NATIONAL STATISTICS
OFFICE OF MONGOLIA

POVERTY PROFILE -2016

ULAANBAATAR 2017

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Ulaanbaatar 2017

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST of ABBREVIATION

HSES	Household Socioeconomic Survey
GDP	Gross Domestic Product
PSU	Primary Sampling Unit
NSO	National Statistics Office
PSSD	Population and Social Statistics Department
GE	Generalized Entropy

FOREWORD

The National Statistical Office (NSO) has been defined the living standards and poverty estimates of Mongolia in terms of their legal obligations.

NSO regularly conducts the 'Households Socioeconomic survey'' and the findings of Household Socioeconomic Survey 2016, collecting data from over 16,000 selected households that have formed the basis of Poverty Profile in Mongolia, the report aims of determining the living standards, the state of poverty and changes on its incidence in Mongolia.

The present survey is one of the nationally representative flagship surveys and as such, it has now established to conduct in a comprehensive and abbreviated form per data needs and frequency of study. A comprehensive form of the survey conducts even numbered years or each two years to estimate welfare and poverty measures expanding indicators determining welfare and produces results. The National Statistical Office has been working with the World Bank professional staff for a long time to produce accurate estimates of poverty according to the internationally accepted methods. As a result of this long-term collaboration, we have developed a methodology that meets the international standard requirements, which is able to substantively demonstrate change in the living standards of population in Mongolia.

We hope that present survey findings and data and information will not only provide credible and up-to-date information on poverty to all policy and decision makers, but also serve as a reference material for researchers and academicians working in the area of poverty, economics and social studies. My appreciation goes to the staff of the poverty team of World Bank and colleagues of the Country office in Mongolia for their collaboration on all stages of producing survey findings and joint release of poverty estimates.

I would like to express my thanks to the core team of the Household Socioeconomic Survey in Population and Social Statistic Department of NSO expeditiously performed data processing and data analysis through rigorous application of internationally recognized methodology and prepared this report, as well as interviewers and supervisors who have performed firsthand the difficult task of collecting data from households.

A.ARIUNZAYA

CHAIRPERSON
NATIONAL STATISTICS OFFICE OF MONGOLIA

1.

POVERTY AND INEQUALITY

The purpose of this chapter is to define three main objectivies.

First, it assesses the current extent of poverty and its sensitivity to changes in the poverty line. Second, it aims to define the trend of inequality. Finally, changes in poverty are examined in the context of growth and inequality. The present analysis uses monetary estimates, that is, the cost of basic needs approach to establish the living standard and the poverty level of the population as did in previous surveys. The poverty line is a threshold consumption index to determine if an individual is poor and those with per capita consumption that falls below the poverty line are defined as poor. The current poverty line as determined based on consumption using the approach to index base poverty line 2010 stands at 146.1 thousand tugrug.

1.1 Poverty estimates

As of 2016, the incidence of poverty in Mongolia stands at 29.6% (Table 1.1), which means about 907.5 thousand individuals are living in poverty. In other words, 30 out of every 100 Mongolians cannot afford to buy essential food and non-food items. Although this poverty level estimate is easy to grasp it does not provide comprehensive information as to how much, in monetary terms, the poor fall short of fulfilling their basic needs and how consumption is distributed among the poor. This presents a serious limitation to evaluate alternative policy options. For example, the adoption of a particular policy may improve the wellbeing of the poor, leaving the incidence of poverty unchanged. To complement the so-called poverty incidence measure and to obtain a more comprehensive estimate of poverty, two other poverty measures are used: poverty gap and poverty severity.

Table 1.1. National poverty rates

Headcount	Poverty gap	Severity
29.6	7.7	2.9
(0.7)	(0.2)	(0.1)

Note: Standard errors taking into account the survey design are shown in parentheses.
Source: HSES 2016.

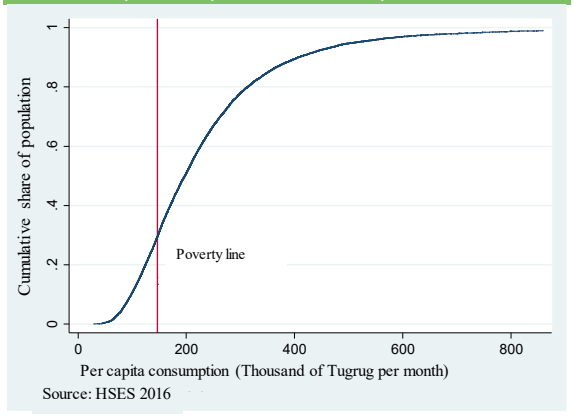
The poverty gap index measures the extent to which individuals fall below the poverty line as a proportion of the poverty line and thus, overcomes the first limitation of the poverty headcount. The current poverty gap is estimated at 7.7 percent, which means that the average shortfall in consumption of each person is 7.7 percent of the poverty line if it is assumed that the non-poor have a shortfall of zero. The poverty gap among the poor population is estimated at 26 percent, which means that the average consumption of the poor falls 26 percent or 38.2 thousand tugrug short from the poverty line.

The poverty severity is estimated at 2.9 percent. Unlike the poverty headcount and poverty gap indices, the poverty severity index is sensitive to the distribution of consumption among the poor. For instance, if the consumption of a poor household decreases inasmuch as the consumption of another better-off household increases, it is considered that poverty has increased. Even then, if the better-off household's consumption still falls below the poverty line, the poverty headcount and poverty gap indices remain unaffected; however, the severity index increases. Thus, the severity index is used to compare the poverty of groups of a population with identical headcount and gap indices.

1.2 Sensitivity of poverty estimates to poverty lines

Essential to the complete understanding of poverty is to determine how sensitive the poverty measures are to changes in the poverty line. To see how much the incidence of poverty changes for every upward or downward shift in the poverty line, we graphically illustrate the cumulative distribution function of per capita consumption.

Figure 1.1 Cumulative distribution of per capita consumption



For a given consumption level on a horizontal axis, a corresponding cumulative percentage of the population is indicated on the vertical axis. For a

given consumption level which has been chosen as the poverty line, the curve indicates the level of incidence of poverty associated with that line and as such, it can be regarded as "poverty incidence curve." Hence, at a poverty line of 146 145 tugrug per person per month, 29.6 percent of the total population is poor. Given that the slope of the distribution curve is steep around that level, a small shift in the current poverty line is likely to have a large impact on the poverty incidence. The concentration of of the poor households near the poverty line is explained using the so-called density function[1]. Figure 1.2 describes the density estimate of per capita consumption. Here, two important characteristics of the distribution around the poverty line can be seen: First, significant clustering occurs close to that point. Secondly, it is highly likely that there is a greater mass below the poverty line than above it, which suggests that changes in poverty indices will be less sensitive to increasing the poverty line than decreasing it.

Figure 1.2 Density function of per capita consumption

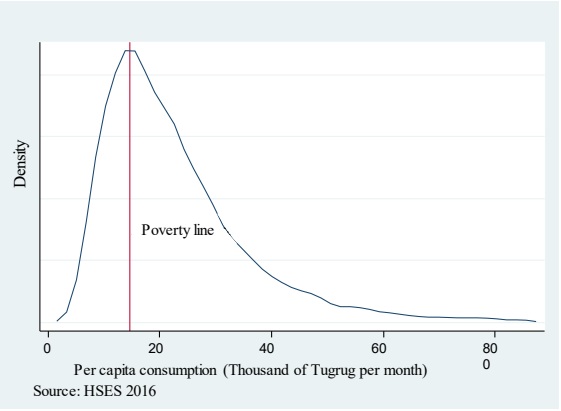


Table 1.2 confirms this by estimating all three poverty indices in response to an upward and downward shifts in the poverty line. For instance, the interval of 10 percent increase and 10 percent decrease around the poverty line contains 13.2 percent of the total population, while 25.1 percent of the population lies between the interval of 20 percent increase and 20 percent decrease around the poverty line. The interval of 30 percent increase around the poverty line stands 189,989 tugrug and poverty head count is 47.9 percent, while 30 percent decrease poverty line is 102,302 and head count decreased to 11.6 percent. On the other hand, the change in headcount index is greater for a downward shift in the poverty line than that for an upward shift.

Table 1.2 Poverty rates on different scales of poverty line

Poverty line (%)	Poverty		
	Headcount	Gap	Severity
150	58.0	20.0	9.2
140	52.8	17.5	7.8
130	47.9	15.0	6.4
120	42.2	12.5	5.1
110	36.3	10.0	3.9
100	**29.6**	**7.7**	**2.9**
90	23.1	5.7	2.0
80	17.1	3.9	1.3
70	11.6	2.4	0.7
60	4.1	0.8	0.2
50	2.0	0.3	0.1

Source: HSES 2016.

1. The notion of the density function is very similar to that of histograms. Traditional histograms divide a range of the variable of interest into certain number of intervals of equal width and draw a vertical bar for each interval with height proportional to the relative frequency of observations within each interval. A density function can be thought of as a "smoothed" histogram. It estimates the density, or relative frequency, at every point rather than at every interval. Hence, say in the case of consumption, the area between two consumption levels is the proportion of the population with consumption within that range (it follows that the total area under the curve is 1 or 100 percent of the population).

1.3 Geographical distribution of poverty

How does poverty vary across the country? For the purposes of this report, Mongolia is divided according into different classifications: by region, by urban and rural areas and by settlement strata.The regional division was identified by the government in order to design appropriate policies to promote economic development in each region. Table 1.3 presents poverty indices by five regions: Western, Khangai, Central, Eastern and Ulaanbaatar[2] . The capital city and Central region have the lowest incidences of poverty with 24.8-26.8 percent of inhabitants being poor. The Western, Khangai and Eastern regions tops the list with the highest poverty headcounts with 33.6-43.9 percent of their population being afflicted by poverty. In terms of poverty distribution, the Western region accounts 16.5 percent of poor people whilst constituting 13.6 percent of the total population, Khangai region accounts 20.9 percent of poor whilst constituting 18.4 percent of total population, Central region accounts 14.1 percent of the poor while constituting 15.5 percent of total population in the country and Eastern region accounts 10.7 percent of the poor whilst constituting 7.2 percent of total population. Meanwhile, Ulaanbaatar, where the 45.2 percent of the total population lives, has 37.8 percent of the poor.

Although the poverty headcount is lowest or 24.8 percent in Ulaanbaatar, the highest or 343.1 thousand people live in poor compared with other regions.

Table 1.3 Poverty by region

	National	Western	Khangai	Central	Eastern	Ulaanbaatar
Poverty headcount	29.6	36.0	33.6	26.8	43.9	24.8
	(0.7)	(1.4)	(1.3)	(1.4)	(1.7)	(1.3)
Poverty gap	7.7	9.7	8.2	7.0	12.5	6.4
	(0.2)	(0.5)	(0.4)	(0.5)	(0.7)	(0.4)
Severity	2.9	3.7	2.9	2.7	4.8	2.5
	(0.1)	(0.2)	(0.2)	(0.2)	(0.3)	(0.2)
Memorandum items:						
Population share (%)	100.0	13.6	18.4	15.5	7.2	45.2
Population ('000)	3 063.6	393.6	585.7	492.0	211.4	1 380.8
Share in poor (%)	100.0	16.5	20.9	14.1	10.7	37.8
Poor ('000)	907.5	150.1	189.6	127.6	97.1	343.1
Household size	3.5	3.9	3.3	3.1	3.4	3.6
Dependency ratio (%)	41.7	42.8	41.6	41.7	41.3	41.4
Children (% household size)	25.5	27.7	24.1	24.1	25.8	26.0
Age of household head	45.7	46.0	46.1	45.7	45.1	45.5
Male-headed households	75.2	82.2	77.1	74.6	76.3	72.5
Urbanization (%)	67.8	33.4	40.8	48.8	41.6	100.0

Note: Population data is based on administrative data and refers to the estimated population at the end 2016 in Mongolia. Standard errors taking into account the survey design are shown in parentheses.
Source: HSES 2016.

2. The West is comprised of the aimags of Bayan-Olgii, Govi-Altai, Zavkhan, Uvs and Khovd; the Khangai Arkhangai, Bayankhongor, Bulgan, Ovorkhangai, Khovsgol and Orkhon; the Central Dornogovi, Dundgovi, Omnogovi, Govisumber, Selenge, Tov and Darkhan-Uul; and the East Dornod, Sukhbaatar; and Khentii.

Table 1.4 Poverty by analytical domain

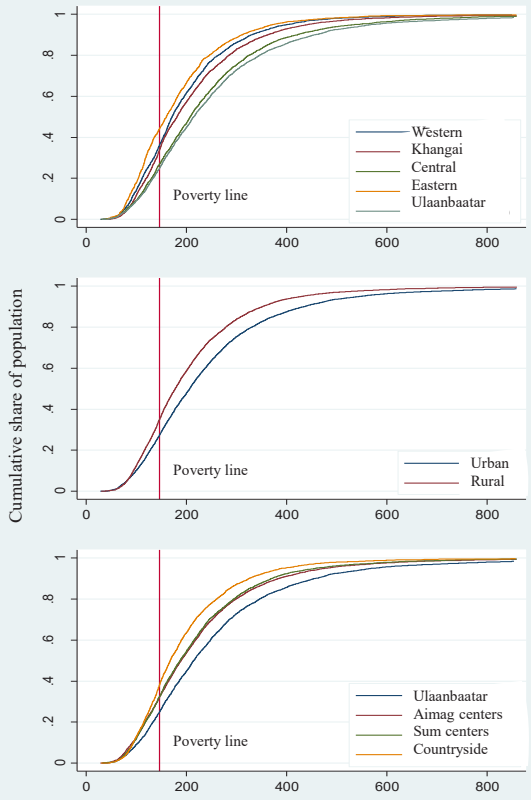
	National average	Urban			Rural		
		Total	Ulaanbaatar	Aimag center	Total	Sum center	Country-side
Poverty headcount	29.6	27.1	24.8	31.8	34.9	32.3	38.0
	(0.7)	(0.9)	(1.3)	(1.2)	(0.9)	(1.1)	(1.5)
Poverty gap	7.7	7.2	6.4	8.8	8.8	8.5	9.2
	(0.2)	(0.3)	(0.4)	(0.4)	(0.3)	(0.4)	(0.5)
Severity	2.9	2.8	2.5	3.4	3.2	3.2	3.2
	(0.1)	(0.2)	(0.2)	(0.2)	(0.1)	(0.2)	(0.2)
Memorandum items:							
Population share (%)	100.0	67.8	45.2	22.6	32.2	17.5	14.6
Population ('000)	3 063.6	2 076.8	1 380.8	696.1	986.7	537.5	449.2
Share below the poverty line (%)	100.0	62.1	37.8	24.3	37.9	19.1	18.8
Population below the poverty line ('000)	907.5	563.8	343.1	220.7	343.7	173.4	170.4
Household size	3.5	3.5	3.6	3.4	3.4	3.3	3.5
Dependency ratio (%)	41.7	41.6	41.4	42.0	41.8	42.5	40.9
Children (% household size)	25.5	25.9	26.0	25.7	24.7	24.8	24.5
Age of household head	45.7	45.6	45.5	45.9	45.8	46.4	45.0
Male-headed households	75.2	72.7	72.5	73.3	80.2	76.6	84.5

Note: Population data is based on administrative data and refers to the estimated population at the end 2016 in Mongolia. Standard errors taking into account the survey design are shown in parentheses.
Source: HSES 2016

Table 1.4 shows the state of poverty by four main settlement strata. Poverty in urban[3] areas is considerably less with a poverty incidence of 27.1 percent compared to 34.9 percent in rural[4] areas. At the urban level, the incidence of poverty is lower in Ulaanbaatar than in aimag centers. In rural areas, sum centers are less poor than countryside. Urban areas account for 62.1 percent of the poor and 67.8 percent of the total population settles whereas countryside constitutes 18.8 percent of the poor and 14.6 percent of the total settlement population and sum centers make up 19.1 percent of the poor and 17.5 percent of the total population.

[3] Urban refers capital city and aimag centers.
[4] Rural refers soum centers and countryside.

Figure 1.3 First-order stochastic ordinance: Cumulative distribution of per capita per month consumption



Source: HSES 2016

How sensitive are these findings to the poverty line level? The stochastic dominance analysis allows us to find a range of poverty lines over which poverty comparisons are robust. It relies on graphical tools[5] and focuses on the entire distribution of consumption (Figure 1.3). At the regional level, poverty incidence is the highest in the Eastern, Western and the Khangai regions. Headcount is lower in Ulaanbaatar and Central region is placed on second. The comparisons between urban and rural areas, the trend in previous years has remained the same. Ulaanbaatar, followed by the Central, Khangai, Western and Eastern has the lowest incidence curves, which overlaps with each other.

The comparisons between settlement stratum, it not allows to make comparison due to incidence curves of the aimag center and sum center overlaps with each other almost all parts. In other words, even though different poverty lines selects, poverty headcounts estimated by them are very close to each other.

Table 1.5 shows the state of poverty by aimags. In the Western region, poverty in Uvs aimag is quite lower than in other four aimags, headcount is 24.2 percent, and Zavkhan aimag has the highest poverty incidence (47.5 percent). In the Khangai region, poverty in Orkhon is less than the other five aimags, the coverage is 23.5 percent, and Uvurkhangai aimag is the highest poverty headcount or the coverage is 41.1 percent. For the Central region, the poverty rate in Omnogovi aimag is quite lower than in other six aimags, covering headcount by 15.4 percent, while Govisumber aimag has the highest poverty incidence (52.4 percent). In the Eastern region, the headcount of poverty in three aimags is approximately 41.5-47.0 percent. Looking at poverty across the country, poverty headcount in Uvs, Orkhon, Khuvsgul, Dornogovi, Dundgovi, Umnugobi and Tuv aimags is lower than the national poverty headcount.

5 By plotting two or more cumulative density functions of per capita consumptions in the same graph, it is possible to infer first-order stochastic dominance.

