.3	5.4	5.8	7.8	5.3	5.9
% of population by type of disabilities						
Sight	1.5	1.2	1.4	1.7	1.3	1.2
Speaking	1.1	1.1	1.0	1.3	1.0	1.3
Hearing	2.6	2.6	2.5	2.8	2.7	2.4
Physical	1.5	1.2	1.3	1.9	1.1	1.5
Mental	1.1	0.9	1.1	1.0	0.9	0.9
Other	1.2	1.0	1.1	1.5	0.8	1.4

Source: HSES 2018

Table D.46. Population shares by employment status

	% of population by employment status				Population shares by variables			
	Employed	Unemployed	Out of the labor force	Total	Employed	Unemployed	Out of the labor force	Total
National	56.6	6.0	37.5	100.0	100.0	100.0	100.0	100.0
Location								
Urban	53.4	6.3	40.2	100.0	62.3	70.1	70.9	66.0
Rural	62.7	5.3	32.0	100.0	37.7	29.9	29.1	34.0
Ulaanbaatar	53.6	5.7	40.8	100.0	43.2	43.4	49.7	45.6
Aimag center	53.2	7.8	39.0	100.0	19.2	26.7	21.3	20.4
Soum center	53.3	7.6	39.1	100.0	17.1	23.0	19.0	18.2
Countryside	73.5	2.6	23.9	100.0	20.6	6.9	10.1	15.8
Western	58.5	8.0	33.5	100.0	13.3	17.4	11.5	12.9
Khangai	58.8	5.5	35.7	100.0	19.6	17.4	18.0	18.8
Central	62.2	5.0	32.8	100.0	17.3	13.2	13.8	15.7
Eastern	54.3	7.5	38.2	100.0	6.7	8.7	7.1	7.0
Quintiles								
Poorest	50.0	10.5	39.6	100.0	14.8	29.3	17.7	16.7
II	55.7	7.8	36.6	100.0	18.3	24.2	18.1	18.6
III	56.9	6.2	36.9	100.0	20.2	20.8	19.8	20.1
IV	57.7	4.1	38.1	100.0	21.9	14.9	21.8	21.4
Richest	60.7	2.8	36.5	100.0	25.0	10.8	22.7	23.3
Poverty								
Non-poor	58.2	4.8	37.1	100.0	77.9	60.5	75.0	75.7
Poor	51.7	9.7	38.6	100.0	22.2	39.5	25.0	24.3
Gender								
Male	64.3	7.8	27.9	100.0	53.3	61.3	34.9	46.9
Female	49.8	4.4	45.9	100.0	46.7	38.7	65.1	53.1
Age group								
16-24	26.3	9.1	64.6	100.0	9.6	31.5	35.6	20.6
25-34	74.8	6.5	18.7	100.0	31.1	25.6	11.8	23.6
35-44	80.8	5.2	14.0	100.0	29.2	17.9	7.6	20.4
45-54	75.1	7.1	17.8	100.0	22.0	19.7	7.9	16.6
55-59	44.2	4.3	51.5	100.0	5.5	5.1	9.7	7.0
60<	12.4	0.2	87.4	100.0	2.6	0.3	27.4	11.8
Educational attainment								
None	52.9	4.6	42.5	100.0	2.9	2.4	3.6	3.1
Primary	47.9	4.1	48.1	100.0	5.3	4.2	8.0	6.2
Lower secondary	43.7	4.7	51.6	100.0	12.6	12.8	22.5	16.3
Higher secondary	49.8	7.5	42.7	100.0	24.9	35.7	32.3	28.3
Vocational	63.1	6.1	30.9	100.0	21.6	19.7	16.0	13.1
University	69.5	5.7	24.8	100.0	32.7	25.3	17.6	6.3

Note: Estimated for 15 and older aged population

Source: HSES 2018

Table D.47. Labor force participation rate and unemployment rate by poverty status

	Labor force participation rate			Unemployment rate		
	Non-poor	Poor	Total	Non-poor	Poor	Total
National	62.9	61.4	62.6	7.6	15.8	9.5
Location						
Urban	60.8	56.3	59.8	8.3	18.7	10.6
Rural	67.1	70.3	68.0	6.3	11.7	7.7
Ulaanbaatar	60.5	54.7	59.2	7.5	17.5	9.6
Aimag center	61.5	59.4	61.0	10.1	21.0	12.8
Soum center	60.3	62.5	60.9	10.0	19.7	12.4
Countryside	75.3	78.1	76.1	2.7	5.2	3.4
Western	64.9	70.9	66.5	10.9	15.0	12.1
Khangai	63.2	67.3	64.3	7.3	11.9	8.6
Central	68.2	63.5	67.2	5.3	15.8	7.4
Eastern	62.2	60.9	61.8	8.5	19.9	12.1
Gender						
Male	71.5	74.0	72.1	8.9	16.5	10.8
Female	55.3	50.3	54.1	6.0	14.9	8.0
Age group						
16-24	33.8	39.3	35.4	21.5	34.9	25.8
25-34	83.9	74.7	81.3	6.5	12.0	8.0
35-44	88.7	79.1	86.0	4.7	10.1	6.1
45-54	84.0	75.0	82.2	7.0	15.9	8.6
55-59	50.1	40.2	48.5	7.1	19.9	8.9
60<	13.0	10.3	12.6	0.8	5.2	1.2
Educational attainment						
None	54.2	61.6	57.5	4.7	11.7	8.0
Primary	47.2	61.5	51.9	5.0	12.1	7.8
Lower secondary	48.2	48.8	48.4	7.2	13.8	9.6
Higher secondary	55.2	63.0	57.3	10.8	18.7	13.1
Vocational	68.6	70.7	69.1	6.2	16.8	8.8
University	75.9	68.5	75.2	6.8	14.2	7.5

Note: Estimated for 15 and older aged population

Source: HSES 2018

Table D.48. Labor force participation rate and unemployment rate by gender

	Labor force participation rate			Unemployment rate		
	Male	Female	Total	Male	Female	Total
National	72.1	54.1	62.6	10.8	8.0	9.5
Location						
Urban	70.0	51.2	59.8	12.4	8.5	10.6
Rural	75.9	60.3	68.0	8.1	7.2	7.7
Ulaanbaatar	70.1	50.2	59.2	11.7	7.1	9.6
Aimag center	69.9	53.3	61.0	13.9	11.5	12.8
Soum center	69.7	52.9	60.9	13.5	11.1	12.4
Countryside	82.5	69.3	76.1	3.3	3.5	3.4
Western	74.3	59.0	66.5	11.8	12.4	12.1
Khangai	72.1	57.0	64.3	9.5	7.5	8.6
Central	76.0	59.2	67.2	7.8	7.0	7.4
Eastern	72.1	52.4	61.8	14.1	9.6	12.1
Poverty						
Non-poor	71.5	55.3	62.9	8.9	6.0	7.6
Poor	74.0	50.3	61.4	16.5	14.9	15.8
Age group						
16-24	43.3	27.5	35.4	26.7	24.3	25.8
25-34	94.2	69.4	81.3	9.0	6.7	8.0
35-44	92.8	79.6	86.0	6.4	5.7	6.1
45-54	86.6	78.4	82.2	9.5	7.7	8.6
55-59	70.3	32.1	48.5	13.1	1.9	8.9
60<	17.0	9.5	12.6	2.3	0.0	1.2
Educational attainment						
None	70.3	42.5	57.5	7.5	8.9	8.0
Primary	68.5	35.2	51.9	9.0	5.5	7.8
Lower secondary	56.1	39.8	48.4	9.8	9.4	9.6
Higher secondary	68.2	47.8	57.3	14.4	11.5	13.1
Vocational	81.2	56.0	69.1	9.5	7.5	8.8
University	83.1	70.2	75.2	9.8	5.9	7.5