Table 1.5. Poverty estimates, by aimag and the capital

	Headcount	Poverty gap	Severity
National average	**29.6**	**7.7**	**2.9**
Western	**36.0**	**9.7**	**3.7**
Bayan-Ulgii	34.4	9.0	3.4
Govi-Altai	43.3	12.2	4.7
Zavkhan	47.5	14.6	5.7
Uvs	24.2	6.0	2.3
Khovd	36.8	9.3	3.4
Khangai	**33.6**	**8.2**	**2.9**
Arkhangai	37.6	8.4	2.8
Bayankhongor	38.8	8.2	2.8
Bulgan	31.4	7.0	2.2
Orkhon	23.5	6.6	2.5
Uvurkhangai	41.1	11.7	4.4
Khuvsgul	29.1	6.9	2.4
Central	**26.8**	**7.0**	**2.7**
Govisumber	52.4	17.5	7.9
Darkhan-Uul	33.4	8.1	2.9
Dornogovi	23.2	6.3	2.6
Dundgovi	22.9	5.4	1.8
Umnugovi	15.4	2.6	0.8
Selenge	36.4	11.0	4.6
Tuv	17.3	3.7	1.3
Eastern	**43.9**	**12.5**	**4.8**
Dornod	41.5	12.3	4.8
Sukhbaatar	47.0	13.7	5.4
Khentii	43.8	11.7	4.3
Ulaanbaatar	**24.8**	**6.4**	**2.5**

Source: HSES 2016.

1.4 Poverty trends

How the state of poverty has changed in the past years is shown in Table 1.6. All three estimates indicate an increase in poverty. Incidence of poverty rose by 8.0 percentage points from 21.6 percent in 2014 to 29.6 percent in 2016. In urban areas, poverty has increased from 18.8 percent to 27.1 percent and rural areas saw increases from 26.4 percent to 34.9 percent. All these locations, poverty have grown. For instance, in the countryside, poverty headcount shows a highest increase as 10.1 percentage points, in Ulaanbaatar, the incidence of poverty has grown by 8.4 percentage points and in sum center it shows an increase as 7.6 percentage points.

In all regions, poverty incidence has increased as well. In the Western region, the incidence of poverty has risen from 26.0 to 36.0 percent, in the Khangai region, from 25.3 % to 33.6% and the Central from 22.2% to 26.8%. Meanwhile, in the Eastern region incidence of poverty has risen from 31.4 to 43.9 percent.

Looking at how has the other poverty indices changed in the same period, the ratio of poverty among urban and rural areas remains the same with urban areas being less poor than rural areas. Ulaanbaatar has the lowest level of poverty. The poverty indices are almost same in aimag and sum centers. Sum centers have lower levels of poverty compared to the countryside. A majority

Table 1.6 Poverty estimates, 2014 and 2016

	2014					2016				
	Poverty			Population share (%)	Share below the poverty line (%)	Poverty			Population share (%)	Share below the poverty line (%)
	Headcount	Gap	Severity			Headcount	Gap	Severity		
National	**21.6**	**5.2**	**1.9**	**100.0**	**100.0**	**29.6**	**7.7**	**2.9**	**100.0**	**100.0**
Urban	18.8	4.9	1.9	66.4	55.6	27.1	7.2	2.8	67.8	62.1
Rural	26.4	5.8	2.0	33.6	44.4	34.9	8.8	3.2	32.2	37.9
Ulaanbaatar	16.4	4.5	1.7	44.7	32.6	24.8	6.4	2.5	45.2	37.8
Aimag center	23.8	5.8	2.1	21.7	23.0	31.8	8.8	3.4	22.6	24.3
Sum center	24.7	5.7	2.0	12.7	19.7	32.3	8.5	3.2	17.5	19.1
Countryside	27.9	6.0	1.9	20.9	24.7	38.0	9.2	3.2	14.6	18.8
Western	26.0	5.3	1.7	12.8	18.2	36.0	9.7	3.7	13.6	16.5
Khangai	25.3	5.4	1.7	19.4	22.2	33.6	8.2	2.9	18.4	20.9
Central	22.2	5.5	2.1	16.2	16.2	26.8	7.0	2.7	15.5	14.1
Eastern	31.4	8.6	3.3	6.9	10.8	43.9	12.5	4.8	7.2	10.7

Source: HSES 2014, HSES 2016.

of the poor population lives in urban areas as same as previous years. In addition, the share of the poor in urban areas has risen, while the share of the poor in rural areas has decreased compared with the previous years.

This has changed across regions. In 2016 the percentage of the poor slightly decreased in all regions. The share of the poor in Khangai region has shown a decrease by 1.3 percentage points compared to the year 2014, while it remains higher than other regions. The share of the poor in the West has decreased by 1.7 percentage points, the Central by 2.1 percentage points and the Eastern decreased a bit or by 0.1 percentage points from the two preceding years.

1.5 Sensitivity of the temporal comparisons of changes in the poverty line

Stochastic dominance analysis once again can help us to see how per capita consumption's distribution changes across different time periods in response to changes in the poverty line level.

Figure 1.4 Cumulative distribution of per capita consumption 2014 and 2016

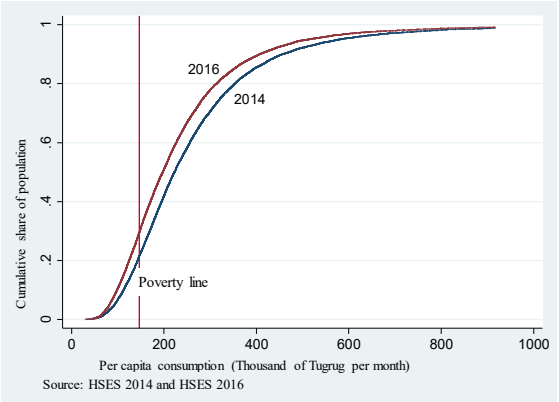


Figure 1.4 shows that the 2016 consumption's distribution is higher than the 2014 distribution, which means that the poverty level in 2016 was higher than that in 2014. At the top of the distribution, the two curves predominantly overlap at points as per capita consumption is over 800.0 thousand tugrugs.

1.6 Inequality

Table 1.7 indicates changes in the Gini coefficient and Generalized Entropy Indices[6] over the period. In the last two years, per capita consumption inequality has not shown any change. For example, Gini coefficient is 0.32 and Theil index is 0.19 respectively in 2014 and 2016 at the national level.

By examining the changes made in the mean consumption during the period of analysis might also help us to obtain a clearer picture. Per capita consumption in 2016 decreased by 11.6 percent in real terms compared with 2014. In urban rural areas, per capita consumption was decreased by 8.5-13.8 percent and urban consumption more decreased compared with rural. Sum centers reported a decrease in their consumption by 9.9 percent, in aimag center by 13.3 percent and Ulaanbaatar reports a decrease in their consumption by 14.0 percent. The mean consumption decreased across all regions with the highest decrease in the Eastern region and lowest in the Central. Table 1.8 indicates changes in the Gini coefficient and Generalized Entropy Indices by aimags. The Gini coefficient, that to present consumption inequality shown in the Western, Khangai, and Eastern regions is 0.02-0.04 at lower than the national average and in the Central region is the same as the national average. The Gini coefficient is 0.33 in Orkhon and Selenge aimags, 0.34 in Ulaanbaatar city or 0.01-0.02 units higher than the national average. The Theil index is 0.19 in the country while Orkhon aimag is same as national average and 0.21 in Ulaanbaatar city or 0.02 units higher than the national average.

6 Generalized Entropy Inequality Measure is denoted by GE (α).The higher (lower) the α value is the more sensitive it is to changes at top (bottom) of the distribution. Gini coefficient is more sensitive to changes in the middle of the distribution. Values of all three indices range between 0 to 1; the greater the value is the higher the inequality is.

Table 1.7 Inequality and average consumption, 2014 and 2016

	Theil or GE(1)		Gini		GE(2)		Per capita consumption (2016 tugrug per month)		
	2014	2016	2014	2016	2014	2016	2014	2016	Change
National	0.19	0.19	0.32	0.32	0.27	0.28	267 146	236 288	-11.6
Urban	0.20	0.20	0.33	0.33	0.28	0.30	289 125	249 102	-13.8
Rural	0.15	0.15	0.28	0.30	0.21	0.21	228 681	209 260	-8.5
Ulaanbaatar	0.20	0.21	0.33	0.34	0.29	0.32	304 329	261 826	-14.0
Aimag centers	0.18	0.17	0.32	0.31	0.26	0.23	257 964	223 689	-13.3
Soum centers	0.16	0.16	0.29	0.30	0.24	0.20	239 402	219 234	-8.4
Countryside	0.13	0.15	0.27	0.28	0.17	0.22	218 981	197 322	-9.9
Western	0.16	0.14	0.28	0.28	0.26	0.18	231 846	198 561	-14.4
Khangai	0.15	0.15	0.29	0.30	0.20	0.20	233 118	213 864	-8.3
Central	0.17	0.18	0.31	0.32	0.24	0.24	261 405	245 333	-6.1
Eastern	0.16	0.15	0.31	0.29	0.20	0.23	223 743	185 222	-17.2

Note: Monetary figures from 2014 were updated to 2016 prices with the ratio between the poverty lines in both periods. GE(a) indices refer to the Generalized Entopy class of inequality measures; the higher (lower) the value of a the greater the sensitivity of the measure to consumption differences at the top (bottom) of the distribution. The Gini index is more sensitive to consumption diffrences in the middle of the distribution.
Source: HSES 2016.

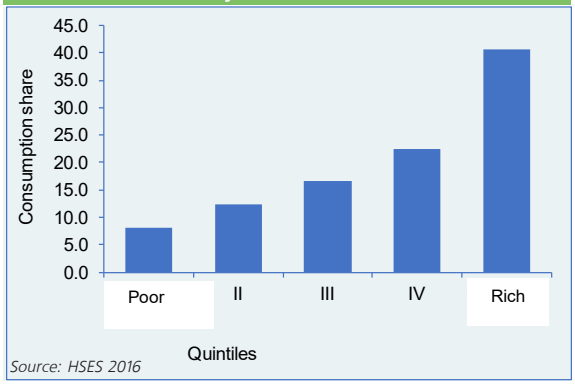
Table 1.8 Inequality and average consumption, by aimag and the capital, 2016

	Theil index	Gini coefficient	GE(2)	Per capita consumption per month (tugrug)
National average	**0.19**	**0.32**	**0.28**	**236 288**
Western	**0.14**	**0.28**	**0.18**	**198 561**
Bayan-Ulgii	0.13	0.28	0.16	205 057
Govi-Altai	0.11	0.25	0.12	172 216
Zavkhan	0.13	0.28	0.16	167 298
Uvs	0.12	0.27	0.14	222 464
Khovd	0.17	0.30	0.26	205 950
Khangai	**0.15**	**0.30**	**0.20**	**213 864**
Arkhangai	0.10	0.24	0.14	186 786
Bayankhongor	0.17	0.30	0.25	208 937
Bulgan	0.11	0.26	0.14	205 786
Orkhon	0.19	0.33	0.24	262 191
Uvurkhangai	0.12	0.27	0.17	176 532
Khuvsgul	0.13	0.29	0.15	236 382
Central	**0.18**	**0.32**	**0.24**	**245 333**
Govisumber	0.18	0.31	0.30	165 360
Darkhan-Uul	0.13	0.27	0.16	203 127
Dornogovi	0.18	0.31	0.28	244 803
Dundgovi	0.13	0.28	0.14	242 842
Umnugovi	0.16	0.30	0.22	279 541
Selenge	0.18	0.33	0.21	219 473
Tuv	0.18	0.32	0.24	309 635
Eastern	**0.15**	**0.29**	**0.23**	**185 222**
Dornod	0.17	0.30	0.30	190 188
Sukhbaatar	0.15	0.30	0.21	180 064
Khentii	0.14	0.28	0.17	184 606
Ulaanbaatar	**0.21**	**0.34**	**0.32**	**261 826**

Source: HSES 2016.

Another approach to measure inequality is, perhaps, more easily understood, is presenting by Quintiles and deciles (sort population from the poor to the rich by per capita consumption, thus by 10 or 20 percent or into 5 and 10 equal parts) shown in Figures 1.5 and 1.6.

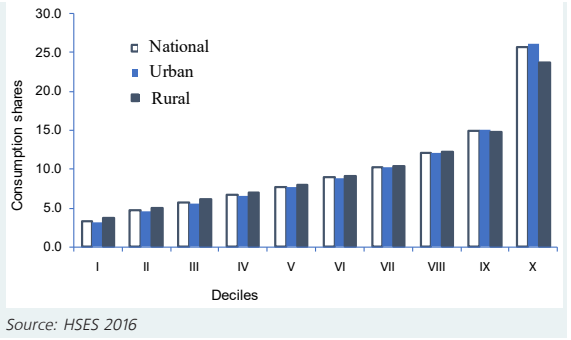
Figure 1.5 Consumption shares, by Quintiles



Source: HSES 2016

Figure 1.5 shows that the average consumption of the richest 20 percent of the population is 5.1 times higher than the poorest 20 percent.

Figure 1.6 Consumption shares, by deciles, urban and rural



Source: HSES 2016

In terms of deciles of consumption, the average consumption of the richest 10% of the population is 7.7 times higher than the poorest 10%. This ratio is 8.3 in urban and 6.3 in rural areas, indicating high inequality in urban consumption.

1.7 Decomposition of poverty changes in growth and inequality components

How does an increase in per capita consumption and growth in inequality of consumption impact poverty? Other things being constant, an increased consumption is generally associated with declining poverty while increasing inequality tends to suggest the opposite. This trend can clearly be seen when changes in poverty are decomposed into growth and inequality components[7]. The growth component refers to changes in poverty, that would have resulted if only the real mean consumption had changed but there was no change in relative inequalities. In contrast, the inequality growth refers to the change in poverty that would have occurred if only relative inequalities had changed, but there was no change in the real mean consumption. Poverty changes decomposed by these components are shown in Table 1.9.

At the national level, while the growth component contributed to a potential increase in poverty. For instance, between 2014-2016, the incidence of poverty has increased by 8.0 percentage points.

Had the relative inequalities not changed during this period, the decrease in consumption would have brought an increase in poverty by 7.3 percentage points. On the other hand, if the real mean consumption had remained constant over the period, poverty would have increased by 0.7 percentage points due to deepened inequality.

The combined effect of these two factors has resulted in a net growth in poverty incidence of 8.0 percentage points. In terms of poverty severity, an increase in the severity has brought more effects in poverty growth same as headcount. A decline in consumption has affected to increase in the severity index - another indicator of poverty measurement, and net growth of poverty severity resulted at 1.0 percentage points.

7. G. Datt and M. Ravallion Manual on Povery comparison (1992)

Table 1.9 Decomposition of poverty changes into growth and inequality components, variance of 2014 and 2016

	Poverty		
	Headcount	Gap	Severity
National average			
Change in poverty	8.0	2.5	1.0
Growth component	7.3	2.3	1.0
Inequality component	0.7	0.2	0.0
Urban			
Change in poverty	8.3	2.3	0.9
Growth component	7.8	2.5	1.1
Inequality component	0.5	-0.2	-0.2
Countryside			
Change in poverty	8.5	3.0	1.2
Growth component	6.6	2.0	0.8
Inequality component	2.0	0.9	0.4
Ulaanbaatar			
Change in poverty	8.4	2.0	0.7
Growth component	7.4	2.3	1.0
Inequality component	1.0	-0.3	-0.3
Aimag center			
Change in poverty	8.0	3.0	1.3
Growth component	8.4	2.9	1.3
Inequality component	-0.4	0.0	0.0
Sum center			
Change in poverty	7.6	2.8	1.1
Growth component	5.9	1.9	0.8
Inequality component	1.8	0.9	0.3
Countryside			
Change in poverty	10.1	3.3	1.3
Growth component	8.5	2.6	1.0
Inequality component	1.6	0.7	0.3
Western			
Change in poverty	10.0	4.4	2.0
Growth component	10.5	3.6	1.5
Inequality component	-0.5	0.8	0.4
Khangai			
Change in poverty	8.3	2.8	1.2
Growth component	6.1	1.9	0.8
Inequality component	2.1	0.9	0.4
Central			
Change in poverty	4.6	1.4	0.6
Growth component	4.0	1.2	0.5
Inequality component	0.5	0.3	0.1
Eastern			
Change in poverty	12.5	4.0	1.5
Growth component	12.8	5.2	2.4
Inequality component	-0.3	-1.3	-0.9

Source: HSES 2014, HSES 2016.

In both urban and rural areas, both components contributed to the increase in poverty in urban and rural areas. Poverty increased by 8.3 points in urban areas and inequalities not changed during this period, poverty would be increased by 7.8 percentage points in urban. In rural areas, poverty increased by 8.5 percentage points, while inequality would not change during this period, the poverty increased by 6.6 percentage points and actual average consumption did not decrease, then poverty would rise by 2.0 percentage points. By settlement strata, in Ulaanbaatar, sum center and the countryside the effect of inequality component outweighs to poverty increase. In contrast, actual average consumption did not decrease, poverty would be decreased by 0.4 percentage points. A growth component contributed to an increase in poverty in all regions.

The opposite is true for the Western and the Eastern regions, decrease in consumption is higher and it was leading to an increase incidences of poverty.

In Western and Eastern regions, consumption decline had affected to increase of poverty incidence, while inequality changes affected to decrease of poverty

2.

WELFARE PROFILE

A welfare profile shows us how living standards vary across different population groups. This chapter helps to flesh out a multidimensional portrait of poverty by examining the characteristics of poverty and their correlation with the specificities of households and other aspects of welfare and constructs a composite poverty profile. This aids differentiation of the poor from the non-poor and definition of the poor. The chapter also gives a better understanding about the levels of human capital and wealth the poor have and the quality of housing they live in, safety nets they receive and the types of activities they are engaged in.

2.1 Consumption pattern

For the purposes of the report, per capita consumption of the household was chosen. According to the household survey, as of 2016 per capita mean consumption per month stands at 236,288 tugrug . Per capita consumptions by main expenditure groups in urban and rural areas and regions are shown in Table 2.1. Urban consumption is significantly 19 percent higher than the rural consumption.

According to ranking by region, the Central Region is the highest, followed by the Khangai, Western and the Eastern regions, which is the same as the 2014 trend.

The shares of consumption are presented in the bottom part of the table. Food has the largest share constituting 32.0 percent of the total consumption with significant differences between urban and rural areas. Owing to the difference in welfare levels, the share of food in the total consumption is lower in urban areas than rural areas. Both urban strata, namely, the capital city and aimag centers show similar food shares of 30.0 percent of the total consumption. More substantial differences are observed in sum center and countryside in food share. Across regions, shares of food consumption are very close to each other or 34-37 percent and it is same as 2014.

The largest of all non-food expenditures is shoes and clothing expenditure with the national average of 15 percent of the total consumption. This is same as 2014. The next important non-food expenditure is transportation and communication, accounting for 13 percent of the total consumption. It is the highest in the capital city and similar for the other 3 strata, in terms of across regions, also similar.

Housing expenditure is 8 percent across all locations and 10 percent in urban areas and 3 percent in rural areas. Health expenditures stand at 5 percent and is similar in all strata.

Heating expenditures stand at 5 percent of the total consumption at the national level, similar in urban and rural areas to the national average. Utilities such as electricity and water account for 3 percent of the total consumption.

The remaining 13 percent of the total consumption is spent on leisure activities, cosmetics, durable goods, tobacco and alcohol products.

8. All monetary values are in current prices 2016.

Table 2.1 Consumption per capita per month by main consumption categories (in tugrugs)

	National	Urban	Rural	Analytical domains				Geographical regions			
				Ulaanbaatar	Aimag centers	Soum centers	Country-side	Western	Khangai	Central	Eastern
Consumption											
Food	75 495	74 093	78 453	76 900	68 487	75 648	81 809	66 783	74 933	82 963	68 464
Alcohol and tobacco	3 005	2 006	5 113	2 038	1 941	5 388	4 784	3 175	3 286	5 039	3 646
Education	14 131	15 399	11 455	16 526	13 148	13 233	9 326	15 948	10 615	11 490	10 369
Health	11 383	12 057	9 960	12 008	12 157	11 306	8 349	11 344	9 978	12 718	8 257
Durable goods 1/	7 550	8 341	5 881	9 186	6 655	6 499	5 143	5 280	6 124	7 339	5 683
Rent 2/	19 442	25 909	5 801	30 917	15 905	8 059	3 097	5 822	9 866	13 666	10 129
Heating 3/	10 577	10 685	10 348	10 703	10 650	11 387	9 106	11 682	10 331	10 355	8 812
Utilities 4/	7 616	9 382	3 889	9 925	8 298	6 193	1 132	4 557	4 762	7 904	5 586
Clothing	35 033	33 905	37 411	31 488	38 732	38 201	36 466	34 453	42 613	39 761	28 767
Transportation and cons	29 646	33 225	22 097	37 623	24 440	22 755	21 309	20 503	21 546	28 875	19 261
Others 5/	22 411	24 099	18 851	24 512	23 275	20 565	16 800	19 013	19 811	25 223	16 247
Total	236 288	249 102	209 260	261 826	223 689	219 234	197 322	198 561	213 864	245 333	185 222
Shares											
Food	32.0	29.8	37.5	29.4	30.6	34.5	41.5	33.6	35.0	33.8	37.0
Alcohol and tobacco	1.3	0.8	2.4	0.8	0.9	2.5	2.4	1.6	1.5	2.0	2.0
Education	6.0	6.2	5.5	6.3	5.9	6.0	4.7	8.0	5.0	4.7	5.6
Health	4.8	4.8	4.8	4.6	5.4	5.2	4.2	5.7	4.7	5.2	4.5
Durable goods 1/	3.2	3.3	2.8	3.5	3.0	2.9	2.6	2.7	2.9	3.0	3.1
Rent 2/	8.2	10.4	2.8	11.8	7.1	3.7	1.6	2.9	4.6	5.6	5.5
Heating 3/	4.5	4.3	4.8	4.1	4.8	5.2	4.6	5.9	4.8	4.2	4.6
Utilities 4/	3.2	3.8	1.9	3.8	3.7	2.8	0.6	2.3	2.2	3.2	3.0
Clothing	14.8	13.6	17.9	12.0	17.3	17.4	18.5	17.4	19.9	16.2	15.5
Transportation and cons	12.5	13.3	10.6	14.4	10.9	10.4	10.8	10.3	10.1	11.8	10.4
Others 5/	9.5	9.7	9.0	9.3	10.4	9.4	8.5	9.6	9.3	10.3	8.8
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 monetary 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 rentals.
3/ Includes central and local heating, firewood, coal and animal dung.
4/ Includes water, electricity and lighting but not telephone usage
5/ Includes recreational and entertainment expenditures, beauty, toiletry items and household products
Source: HSES 2016.

Table 2.2 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	88 036	45 702	85 676	42 980	93 608	50 166
Alcohol and tobacco	3 643	1 490	2 407	927	6 560	2 412
Education	18 406	3 974	19 539	4 280	15 732	3 471
Health	15 215	2 278	15 614	2 505	14 275	1 906
Durable goods 1/	9 815	2 171	10 673	2 078	7 789	2 322
Rent 2/	25 578	4 863	33 234	6 233	7 506	2 617
Heating 3/	11 999	7 198	11 870	7 504	12 305	6 697
Utilities 4/	9 112	4 061	10 949	5 175	4 777	2 233
Clothing	42 986	16 137	41 208	14 288	47 184	19 171
Transportation and cons	38 043	9 697	41 681	10 511	29 456	8 361
Others 5/	27 469	10 395	29 071	10 743	23 688	9 824
Total	290 304	107 965	301 921	107 224	262 880	109 181
Shares						
Food	30.3	42.3	28.4	40.1	35.6	45.9
Alcohol and tobacco	1.3	1.4	0.8	0.9	2.5	2.2
Education	6.3	3.7	6.5	4.0	6.0	3.2
Health	5.3	2.1	5.2	2.3	5.4	1.7
Durable goods 1/	3.4	2.0	3.6	2.0	3.0	2.2
Rent 2/	8.8	4.5	11.0	5.8	2.9	2.4
Heating 3/	4.1	6.7	3.9	7.0	4.7	6.1
Utilities 4/	3.1	3.8	3.6	4.8	1.8	2.0
Clothing	14.8	14.9	13.6	13.3	17.9	17.6
Transportation and cons	13.1	9.0	13.8	9.8	11.2	7.7
Others 5/	9.5	9.6	9.6	10.0	9.0	9.0
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 monetary 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 recreational and entertainment expenditures, beauty, toiletry items and household products.
Source: HSES 2016.

More striking differences are observed in consumption between poor and non-poor. (Table 2.2). The average consumption of the non-poor is higher by 3 times than average poor consumption and the poor on average, consumes almost twice as less food as the non-poor.

The share of food consumption of poor's is higher or 42.3 percent to total consumption. The higher the share of food than the non-poor, the rise in food prices is more severe for poor people. The non-poor's average education expenditure is higher by 5 times than the poor, while in terms of the share in the total consumption, the non-poor's share is only slightly higher than that of the poor's.

The non-poor not only have substantially higher by 7 times average health expenditures, but in terms of the share in the total consumption, the poor's share is higher than non-poor. The non-poor's mean heating expenditure is higher than that of the poor, but the poor's expenditure is proportionately higher. The non-poor's spending on clothing is much higher by 3 times than poor's but proportionately almost similar to

the poor. Finally, the non-poor devotes higher by 4 times of resources to transportation and communication than the poor.

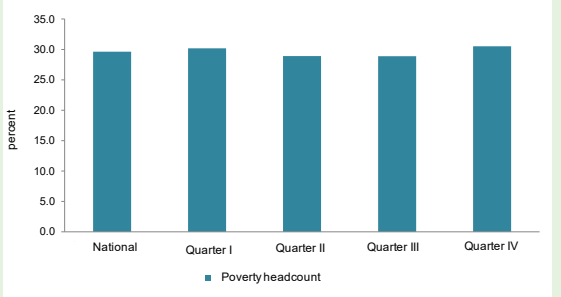
2.2 Seasonality of poverty

The poverty in Mongolia is distinct in that it varies per season. Livestock and crop production factors play a large role in this seasonal variation of consumption. The composition of food consumption distinctly varies depending on the season with more intake of dairy products in the summer, more vegetables in the autumn, more meat products in the winter and somehow lean period in the spring.

The autumn is considered to be relatively abundant of all seasons with the availability of the remaining dairy products for the summer and early supply of meat products; the food consumption is at its highest at this time of the year. To ensure comparability to the previous report, the analysis presented here is by quarters, which do not exactly match with the four seasons[9] of Mongolia.

It can be said that during the survey period of one year, welfare in general, remained steady without much variation across all quarters except for the third quarter where a slight improvement can be seen from Figure 2.1.

Figure 2.1 Poverty headcount, by quarter



Poverty was relatively stable at 28.9 percent in the second and third quarter, but it increased by 1.6 percentage points in the fourth quarter.

2.3 Household composition

The structure of the households surveyed differs greatly in their demographic composition. Some households were comprised of nuclear families where only single family members, husband, wife and their children live; others of extended families where other relatives live in the same household as the nuclear family members. Still others have a higher number of children or are comprised of only elderly people. A natural question that arises is whether there are any correlations between poverty and household composition. Thus, the question arises that "is there any correlation between poverty and household composition?". How poverty indices vary with the size of the household is shown in Table 2.3. The incidence of poverty monotonically increases with household size. This is hardly surprising when per capita consumption is used as a welfare indicator, which implicitly assumes consumption is shared equally among household members.

The probability of being poor is about 3 percent if single person lives in a household, while household has two members the probability of being poor is 7 percent. Such households make up 14 percent of the total population and 3 percent of the poor.

9. In Mongolia, the months of June to August are regarded as summer, September to November as autumn, December to February as winter and March to May spring.

The poverty incidence in the average-size households of three to five members is about 15-39 percent. Such households make up 66 percent of the total population and 61 percent of the poor. In contrast, about 49 percent of households with 6 members and more than half of those households with seven or more members are poor. They represent only 17 percent of the total population, but 29 percent of the total poor population. The extreme poor tend to live in households with an average size of eight or more persons, where 68 percent of such household members are living below the poverty line. Such households make up 4 percent of the total population and 8 percent of the poor.

Table 2.3 Poverty by household size

	National	Household size							
		1	2	3	4	5	6	7	8-plus
Headcount	29.6	2.9	6.9	15.0	25.5	39.1	48.8	56.7	67.6
	(0.7)	(0.5)	(0.5)	(0.8)	(0.9)	(1.3)	(1.9)	(3.1)	(4.0)
Poverty gap	7.7	0.6	1.0	2.8	5.8	10.1	14.2	17.5	24.2
	(0.2)	(0.1)	(0.1)	(0.2)	(0.3)	(0.4)	(0.7)	(1.3)	(1.9)
Severity	2.9	0.2	0.3	0.8	2.0	3.7	5.7	7.4	10.9
	(0.1)	(0.0)	(0.0)	(0.1)	(0.1)	(0.2)	(0.3)	(0.7)	(1.1)
Memorandum items:									
Population share (%)	100.0	3.9	9.7	18.1	26.5	21.7	11.6	5.0	3.5
Share among the poor (%)	100.0	0.4	2.3	9.1	22.8	28.7	19.1	9.6	7.9
Dependency ratio (%)	41.7	44.5	43.6	33.1	40.7	46.4	47.5	46.6	46.8
Children (% household size)	25.5	0.0	6.8	23.1	36.9	42.9	43.5	41.6	40.5
Age of household head	45.7	52.3	53.4	43.7	40.6	41.9	43.9	47.0	48.5
Male household head (%)	75.2	48.3	65.6	73.4	86.1	88.2	88.2	82.6	81.2

Note: Standard errors taking into account the survey design are shown in parentheses.
Source: HSES 2016.

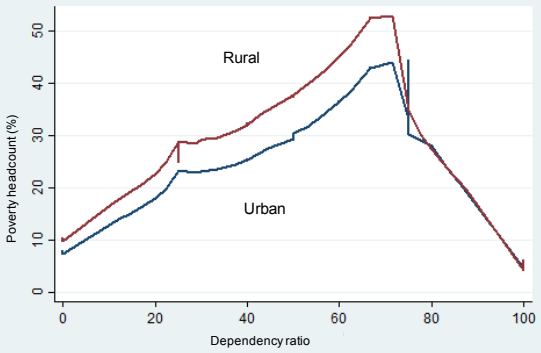
A second tool of household demographic analysis involves measuring the burden weighing on members within the household. The dependency ratio, which is the ratio of the number of non-working age, family members to the number of all members of the household is a common indicator that analyses the demographic composition of a household . In other words, it represents the proportion of the "dependants." The correlation between poverty incidence and dependency ratio is shown in Figure 2.2.

A higher proportion of children and elderly in the household relative to the total number of working members means "earners" have more persons to support and therefore, there is less per capita income and consumption available within the household; hence more poverty. One can expect that a high dependency ratio will be associated with greater poverty. The ratio usually takes a value of up to 75 percent, poverty is increasing and above this level, poverty appears to decline. This relatively high ratio is likely to reflect the fact that in households where the proportion of dependants is high, these households are mainly comprised of elderly who are still working or receiving steady income in pensions or in remittances that protect them against poverty.

The dependency ratio is relatively high in rural areas. In other words, the proportion of "dependants" in the household is higher in rural areas.

10. Alternatively, it can also be defined as the ratio between the non-working age population and working age population, typically those aged less than 15 or more than 64 to those aged between 15 to 64. Thus, it represents the number of "dependants" for each "earner" in the household. However, in Mongolia a different cut-off is used to define working age population: men aged between 16 to 59 and women 16 to 54.

Figure 2.2 Poverty by dependency ratio



Note: Unweighted results.
Source: HSES 2016.

2.4 Characteristics of the household head

It is a common practice to classify households by certain characteristics of their heads in order to undertake some comparisons about poverty[11]. Although with some limitations[12], it is a simple and useful way of comparing households.
The demographic composition and the level of well-being of a household often has correlation with the characteristics of the head who is usually the main earner of income means.

This chapter looks into poverty in relation to household head's age, sex, education level, employment and migration.

2.4.1 Age

How does the age of a household head relate to poverty? Five age groups of household heads are presented along with their corresponding poverty rates in Table 2.4.
A pattern of poverty was observed by age groups: Poverty seems to be less at age below 30 and increasing in 30-39 age group and drops in 40 and above. The 12 percent of households are headed by younger heads aged below 30, 57 percent are aged 30-49 and remaining 37 percent of the households are headed by older heads aged 50 and above. Consumption differences by these age cohorts might help to explain the observed poverty trend.

Table 2.4 Poverty by age of household head

	National	<30	30 - 39	40 - 49	50 - 59	>=60
Headcount	29.6	27.0	36.2	30.3	26.0	20.7
	(0.7)	(1.4)	(1.1)	(1.1)	(1.2)	(1.3)
Poverty gap	7.7	6.4	9.6	8.1	7.0	4.9
	(0.2)	(0.4)	(0.4)	(0.4)	(0.5)	(0.5)
Severity	2.9	2.2	3.6	3.1	2.7	1.7
	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Memorandum items:						
Population share (%)	100.0	12.0	29.0	27.9	18.5	12.5
Share among the poor (%)	100.0	11.0	35.5	28.6	16.2	8.7
Household size	3.5	3.1	4.0	4.0	3.2	2.5
Dependency ratio (%)	41.7	33.4	45.5	28.2	26.5	79.6
Children (% household size)	25.5	31.8	43.8	26.9	11.9	7.5
Age of household head	45.7	26.1	34.6	44.4	54.2	69.1
Male household head (%)	75.2	82.6	85.3	78.9	69.1	56.4

Note: Standard errors taking into account the survey design are shown in parentheses.
Source: HSES 2016.

11. The HSES applies a precise definition of a household head. It is the person who is acknowledged as the head by the other members, who plays the main role in organizing the household activities, who bears main responsibility for problems and who usually makes financial decisions pertaining to the household.

12. An examples of limitations is that the eldest person sometimes regarded as the head of the household out of respect although he or she does not fulfill the given definition. Another example is when female widows, who may be in practice the head of the household refer their eldest son as the head of the family.

Table 2.5 Poverty by gender of the household head

	National		Urban		Rural	
	Female	Male	Female	Male	Female	Male
Headcount	30.3	29.5	30.0	26.3	31.6	35.4
	(1.2)	(0.7)	(1.5)	(1.0)	(1.7)	(1.0)
Poverty gap	8.3	7.6	8.4	6.9	7.8	9.0
	(0.5)	(0.2)	(0.6)	(0.3)	(0.6)	(0.3)
Severity	3.3	2.8	3.4	2.6	2.9	3.2
	(0.2)	(0.1)	(0.3)	(0.2)	(0.3)	(0.2)
Memorandum items:						
Population share (%)	19.3	80.7	22.2	77.8	13.3	86.7
Share among the poor (%)	19.8	80.2	24.5	75.5	12.0	88.0
Household size	2.7	3.7	2.9	3.8	2.3	3.7
Dependency ratio (%)	49.1	39.2	46.6	39.7	56.2	38.2
Children (% household size)	20.4	27.2	21.6	27.5	17.2	26.5
Age of household head	51.5	43.8	50.3	43.9	55.0	43.5
Married, living together (%)	16.4	92.8	10.0	91.8	15.0	92.4
Separated, divorced, widowed (%)	72.3	4.5	76.4	4.4	73.2	4.5

Note: Standard errors taking into account the survey design are shown in parentheses.
Source: HSES 2016.

For instance, the likely increase in a family size in one's thirties is associated with increased poverty and it appears from the picture that dependency ratio is higher among the households with heads at this age. It is increasingly likely for households in above 60 age groups be headed by female persons.