Note: Estimated for 15 and older aged population

Source: HSES 2018

Table D.49. Share of employment between non-poor and poor by employed industry, sector and occupation type

	Urban			Rural			National		
	Non-poor	Poor	Total	Non-poor	Poor	Total	Non-poor	Poor	Total
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Industry									
Agriculture	3.0	5.8	3.6	54.5	66.8	57.6	21.6	32.4	24.0
Industry	27.8	37.7	29.8	10.8	11.6	11.0	21.7	26.3	22.7
Services	69.2	56.5	66.7	34.7	21.6	31.4	56.8	41.3	53.3
Agriculture, herding	3.0	5.8	3.6	54.5	66.8	57.6	21.6	32.4	24.0
Mining	6.8	6.0	6.7	4.5	3.9	4.4	6.0	5.1	5.8
Manufacturing	9.9	12.3	10.4	2.7	3.9	3.0	7.3	8.6	7.6
Electricity, water	2.3	2.5	2.3	1.3	0.9	1.2	1.9	1.8	1.9
Construction	8.8	16.9	10.4	2.3	3.0	2.5	6.5	10.9	7.4
Trade	19.0	17.5	18.7	5.8	2.8	5.0	14.2	11.1	13.5
Hotels, restaurants, tourism	4.4	6.6	4.9	1.4	2.0	1.6	3.4	4.6	3.6
Transportation	7.9	6.1	7.5	3.5	1.7	3.0	6.3	4.2	5.8
Financial, insurance, real estate	3.3	0.9	2.8	1.5	0.6	1.2	2.7	0.8	2.2
Public administration	8.3	7.0	8.0	6.5	3.8	5.8	7.6	5.6	7.2
Education	9.9	6.3	9.2	10.1	6.8	9.3	10.0	6.5	9.2
Health	5.0	3.1	4.6	3.4	1.5	2.9	4.4	2.4	4.0
Other	11.4	8.9	10.9	2.6	2.4	2.6	8.3	6.1	7.8
Sector									
Private	73.6	81.4	75.2	76.4	86.3	78.9	74.6	83.5	76.6
Public	21.3	16.1	20.2	21.0	12.8	18.9	21.1	14.6	19.7
State	5.2	2.6	4.6	2.7	0.9	2.2	4.3	1.8	3.7
Occupation									
Managers, senior officials and legislators	10.3	1.5	8.5	3.5	0.7	2.8	7.8	1.1	6.3
Professionals	23.4	7.6	20.2	11.4	5.0	9.8	19.1	6.4	16.3
Technicians and associate professionals	3.4	1.8	3.1	2.0	0.7	1.7	2.9	1.3	2.5
Clerks	4.1	3.3	3.9	2.1	0.8	1.8	3.4	2.2	3.1
Service workers, shop and market salespeople	21.7	19.6	21.3	8.3	5.4	7.6	16.9	13.4	16.1
Skilled agricultural and fishery workers	2.6	5.2	3.1	53.5	65.1	56.4	20.9	31.3	23.2
Craft and related trader workers	12.4	23.5	14.6	4.3	5.7	4.6	9.5	15.8	10.9
Plant and machine operators	11.6	10.1	11.3	6.0	3.9	5.5	9.6	7.4	9.1
Elementary occupations	9.6	26.7	13.0	8.2	12.2	9.2	9.1	20.4	11.6
Others	0.9	0.7	0.9	0.8	0.5	0.7	0.9	0.6	0.8

Source: HSES 2018

Table D.50. Share of employment between non-poor and poor by employed industry, sector and occupation type

	Urban			Rural			National		
	Non-poor	Poor	Total	Non-poor	Poor	Total	Non-poor	Poor	Total
Total employed population	80.0	20.1	100.0	74.4	25.6	100.0	77.9	22.2	100.0
Industry									
Agriculture	67.5	32.5	100.0	70.3	29.7	100.0	70.0	30.0	100.0
Industry	74.6	25.4	100.0	72.9	27.1	100.0	74.3	25.7	100.0
Services	83.0	17.0	100.0	82.4	17.6	100.0	82.9	17.1	100.0
Agriculture, herding	67.5	32.5	100.0	70.3	29.7	100.0	70.0	30.0	100.0
Mining	81.9	18.1	100.0	77.2	22.8	100.0	80.6	19.4	100.0
Manufacturing	76.3	23.7	100.0	66.8	33.2	100.0	74.9	25.1	100.0
Electricity, water	78.3	21.7	100.0	81.3	18.7	100.0	79.0	21.0	100.0
Construction	67.5	32.6	100.0	69.1	30.9	100.0	67.7	32.3	100.0
Trade	81.2	18.8	100.0	85.7	14.3	100.0	81.9	18.2	100.0
Hotels, restaurants, tourism	72.7	27.3	100.0	67.8	32.2	100.0	71.9	28.1	100.0
Transportation	83.7	16.3	100.0	85.5	14.5	100.0	84.1	15.9	100.0
Financial, insurance, real estate	93.7	6.3	100.0	87.9	12.1	100.0	92.5	7.5	100.0
Public administration	82.6	17.4	100.0	83.0	17.0	100.0	82.7	17.3	100.0
Education	86.2	13.8	100.0	81.2	18.8	100.0	84.3	15.7	100.0
Health	86.3	13.7	100.0	86.4	13.6	100.0	86.3	13.7	100.0
Other	83.6	16.4	100.0	76.5	23.5	100.0	82.7	17.3	100.0
Sector									
Private	78.3	21.7	100.0	72.0	28.0	100.0	75.8	24.2	100.0
Public	84.1	16.0	100.0	82.6	17.4	100.0	83.5	16.5	100.0
State	89.0	11.0	100.0	89.4	10.6	100.0	89.1	10.9	100.0
Occupation									
Managers, senior officials and legislators	96.5	3.5	100.0	93.6	6.5	100.0	96.0	4.0	100.0
Professionals	92.5	7.5	100.0	87.0	13.0	100.0	91.2	8.8	100.0
Technicians and associate professionals	88.2	11.8	100.0	89.3	10.7	100.0	88.5	11.5	100.0
Clerks	83.0	17.0	100.0	88.1	11.9	100.0	84.1	15.9	100.0
Service workers, shop and market salespeople	81.6	18.4	100.0	81.6	18.5	100.0	81.6	18.4	100.0
Skilled agricultural and fishery workers	66.5	33.5	100.0	70.5	29.6	100.0	70.1	29.9	100.0
Craft and related trader workers	67.8	32.2	100.0	68.4	31.7	100.0	67.9	32.1	100.0
Plant and machine operators	82.1	17.9	100.0	82.0	18.0	100.0	82.1	17.9	100.0
Elementary occupations	58.9	41.1	100.0	66.0	34.1	100.0	61.0	39.0	100.0
Others	83.5	16.5	100.0	81.6	18.4	100.0	82.9	17.1	100.0