2.4.2 Gender

According to the household survey, the incidence of poverty is similar between female-headed and male-headed households. (Table 2.5)
The 19 percent of households are headed by female heads and 22.0 percent in urban and 13 percent in rural areas. In terms of the distribution of the poor by gender, female-headed household tend to be poor in urban areas while the opposite is happening in countryside with more male-headed households being poor. In particular, households with male headed households are more vulnerable to poverty. These findings must be used with caution as the families being compared greatly differed in demographic structure. In this regard, three demographic features are worth mentioning. First, almost seven out of ten female household heads were either widowed, divorced or separated while nine out of ten male household heads were married. Second, the average three while it is at least four for male-headed households. Finally, a distinct gap in age was observed between female and male-headed households. The average age of female household head was eight years older than that of the male heads. These demographic characteristics remain unchanged.

2.4.3 Education

Education is an important factor that contributes to living standards. Those with little or no education are more likely to be engaged in low-paid labor-intensive jobs that require little professional skills and thus, more susceptible to hardships. In addition to better employment opportunities, the better-educated have better health awareness and higher social capital, other dimensions of well-being. Table 2.6 shows poverty indices by the highest level of education the household head attained.

Before drawing any conclusion regarding the relationship between education and poverty, it is worth mentioning that the educational attainment of the household heads nationwide was very high with nine out of every ten people living in households headed by individuals with at least lower secondary or eight-year of schooling or education higher than that . As predicted, higher educational attainment of the household head was associated with less likelihood of poverty within the household. With household heads with tertiary education, the likelihood of being poor fell considerably.

With household heads with above upper secondary education, the likelihood of being poor fell considerably. The poverty incidence stands at 35.7 percent among individuals whose household heads have upper secondary schooling. Meanwhile, it is 44-53 percent among those whose household heads had lower than upper secondary education and about 19-27 percent among technical and vocational-educated households. But poverty incidence is 1-11 percent among tertiary-educated households.

13. The number of years of study to completion of lower secondary schooling depends on one's year of graduation. Until 1963, lower secondary involved 7 years of schooling, between 1964 and 2004 8 years of schooling and from 2005 9 years of schooling, respectively.

Table 2.6 Poverty estimates, by the highest educational level completed by household head

	National	None	Primary	Lower secondary	Higher secondary	Vocational	Technical secondary	Degree or higher education diploma	Bachelor	Master	Doctor
Headcount	29.6	52.8	45.7	43.9	35.7	27.4	19.2	9.5	10.6	0.8	0.0
	(0.7)	(2.5)	(1.7)	(1.3)	(1.2)	(1.3)	(1.8)	(1.3)	(1.0)	(0.6)	(0.0)
Poverty gap	7.7	15.7	12.7	12.6	9.2	6.5	5.0	2.0	2.1	0.0	0.0
	(0.2)	(1.1)	(0.7)	(0.5)	(0.5)	(0.4)	(0.6)	(0.4)	(0.2)	(0.0)	(0.0)
Severity	2.9	6.3	5.0	5.0	3.4	2.3	1.8	0.6	0.6	0.0	0.0
	(0.1)	(0.6)	(0.3)	(0.3)	(0.2)	(0.2)	(0.3)	(0.2)	(0.1)	(0.0)	(0.0)
Memorandum items:											
Population share (%)	100.0	3.0	7.3	15.9	25.5	18.7	6.6	8.1	13.3	1.3	0.3
Share among the poor (%)	100.0	5.3	11.3	23.6	30.8	17.3	4.3	2.6	4.8	0.0	0.0
Household size	3.5	3.4	3.1	3.6	3.6	3.7	3.2	3.1	3.5	3.1	3.4
Dependency ratio (%)	41.7	48.6	58.2	40.3	37.3	39.4	44.8	43.9	39.6	36.2	54.3
Children (% household size)	25.5	26.2	20.7	24.9	27.5	25.7	17.4	21.3	32.6	23.9	19.6
Age of household head	45.7	47.6	54.7	46.9	42.8	46.2	52.9	47.8	37.5	42.1	58.1
Male household head (%)	75.2	72.1	65.5	78.6	76.4	81.8	62.1	69.2	78.7	70.7	82.9

Note: Standard errors taking into account the survey design are shown in parentheses.
Source: HSES 2016.

2.4.4 Employment

One of the most important determinants of the household wellbeing is the employment status and employment opportunities of the head and other members of the household and types of employment they are engaged in. Poverty rates by employment status and by industry affiliations are shown in Table 2.7[14].

The 27.6 percent of people who live in a household with employed heads are poor, while 48.7 percent in households with unemployed heads are poor. The relationship between poverty and employment can be studied more closely by looking into the household head's employment sector. Among those households with currently working heads, the poverty rates were lower among those in the services sector than in the industry and considerably lower than those in the agriculture sector.

The 21.4 percent of the poor have household heads who engage in agricultural activities, 23.2 percent in the services sector and 21.3 percent in the industry sector, respectively, while 10.5 percent of the poor population had household heads who have not employed during the last one year period.

Let's examine the correlation between the poverty and the household head's employment sector. Table 2.8 classifies the employment affiliation of currently working household heads into herding, private and public sectors and state-run enterprises. Those currently out of the labour force are classified as pensioners. A few findings from the table are worth mentioning. The living standards rose with those households in the private sector, rose even further with those working in the public sector and state-run organizations. But, the living standard is better in households with heads work in the private sector than household with heads herding livestock.

The likelihood of being poor is more than 48.7 percent of those living in households with unemployed heads. They constitute 10.5 percent of the total poor. There is a group of household, which distinctly differed from these households. They are pensioner households that do not participate in the labour market.

The likelihood of being poor of households headed by pensioner is similar to the national average, but they constitute 23.7 percent of the total poor.

14. A person is deemed to participate in a labour force if he or she worked, or did not work but had a job, or did not work and did not have a job but looked for work during the last one year period. Otherwise, he or she is considered out of the labour force.

Table 2.7 Poverty by the sector of employment of household head

	National	Employed				Unemployed	Out of the labor force
		Total	Agriculture	Industry	Services		
Headcount	29.6	27.6	39.1	31.7	19.8	48.7	30.6
	(0.7)	(0.7)	(1.3)	(1.3)	(0.8)	2.2	1.2
Poverty gap	7.7	6.8	10.0	8.5	4.3	15.4	8.5
	(0.2)	(0.2)	(0.5)	(0.5)	(0.2)	0.9	0.5
Severity	2.9	2.4	3.6	3.2	1.4	6.5	3.4
	(0.1)	(0.1)	(0.2)	(0.2)	(0.1)	0.5	0.2
Memorandum items:							
Population share (%)	100.0	70.7	16.3	19.9	34.6	6.4	22.9
Share among the poor (%)	100.0	65.9	21.4	21.3	23.2	10.5	23.7
Household size	3.5	3.7	3.7	3.8	3.6	3.7	2.9
Dependency ratio (%)	41.7	34.9	37.0	34.7	34.1	30.8	60.6
Children (% household size)	25.5	29.9	27.2	31.9	30.0	26.4	14.6
Age of household head	45.7	40.5	42.5	38.8	40.5	42.2	59.1
Male household head (%)	75.2	83.0	90.7	89.2	76.1	81.5	54.6

Note: Standard errors taking into account the survey design are shown in parentheses.
Source: HSES 2016.

Table 2.8 Poverty estimates, by the employment status of household heads

	National	Employed				Unemployed	Pensioner
		Herder	Private	Public	State		
Headcount	29.6	37.8	27.5	19.2	17.5	48.7	30.6
	(0.7)	(1.4)	(1.0)	(1.2)	(2.4)	(2.2)	(1.2)
Poverty gap	7.7	9.2	7.0	4.0	4.5	15.4	8.5
	(0.2)	(0.5)	(0.3)	(0.3)	(0.9)	(0.9)	(0.5)
Severity	2.9	3.2	2.6	1.2	1.8	6.5	3.4
	(0.1)	(0.2)	(0.2)	(0.1)	(0.4)	(0.5)	(0.2)
Memorandum items:							
Population share (%)	100.0	14.3	40.1	13.2	3.1	6.4	22.9
Share among the poor (%)	100.0	18.2	37.2	8.6	1.8	10.5	23.7
Household size	3.5	3.7	3.7	3.6	3.8	3.7	2.9
Dependency ratio (%)	41.7	37.9	34.4	33.7	34.0	30.8	60.6
Children (% household size)	25.5	27.3	30.6	30.0	31.0	26.4	14.6
Age of household head	45.7	42.7	39.7	40.7	40.6	42.2	59.1
Male household head (%)	75.2	91.1	82.7	75.6	82.3	81.5	54.6

Note: A pensioner refers to a household head who receive any pension or benefit from the state.
Source: HSES 2016.

2.5 Asset

Ownership of assets is another major determinant of the quality of life. Having an asset at its disposal or have access to an asset affects the household's prospects for coping with economic insecurity and seasonality of agricultural production. In the event of a sudden loss of unemployment of the breadwinner or natural calamities such as dzud, droughts and floods, a household uses its asset to smooth out its consumption. Assets a household possesses is important to access credit markets. Hence, this wealth indicator can be understood as an insurance that hedges the household against various risks.

2.5.1 Livestock

Livestock serves a double purpose of being a household's valued asset and the main sub-sector of the agriculture sector. At least four out of ten persons currently employed are engaged in some sort of livestock activities. Livestock includes five species of animals, each of which provides a different support towards household's welfare and opens different business opportunities. For example, the possession of goats means a comparative advantage in engaging in a cashmere business, those with sheep and camels in the wool trade, those with cattle and horses in a meat and leathery production.

Households with livestock are shown by each species of animals and by urban and rural areas in Table 2.9. The 26.1 percent of the total population lives in households with livestock. In terms of urban and rural, 6.7 percent of the urban population and 67.2 percent of the rural population live in households with livestock. The 16.9-21.8 percent of the total population raises cows, horses, goats and sheep while 2.5 percent breed camels.

Ulaanbaatar has the least number of herder households compared to 91.4 percent of the total rural population owning some species of livestock.

In terms of regions, the share of the population, who raise livestock in the Western is 61.2 percent, 48.5 percent in Khangai, 42.3 percent in Eastern and lowest or 30.4 percent in the Central region, respectively.

For the purposes of comparability across households with different species of animals, different values of various livestock species were re-scaled into bod scale. Among herders, the average livestock number per capita is 16 bods or 16 horses[15]. (Table 2.9)

The average number per capita livestock in rural areas doubles that in urban areas. By regions, the average number of livestock per capita is the highest in the Central and Eastern, while number of population with livestock is low compared to the Western and Khangai regions. In contrast, the average number per capita livestock fell to the lowest in the Western despite the highest proportion of population owning livestock and the highest number of all species owned in that region. Overall, many poor people raise livestock, but the average number of livestock they own is considerably lower than that owned by the non-poor. For instance, poor people raise sheep and goats, but the average number of livestock is relatively lower.

What is the relationship between livestock holdings and welfare levels? Table 2.10 shows poverty rates by households and by urban and rural areas.

15. On the other hand, owning only one to two species of animals might enable a household's ability to operate in niche markets and benefit from economies of scale at a certain points of production process.

Table 2.9 Livestock holdings

	Cattle		Horses		Camels		Sheep		Goats		Bods	
	Holders (%)	Average among holders	Holders (%)	Average among holders	Holders (%)	Average among holders	Holders (%)	Average among holders	Holders (%)	Average among holders	Holders (%)	Average among holders
National	21.1	5.0	16.9	5.2	2.5	4.6	20.8	33.2	21.8	30.2	26.1	15.6
Urban	5.0	4.0	2.7	4.4	0.2	3.5	4.1	21.5	4.2	20.6	6.7	8.8
Rural	55.0	5.1	46.9	5.3	7.2	4.6	56.1	35.0	59.0	31.7	67.2	17.0
Ulaanbaatar	2.1	4.9	1.0	6.1	0.0	.	1.0	27.6	0.9	17.5	2.4	9.8
Aimag centers	10.7	3.7	6.1	3.9	0.6	3.5	10.2	20.3	11.0	21.1	15.2	8.5
Soum centers	36.9	3.4	24.6	3.9	2.6	3.5	33.0	19.0	36.9	19.1	46.9	9.2
Countryside	76.5	6.1	73.6	5.8	12.7	4.9	83.7	42.6	85.5	38.1	91.4	21.8
Western	49.6	2.9	39.1	2.7	8.0	2.2	48.5	22.5	53.9	24.9	61.2	10.2
Khangai	37.9	6.4	32.3	5.2	2.5	5.5	41.9	33.3	43.3	31.0	48.5	17.1
Central	23.0	5.3	17.8	7.2	3.7	9.9	22.1	45.8	22.9	41.4	30.4	19.4
Eastern	38.7	5.9	33.7	8.2	4.6	1.8	35.9	44.5	35.7	29.2	42.3	21.6
Non-poor	20.8	5.7	16.2	6.2	2.4	6.0	20.0	40.2	20.8	35.2	25.3	18.4
Poor	21.7	3.2	18.6	3.0	2.7	1.6	22.9	18.8	24.4	20.1	28.1	9.4

Note: The bod scale was used to estimate the size of the herd. These factors transform cattle, camels, sheep and goats into equivalent horses. One horse is assumed to have the same value as one cattle, 0.67 camels, six sheep or eight goats. Cattle includes cows and yaks.
Source: HSES 2016

In rural areas, 67.2% of the population has livestock, 32.8% have no livestock, while in urban areas, 6.7% of the population have livestock and 93.3% have not any. Households are engaged in livestock activities tend to be more severely affected by poverty than those that are not. For example, 28.8 percent of households have no livestock are poor, while 31.9 percent of households are engaged in livestock activities is poor. In contrast, urban and rural people engage in livestock activities are tend to be less severely affected by poverty and better livelihood than those that are not.

The same pattern can be seen at 2014 or in both of urban and rural area's populations are not engaged in any livestock activities are poor compared to those that are raising livestock.

Table 2.10 Poverty by livestock holding

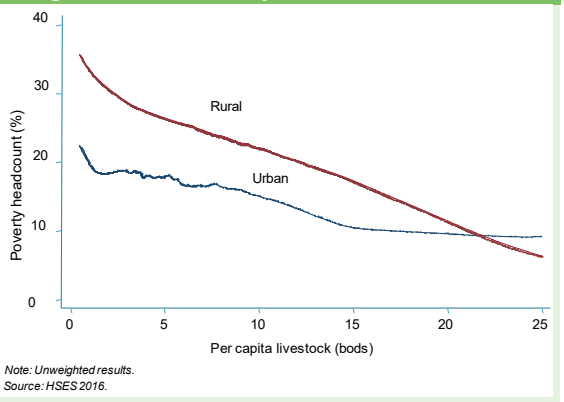
	National		Urban		Rural	
	Herder	Non-herder	Herder	Non-herder	Herder	Non-herder
Headcount	31.9	28.8	24.3	27.3	33.4	37.8
	(1.0)	(0.8)	(2.0)	(1.0)	(1.2)	(1.3)
Poverty gap	7.7	7.7	6.3	7.3	8.0	10.5
	(0.3)	(0.3)	(0.7)	(0.3)	(0.4)	(0.5)
Severity	2.7	3.0	2.3	2.8	2.8	4.1
	(0.2)	(0.1)	(0.3)	(0.2)	(0.2)	(0.3)
Memorandum items:						
Population share (%)	26.1	73.9	6.7	93.3	67.2	32.8
Share among the poor (%)	28.1	71.9	6.0	94.0	64.4	35.6
Household size	3.7	3.4	3.9	3.5	3.7	2.9
Dependency ratio (%)	41.7	41.7	43.0	41.5	41.4	42.4
Children (% household size)	26.3	25.2	27.8	25.8	26.0	22.5
Age of household head	45.4	45.8	45.5	45.6	45.3	46.5
Male household head (%)	85.5	71.9	81.7	72.2	86.2	70.4

Note: Standard error taking into account the survey design are shown in parentheses
Source: HSES 2016.

What is the relationship between poverty and the average number of livestock per capita? Figure 2.3 depicts how poverty incidence changes with the number of livestock per herder.

Poverty incidence fell in both urban and rural areas as the number of livestock per herder increased. This corroborates the direct relationship between the living standard and the number of livestock per person.

Figure 2.3 Poverty and livestock size



Note: Unweighted results.
Source: HSES 2016.

2.5.2 Land

Land is typically considered as one of the most valuable assets a household can have if it is engaged in an agricultural production. In Mongolia crop production is limited and cannot be compared to the significance of the livestock sub-sector. The exposure to an extreme climate makes crop production more difficult as weather hazards can lead to a sudden loss of harvest.

According to the household survey, almost half of persons own a piece of land for either crop or vegetable farming. These findings were similar across urban and rural areas.

At the national level, the land owners are better-off than those that do not own land. In terms of urban and rural land ownership, in urban areas, 48.5 percent of the population have land, while in rural areas, 49.8 percent of the population have land. Poverty incidence is higher among people who do not own land in rural, while poverty is higher among people own land in urban areas.

Table 2.11 Poverty estimates, by ownership of land

	National		Urban		Rural	
	Land	No land	Land	No land	Land	No land
Headcount	28.3	30.9	28.3	26.0	28.2	41.5
	(0.8)	(0.9)	(1.1)	(1.2)	(1.1)	(1.3)
Poverty gap	7.1	8.4	7.4	7.1	6.6	11.1
	(0.3)	(0.3)	(0.4)	(0.4)	(0.4)	(0.4)
Severity	2.6	3.2	2.7	2.8	2.3	4.1
	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Memorandum items:						
Population share (%)	48.9	51.1	48.5	51.5	49.8	50.2
Share among the poor (%)	46.7	53.3	50.5	49.5	40.3	59.7
Household size	3.8	3.2	3.8	3.3	3.7	3.1
Dependency ratio (%)	41.8	41.5	42.2	41.1	41.1	42.4
Children (% household size)	25.6	25.4	25.5	26.2	25.8	23.7
Age of household head	47.2	44.4	47.6	44.0	46.5	45.2
Male household head (%)	78.8	72.2	76.3	69.8	84.0	77.0

Note: Standard error taking into account the survey design are shown in parentheses
Source: HSES 2016.