Source: HSES 2018

Table D.51. Industry, sector of employment and occupation by gender

	Urban			Rural			National		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Industry									
Agriculture	4.4	2.7	3.6	60.9	53.7	57.6	26.3	21.3	24.0
Industry	39.7	18.8	29.8	15.2	6.0	11.0	30.2	14.2	22.7
Services	55.9	78.4	66.7	24.0	40.3	31.4	43.6	64.5	53.3
Agriculture, herding	4.4	2.7	3.6	60.9	53.7	57.6	26.3	21.3	24.0
Mining	10.9	2.0	6.7	6.4	1.9	4.4	9.1	2.0	5.8
Manufacturing	9.6	11.2	10.4	3.1	2.9	3.0	7.1	8.2	7.6
Electricity, water	2.9	1.7	2.3	1.6	0.6	1.2	2.4	1.3	1.9
Construction	16.3	3.9	10.4	4.1	0.5	2.5	11.6	2.7	7.4
Trade	15.7	22.0	18.7	3.5	6.9	5.0	11.0	16.5	13.5
Hotels, restaurants, tourism	1.7	8.3	4.9	0.6	2.8	1.6	1.3	6.3	3.6
Transportation	11.6	3.1	7.5	4.4	1.3	3.0	8.8	2.4	5.8
Financial, insurance, real estate	2.2	3.5	2.8	0.8	1.8	1.2	1.7	2.9	2.2
Public administration	8.5	7.5	8.0	6.2	5.2	5.8	7.6	6.7	7.2
Education	4.2	14.7	9.2	4.7	14.9	9.3	4.4	14.8	9.2
Health	1.5	8.0	4.6	1.1	5.0	2.9	1.4	6.9	4.0
Other	10.6	11.3	10.9	2.7	2.4	2.6	7.5	8.1	7.8
Sector									
Private	79.9	69.9	75.2	84.5	72.2	78.9	81.7	70.8	76.6
Public	14.7	26.3	20.2	13.2	25.7	18.9	14.1	26.1	19.7
State	5.4	3.8	4.6	2.3	2.1	2.2	4.2	3.2	3.7
Occupation									
Managers, senior officials and legislators	9.2	7.7	8.5	2.9	2.6	2.8	6.7	5.9	6.3
Professionals	13.1	28.1	20.2	4.8	15.8	9.8	9.9	23.6	16.3
Technicians and associate professionals	3.0	3.2	3.1	1.1	2.4	1.7	2.2	2.9	2.5
Clerks	1.8	6.3	3.9	0.9	2.8	1.8	1.4	5.1	3.1
Service workers, shop and market salespeople	14.3	29.0	21.3	3.5	12.5	7.6	10.1	23.0	16.1
Skilled agricultural and fishery workers	3.8	2.3	3.1	59.2	53.1	56.4	25.3	20.8	23.2
Craft and related trader workers	20.2	8.5	14.6	6.4	2.5	4.6	14.9	6.3	10.9
Plant and machine operators	20.1	1.7	11.3	9.5	0.7	5.5	16.0	1.3	9.1
Elementary occupations	13.1	12.9	13.0	10.8	7.3	9.2	12.2	10.9	11.6
Others	1.5	0.3	0.9	1.0	0.3	0.7	1.3	0.3	0.8

Source: HSES 2018

Table D.52. Industry, sector of employment and occupation by gender

	Urban			Rural			National		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Total employed population	52.4	47.6	100.0	54.8	45.2	100.0	53.3	46.7	100.0
Industry									
Agriculture	63.8	36.2	100.0	57.9	42.1	100.0	58.4	41.6	100.0
Industry	69.9	30.2	100.0	75.3	24.7	100.0	70.9	29.2	100.0
Services	44.0	56.0	100.0	41.9	58.1	100.0	43.5	56.5	100.0
Agriculture, herding	63.8	36.2	100.0	57.9	42.1	100.0	58.4	41.6	100.0
Mining	85.6	14.5	100.0	79.9	20.1	100.0	84.0	16.0	100.0
Manufacturing	48.5	51.5	100.0	56.1	43.9	100.0	49.7	50.3	100.0
Electricity, water	64.7	35.3	100.0	75.8	24.2	100.0	67.3	32.7	100.0
Construction	82.2	17.9	100.0	90.3	9.7	100.0	83.2	16.8	100.0
Trade	43.9	56.1	100.0	38.0	62.0	100.0	43.1	56.9	100.0
Hotels, restaurants, tourism	18.5	81.5	100.0	20.3	79.7	100.0	18.8	81.2	100.0
Transportation	80.6	19.4	100.0	80.9	19.1	100.0	80.7	19.4	100.0
Financial, insurance, real estate	40.6	59.4	100.0	35.2	64.8	100.0	39.5	60.6	100.0
Public administration	55.4	44.7	100.0	59.0	41.0	100.0	56.5	43.6	100.0
Education	23.8	76.2	100.0	27.5	72.5	100.0	25.2	74.8	100.0
Health	17.6	82.4	100.0	21.6	78.4	100.0	18.7	81.3	100.0
Other	50.7	49.3	100.0	57.3	42.7	100.0	51.5	48.5	100.0
Sector									
Private	55.7	44.3	100.0	58.7	41.3	100.0	56.8	43.2	100.0
Public	38.0	62.0	100.0	38.4	61.6	100.0	38.2	61.8	100.0
State	61.1	38.9	100.0	57.6	42.4	100.0	60.3	39.7	100.0
Occupation									
Managers, senior officials and legislators	56.7	43.3	100.0	57.0	43.1	100.0	56.7	43.3	100.0
Professionals	33.9	66.1	100.0	26.7	73.3	100.0	32.3	67.7	100.0
Technicians and associate professionals	50.7	49.4	100.0	35.9	64.2	100.0	47.0	53.0	100.0
Clerks	23.5	76.5	100.0	27.2	72.8	100.0	24.3	75.7	100.0
Service workers, shop and market salespeople	35.1	64.9	100.0	25.4	74.6	100.0	33.4	66.6	100.0
Skilled agricultural and fishery workers	64.6	35.4	100.0	57.5	42.5	100.0	58.1	41.9	100.0
Craft and related trader workers	72.4	27.6	100.0	76.1	23.9	100.0	73.0	27.0	100.0
Plant and machine operators	92.8	7.2	100.0	94.5	5.5	100.0	93.2	6.8	100.0
Elementary occupations	52.8	47.2	100.0	64.2	35.8	100.0	56.2	43.8	100.0
Others	85.4	14.6	100.0	79.9	20.2	100.0	83.6	16.4	100.0

Source: HSES 2018

Table D.53. Poverty profile by savings and loan, urban and rural areas

	Poverty headcount			Share of population			Share of poor		
	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural
Total	28.4	27.2	30.8	100.0	100.0	100.0	100.0	100.0	100.0
Savings									
No	33.0	32.1	34.8	75.2	76.3	73.0	87.3	90.0	82.6
Yes	14.5	11.5	19.8	24.8	23.7	27.0	12.7	10.0	17.4
Loan									
No	34.2	32.5	38.4	40.3	43.2	34.6	48.5	51.6	43.2
Yes	24.5	23.2	26.7	59.7	56.8	65.4	51.5	48.4	56.8
Loan type									
Salary									
No	27.8	26.0	30.5	56.3	53.2	61.6	63.9	59.6	70.3
Yes	20.2	20.0	20.7	43.7	46.8	38.4	36.1	40.4	29.7
Pension									
No	23.3	21.0	27.1	78.8	78.3	79.8	74.9	71.0	80.7
Yes	29.0	30.9	25.5	21.2	21.7	20.2	25.1	29.0	19.3
Mortgage									
No	26.8	26.5	27.2	87.6	81.8	97.6	95.9	93.6	99.4
Yes	8.1	8.2	6.5	12.4	18.2	2.4	(4.1)	(6.4)	(*)
Household consumption									
No	24.2	22.5	26.7	92.4	89.9	96.6	91.2	87.5	96.6
Yes	28.3	28.6	26.9	7.6	10.1	3.4	8.8	12.5	(3.4)
Herders'									
No	23.4	23.1	24.3	84.8	98.6	61.1	81.2	98.4	55.6
Yes	30.3	27.0	30.5	15.2	1.4	38.9	18.8	(1.6)	44.4
Business									
No	25.0	23.7	27.1	95.3	94.7	96.5	97.3	96.9	97.9
Yes	14.2	13.4	16.1	4.7	5.3	3.5	(2.7)	(3.1)	(*)
Other									
No	24.4	23.0	26.7	82.9	81.2	86.0	82.7	80.5	85.9
Yes	24.9	24.0	26.9	17.1	18.8	14.0	17.3	19.5	14.1

()- sample size is 25-49
(*)- sample size is less than 25

Source: HSES 2018

Table D.54. Average Loan amount in last 12 months by loan type (thousand tugrug)

	National	Average loan amount by type of loan*						
		Salary	Pension	Mortgage	Household consumption	Herders'	Business	Other
National	6 823	6 734	3 303	41 657	4 508	3 933	14 170	6 283
Location								
Urban	8 272	7 229	3 425	47 320	4 798	5 173	16 319	7 594
Rural	5 057	5 930	3 133	14 780	3 381	3 864	9 721	3 658
Ulaanbaatar	8 952	7 552	3 200	57 075	4 674	(*)	16 239	8 737
Aimag center	7 341	6 838	3 696	30 971	5 122	4 284	16 383	5 142
Soum center	5 655	5 946	3 247	16 931	3 257	3 852	9 676	4 046
Countryside	4 219	5 811	2 916	(*)	4 018	3 867	10 013	2 917
Western	5 747	5 467	3 594	19 713	4 011	3 254	16 025	3 820
Khangai	5 225	6 130	3 268	(*)	3 789	3 350	12 534	3 765
Central	6 604	7 248	3 301	26 684	5 710	4 780	11 076	5 216
Eastern	5 817	5 843	3 300	(*)	3 166	4 910	12 295	4 195
Quintile								
I	3 374	4 586	2 210	(*)	2 304	2 727	(*)	2 679
II	4 667	5 182	2 628	(*)	3 745	3 327	8 772	3 448
III	5 577	6 037	3 247	(*)	3 711	3 913	9 718	4 005
IV	7 366	7 394	3 481	44 748	4 033	4 477	10 725	6 535
V	10 348	8 345	4 036	50 748	7 212	5 036	21 018	11 279
Poverty								
Non-poor	7 489	7 071	3 490	43 867	5 015	4 261	15 153	7 121
Poor	3 769	4 575	2 375	(*)	2 722	2 945	5 576	2 875

**- Estimated only households with particular loan.*
()- sample size is 25-49
(*)- sample size is less than 25

Source: HSES 2018

Table D.55. Purposes of paid loans in last 12 months

	Household consumption	Purchase of a car	Running a private business	Purchase of land	Purchase of durable goods	Building and buying an accommodation	Sending to other household members	Other
National	72.5	11.7	5.5	0.8	5.0	16.5	1.8	16.7
Location								
Urban	65.5	14.6	5.7	1.1	6.2	22.8	2.4	16.6
Rural	83.7	6.9	5.3	(*)	3.2	6.3	(1.0)	16.8
Ulaanbaatar	59.5	17.7	4.7	(*)	6.5	25.6	(2.7)	16.2
Aimag center	75.1	9.8	7.3	(0.8)	5.6	18.3	1.8	17.3
Soum center	82.8	7.0	6.8	(*)	3.9	7.2	(1.1)	15.8
Countryside	85.0	6.6	(3.0)	(*)	(2.1)	5.0	(*)	18.3
Western	83.0	6.8	7.7	(*)	3.8	9.4	(1.4)	20.2
Khangai	83.9	6.9	5.0	(*)	3.5	10.2	(1.2)	16.9
Central	75.8	8.9	6.7	(*)	4.2	12.2	(1.3)	13.1
Eastern	78.1	10.7	4.2	(*)	5.9	12.1	(*)	21.1
Quintile								
I	88.3	(2.6)	(1.7)	(*)	(*)	(3.6)	(*)	17.8
II	80.4	6.6	3.9	(*)	3.6	9.3	(*)	15.1
III	74.5	11.6	3.6	(*)	4.2	13.8	(1.4)	15.5
IV	67.5	15.9	6.1	(*)	6.6	20.0	(2.1)	17.0
V	60.0	16.9	10.3	(*)	7.3	28.8	3.1	18.2
Poverty								
Non-poor	70.1	12.9	6.1	0.8	5.4	18.3	2.2	16.6
Poor	83.0	6.2	3.1	(*)	3.4	8.5	(*)	17.3

Note: Include households who repayed loans in the last 12 months. The HSES asked households to select up to 3 purposes of loan usage so that the sum of percentage shares can exceed 100.
()- sample size is 25-49
(*)- sample size is less than 25

Source: HSES 2018

Table D.56. Durable goods ownership at household

	Computer	Refrigerator	Washing machine	Electric Gen-set	Television	Motorcycle	Truck, large truck	Car	Ger	House, dwelling
National	18.5	81.8	71.1	8.6	92.9	13.5	9.0	36.8	40.9	52.6
Location										
Urban	24.4	93.3	82.8	0.8	95.3	1.8	4.0	42.4	26.9	63.3
Rural	7.6	60.9	50.0	22.9	88.5	34.7	18.2	26.8	66.4	33.2
Ulaanbaatar	27.6	95.0	84.5	(*)	95.7	(*)	3.3	45.6	23.7	67.8
Aimag center	17.9	89.8	79.3	1.6	94.6	4.7	5.4	35.8	33.5	54.1
Soum center	11.6	82.8	70.3	4.0	92.9	17.5	10.8	30.4	50.5	43.7
Countryside	2.8	34.6	25.6	45.6	83.2	55.4	27.0	22.5	85.6	20.5
Western	12.3	66.4	54.8	21.0	86.9	29.9	12.4	32.4	72.1	44.1
Khangai	10.4	66.4	56.7	17.1	91.6	27.5	12.5	28.1	57.4	39.7
Central	13.2	81.4	70.3	10.0	92.2	16.2	14.9	32.6	44.0	42.7
Eastern	8.9	71.7	60.5	10.8	91.6	19.6	14.0	26.3	40.0	35.6
Poverty										
Non-poor	22.2	84.7	74.3	8.2	93.8	12.7	10.0	41.8	36.3	58.0
Poor	4.3	71.0	59.3	10.3	89.3	16.3	5.5	18.3	58.4	32.5