2.5.3 Savings

An important component of household wealth is financial assets. It is clear that if the income exceeds its expense, allows to make savings, while household has income only enough to meet daily needs not allows savings. About 27 percent of the population has a savings account in financial institutions[16].

In terms of settlement strata, these findings were similar across urban and rural areas or 27 percent of the population has a savings in both areas. It shows that people are interested in saving money regardless of where they live.

Both urban and rural areas, poverty incidence is less among with savings accounts, while higher among households without savings, it means that these two variables are directly correlated.

In Ulaanbaatar Urban and Aimag centers, the poverty headcount of the depositors is almost three times lower than those have not savings, while sum center and rural areas are approximately twice low.

16. Although the Household Socio-Economic Survey identifies whether households have savings, does not ask about what kind of savings and how much money is available.

Table 2.12 Poverty by possession of savings

	National		Urban		Rural	
	Saver	Non-saver	Saver	Non-saver	Saver	Non-saver
Headcount	17.4	34.1	13.7	32.0	25.1	38.5
	(0.9)	(0.8)	(1.1)	(1.1)	(1.5)	(1.1)
Poverty gap	3.7	9.2	3.0	8.8	5.3	10.1
	(0.2)	(0.3)	(0.3)	(0.4)	(0.4)	(0.4)
Severity	1.2	3.5	0.9	3.4	1.7	3.8
	(0.1)	(0.1)	(0.1)	(0.2)	(0.2)	(0.2)
Memorandum items:						
Population share (%)	26.7	73.3	26.6	73.4	26.9	73.1
Share among the poor (%)	15.7	84.3	13.5	86.5	19.4	80.6
Household size	3.7	3.4	3.7	3.4	3.8	3.3
Dependency ratio (%)	42.1	41.5	41.4	41.7	43.6	41.2
Children (% household size)	31.2	23.6	30.9	24.2	31.8	22.4
Age of household head	43.1	46.5	43.2	46.4	42.9	46.7
Male household head (%)	80.7	73.4	77.8	71.1	86.9	78.0

Note: Standard error taking into account the survey design are shown in parentheses
Source: HSES 2016.

2.5.4 Liabilities

The trend to take a loan is increasing year by year among our people, which has become one of the important sources of household finance in recent years. Almost half of the total population of Mongolia has a type of loan and 42.8 percent of the population is covered by loan pledging their salary, 18.4 percent has a pension loan, 15.8 percent has a herder loan, 12.0 percent has a mortgage loan, 7.2 percent of households use loans for household consumption, 5.4 percent have business loans, and 13.2 percent have other types of loans.

The 24.3 percent of the total population use loans and 35.3 percent of the non-borrowed population are poor. In terms of distribution, 42 percent of the poor population has any loan and 58 percent have no loans.

The poverty headcount is higher than the national average among people with household consumption and herder loans. Although 31 percent of the population with a household consumption loan is poor, they are constituting 7 percent of the total population have loans and 9 percent of the poor. In contrast, people have taken a mortgage loan are constituting 12 percent of the total population and 3 percent of the poor. People use salary loans are sharing 43 percent of the total population and 37 percent of the poor.

2.6 Dwelling

Another important determinant of the quality of life is the type of housing a household and an individual live in and their access to basic infrastructure services. With improved housing conditions and improved access to public utilities, a household's prospect of moving out of vulnerability to poverty increases and expand their available options and opportunities.

Table 2.13 Poverty by types of loan

	National	Loan								No loan
		Total	Salary	Pension	Housing	Household consumption	Herders	Business	Other	
Headcount	29.6									35.3
	(0.7)	(0.7)	(0.9)	(1.6)	(1.2)	(2.5)	(1.7)	(2.0)	(2.1)	(1.0)
Poverty gap	7.7	5.8	4.6	7.3	1.3	7.4	7.7	2.2	7.5	9.8
	(0.2)	(0.2)	(0.3)	(0.6)	(0.3)	(0.9)	(0.5)	(0.4)	(0.7)	(0.4)
Severity	2.9	2.0	1.5	2.9	0.3	2.6	2.6	0.7	2.9	3.9
	(0.1)	(0.1)	(0.1)	(0.4)	(0.1)	(0.4)	(0.2)	(0.2)	(0.4)	(0.2)
Memorandum items:										
Population share (%)	100.0	51.6	42.8	18.4	12.0	7.2	15.8	5.4	13.2	48.4
Share among the poor (%)	100.0	42.2	36.9	20.6	3.4	9.0	21.3	2.8	16.4	57.8
Household size	3.5	3.7	3.9	3.0	3.8	4.2	4.2	4.0	4.1	3.2
Dependency ratio (%)	41.7	41.7	34.4	63.4	38.3	38.8	36.5	32.7	38.6	41.6
Children (% household size)	25.5	27.3	30.6	10.7	34.2	33.8	31.3	29.0	33.0	23.8
Age of household head	45.7	45.3	41.7	60.5	39.0	41.6	42.0	43.8	41.4	46.0
Male household head (%)	75.2	79.1	83.6	59.5	83.7	84.0	92.5	83.5	82.4	71.6

Note: Standard error taking into account the survey design are shown in parentheses
Source: HSES 2016.

Better infrastructure provides for a more convenient way of life and help improve household members' productivity. Those households connected to central water supply and having access to safe drinking water obviously have better level of well-being than those that fetch their consumption water from a half-an-hour walking distance. Discussed here will be types of living quarters and basic infrastructure services that households have access to.

2.6.1 Dwelling type

The most common type of dwelling in Mongolia is ger where 39.2 percent of the total population lives in, 39.2 live in detached houses and 23.1 reside in apartments. By settlement strata, in urban areas 36.9 percent of all inhabitants live in detached houses, 32.7 percent in apartments and another 28.4 percent in ger. In comparison, in rural areas 61.9 percent of total inhabitants live in ger, 33.9 percent in detached houses and the remaining 2.7 percent in apartments.

The relationship of dwelling and poverty is shown in Table 2.14. The poverty rates relatively high with the households living in ger, slightly lower with the households that live in detached houses and lowest with those living in apartments. A similar trend is seen in both urban and rural areas.

As results of the 2016 survey, 48.9 percent of all ger dwellers in urban areas and 40.2 percent of all rural ger dwellers being poor. In urban areas 6.8 percent of all apartment dwellers and 17.7 percent of all rural apartment dwellers being poor.

In urban areas 51.3 percent of the poor live in gers making up 28.4 percent of the total population whereas only 8.2 percent of the poor dwell in apartments making up another 32.7 percent of the total population. The distribution of the poor in rural areas of each type of dwelling is similar to the general population distribution.

Table 2.14 Poverty by type of dwelling

	National				Urban				Rural			
	Ger	Apartment	House	Other	Ger	Apartment	House	Other	Ger	Apartment	House	Other
Headcount	44.5	7.2	27.4	36.3	48.9	6.8	27.7	39.0	40.2	17.7	26.8	28.8
	(0.9)	(0.7)	(1.0)	(4.0)	(1.4)	(0.8)	(1.3)	(5.1)	(1.2)	(2.9)	(1.5)	(5.1)
Poverty gap	12.3	1.3	6.8	8.8	14.5	1.2	6.8	9.8	10.2	3.9	6.8	6.1
	(0.4)	(0.2)	(0.3)	(1.7)	(0.6)	(0.2)	(0.4)	(2.2)	(0.4)	(0.9)	(0.5)	(1.4)
Severity	4.8	0.4	2.5	3.4	5.9	0.4	2.4	3.9	3.7	1.4	2.5	1.9
	(0.2)	(0.1)	(0.2)	(0.9)	(0.4)	(0.1)	(0.2)	(1.2)	(0.2)	(0.4)	(0.3)	(0.6)
Memorandum items:												
Population share (%)	39.2	23.1	35.9	1.8	28.4	32.7	36.9	2.0	61.9	2.7	33.9	1.5
Share among the poor (%)	58.9	5.6	33.3	2.2	51.3	8.2	37.7	2.8	71.4	1.4	26.0	1.2
Household size	3.4	3.3	3.7	3.2	3.5	3.3	3.7	3.3	3.3	3.1	3.7	3.0
Dependency ratio (%)	42.7	40.4	41.6	37.2	43.3	40.5	41.7	37.2	42.2	38.6	41.6	37.1
Children (% household size)	25.7	25.2	25.5	24.3	27.5	25.1	25.4	24.0	24.0	26.8	25.7	25.3
Age of household head	45.4	44.3	47.1	45.0	45.2	44.3	47.3	45.3	45.6	42.8	46.7	44.4
Male household head (%)	75.4	72.2	77.6	66.6	70.6	71.9	75.9	65.1	79.7	81.5	81.4	70.4

Note: Other includes student residences, company dormitories and any other building designed not to be inhabited by households.
Standard error taking into account the survey design are shown in parentheses
Source: HSES 2016.

2.6.2 Infrastructure services

Quality of life improves with the provision of basic infrastructure services such as improved water sources, improved sanitation and electricity[17]. Unimproved water sources and sanitation facilities can have a direct impact on population wellbeing and health through an increased risk of disease outbreaks and resultant financial risks due to ill health. Likewise, insufficient access to electricity can limit education and investment opportunities. How do Mongolians fare in these indicators?

The association between poverty rates and access to basic infrastructure services is shown in Table 2.15 and Table 2.16.

Accordance with the household survey, 78.3 percent of all Mongolians have access to improved water sources, 85.7 percent to improved sanitation and 86.5 percent of electricity, respectively. Accessing all three services are 74.0 percent of the population. Compared to 2014, there is an increased access to. The number of people accessing these services is, however, higher in urban areas than in rural areas. For instance, 97.6 percent of the total urban population and 60.6 percent of all rural residents have access to improved sanitation facilities. Almost all urban dwellers have access to electricity compared to only 59.6 percent of all rural dwellers.

Findings in these two tables do not reflect the rapidly increasing consumption of solar energy in rural areas. In the past a few years the government successfully implemented a policy to provide herders with solar panels on a concessional basis. Although this cannot fully meet the energy needs of the rural population, almost all persons in the countryside now have access to either solar-powered or electrically powered energy. Significant differences emerge from comparisons between urban and rural areas; 87.9 percent of all urban dwellers avail of all three basic services, namely, improved water sources, improved sanitation and electricity in contrast to barely 44.7 percent people in rural areas having access to these services. Differences in the quality of services households have access to is worth mentioning, although this was outside the scope of the present survey. In general, urban dwellers enjoy higher quality of services.

17. An improved water source refers to piped water into dwelling or water from a protected well. Unimproved water sources are unprotected wells, rivers, springs and surface water. An improved sanitation facility means sewerage connection, or private and shared (but not public) pit latrines.

Table 2.15 Poverty estimates, by type of infrastructure services

	Improved water sources a/		Sanitation b/		Electrycity		All three	
	Yes	No	Yes	No	Yes	No	Yes	No
Headcount	27.1	38.7	27.7	41.2	28.2	38.9	26.2	39.5
	(0.8)	(1.2)	(0.8)	(1.4)	(0.8)	(1.5)	(0.8)	(1.1)
Poverty gap	7.1	9.9	7.3	10.5	7.5	9.4	6.8	10.3
	(0.3)	(0.5)	(0.3)	(0.5)	(0.3)	(0.5)	(0.3)	(0.4)
Severity	2.7	3.6	2.8	3.8	2.8	3.3	2.6	3.8
	(0.1)	(0.2)	(0.1)	(0.2)	(0.1)	(0.2)	(0.1)	(0.2)
Memorandum items:								
Population share (%)	78.3	21.7	85.7	14.3	86.5	13.5	74.0	26.0
Share among the poor (%)	71.6	28.4	80.1	19.9	82.3	17.7	65.4	34.6
Household size	3.5	3.5	3.5	3.5	3.5	3.4	3.5	3.5
Dependency ratio (%)	41.8	41.3	41.9	40.1	42.0	39.7	41.8	41.2
Children (% household size)	25.6	24.9	25.6	25.0	25.7	24.3	25.7	25.0
Age of household head	45.7	45.7	45.8	44.8	45.8	44.7	45.7	45.6
Male household head (%)	74.0	79.5	73.6	84.8	73.5	86.2	73.5	80.1

a/ 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.
б/ 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 range from simple but protected pit latrines to flush toilets with a sewerage connection.
Note: Standard errors taking into account the survey design are shown in parentheses.
Source: HSES 2016

Overall, households that do not have access to water, sanitation and electricity were poorer than those that do. About 26.2 percent persons having access to all three services were poor while this increases to 39.5 persons in households that do not have access to the services. This pattern was seen in both urban and rural areas.

The availability of infrastructure services by poverty status is shown in Figure 2.4.

The non-poor have an increased access to improved water sources and sanitation and electricity than the poor and the divergence increases when access to all three services are compared. This was observed in both urban and rural areas, although the difference in the latter is less pronounced.

Figure 2.4 Access to infrastructure services by poverty status

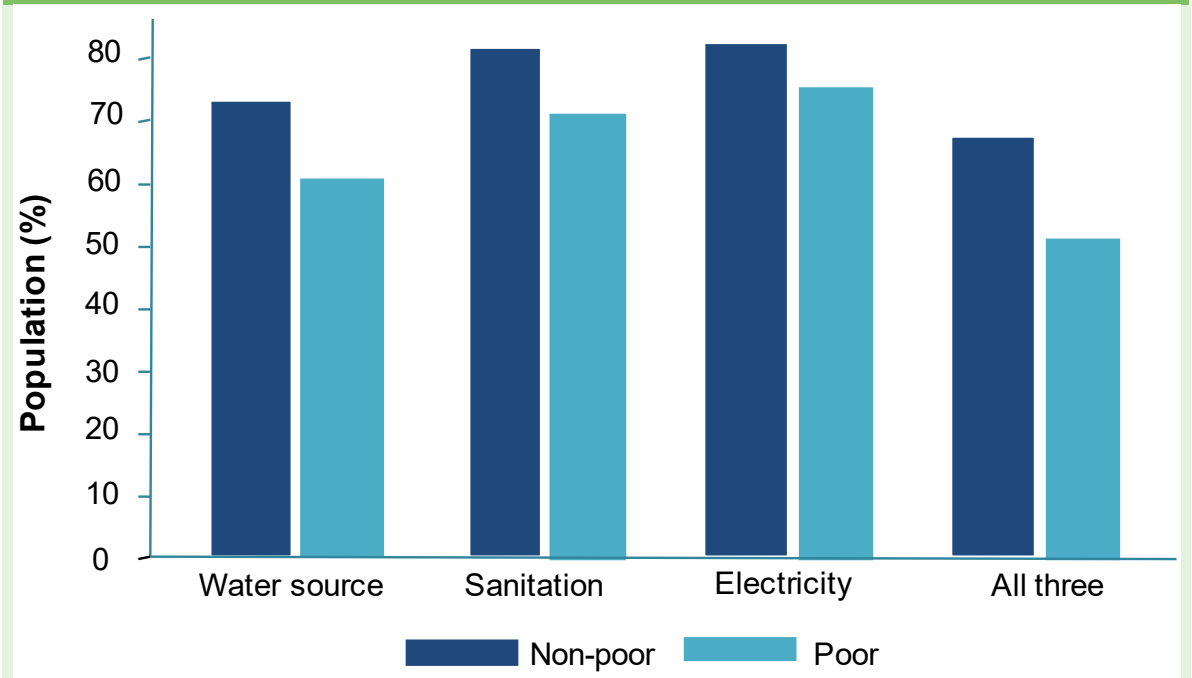


Table 2.16 Poverty estimates, by type of infrastructure services, urban and rural

	Improved water sources a/				Sanitation b/				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
Headcount	25.3	42.9	33.4	36.7	26.5	53.1	31.8	39.6	27.0	42.8	32.3	38.7	24.8	43.8	31.7	37.5
	1.0	2.4	1.1	1.4	0.9	4.1	1.1	1.5	0.9	5.9	1.1	1.6	1.0	2.1	1.2	1.3
Poverty gap	6.6	12.3	8.9	8.8	7.0	17.8	8.4	9.5	7.2	11.0	8.4	9.4	6.4	12.9	8.4	9.1
	0.3	1.0	0.4	0.5	0.3	2.0	0.4	0.5	0.3	2.5	0.4	0.5	0.3	0.9	0.4	0.4
Severity	2.5	4.9	3.3	3.0	2.6	7.7	3.1	3.3	2.8	4.1	3.1	3.3	2.4	5.2	3.2	3.2
	0.2	0.5	0.2	0.2	0.2	1.2	0.2	0.2	0.2	1.1	0.2	0.2	0.2	0.5	0.2	0.2
Memorandum items:																
Population share (%)	89.7	10.3	54.2	45.8	97.6	2.4	60.6	39.4	99.3	0.7	59.6	40.4	87.9	12.1	44.7	55.3
Share among the poor (%)	83.7	16.3	51.8	48.2	95.2	4.8	55.3	44.7	98.8	1.2	55.2	44.8	80.5	19.5	40.5	59.5
Household size	3.5	3.5	3.3	3.4	3.5	3.7	3.4	3.4	3.5	3.1	3.3	3.5	3.5	3.5	3.3	3.4
Dependency ratio (%)	41.5	42.8	42.8	40.6	41.6	40.5	42.9	40.1	41.6	45.9	43.3	39.4	41.4	42.8	43.4	40.5
Children (% household size)	25.8	26.2	25.0	24.3	25.9	26.7	24.6	24.8	25.9	21.7	24.8	24.4	25.9	25.9	24.8	24.5
Age of household head	45.5	46.4	46.1	45.4	45.6	46.0	46.5	44.7	45.6	47.5	46.6	44.5	45.5	46.6	46.6	45.1
Male household head (%)	72.8	72.0	77.8	83.1	72.6	78.0	76.7	85.6	72.6	85.8	76.2	86.3	72.8	72.6	76.2	83.4

a/ 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.
б/ 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 range from simple but protected pit latrines to flush toilets with a sewerage connection.
Note: Standard errors taking into account the survey design are shown in parentheses.
Source: HSES 2016

2.7 Safety nets

Social safety nets can play the key role in reducing economic insecurity and alleviating poverty by mitigating adverse shocks on a household's ability to cope. The shocks can be permanent (e.g., disability or unable to work) or temporary or unemployment, and can occur at the macro (e.g., natural disasters) or micro (e.g., death of the household head) levels. Each shock may require a different response.