(*)- sample size is less than 25

Source: HSES 2018

Table D.57.1. Per capita real annual income growth (%, CAGR)

a). Urban

Urban Quintile	2010-2014					2016-2018				
	total income	wage	farm	business	social transfer	total income	wage	farm	business	social transfer
I	4.5	7.3	na	-11.8	5.1	-1.0	-0.2	na	-6.4	2.9
II	6.0	7.9	na	-2.0	6.7	1.6	4.4	na	-15.2	3.0
III	9.2	10.2	na	6.6	6.7	1.7	0.8	na	-1.0	2.5
IV	8.5	11.3	na	-2.3	8.4	1.8	-1.5	na	12.3	3.1
V	6.2	12.1	na	-9.4	7.1	1.7	-3.1	na	10.1	4.0
Total	7.0	10.5	na	-5.2	6.9	1.4	-0.8	na	4.5	3.2

b). Rural

Rural Quintile	2010-2014					2016-2018				
	total income	wage	farm	business	social transfer	total income	wage	farm	business	social transfer
I	10.2	16.5	12.0	-2.0	2.8	3.8	5.4	3.6	13.3	8.1
II	11.8	23.0	12.3	1.4	2.7	3.4	7.9	0.2	-9.6	7.9
III	11.2	10.7	14.9	-1.0	6.2	3.7	4.5	0.5	0.7	11.3
IV	11.7	8.1	16.7	1.1	7.2	3.2	-4.7	8.5	5.3	6.6
V	11.7	4.9	22.2	0.2	11.6	1.0	-3.7	7.8	-6.5	2.2
Total	11.5	9.5	16.7	0.2	6.8	2.6	-0.2	4.8	-2.2	6.5

Source: HSES 2010-2018

Table D.57.2. Per capita nominal annual income growth (%, CAGR)

a). Urban

Urban Quintile	2010-2014					2016-2018				
	total income	wage	farm	business	social transfer	total income	wage	farm	business	social transfer
I	17.4	20.6	na	-0.9	18.1	5.7	6.6	na	0.0	9.8
II	19.1	21.3	na	10.1	19.8	8.5	11.5	na	-9.5	10.0
III	22.7	23.8	na	19.8	19.9	8.6	7.6	na	5.7	9.5
IV	21.8	25.0	na	9.7	21.7	8.7	5.1	na	19.9	10.1
V	19.3	26.0	na	1.8	20.3	8.5	3.4	na	17.5	11.1
Total	20.2	24.2	na	6.5	20.1	8.3	6.0	na	11.6	10.2

b). Rural

Rural Quintile	2010-2014					2016-2018				
	total income	wage	farm	business	social transfer	total income	wage	farm	business	social transfer
I	23.9	30.8	25.9	10.1	15.5	10.9	12.6	10.7	20.9	15.4
II	25.6	38.1	26.2	13.9	15.4	10.4	15.2	7.0	-3.5	15.2
III	24.9	24.4	29.0	11.2	19.3	10.7	11.5	7.3	7.6	18.8
IV	25.4	21.5	31.1	13.5	20.4	10.2	1.7	15.8	12.4	13.8
V	25.5	17.8	37.2	12.5	25.4	7.8	2.9	15.1	-0.1	9.1
Total	25.2	23.1	31.1	12.6	20.0	9.6	6.6	11.9	4.4	13.7

Source: HSES 2010-2018

ANNEX E. STANDARD ERRORS AND CONFIDENCE INTERVALS OF POVERTY ESTIMATES

Table E.1. Poverty by urban and rural areas

Observations 16,454
Strata 3
PSUs 1,836

	Estimation	Standard error	[95% confidence interval]		Obs.
			Lower	Upper	
Poverty headcount					
National	28.4	0.7	27.1	29.7	16 454
Urban	27.2	0.9	25.4	29.0	8 969
Rural	30.8	0.8	29.2	32.4	7 485
Poverty gap					
National	7.2	0.2	6.7	7.6	16 454
Urban	7.2	0.3	6.5	7.8	8 969
Rural	7.2	0.2	6.7	7.7	7 485
Poverty severity					
National	2.7	0.1	2.4	2.9	16 454
Urban	2.8	0.2	2.5	3.1	8 969
Rural	2.4	0.1	2.2	2.6	7 485

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.

Source: HSES 2018

Table E.2. Poverty by analytical domain

Observations 16,454
Strata 3
PSUs 1,836

	Estimation	Standard error	[95% confidence interval]		Obs.
			Lower	Upper	
Poverty headcount					
Ulaanbaatar	25.9	1.2	23.5	28.4	3 573
Aimag center	30.1	1.2	27.8	32.3	5 396
Soum center	28.9	1.0	27.0	30.8	4 175
Countryside	32.9	1.3	30.4	35.4	3 310
Poverty gap					
Ulaanbaatar	6.7	0.4	5.9	7.6	3 573
Aimag center	8.2	0.4	7.4	9.0	5 396
Soum center	7.0	0.3	6.4	7.6	4 175
Countryside	7.4	0.4	6.7	8.1	3 310
Poverty severity					
Ulaanbaatar	2.6	0.2	2.2	3.0	3 573
Aimag center	3.2	0.2	2.8	3.6	5 396
Soum center	2.4	0.1	2.2	2.7	4 175
Countryside	2.4	0.2	2.1	2.7	3 310

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.

Source: HSES 2018

Table E.3. Poverty by region

Observations 16,454
Strata 3
PSUs 1,836

	Estimation	Standard error	[95% confidence interval]		Obs.
			Lower	Upper	
Poverty headcount					
Western	31.8	1.3	29.3	34.3	3 119
Khangai	30.8	1.2	28.5	33.1	3 911
Central	26.1	1.3	23.6	28.5	3 980
Eastern	37.4	1.8	33.9	40.8	1 871
Ulaanbaatar	25.9	1.2	23.5	28.4	3 573
Poverty gap					
Western	7.8	0.4	7.0	8.7	3 119
Khangai	7.3	0.4	6.6	8.0	3 911
Central	6.6	0.4	5.7	7.5	3 980
Eastern	10.0	0.6	8.7	11.3	1 871
Ulaanbaatar	6.7	0.4	5.9	7.6	3 573
Poverty severity					
Western	2.8	0.2	2.4	3.2	3 119
Khangai	2.5	0.2	2.2	2.8	3 911
Central	2.4	0.2	2.0	2.9	3 980
Eastern	3.7	0.3	3.1	4.4	1 871
Ulaanbaatar	2.6	0.2	2.2	3.0	3 573

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.

Source: HSES 2018

Table E.4. Poverty by aimags and capital

Observations 16,454
Strata 3
PSUs 1,836

	Poverty headcount					Poverty gap					Poverty severity				
	Estimation	Standard error	[95% confidence interval]		Obs.	Estimation	Standard error	[95% confidence interval]		Obs.	Estimation	Standard error	[95% confidence interval]		Obs.
			Lower	Upper				Lower	Upper				Lower	Upper	
National	28.4	0.7	27.1	29.7	16454	7.2	0.2	6.7	7.6	16454	2.7	0.1	2.4	2.9	16454
Western	31.8	1.3	29.3	34.3	3119	7.8	0.4	7.0	8.7	3119	2.8	0.2	2.4	3.2	3119
Bayan-Ulgii	24.3	2.2	19.9	28.6	624	5.2	0.6	4.0	6.3	624	1.8	0.3	1.2	2.3	624
Govi-Altai	45.1	3.3	38.6	51.6	623	13.4	1.3	10.9	16.0	623	5.1	0.6	3.9	6.3	623
Zavkhan	25.7	2.5	20.8	30.7	624	5.0	0.8	3.3	6.6	624	1.8	0.4	1.0	2.6	624
Uvs	29.6	2.5	24.7	34.6	624	7.2	0.8	5.7	8.7	624	2.5	0.3	1.8	3.1	624
Khovd	40.9	3.0	34.9	46.8	624	10.9	1.1	8.8	13.0	624	4.1	0.5	3.1	5.0	624
Khangai	30.8	1.2	28.5	33.1	3911	7.3	0.4	6.6	8.0	3911	2.5	0.2	2.2	2.8	3911
Arkhangai	38.2	2.3	33.7	42.8	623	9.9	0.9	8.2	11.6	623	3.5	0.4	2.7	4.4	623
Bayankhongor	29.6	2.3	25.2	34.1	624	4.3	0.5	3.2	5.3	624	1.1	0.2	0.7	1.5	624
Bulgan	36.8	3.1	30.7	42.8	624	11.3	1.2	9.0	13.6	624	4.4	0.6	3.3	5.5	624
Orkhon	25.1	3.2	18.8	31.3	600	6.5	1.0	4.6	8.4	600	2.5	0.5	1.6	3.4	600
Uvurkhangai	34.1	2.4	29.3	38.9	720	7.6	0.7	6.3	9.0	720	2.4	0.3	1.9	3.0	720
Khuvsgul	25.3	2.8	19.8	30.8	720	6.1	0.8	4.5	7.7	720	2.1	0.3	1.4	2.7	720
Central	26.1	1.3	23.6	28.5	3980	6.6	0.4	5.7	7.5	3980	2.4	0.2	2.0	2.9	3980
Govisumber	51.9	4.8	42.5	61.3	311	12.2	1.9	8.6	15.8	311	4.2	1.0	2.1	6.2	311
Darkhan-Uul	32.8	4.0	24.9	40.6	551	9.6	1.7	6.4	12.9	551	4.1	0.9	2.4	5.7	551
Dornogovi	23.4	2.5	18.6	28.3	622	5.2	0.7	3.8	6.6	622	1.7	0.3	1.1	2.2	622
Dundgovi	21.7	2.5	16.9	26.6	624	6.3	0.8	4.7	7.9	624	2.5	0.4	1.7	3.3	624
Umnugovi	11.8	2.0	7.9	15.7	624	2.2	0.4	1.3	3.0	624	0.7	0.2	0.4	1.0	624
Selenge	34.0	2.5	29.1	38.8	624	7.9	0.8	6.4	9.4	624	2.7	0.4	2.0	3.4	624
Tuv	20.5	2.2	16.2	24.9	624	5.4	0.6	4.1	6.6	624	2.0	0.3	1.4	2.5	624
Eastern	37.4	1.8	33.9	40.8	1871	10.0	0.6	8.7	11.3	1871	3.7	0.3	3.1	4.4	1871
Dornod	42.5	3.1	36.4	48.7	624	12.0	1.2	9.7	14.4	624	4.6	0.6	3.4	5.8	624
Sukhbaatar	30.2	2.5	25.3	35.1	624	6.6	0.8	4.9	8.2	624	2.4	0.4	1.6	3.2	624
Khentii	38.0	3.1	32.0	44.0	623	10.8	1.1	8.7	12.8	623	4.0	0.5	3.1	4.9	623
Ulaanbaatar	25.9	1.2	23.5	28.4	3573	6.7	0.4	5.9	7.6	3573	2.6	0.2	2.2	3.0	3573

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.

Source: HSES 2018

Table E.5. Poverty indicators by quarter

Observations 16,454
Strata 3
PSUs 1,836

	Estimation	Standard error	[95% confidence interval]		Obs.
			Lower	Upper	
Poverty headcount					
Jan - Mar	28.6	1.3	26.0	31.2	4 115
Apr - Jun	29.7	1.3	27.1	32.3	4 106
Jul - Sep	27.1	1.4	24.3	29.9	4 113
Oct - Dec	28.1	1.3	25.6	30.7	4 120
Poverty gap					
Jan - Mar	7.5	0.5	6.5	8.4	4 115
Apr - Jun	7.5	0.5	6.6	8.4	4 106
Jul - Sep	6.8	0.5	5.9	7.7	4 113
Oct - Dec	6.9	0.4	6.0	7.7	4 120
Poverty severity					
Jan - Mar	2.9	0.2	2.4	3.4	4 115
Apr - Jun	2.8	0.2	2.4	3.2	4 106
Jul - Sep	2.5	0.2	2.1	3.0	4 113
Oct - Dec	2.5	0.2	2.1	2.9	4 120

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.

Source: HSES 2018

Table E.6. Poverty by age of the household head

Observations 16,454
Strata 3
PSUs 1,836

	Estimation	Standard error	[95% confidence interval]		Obs.
			Lower	Upper	
Poverty headcount					
<30	25.7	1.4	22.9	28.4	1 828
30-39	33.9	1.1	31.8	36.1	4 026
40-49	28.5	1.1	26.4	30.6	4 001
50-59	27.2	1.3	24.8	29.7	3 555
60+	20.1	1.3	17.6	22.6	3 044
Poverty gap					
<30	5.4	0.4	4.6	6.2	1 828
30-39	8.5	0.4	7.8	9.2	4 026
40-49	7.7	0.4	7.0	8.5	4 001
50-59	7.0	0.5	6.1	7.9	3 555
60+	4.8	0.4	3.9	5.7	3 044
Poverty severity					
<30	1.8	0.2	1.4	2.2	1 828
30-39	3.1	0.2	2.8	3.5	4 026
40-49	3.0	0.2	2.6	3.4	4 001
50-59	2.7	0.2	2.2	3.1	3 555
60+	1.8	0.2	1.3	2.2	3 044

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.