There are two broad types of social safety nets: Informal safety nets that are traditional coping strategies based on community, social network and kinship and include assistance, supports and gifts received through these informal networks. Formal safety nets are public assistance in the form of cash transfers provided to support and protect the poor and vulnerable groups of the population. Informal safety nets such as private assistance and transfers are quite common. For instance, to gift or herders exchange animals, as in the form of private transfer.

Mongolia maintains an extensive network of social safety nets which mainly consist of social insurance and social assistance[18]. The state social safety net which was passed down from a centrally planned economy to a market economy still plays the key role. This section explains in detail formal and informal (private) safety nets and private and state transfers such as pensions, welfare allowances and cash transfers that households receive.

2.7.1 The extent and importance of the gift, cash transfers and remittances

Table 2.17 summarizes cash remittances, assistance and gifts that households receive. The formal and informal safety nets cover a wide range of issues, and almost all households receive cash transfers, remittances and gifts from the state and others. The inclusive of households, donations and transfers varies dramatically from both the state and others.

The extent of the cash remittances, assistance and gifts is quite remarkable with 89.4 percent of households having received one or other forms of cash remittance and assistance from the state and 16.8 percent received gifts from the family and friends. The state transfers make up 83.3 percent of the total amount transferred to.

Retirement pension is a core component of the state transfers. Retirement pension received by 29.2 households and constitute 53.5 percent of the total amount of state cash transfers. Most or 15.7 percent of private private transfers and remittances have benefitted from the family and friends.

The public transfers constitute 32.3 percent of the total consumption of the recipient households, while private transfers make up 26.4 percent of the total consumption of the recipient households.

18. Social insurance consists of retirement pensions, and unemployment and sickness benefits to cover specific risks. Social assistance is intended for disadvantaged or vulnerable groups that are in need of social protection and includes benefits such as disability or special pensions and compensations.

Table 2.17 Transfers and remittances received by households

	Households with transfers (%)	Population with transfers (%)	Among those receiving		
			Average transfer per household (Tugrug per month)	Share of consumption (%)	Share of total transfers (%)
Total	**89.4**	**94.3**	**222 339**	**36.6**	**100.0**
Pension and allowances	87.4	93.4	189 377	32.3	83.3
State pension	29.2	24.6	364 453	65.3	53.5
Allowance to pregnant and lactating mothers	8.9	12.1	35 858	4.8	1.6
Disability pension	11.3	13.0	195 205	34.1	11.1
Survivor pension	2.1	2.4	158 688	26.2	1.7
Human development fund allowances	63.9	79.4	35 349	5.1	11.4
Other a/	26.2	30.0	30 782	4.3	4.1
Remittances and aid	**16.8**	**15.2**	**197 209**	**26.4**	**16.7**
Family and friends	15.7	13.8	194 736	26.8	15.4
Other b/	1.4	1.8	184 069	16.6	1.3
From within the country	2.0	1.8	412 029	40.7	4.1
From abroad	15.1	13.7	166 068	24.1	12.6

a/ Includes special pension, unemployement benefits, illness payments, funeral payments and other benefits.
b/ Includes the government, companies and organizations, NGOs, foreign organizations or indviduals, and other sources.
Source: HSES 2016

2.7.2 Transfers received by households

The main purpose of the social safety nets is to provide an assistance to the vulnerable and to mitigate adverse economic and social shocks on a household's ability to cope. The relationship between poverty rates and whether a household receives any transfers is shown in Table 2.18.

Poverty incidences are higher in households that are in receipt of some form of private transfers than in those that do not receive any private transfers. This picture is observed more in rural areas.

A degree of caution needs to be exercised when making comparisons between the households that receive public transfers and those that don't. The fact that poverty rates are higher among the households that receive some form of public assistance than those that do not receive any public transfers. This picture remains same in rural areas.

Table 2.18 Poverty estimates, by receipt of private and public transfers

	Private				Public			
	Urban		Rural		Urban		Rural	
	Yes	No	Yes	No	Yes	No	Yes	No
Headcount	28.1	26.9	37.0	34.6	28.6	5.2	36.9	8.9
	(1.7)	(1.0)	(2.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.3)
Poverty gap	7.7	7.1	10.7	8.5	7.6	1.2	9.4	1.8
	(0.6)	(0.4)	(0.8)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)
Severity	3.0	2.7	4.2	3.0	2.9	0.4	3.4	0.5
	(0.3)	(0.2)	(0.4)	(0.2)	(0.2)	(0.1)	(0.2)	(0.1)
Memorandum items:								
Population share (%)	16.4	83.6	12.9	87.1	93.7	6.3	93.0	7.0
Share among the poor (%)	16.9	83.1	13.7	86.3	98.8	1.2	98.2	1.8
Household size	3.2	3.6	3.1	3.4	3.7	1.9	3.7	1.7
Dependency ratio (%)	45.4	40.8	42.2	41.7	46.9	1.9	48.5	0.7
Children (% household size)	25.0	26.1	24.8	24.6	29.3	0.4	28.7	0.1
Age of household head	46.1	45.5	45.1	45.9	46.1	42.1	46.5	41.5
Male household head (%)	58.8	75.8	71.5	81.6	73.0	70.6	79.4	84.8

Note: Standard error taking into account the survey design are shown in parentheses
Source: HSES 2016.

2.7.3 Retirement pensions

Given the importance of public transfers on household welfare, the relationship between poverty and retirement pension, the largest constituent of public transfer, was studied. (Table 2.18)

At the national level households that receive pensions are better-off than those that do not receive such benefits[19]. In terms of settlement strata, considerably lower poverty incidence was observed in rural households that receive pensions than households have no one received pensions, while in urban areas, similar incidences of poverty were found between pension recipient and non-recipient households. This may be explained by the fact that

19. It should be kept in mind that retirement pensions are not a form of social assistance. Rather, it is an arrangement whereby one is to be paid when he or she is retired, from the contributions he or she made to the pension fund.

having a pensioner in the household that receive steady income regardless of seasons could be an important factor to the well-being of the households in sum center and countryside.

At the national level, 19.8 percent of poor individuals belong to the households that receive pensions and this trend is higher in urban and lower in rural areas.
Demographic indicators corroborate these findings. Households that receive pensions have less number of children than the national average, but these households have higher dependency ratios, reflecting higher proportions of elderly in the household. Such households tend to be headed by considerably older females.

Table 2.19 Poverty estimates, by receipt of retirement pensions

	National		Urban		Rural	
	Yes	No	Yes	No	Yes	No
Headcount	23.8	31.5	23.5	28.4	24.7	37.6
	(1.0)	(0.8)	(1.3)	(1.0)	(1.4)	(1.0)
Poverty gap	6.1	8.3	6.2	7.6	5.9	9.6
	(0.4)	(0.3)	(0.5)	(0.4)	(0.5)	(0.4)
Severity	2.3	3.1	2.4	2.9	2.1	3.5
	(0.2)	(0.1)	(0.3)	(0.2)	(0.3)	(0.2)
Memorandum items:						
Population share (%)	24.6	75.4	26.3	73.7	21.1	78.9
Share among the poor (%)	19.8	80.2	22.8	77.2	14.9	85.1
Household size	2.9	3.7	3.1	3.7	2.5	3.7
Dependency ratio (%)	64.7	32.2	63.1	32.5	68.1	31.5
Children (% household size)	10.3	31.7	11.4	32.0	8.0	31.2
Age of household head	61.2	39.3	60.7	39.3	62.4	39.3
Male household head (%)	59.0	81.8	58.3	78.8	60.7	87.8

Note: Standard error taking into account the survey design are shown in parentheses
Source: HSES 2016.

ANNEX A.

THE HOUSEHOLD SOCIO-ECONOMIC SURVEY 2016

This appendix provides some details on the general characteristics of Socio Economic Survey (HSES) 2016, its sample design and overall assessments of the quality of the data.

A.1 An overview of HSES

The HSES is a nationally representative survey, which aims to evaluate and monitor the income and expenditure of households, update the basket and weights for consumer price index and offer input to the GDP by final consumption method.

The HSES is a survey regularly conducted by the NSO and carrying out a Household Socio Economic Survey starting from 1 July 2007 by combining the HIES and Living Standards Measurement Survey. It has now established to conduct in a comprehensive and abbreviated form according to the concept of this survey. The HSES is a survey regularly conducted by the NSO and covers a year period for analysis. The present report period covers the 12 month period of January to December 2016.

Survey questionnaire

The survey was carried in the comprehensive form and its questionnaires included 14 sets of questions. Three questionnaires were used for the survey. These include:

- A core questionnaire of the Household Socio-Economic data (HSES-1): Form HSES-1 includes general household information, education, health, employment, livestock breeding and crops, non-agricultural production, trade, services and other income, savings, loans, housing and energy, durable goods, and non-food expenditure related questions.
- Household food consumption modules (HSES-2a, HSES-2б): The HSES-2a is a consolidated form of household diary and collected data on food consumption of selected household in the capital city and aimag centers for 30 days. The HSES-2b form used to collect data on food consumption for the last seven days of selected households in sum center and countryside.
- Household diary (HSES-3): Selected households should keep diary in the capital and aimag center and collected data on household's daily food consumption throughout the month.

A.2 The sampling design

The 2016 HSES used the sampling frame which was developed by the NSO based on 2015 population figures obtained from administrative records.

The design of the survey recognizes two explicit strata that urban (Ulaanbaatar, aimag centers), and urban (sum centers and the countryside).

The Primary Sampling Unit (PSU) was kheseg in Ulaanbaatar and bags in aimag center and rural areas, and 1836 PSUs covered in survey whole year.

In order to comparison of results by aimags, sample was allocated proportionally and PSUs selected two stages of simple random sampling. In Ulaanbaatar, 360 PSUs, 24 PSUs from each aimag (36 PSUs in Darkhan-Uul, 60 PSUs in Orkhon and 12 PSU s in Govisumber aimags) were selected, while for the rural, 48 PSUs (60 PSUs in Uvurkhangai, 60 in Khuvsgul, 24 in Darkhan-Uul, 0 in Orkhon and 24 PSUs in Govisumber aimags). Then 10 households selected from each PSU in urban areas and 8 households in each PSU in rural areas.

The sample of 16488 households was allocated as follows: 3,600 in Ulaanbaatar, 5400 in aimag centers and 7488 in rural areas and sum centers. However, the actual sample size used for this analysis is slightly smaller: 3573 households in Ulaanbaatar; 5394 in aimag centers; and 7484 in rural areas.

Table A.1. HSES 2016 sample by stratum and month of interview

	Ulaanbaatar	Aimag centers	Rural	National
In 2016				
January	300	449	624	1 373
February	298	449	623	1 370
March	299	459	623	1 381
April	292	449	625	1 366
May	298	450	624	1 372
June	295	440	624	1 359
July	298	449	623	1 370
August	298	450	623	1 371
September	299	450	624	1 373
October	300	450	624	1 374
November	296	450	624	1 370
December	300	449	623	1 372
Total	**3 573**	**5 394**	**7 484**	**16 451**

In order to obtain representative statistics for each stratum and for the country as a whole, it was necessary to use sampling weights.

A.3 Data quality and processing

For the data collection of this survey, we used a modern technology that fully automated paper technology is tablet technology. This approach has a number of strengths as collected data is transmitted to the central network just after gathering from the primary level, ensuring the quality and security of data, time, personnel and cost savings.
For our previous procedure, field supervisor checked all collected data by enumerators and then data transmitted to a central server of the NSO. Upon receiving data in a central server, a survey team in NSO made logical and other checks for all data transmitted from the field offices and additional clarifications were received from the field offices through the field supervisors. In all cases, it was possible to compare the listings used for consistency checks against actual questionnaires filled out by households (in fact, during the first round of checks, some households were visited again) and the data were revised whenever an error was found. Basically, three different rounds of consistency checks were applied to the data: first during the data collection by tablet, then during the compilation of the raw data files and finally during the preparation of this report.
Before conducting the survey, we conducted a pilot study of using tablet PCs and conducted training for field supervisors and enumerators to conduct this survey, according to the common understanding, methodology and techniques, and provided preparations of successfully conducting a survey. We consider that the data quality standards are provided.
The data collected using the CSPro 5.0 software and used the STATA 14.2 software to process and analyze survey results.

ANNEX B.

THE METHODOLOGY FOR POVERTY ANALYSIS

First and foremost, poverty analysis requires three main elements. First, welfare indicators, both measurable and acceptable, to rank all populations accordingly. Second, an appropriate poverty line which is to be used as a cutoff to define individuals as poor and which is comparable against a given indicator. Lastly, a set of measures that consolidates individual welfare indicators into an aggregated poverty profile.

This annex describes all steps of the processing that describe the poverty measures, the poverty line, and the consumption aggregates. The first section describes a selection of consumption as a welfare indicator. Section II illustrates the method of estimating the nominal household consumption. Section III and IV illustrate how estimate the nominal household consumption adjusted by the date of interviewed and the composition of the household size.

Section III illustrates the methodologies of geographical and price adjustment over time and household composition adjustment in section IV and methodology of constructing poverty lines in section V. The last section VI illustrates the poverty measures used in this report.

B.1 The choice of welfare indicators

Poverty involves multiple dimensions of deprivation, such as poor health, low human capital, limited access to infrastructure, malnutrition, lack of goods and services, inability to express political views or profess religious beliefs, etc. Each of them deserves separate attention as they refer to different components of welfare, and indeed may help policy makers to focus attention on the various facets of poverty. Nonetheless, more often than not, there is a high degree of overlapping: a malnourished person is also poorly educated and without access to health care.

The important decision to make is to choose between income and consumption as the welfare indicator. Consumption is the preferred measure because it is more accurate and useful measure of living standards than income. This preference of consumption over income is based on both theoretical and practical issues[20].

Both consumption and income can be approximations to utility, even though they are different concepts. Consumption measures what individuals have actually acquired, while income, together with assets, measures the potential claims of a person. Second, the time period over which living standards are to be measured is important. If the interest is the long run, as in a lifetime period, both should be the same and the choice does not matter. In the short-run, though, say a year, consumption is likely to be more stable than income. Households are often able to smooth out their consumption, which may reflect access to credit or savings as well as information on future streams of income. Consumption is also less affected by seasonal patterns than income, for example, in agricultural economies, income is more volatile and affected by growing and harvest seasons, hence relying on that indicator might significantly overestimate or underestimate the true living standards. There are practical arguments to take into account. First, consumption is generally an easier concept than income for the respondents to grasp, especially if the latter is from 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. But 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. Often is 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 simply, know more about the household consumption than the level and sources of household income.

B.2 The constitutes of the consumption aggregate

Creating 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 assumes that they do not contribute to people's welfare or that they do not affect the rankings of individuals. Second, market and non-market transactions are to be included, which means that purchase is not the

20. See Deaton and Zaidi (2002)

sole component of the indicator. Third, the expenditure is not consumption. For perishable goods, mostly food, it is usual to assume that all purchases are consumed. But for other goods and services, such as housing or durable goods, corrections have to be made. Lastly, 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 2016 records information on food consumption at the household level for 130 items, organized in 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 food; tea and coffee; mineral water and soft drinks; alcoholic beverages; and tobacco and cigarettes.

The method to collect these data and the reference period vary across urban and rural areas. In the capital and in aimag centers, information is captured through a diary, which is compiled by an enumerator every ten days, three times during a month. In other words, the reference period for household food information is one month. In sum centers and in the countryside, a recall period of last one week is employed. The reasons for this different approach are at least threefold. First, enumerators live in aimag centers, which are frequently at considerable distance from rural areas. It is impractical to visit households every ten days. Second, herder households move often, so sometimes it is difficult to find the dwelling in a second or third visit. Lastly, people in rural areas make bulk purchases and thus, have more problems filling out the diary on a daily basis compared to those living in urban areas.

A few general principles are applied in the construction of this component. First, all possible sources of consumption are included. This means that the food component consists of not only expenditures on market purchases or on meals eaten out but also food that was home-produced or received in gifts. Second, only food that was actually consumed, as opposed to total food purchases or total home-produced food was entered in the consumption aggregate. Third, the value of non purchased food items was estimated and included in the welfare measure. Both pieces of information about the average price and quantity were collected for purchased food only and for food from all other sources, only the quantities were reported. The HSES used average prices to estimate the monetary value of non-purchased food. Most food items are disaggregated enough to be regarded as relatively homogeneous within each category; however, these average prices also reflect differences in the quality of the good. To minimize this effect, and to consider spatial and seasonal differences too, median prices were computed at several levels by household, cluster, aimag, stratum and month. Hence, if a household purchased a food item, the same price would be used to value its self produced and in kind consumption. If the household did not make any purchase but consumed a food item, the average price from the immediate upper level (e.g. PSU that household

belongs) was used to estimate the value of that consumption.
2016 food consumption aggregates the quantity of purchased, in-kind and home-made food items.