Source: HSES 2018

Table E.7. Poverty by gender of the household head

Observations 16,454
Strata 3
PSUs 1,836

	Estimation	Standard error	[95% confidence interval]		Obs.
			Lower	Upper	
National					
Poverty headcount					
Male	27.6	0.7	26.3	28.9	12 561
Female	31.7	1.4	29.0	34.4	3 893
Poverty gap					
Male	6.7	0.2	6.3	7.2	12 561
Female	9.0	0.5	8.0	10.0	3 893
Poverty severity					
Male	2.5	0.1	2.2	2.7	12 561
Female	3.6	0.3	3.0	4.1	3 893
Urban, rulal					
Poverty headcount					
Urban: Male	25.7	0.9	23.9	27.5	6 564
Rural: Male	31.0	0.9	29.3	32.7	5 997
Urban:Female	32.4	1.7	29.1	35.8	2 405
Rural: Female	29.4	1.6	26.2	32.7	1 488
Poverty gap					
Urban: Male	6.5	0.3	5.9	7.1	6 564
Rural: Male	7.2	0.3	6.6	7.7	5 997
Urban:Female	9.5	0.7	8.2	10.8	2 405
Rural: Female	7.4	0.6	6.3	8.5	1 488
Poverty severity					
Urban: Male	2.5	0.2	2.2	2.8	6 564
Rural: Male	2.4	0.1	2.2	2.6	5 997
Urban:Female	3.9	0.3	3.2	4.5	2 405
Rural: Female	2.7	0.3	2.2	3.2	1 488

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.

Source: HSES 2018

Table E.8. Poverty rate by household head's education attainment level

Observations 16,454
Strata 3
PSUs 1,836

	Estimation	Standard error	[95% confidence interval]		Obs.
			Lower	Upper	
Poverty headcount					
None	51.7	2.3	47.2	56.3	768
Primary	41.6	1.7	38.3	45.0	1 663
Lower secondary	41.1	1.3	38.5	43.8	2 837
Higher secondary	33.0	1.2	30.7	35.3	4 141
Vocational	29.4	1.4	26.6	32.2	2 517
University	19.7	1.8	16.1	23.3	1 168
Poverty gap					
None	14.7	1.0	12.7	16.7	768
Primary	11.0	0.6	9.7	12.2	1 663
Lower secondary	11.0	0.5	10.0	12.0	2 837
Higher secondary	8.6	0.4	7.8	9.4	4 141
Vocational	7.0	0.5	6.0	8.0	2 517
University	4.5	0.6	3.4	5.6	1 168
Poverty severity					
None	5.8	0.6	4.6	6.9	768
Primary	4.1	0.3	3.4	4.8	1 663
Lower secondary	4.2	0.3	3.7	4.8	2 837
Higher secondary	3.3	0.2	2.8	3.7	4 141
Vocational	2.5	0.2	2.0	3.0	2 517
University	1.5	0.2	1.0	1.9	1 168

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.

Source: HSES 2018

Table E.9. Poverty by possession of savings

Observations 16,454
Strata 3
PSUs 1,836

	Estimation	Standard error	[95% confidence interval]		Obs.
			Lower	Upper	
National					
Poverty headcount					
without saving	33.0	0.7	31.5	34.4	12 366
with saving	14.5	0.8	13.0	16.1	4 088
Poverty gap					
without saving	8.6	0.3	8.0	9.1	12 366
with saving	3.0	0.2	2.5	3.4	4 088
Poverty severity					
without saving	3.2	0.1	3.0	3.5	12 366
with saving	0.9	0.1	0.8	1.1	4 088
Urban, rural					
Poverty headcount					
Urban: without saving	32.1	1.0	30.1	34.1	6 802
Rural: without saving	34.8	0.9	33.0	36.6	5 564
Urban: with saving	11.5	1.0	9.5	13.4	2 167
Rural: with saving	19.8	1.2	17.5	22.2	1 921
Poverty gap					
Urban: without saving	8.6	0.4	7.9	9.4	6 802
Rural: without saving	8.5	0.3	7.9	9.0	5 564
Urban: with saving	2.5	0.3	1.9	3.1	2 167
Rural: with saving	3.7	0.3	3.1	4.4	1 921
Poverty severity					
Urban: without saving	3.4	0.2	3.0	3.8	6 802
Rural: without saving	2.9	0.1	2.7	3.2	5 564
Urban: with saving	0.8	0.1	0.6	1.1	2 167
Rural: with saving	1.1	0.1	0.9	1.4	1 921

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.

Source: HSES 2018

Table E.10. Poverty by loan status

Observations 16,454
Strata 3
PSUs 1,836

	Estimation	Standard error	[95% confidence interval]		Obs.
			Lower	Upper	
National					
Poverty headcount					
without any loan	34.2	1.0	32.2	36.2	6 686
with loan	24.5	0.7	23.1	25.8	9 768
Poverty gap					
without any loan	9.6	0.4	8.9	10.4	6 686
with loan	5.5	0.2	5.1	5.9	9 768
Poverty severity					
without any loan	3.8	0.2	3.4	4.2	6 686
with loan	1.9	0.1	1.7	2.1	9 768
Urban, rural					
Poverty headcount					
Urban: without any loan	32.5	1.3	29.9	35.1	3 782
Rural: without any loan	38.4	1.3	35.8	40.9	2 904
Urban: with loan	23.2	1.0	21.2	25.1	5 187
Rural: with loan	26.7	0.9	25.0	28.5	4 581
Poverty gap					
Urban: without any loan	9.4	0.5	8.4	10.4	3 782
Rural: without any loan	10.3	0.4	9.4	11.1	2 904
Urban: with loan	5.5	0.3	4.9	6.1	5 187
Rural: with loan	5.6	0.2	5.1	6.1	4 581
Poverty severity					
Urban: without any loan	3.9	0.3	3.3	4.4	3 782
Rural: without any loan	3.8	0.2	3.4	4.2	2 904
Urban: with loan	2.0	0.1	1.7	2.2	5 187
Rural: with loan	1.7	0.1	1.5	1.9	4 581

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.

Source: HSES 2018

Table E.11. Poverty by type of dwelling

Observations 16,454
Strata 3
PSUs 1,836

	Estimation	Standard error	[95% confidence interval]		Obs.
			Lower	Upper	
National					
Poverty headcount					
Ger	43.2	0.9	41.4	45.1	7 275
Apartment	6.4	0.7	5.1	7.7	3 223
House	27.6	0.9	25.8	29.4	5 626
Other	35.0	3.7	27.8	42.2	330
Poverty gap					
Ger	11.9	0.4	11.1	12.7	7 275
Apartment	1.1	0.2	0.8	1.4	3 223
House	6.3	0.3	5.8	6.9	5 626
Other	8.5	1.2	6.2	10.8	330
Poverty severity					
Ger	4.6	0.2	4.2	5.0	7 275
Apartment	0.3	0.1	0.2	0.5	3 223
House	2.2	0.1	1.9	2.5	5 626
Other	3.0	0.6	1.8	4.1	330
Urban, rural					
Poverty headcount					
Urban: Ger	51.3	1.5	48.4	54.3	2 668
Rural: Ger	36.3	1.1	34.3	38.4	4 607
Urban: Apartment	6.2	0.7	4.9	7.6	2 833
Rural: Apartment	10.2	2.0	6.4	14.1	390
Urban: House	29.3	1.2	26.9	31.7	3 287
Rural: House	24.0	1.3	21.4	26.5	2 339
Urban: Other	42.6	4.6	33.5	51.7	181
Rural: Other	17.7	4.2	9.4	26.0	149
Poverty gap					
Urban: Ger	15.6	0.7	14.3	17.0	2 668
Rural: Ger	8.7	0.3	8.1	9.4	4 607
Urban: Apartment	1.1	0.2	0.7	1.4	2 833
Rural: Apartment	1.9	0.5	1.0	2.8	390
Urban: House	6.8	0.4	6.1	7.6	3 287
Rural: House	5.2	0.3	4.5	5.9	2 339
Urban: Other	10.3	1.5	7.3	13.2	181
Rural: Other	4.6	1.5	1.7	7.4	149
Poverty severity					
Urban: Ger	6.5	0.4	5.8	7.3	2 668
Rural: Ger	3.0	0.2	2.7	3.3	4 607
Urban: Apartment	0.3	0.1	0.2	0.5	2 833
Rural: Apartment	0.5	0.2	0.2	0.8	390
Urban: House	2.5	0.2	2.1	2.8	3 287
Rural: House	1.7	0.1	1.4	2.0	2 339
Urban: Other	3.5	0.8	2.0	5.0	181
Rural: Other	1.8	0.7	0.4	3.1	149

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.

Source: HSES 2018

Table E.12. Poverty by access to improved water sources

Observations 16,454
Strata 3
PSUs 1,836

	Estimation	Standard error	[95% confidence interval]		Obs.
			Lower	Upper	
National					
Poverty headcount					
No	35.8	1.4	33.1	38.5	2 795
Yes	27.3	0.7	25.8	28.7	13 659
Poverty gap					
No	8.3	0.4	7.5	9.2	2 795
Yes	7.0	0.3	6.5	7.5	13 659
Poverty severity					
No	2.8	0.2	2.5	3.2	2 795
Yes	2.6	0.1	2.4	2.9	13 659
Urban, rural					
Poverty headcount					
Urban: No	46.5	4.4	37.8	55.1	216
Rural: No	35.1	1.4	32.3	38.0	2 579
Urban: Yes	27.0	0.9	25.1	28.8	8 753
Rural: Yes	28.2	0.9	26.5	30.0	4 906
Poverty gap					
Urban: No	12.2	1.8	8.7	15.7	216
Rural: No	8.1	0.4	7.2	8.9	2 579
Urban: Yes	7.1	0.3	6.5	7.8	8 753
Rural: Yes	6.7	0.3	6.1	7.2	4 906
Poverty severity					
Urban: No	4.7	1.0	2.8	6.7	216
Rural: No	2.7	0.2	2.4	3.1	2 579
Urban: Yes	2.8	0.2	2.4	3.1	8 753
Rural: Yes	2.3	0.1	2.0	2.5	4 906

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.

Source: HSES 2018

Table E.13. Poverty by access to improved sanitation

Observations 16,454
Strata 3
PSUs 1,836

	Estimation	Standard error	[95% confidence interval]		Obs.
			Lower	Upper	
National					
Poverty headcount					
No	35.8	0.7	34.4	37.1	12 528
Yes	9.6	0.7	8.2	11.1	3 926
Poverty gap					
No	9.2	0.3	8.7	9.8	12 528
Yes	1.9	0.2	1.5	2.3	3 926
Poverty severity					
No	3.5	0.1	3.2	3.7	12 528
Yes	0.6	0.1	0.5	0.8	3 926
Urban, rural					
Poverty headcount					
Urban: No	39.0	1.0	36.9	41.1	5 649
Rural: No	31.6	0.8	29.9	33.2	6 879
Urban: Yes	8.7	0.8	7.2	10.2	3 320
Rural: Yes	19.9	2.6	14.8	25.0	606
Poverty gap					
Urban: No	10.6	0.4	9.8	11.5	5 649
Rural: No	7.5	0.3	6.9	8.0	6 879
Urban: Yes	1.7	0.2	1.3	2.2	3 320
Rural: Yes	3.8	0.6	2.6	4.9	606
Poverty severity					
Urban: No	4.2	0.2	3.7	4.6	5 649
Rural: No	2.5	0.1	2.3	2.8	6 879
Urban: Yes	0.6	0.1	0.4	0.8	3 320
Rural: Yes	1.0	0.2	0.6	1.5	606

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.

Source: HSES 2018

Table E.14. Poverty by access to electricity

Observations 16,454
Strata 3
PSUs 1,836

	Estimation	Standard error	[95% confidence interval]		Obs.
			Lower	Upper	
National					
Poverty headcount					
No	42.6	8.5	25.9	59.4	56
Yes	28.4	0.7	27.1	29.7	16 398
Poverty gap					
No	12.4	3.2	6.2	18.6	56
Yes	7.2	0.2	6.7	7.6	16 398
Poverty severity					
No	4.4	1.3	2.0	6.9	56
Yes	2.7	0.1	2.4	2.9	16 398
Urban, rural					
Poverty headcount					
Urban: No	60.1	18.0	24.8	95.5	10
Rural: No	39.7	9.5	21.0	58.3	46
Urban: Yes	27.2	0.9	25.4	29.0	8 959
Rural: Yes	30.7	0.8	29.1	32.3	7 439
Poverty gap					
Urban: No	22.7	8.1	7.0	38.5	10
Rural: No	10.6	3.4	3.9	17.3	46
Urban: Yes	7.2	0.3	6.5	7.8	8 959
Rural: Yes	7.2	0.2	6.7	7.7	7 439
Poverty severity					
Urban: No	9.5	3.6	2.4	16.6	10
Rural: No	3.6	1.3	1.0	6.2	46
Urban: Yes	2.8	0.2	2.5	3.1	8 959
Rural: Yes	2.4	0.1	2.2	2.6	7 439

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.

Source: HSES 2018

Table E.15. Poverty by access to improved water sources, improved sanitation and electricity

Observations 16,454
Strata 3
PSUs 1,836

	Estimation	Standard error	[95% confidence interval]		Obs.
			Lower	Upper	
National					
Poverty headcount					
No	35.7	0.7	34.4	37.1	12 581
Yes	9.5	0.7	8.0	11.0	3 873
Poverty gap					
No	9.2	0.3	8.7	9.8	12 581
Yes	1.9	0.2	1.5	2.3	3 873
Poverty severity					
No	3.5	0.1	3.2	3.7	12 581
Yes	0.6	0.1	0.4	0.8	3 873
Urban, rural					
Poverty headcount					
Urban: No	39.0	1.0	36.9	41.1	5 651
Rural: No	31.6	0.8	29.9	33.2	6 930
Urban: Yes	8.7	0.8	7.2	10.2	3 318
Rural: Yes	19.1	2.8	13.7	24.6	555
Poverty gap					
Urban: No	10.6	0.4	9.8	11.5	5 651
Rural: No	7.4	0.3	6.9	7.9	6 930
Urban: Yes	1.7	0.2	1.3	2.2	3 318
Rural: Yes	3.5	0.6	2.3	4.7	555
Poverty severity					
Urban: No	4.2	0.2	3.7	4.6	5 651
Rural: No	2.5	0.1	2.3	2.8	6 930
Urban: Yes	0.6	0.1	0.4	0.8	3 318
Rural: Yes	0.9	0.2	0.5	1.4	555

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.

Source: HSES 2018