Non-food component

As in the case of food, non-food consumption is a simple and straightforward calculation. Again, all possible sources of consumption must be included and normalized to a common reference period. Data on an extensive range of non-food items are available, 371 items arranged 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 to try to calculate unit values. With the exception of durable goods, housing and energy, which will be dealt later, this subsection covers the consumption of all the other non food items.
Practical difficulties arise often for two reasons: the choice of items to include and the selection of the recall period. Regarding the first issue, the rule of thumb is that only items that contribute to the consumption are to be included. For instance, clothing, footwear, beauty articles and recreation are included. Others such as taxes are commonly excluded because they are not linked to higher levels of consumption; households paying more taxes are not likely to receive more public services. Capital transactions like purchases of financial assets, debt and interest payments should also be excluded.
The case for one-off lump expenditures like marriages, births and funerals is more difficult. Given their sporadic nature, the ideal approach would be to spread these expenses over the years and thus smooth them out; otherwise the true level of welfare of the household will probably be overestimated. Lack of information prevents us from doing that, so they are omitted from the estimate. Finally, remittances given 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 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 a one's life. Say that we compare two individuals that will pay the same 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 out would be to smooth these expenses over the life period. Third, we must consider the coverage in the supply of public education. If all populations can benefit from free or heavily subsidized education as it happens in Mongolia and the decision of studying in private schools is driven by quality factors, differences in expenditures can be associated with differences in welfare

levels and thus, the case for their inclusion is stronger. Standard practice was followed and educational expenses were included in the consumption aggregate. Excluding them would make no distinction between two households with children in school age, but only one being able to send them to school.
Health expenses share some of the features of education. Expenditures on preventive health care could be considered as investments. 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, differences in expenditures do not correspond to differences in welfare. But there are other factors to be taken 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. Insured households may report small expenditures when some member has fallen sick, while uninsured ones larger amounts. It was decided to include health expenses because, as in the case of education, their exclusion would imply making no distinction between two households, both facing the same health problems, but only one is capable of paying.
The second difficulty regarding non-food consumption is related with 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 monthly recall period, exceptions being for instance, toiletry, beauty articles and payment of utilities, hence generally recall periods are the last quarter or the last year.
The HSES collects information with two reference periods: last month and last year. The decision on which to choose can have significant implications for the consumption aggregate. The use of last month data only 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. Whereas this could provide an appropriate estimation of the average consumption in the last month, 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 year as the reference period will certainly overcome the previous limitation because the last 12 months is a more reasonable recall period for non-food expenses. 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. A third option that can be seen as a compromise between these two choices is to combine the information from both recall periods. In this case, 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 year will be considered.

Durable goods

Ownership of durable goods could be an important determinant of the welfare of the households. Given that these goods last typically for many years, the expenditure on purchases is not the proper indicator to consider. The right measure to estimate, 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 good and determined by depreciation rates. A usual procedure involves calculating depreciation rates for each type of good 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[21].

The estimation of this component involved three steps. First, selection of durable goods for consumption aggregate is performed. The HSES supplies data on 44 durable goods, ranging from home appliances to furniture. However, one third of them were excluded due to their being used for household businesses or fell under jewelry, dwelling or residual categories. Second, to calculate implicit depreciation rates a linear regression for each of the selected goods was run with the current unit value as the dependent variable and the age of the durables. This technique provides more robust estimates for the depreciation rates. For example, the newer the better is, the higher its utility is, hence less depreciation rate. Finally, the stream of consumption was computed by multiplying the estimated value of the good a year ago by its depreciation rate, and aggregating these amounts by households.

Housing

Housing conditions are considered 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 utilities derived by the household from its living quarter. For households that rent, the utility of the rented accommodation can be expressed as the actual rentals the households pay.

In Mongolia, the value of housing for households who own their dwelling cannot be determined based upon on the above information because very few households reported renting their dwellings although it is increasingly common these days and rentals are too high. However, HSES asked households for estimates of how much they would rent their living quarter for and how much their dwelling could be sold. Implicit rental values can in principle be used in the consumption aggregate whenever actual rents are not reported. But they are hypothetical and the estimates may not always be credible. An additional complication is that almost half of the population lives in gers, for which establishing a rental value appears to be even more difficult. Hedonic housing regressions were run with the imputed value of the dwelling as the dependent variable. The set of independent variables included characteristics of the dwelling such as the main material for floor, walls and roof, number of rooms, access to water, electricity, heating, location, etc. This

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

exercise was conducted separately for gers, houses and apartments. Results show that the estimated sale price of the dwelling has a strong correlation with its condition characteristics and this may be intuitively explained by the fact that even though households do not lease dwellings, since they either bought or built them, they tend report more accurate value of the dwelling rather than a hypothetical rent. However, the use of property values requires an additional assumption to arrive to an estimation of the utilities derived from housing. That is either the depreciation rate or the remaining lifespan of the dwelling. It was assumed that houses and apartments have a lifespan of 33 years and gers 17 years. Therefore for the consumption aggregate, the imputed rents which were derived using property values were used as estimates for the flow of services from housing, except when actual rents were available.

Fuel and Energy

The final non-food component that deserves special attention was energy that is expenditures on heating and electricity. Mongolia is a country that endures extreme weather conditions with winter temperatures up to -40 degrees Celsius and summer temperatures up to +30 degrees Celsius. While summer may pose fewer inconveniences, winter is indeed a serious matter. Winters are long and last on average, six months and usually with below zero temperatures. For instance, average temperatures in January and February in the capital are minus 25C. This means that heating and fuel is regarded 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 collects information only on purchases and self-reported valuations of fuels and services obtained for free. In principle, this should be enough to capture energy consumption. However, that may not be the case. When there is no information available regarding the quantity of fuel items that households collected and prepared themselves and that are obtained free of charge, it is impossible to assign monetary values to the consumption. But if the household uses fuel such wood, coal and/or dung for heating and lighting, households tend to overwhelmingly report purchases only and not the fuel fetched for free. Given that no data on quantities of collected fuel are available, it is not possible to impute a value to that consumption. This is likely to lead to an underestimation of the energy consumption of households and this distortion is expected to be higher in rural areas, where households largely rely on collected fuels.

For the valuation of collected fuels, the price of the fuels in the corresponding unit of the household was calculated using a median price corresponding to one fuel per household. Given collected fuel are not available or did not purchase in particular primary unit, in such cases, we used a median price belongs to the higher level (sum, aimag, region, and settlement strata). Thus, the quantity of collected fuel by the household is multiplied by the median price of the respective fuel and added to the energy consumption.

B.3 Price adjustments

Mongolia shows remarkable seasonal differences for food prices. For instance, food prices are usually higher during the spring compared to all the other seasons. At the same time, there are also regional price differences. Prices in Ulaanbaatar are particularly higher than in the rest of the country. Therefore, in order to accurately measure living standards, expenditure values need to be corrected for such differences using price indices. Since it varies with price levels and consumption aggregate, a price index consists of two components: prices and consumption shares, the share of the good in the total expenditure that corresponds to a given price period. The household survey collects information on the share of a given good in the total expenditure for all consumption items except for food. For food items, the survey only collects information on average prices paid by a household. A Paasche price index at the cluster level was constructed combining information from the HSES and the national consumer price index. A cluster is comprised of 10 households in urban areas and 8 households in rural areas. Households within the same cluster are likely to face similar prices and have similar consumption patterns. The Paasche price index for the primary sampling unit 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_i - 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. The HSES provided both pieces of information. In the case of non-food, 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 considers temporal adjustment for both food and non-food items, but spatial adjustment was made for food only.

The average values and total price indices for food items are shown by stratum and by the month of interview in Table B.1. Indices confirm that the cost of living in Ulaanbaatar is higher than in any part of the country and seasonal pattern of prices can be seen. In other words, indices increases with quarter 1 and quarter 2 and reduces with other quarters.

B.4 Household composition adjustment

The final step in constructing a welfare indicator involves transforming measures of living standards that are measured at the household level to per capita level. Ultimate concern is to make comparisons across individuals and not across households Consumption data are collected typically at the household level (usual exceptions are health and education expenses), so imputation of an individual welfare measure is generally performed by dividing the total household consumption by the number of people in the household, and assigning that value to each household member. A common practice when doing this is to assume that consumption is equally shared by household members.

Table B.1 Cluster Paasche index by stratum and month of interview

	Food Paasche Index				Total Paasche Index			
	Ulaanbaatar	Aimag centers	Rural	National	Ulaanbaatar	Aimag centers	Rural	National
In 2016								
January	1.00	0.96	0.92	0.97	1.01	0.99	0.97	0.99
February	1.05	0.99	0.94	1.00	1.02	1.00	0.97	1.00
March	1.07	1.02	0.93	1.01	1.02	1.00	0.97	1.00
April	1.10	1.07	1.02	1.07	1.03	1.02	1.01	1.02
May	1.12	1.08	1.03	1.08	1.03	1.02	1.01	1.02
June	1.11	1.04	1.03	1.07	1.03	1.01	1.01	1.02
July	1.07	1.02	0.97	1.03	1.02	1.00	0.98	1.00
August	1.02	0.98	0.90	0.97	1.01	0.99	0.95	0.99
September	0.98	0.96	0.95	0.97	1.00	0.99	0.98	0.99
October	0.97	0.95	0.92	0.95	1.00	0.99	0.97	0.99
November	0.97	0.94	0.87	0.93	1.01	0.99	0.95	0.98
December	1.01	0.98	0.91	0.97	1.02	1.01	0.97	1.00
Average	1.04	1.00	0.95	1.00	1.02	1.00	0.98	1.00

Source: HSES 2016.

Two types of adjustments are typically made in consumption aggregate and size. The first relates to demographic composition. Household members have different needs based mainly on their age and gender, although other characteristics can also be considered. Equivalence scales are the factors that reflect those differences and are used to convert all household members into "equivalent adults." For instance, children are thought to need a fraction of what adults require, thus if a comparison is made between two households with the same total consumption and equal number of members, but one of them has children while the other is comprised entirely by adults, it would be expected that the former will have a higher individual welfare than the latter.

Unfortunately there is no single methodology to calculate these conversion scales. Some conversions are based on nutritional needs assuming a child may need only 50% of the food requirements of an adult. But is not clear why the same scale as adults is used for non-food items. It may very well be the case that the same child requires more in education and clothing expenses. Others are based on empirical studies of household consumption behavior, although with more analytical grounds, they do not command complete support either.

The second adjustment focuses in the economies of scale in consumption within the household. The motivation for this is the fact that some of the goods and services consumed by the household have characteristics of "public or common goods.'' A good is said to be public when its consumption by a member of the household does not necessarily prevent another member from consuming it too. Examples of these goods could be housing and durable goods. For example, one member's watching television does not preclude another from watching it too.

Larger households may spend less to be as well-off as smaller ones. Hence, the bigger the share of public goods in total consumption is, the larger the scope for economies of scale is. In contrast, private goods cannot be shared among members, once they have been consumed by one member, no others can. Food is the classic example of a private good. It is often pointed out that in poor economies, food represents a sizeable share of the household budget and therefore in those cases there is little room for economies of scale.
Both adjustments can be implemented using the following approach:

$$AE = (A + \alpha K)^{\theta}$$

Where AE is the number of adult equivalents of the household, A - is the number of adults, K- is the number of children, α is the parameter that measures the relative cost of a child compared to an adult and θ represents the extent of the economies of scale[22]. Both parameters can take values between zero and one. It is been reported that in developing countries, children are relatively cheaper than adults, perhaps with values of α as low as 0.3, while in developed countries values are closer to one[23].
At the same time, in poorer economies, food is often the most important good in the household consumption, and given that is a private good, the budget share of public goods is limited and so is the scope for economies of scale, perhaps with θ being close to 1, whereas in richer countries around 0.75.
It was mentioned above that standard practice is to use a per capita adjustment for household composition and that is also followed here. This is a special case of the above formula, it assumes α and θ are set equal to one, so children consume as much as adults and there is no room for economies of scale. In other words, all members within the household have equal shares in the total consumption and the costs increase in proportion to the number of people in the household. In general, per capita measures will underestimate the welfare of households with children and larger households compared to households with no kids or small households. It is, therefore, important to conduct sensitivity analysis to see how robust the poverty measures and rankings are to different assumptions regarding child costs and economies of scale.

B.5 Poverty line

The poverty line can be defined as the monetary cost to a given person, 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. But setting poverty lines could be a very controversial issue because people disagree on what " subsistence minimum" is. The poverty line is crucial to monitoring poverty and policy making decisions.
The poverty line will be absolute because it fixes a given welfare level, or standard of living, over the survey location strata. This guarantees that comparisons across individuals will be consistent, e.g. two persons with the same welfare level will be treated the same way regardless of the location where they live. Second, the reference utility level is anchored to certain attainments, generally nutritional ones, for instance, obtaining the necessary calories to have a healthy and active life. Finally, the poverty line

22. Since the elasticity of adult equivalents with respect to "effective size" ($A+\alpha K$) is θ, the measure of economies of scale is $1-\theta$. These parameters range between 0 and 1.
23. Deaton and Zaidi (2002)

will be set as the minimum cost of achieving that requirement.

In collaboration of the World Bank, to compare poverty changes on over time, we have been using an approach that indexing by poverty line for base year 2010 in the estimation of the poverty measures, allows us to compare poverty incidence in over time.

This technique shows that how a person's livelihood changing depends on the growth of the price of consumer goods and services, if there is no change in the basket of goods or services consumed by the particular individual.

The Cost of Basic Needs approach was employed to estimate the base poverty line 2010 that used poverty estimates 2016, calculates the cost of obtaining a consumption bundle believed to be adequate for basic consumption needs. If a person cannot afford the cost of the basket, this person will be considered to be poor. The poverty line comprises two main components: food and non-food.

Food component

The first step in setting this component is to determine the nutritional requirements deemed to be appropriate for being healthy and able to participate in society. Clearly, it is rather difficult to arrive to a consensus on what could be considered as a healthy and active life, and hence to assign caloric requirements. The common practice is to establish 2,100 calories per person per day as the reference for energy intake. Second, a food bundle must be chosen. In theory, infinite food bundles can provide that amount of calories. One way out of this is to take into consideration the existing food consumption patterns of a reference group in the country. It was decided to use the bottom 40% of the population, ranked in terms of real per capita consumption, and obtain its average con-summed food bundle. It is better to try to capture the consumption pattern of the population located in the low end of the welfare distribution because it will probably reflect better the preferences of the poor. Hence the reference group can be seen as a first guess for the poverty incidence. Third, caloric conversion factors were used to transform the food bundle into calories. The main source for these factors was Public Health Institute of the Ministry of Health of Mongolia. Tobacco, liquors and meals eaten outside the household were excluded from this calculation: Tobacco and liquors are not necessities. It is very difficult to approximate caloric intakes meals outside the household. Fourth, median unit values were derived for each unit of calorie in order to price the food bundle. Unit values were computed using only transactions from the reference group. Again, this will capture more accurately the prices faced by the poor. Fifth, the average caloric intake of the food basket was estimated, so the value of the food bundle could be scaled proportionately to achieve 2,100 calories per person per day. For instance, the average daily caloric intake of the bottom 40% of the population in Mongolia was around 1391 calories per person and the daily value of the food bundle was 1634 tugrug per person. Hence the value of the daily poverty line is 2467 tugrug (2467 = 1634 tugrug x 2,100 calorie /1391 calorie) per person. Table B.2 shows the caloric contribution of the main food categories as well as their respective share in the cost of the food poverty line[24].

Table B.2. Food basket per person per day by main food groups

	Caloric intake		Value	
	Calories	%	Tugrug	%
Total	2 100	100	2 467	100
Flour and flour products	1 286	61	627	25
Meat and meat products	241	11	985	40
Fish and seafood	0	0	1	0
Milk, cheese and eggs	141	7	340	14
Oils and fat	235	11	125	5
Fruits	4	0	23	1
Vegetables	77	4	152	6
Sugar and jam	93	4	93	4
Other food	3	0	22	1
Tea and coffee	8	0	43	2
Mineral water and soft drinks	5	0	22	1
Alcoholic beverages	6	0	33	1

Source: HSES 2016.

Non-food component

There is considerable disagreement on what sort of items should be included in the non-food share of the poverty line. However, it is possible to link this component with the normative judgment used when choosing the food component. Being healthy and able to participate in society requires spending on shelter, clothing, health care, recreation, etc.

The initial step is to choose a reference group that will represent the poor and calculate how much they spend on non-food goods and services. Two possible non-food poverty lines can be constructed accordance with the World Bank research. On the one hand, the upper nonfood poverty line is the average non-food consumption of the population whose food consumption is similar to the food poverty line.

The rationale behind this upper reference group is that if an individual spends on what food was considered appropriate for being healthy and maintaining certain activity levels, it will be assumed that this person has also acquired the minimum non-food goods and services to support this lifestyle. On the other hand, the lower non-food poverty line is the average non-food consumption of the population whose total consumption is similar to the food poverty line. The justification for the lower reference group is that if an individual spends on what food was considered appropriate for being healthy, it will be assumed that this person has also acquired the minimum non-food goods and services to support this lifestyle. If these people have substituted basic food needs in order to satisfy some nonfood needs, that amount can be interpreted as the minimum necessary allowance for non-food spending. An equivalent way of estimating the non-food poverty lines is using the food shares of the upper and lower reference groups rather than their average non-food consumption.

24. A more detailed table by food item is provided at the end of this annex.

Two different procedures to calculate the food share can be proposed. One relies on econometric techniques to estimate the Engel curve, i.e. the relationship between food spending and total expenditures. Another is to use a simple, non parametric calculation as suggested in Ravallion (1998). The advantages of the latter are that no assumptions are made on the functional form of the Engel curve and that weights decline linearly around the food poverty line, i.e. the closer the household to the food poverty line is, the higher its weight is. This procedure was used to determine the non-food components of the upper and lower poverty lines.

In the case of the upper poverty line, the procedure starts by estimating the average food share of those households whose food expenditures lie within plus and minus 1 percent of the food poverty line. The same exercise is then repeated for households lying plus and minus 2 percent, percent, and up to 10 percent.

Second, these ten mean food shares are averaged and that will be the final food share of the upper reference group. Finally, the upper poverty line can be easily estimated by dividing the food poverty line by this food share[25].

Calculating this poverty line, we used a simple, non parametric calculation as suggested in Ravallion based on data on population who have total consumption is close to the food poverty line.

The poverty line used in this report has a food share that is the average between the food share of the lower and upper poverty lines and can be seen as a compromise between the two.

Table B.3 displays poverty line 2016 that indexed the food and non-food components of these three poverty lines by the respective consumer price index. Even though this moderate poverty line is applied throughout the report, estimates with the lower and upper poverty lines are presented in Appendix C.

Table B.3. Poverty lines per person per month

	Lower poverty line		Moderate poverty line		Upper poverty line	
	Tugrug	%	Tugrug	%	Tugrug	%
Food	75 034	67	75 034	51	75 034	39
Non-food	37 244	33	71 111	49	116 463	61
Total	112 278	100	146 145	100	191 497	100

Source: HSES 2016.

25. Say FZ is the food poverty line. FSu is the food share from the upper reference group and FSI is the food share from the lower reference group. The upper poverty line will be estimated as FZ/FSu, while the lower poverty line as FZ*(2-FSI).

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, and 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 takes 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, the higher the gap, this measure overcomes the first limitation of the headcount. Finally, the severity of poverty (α=2) is sensitive to the distribution of consumption among the poor, a transfer from a poor person to somebody less poor may leave unaffected the headcount or the poverty gap but will increase this measure.

Finally, along the report all poverty measures are shown with their respective standard errors. Since these estimations are based on surveys and not on census data, standard errors must reflect the elements of the sample design, i.e. stratification, clustering and sampling weights[26]. Ignoring them will risk, when carrying out poverty comparisons, mixing up true population differences with differences in sampling procedures. Appendix D shows confidence intervals for the poverty measures and the effects of sampling method on them.

26. See Howes and Lanjouw (1997) for detailed explanation.

Table B.4. Food bundle per person per day

	Calories per unit (kcals)	Quantity required	Calories provided	Price per unit (tugrug)	Value (tugrug)
Total			2 100		2 467
Flour and flour products					
Bread (1 piece = 670 gr) - piece	1 589	0.128	204	977	125
Rice - kg	3 447	0.053	183	2 521	134
Flour, highest grade - kg	3 617	0.009	31	1 205	10
Flour, grade 1 - kg	3 250	0.199	646	1 058	210
Flour, grade 2 - kg	3 474	0.007	25	910	7
Other flour - kg	3 742	0.000	1	2 403	1
Noodle, domestic - kg	3 505	0.007	24	2 331	16
Noodle, import - kg	3 623	0.003	12	2 468	8
Bakery - kg	4 050	0.036	145	2 803	100
Biscuit - kg	2 508	0.001	3	4 266	6
Cake - kg	3 096	0.000	1	9 527	5
Millet - kg	3 513	0.002	6	1 812	3
Other rice (farina) - kg	3 455	0.001	3	1 891	2
Meat and meat products					
Mutton - kg	1 083	0.087	94	5 010	437
Beef - kg	1 531	0.028	43	5 720	162
Goat meat - kg	1 057	0.040	42	3 937	157
Horse meat - kg	911	0.015	14	4 286	64
Camel meat - kg	1 025	0.001	1	4 441	6
Dried meat - kg	4 292	0.004	19	22 515	98
Chicken - kg	1 908	0.000	1	5 951	2
Pork - kg	3 554	0.000	0	8 195	1
Bacon - kg	4 580	0.000	0	7 484	0
Game - kg	1 788	0.000	1	3 116	1
other poultry - kg	1 908	0.000	0	1 568	0
Animal interior - kg	1 057	0.016	17	2 361	37
Sausage (big), salami - kg	2 666	0.003	8	6 114	17
Sausage (small) - kg	1 680	0.000	0	6 066	0
Canned meat - kg	2 250	0.000	1	5 252	3
Fish and seafood					
Fish - kg	821	0.000	0	5 223	1
Dried, smoked, salted fish - kg	2 600	0.000	0	11 128	0
Canned fish - kg	1 965	0.000	0	6 155	0
Milk, cheese and eggs					
Milk - lt	671	0.129	87	1 759	227
Youghurt - lt	564	0.022	12	1 839	40
Eggs - Piece	78	0.033	3	332	11

Table B.4. continuation

	Calories per unit (kcals)	Quantity required	Calories provided	Price per unit (tugrug)	Value (tugrug)
Dried curds - kg	4 908	0.004	19	7 307	28
Horse milk - lt	487	0.003	1	3 006	9
Curds - kg	2 566	0.003	8	2 725	9
Cheese, national - kg	4 733	0.000	2	6 760	2
Cheese - kg	3 040	0.000	0	14 969	0
Eezgii (a kind of traditional diary products) - kg	4 010	0.000	2	4 401	2
Dried and coffee milk - kg	3 293	0.001	3	7 556	6
Condensed milk - lt	4 850	0.001	4	4 764	4
Sour cream - kg	2 495	0.000	1	6 486	3
OILS AND FAT					
Butter - kg	5 323	0.006	34	4 964	31
Margarine - kg	7 448	0.000	0	3 565	0
Vegetable oil - lt	8 991	0.013	116	3 885	50
Edible animal fats - kg	8 991	0.007	66	2 521	18
Cream - kg	3 835	0.003	10	5 756	15
Melted butter - kg	8 415	0.001	10	8 409	10
Olive oil - lt	8 991	0.000	0	19 012	0
FRUITS					
Apple - kg	468	0.005	2	2 668	14
Mandarin - kg	376	0.001	0	3 094	2
Raisin - kg	716	0.000	0	4 525	1
Wild fruit - kg	398	0.001	0	4 791	6
Dried fruit - kg	2 721	0.000	1	4 538	1
Wild nuts - kg	5 980	0.000	0	3 073	0
VEGETABLES					
Potato - kg	877	0.072	63	1 136	82
Cabbage - kg	140	0.012	2	1 345	16
Carrot - kg	224	0.011	3	1 239	14
Turnip - kg	208	0.003	1	1 245	4
Onion - kg	336	0.014	5	1 541	22
Garlic - gr	1	0.386	0	6	2
Tomato - kg	260	0.000	0	3 863	1
Cucumber - kg	142	0.001	0	3 713	3
Jelly sticks - kg	3 272	0.001	3	2 548	2
Canned cucumber - kg	164	0.000	0	4 113	1
Canned vegetable salad - kg	1 120	0.001	1	4 514	2
Pepper - kg	220	0.001	0	3 783	2

Table B.4. continuation

	Calories per unit (kcals)	Quantity required	Calories provided	Price per unit (tugrug)	Value (tugrug)
SUGAR AND JAM					
Sugar - kg	3 992	0.016	64	2 703	43
Lump sugar - kg	3 996	0.000	2	3 550	1
Sugar substitution - gr	4	0.000	0	17	0
Candy - kg	3 697	0.004	14	5 383	21
Sweet - kg	5 200	0.002	8	7 104	11
Chocolate - gr	5	0.368	2	17	6
Honey - gr	3	0.024	0	11	0
Compotes - gr	1	0.126	0	7	1
Jam - gr	3	0.610	2	7	4
Icecream - gr	2	0.875	2	6	5
Chewing gum - Piece	4	0.009	0	79	1
OTHER FOOD					
Salt - gr	0	8.872	0	1	6
Vinegar - gr	1	0.039	0	7	0
Ketchup - gr	1	0.459	0	3	1
Mayonnaise - kg	6 258	0.000	2	6 376	2
Yeast - gr	2	0.203	0	16	3
Spice - gr	1	0.561	0	15	8
Babyfood - kg	2 940	0.000	0	2 974	0
TEA AND COFFEE					
Green tea - gr	1	7.206	8	4	32
Tea - gr	1	0.455	1	21	10
Coffee - gr	1	0.081	0	16	1
Cocoa - gr	3	0.003	0	29	0
MINERAL WATER AND SOFT DRINKS					
Beverage - lt	342	0.008	3	1 550	13
Juice - lt	488	0.004	2	2 367	8
Pure water, bottled - lt	0	0.000	0	788	0
ALCOHOLIC BEVERAGES					
Vodka, domestic - lt	2 750	0.002	6	14 070	29
Beer, domestic - lt	240	0.000	0	3 553	1
Vodka, imported - lt	2 750	0.000	0	13 870	0
Beer, imported - lt	240	0.000	0	3 876	0
Wine - lt	700	0.000	0	11 346	1

Source: HSES 2016.

ANNEX C.

LOWER AND UPPER POVERTY ESTIMATES

Table C.1. Poverty lines per person per month, 2014, 2016

	2014		2016	
	Tugrug	%	Tugrug	%
Lower				
Food	79 855	70	75 034	67
Non-food	34 984	30	37 244	33
Total	114 839	100	112 278	100
Moderate				
Food	79 855	54	75 034	51
Non-food	66 795	46	71 111	49
Total	146 650	100	146 145	100
Upper				
Food	79 855	42	75 034	39
Non-food	109 394	58	116 463	61
Total	189 249	100	191 497	100

Note: Poverty line estimates based on 2010 index
Sources: HSES 2014, 2016.

Table C.2. Lower poverty estimates, 2014, 2016

	2014				2016			
	Poverty			Poor (%)	Poverty			Poor (%)
	Headcount	Gap	Severity		Headcount	Gap	Severity	
National	15.6	3.6	1.2	100.0	15.2	3.4	1.1	100.0
Urban	14.2	3.5	1.2	57.8	14.0	3.2	1.1	62.2
Rural	18.1	3.8	1.2	42.2	17.9	3.6	1.1	37.8
Ulaanbaatar	12.6	3.2	1.2	34.7	12.3	2.8	1.0	36.5
Aimag centers	17.3	4.0	1.4	23.2	17.3	4.0	1.3	25.8
Sum centers	17.0	3.8	1.3	18.8	17.5	3.6	1.1	20.1
Countryside	19.1	3.8	1.2	23.4	18.4	3.6	1.1	17.7
Western	17.3	3.3	1.0	16.7	20.3	4.3	1.4	18.1
Khangai	17.5	3.4	1.0	21.3	16.8	3.3	1.0	20.3
Central	15.2	3.9	1.4	15.4	13.1	3.1	1.1	13.4
Eastern	25.2	6.1	2.2	11.9	24.7	5.5	1.8	11.7

Sources: HSES 2014, 2016.

Table C.3. Upper poverty estimates, 2014, 2016

	2014				2016			
	Poverty			Poor (%)	Poverty			Poor (%)
	Headcount	Gap	Severity		Headcount	Gap	Severity	
National	54.3	17.9	7.9	100.0	48.5	15.3	6.5	100.0
Urban	48.4	15.9	7.2	56.8	45.1	14.1	6.1	63.1
Rural	64.5	21.3	9.3	43.2	55.6	17.6	7.4	36.9
Ulaanbaatar	44.6	14.4	6.5	35.1	42.2	12.9	5.5	39.4
Aimag centers	56.3	18.9	8.6	21.7	50.9	16.6	7.3	23.8
Sum centers	60.7	20.2	8.9	19.3	51.6	16.5	7.1	18.6
Countryside	67.9	22.3	9.6	23.9	60.5	18.9	7.8	18.3
Western	64.0	20.7	8.8	17.8	58.6	18.8	8.1	16.4
Khangai	63.5	20.5	8.8	22.2	54.4	16.9	7.0	20.7
Central	54.9	18.3	8.3	15.9	44.0	13.7	5.9	14.1
Eastern	65.6	24.3	11.6	8.9	63.5	22.3	10.1	9.4

Sources: HSES 2014, 2016.

ANNEX D.

ADDITIONAL STATISTICAL TABLES

Table D.1. Per capita monthly consumption by poverty status and analytical domain

	Total		Ulaanbaatar		Aimag centers		Sum centers		Countryside	
	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor
Consumption, tugrug										
Food	88 036	45 702	88 304	42 281	79 886	44 067	88 842	47 988	99 835	52 383
Alcohol and tobacco	3 643	1 490	2 413	899	2 394	971	6 769	2 493	6 287	2 330
Education	18 406	3 974	20 546	4 321	17 318	4 216	17 874	3 504	12 934	3 437
Health	15 215	2 278	15 069	2 714	16 814	2 180	15 671	2 155	12 452	1 653
Durable goods 1/	9 815	2 171	11 517	2 109	8 813	2 030	8 555	2 189	6 788	2 457
Rent 2/	25 578	4 863	38 831	6 892	20 899	5 208	10 266	3 432	3 900	1 788
Heating 3/	11 999	7 198	11 606	7 963	12 452	6 790	13 551	6 850	10 677	6 541
Utilities 4/	9 112	4 061	11 403	5 440	9 948	4 764	7 329	3 812	1 442	627
Clothing	42 986	16 137	37 724	12 555	48 885	16 983	47 863	17 944	46 296	20 419
Transportation and communication	38 043	9 697	46 049	12 044	32 055	8 126	30 001	7 565	28 743	9 172
Others 5/	27 469	10 395	28 983	10 938	29 266	10 441	25 700	9 801	21 059	9 847
Total	290 304	107 965	312 445	108 156	278 731	105 776	272 422	107 733	250 413	110 654
Shares										
Food	30.3	42.3	28.3	39.1	28.7	41.7	32.6	44.5	39.9	47.3
Alcohol and tobacco	1.3	1.4	0.8	0.8	0.9	0.9	2.5	2.3	2.5	2.1
Education	6.3	3.7	6.6	4.0	6.2	4.0	6.6	3.3	5.2	3.1
Health	5.2	2.1	4.8	2.5	6.0	2.1	5.8	2.0	5.0	1.5
Durable goods 1/	3.4	2.0	3.7	2.0	3.2	1.9	3.1	2.0	2.7	2.2
Rent 2/	8.8	4.5	12.4	6.4	7.5	4.9	3.8	3.2	1.6	1.6
Heating 3/	4.1	6.7	3.7	7.4	4.5	6.4	5.0	6.4	4.3	5.9
Utilities 4/	3.1	3.8	3.6	5.0	3.6	4.5	2.7	3.5	0.6	0.6
Clothing	14.8	14.9	12.1	11.6	17.5	16.1	17.6	16.7	18.5	18.5
Transportation and communication	13.1	9.0	14.7	11.1	11.5	7.7	11.0	7.0	11.5	8.3
Others 5/	9.5	9.6	9.3	10.1	10.5	9.9	9.4	9.1	8.4	8.9
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 2016.

Table D.2. Per capita 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	88 036	45 702	78 283	46 374	87 693	49 665	96 176	46 875	84 916	47 472	88 304	42 281
Alcohol and tobacco	3 643	1 490	4 053	1 617	4 065	1 743	6 049	2 279	5 055	1 848	2 413	899
Education	18 406	3 974	22 842	3 713	14 204	3 509	14 183	4 136	15 484	3 842	20 546	4 321
Health	15 215	2 278	16 133	2 845	14 049	1 915	16 810	1 543	13 526	1 534	15 069	2 714
Durable goods 1/	9 815	2 171	6 954	2 310	8 101	2 207	9 305	1 966	8 281	2 369	11 517	2 109
Rent 2/	25 578	4 863	7 824	2 268	13 245	3 175	16 920	4 778	14 057	5 117	38 831	6 892
Heating 3/	11 999	7 198	13 924	7 703	12 238	6 556	11 748	6 549	11 157	5 821	11 606	7 963
Utilities 4/	9 112	4 061	5 663	2 593	5 872	2 563	9 130	4 557	7 039	3 733	11 403	5 440
Clothing	42 986	16 137	43 662	18 108	53 611	20 833	48 365	16 262	38 446	16 417	37 724	12 555
Transportation and communication	38 043	9 697	27 225	8 573	28 252	8 266	36 269	8 680	28 660	7 269	46 049	12 044
Others 5/	27 469	10 395	23 805	10 508	24 840	9 851	30 578	10 595	21 847	9 102	28 983	10 938
Total	290 304	107 965	250 368	106 611	266 170	110 282	295 532	108 222	248 466	104 524	312 445	108 156
Shares												
Food	30.3	42.3	31.3	43.5	32.9	45.0	32.5	43.3	34.2	45.4	28.3	39.1
Alcohol and tobacco	1.3	1.4	1.6	1.5	1.5	1.6	2.0	2.1	2.0	1.8	0.8	0.8
Education	6.3	3.7	9.1	3.5	5.3	3.2	4.8	3.8	6.2	3.7	6.6	4.0
Health	5.2	2.1	6.4	2.7	5.3	1.7	5.7	1.4	5.4	1.5	4.8	2.5
Durable goods 1/	3.4	2.0	2.8	2.2	3.0	2.0	3.1	1.8	3.3	2.3	3.7	2.0
Rent 2/	8.8	4.5	3.1	2.1	5.0	2.9	5.7	4.4	5.7	4.9	12.4	6.4
Heating 3/	4.1	6.7	5.6	7.2	4.6	5.9	4.0	6.1	4.5	5.6	3.7	7.4
Utilities 4/	3.1	3.8	2.3	2.4	2.2	2.3	3.1	4.2	2.8	3.6	3.6	5.0
Clothing	14.8	14.9	17.4	17.0	20.1	18.9	16.4	15.0	15.5	15.7	12.1	11.6
Transportation and communication	13.1	9.0	10.9	8.0	10.6	7.5	12.3	8.0	11.5	7.0	14.7	11.1
Others 5/	9.5	9.6	9.5	9.9	9.3	8.9	10.3	9.8	8.8	8.7	9.3	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	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 2016.

Table D.3. Per capita monthly consumption by decile

	National	Urban	Rural	Analytical domains				Regions			
				Ulaanbaatar	Aimag centers	Sum centers	Countryside	Western	Khangai	Central	Eastern
I	78 405	78 575	78 406	81 373	74 356	77 668	79 332	74 882	80 696	79 284	70 648
II	111 258	114 629	105 789	119 876	106 159	106 780	104 730	101 540	107 878	116 820	94 045
III	135 688	140 594	127 431	146 267	129 881	130 581	124 403	122 917	130 641	142 272	111 858
IV	157 850	164 979	146 562	171 838	152 980	151 607	141 892	144 558	148 308	167 413	127 218
V	182 519	191 886	166 214	200 413	176 641	174 560	158 472	162 775	168 429	194 366	148 487
VI	210 712	221 172	190 347	230 948	203 723	201 372	179 078	183 049	193 976	221 977	171 621
VII	242 832	255 425	218 282	266 387	233 670	230 204	203 914	210 366	223 348	255 561	195 835
VIII	285 165	299 705	254 833	313 846	273 288	269 508	237 329	241 746	261 317	298 240	225 954
IX	353 155	374 949	310 290	394 500	336 363	327 922	288 627	294 159	318 292	365 178	275 107
X	605 365	649 524	494 800	693 420	550 423	522 493	456 276	450 426	506 290	612 846	432 060
Нийт	236 288	249 102	209 260	261 826	223 689	219 234	197 322	198 561	213 864	245 333	185 222

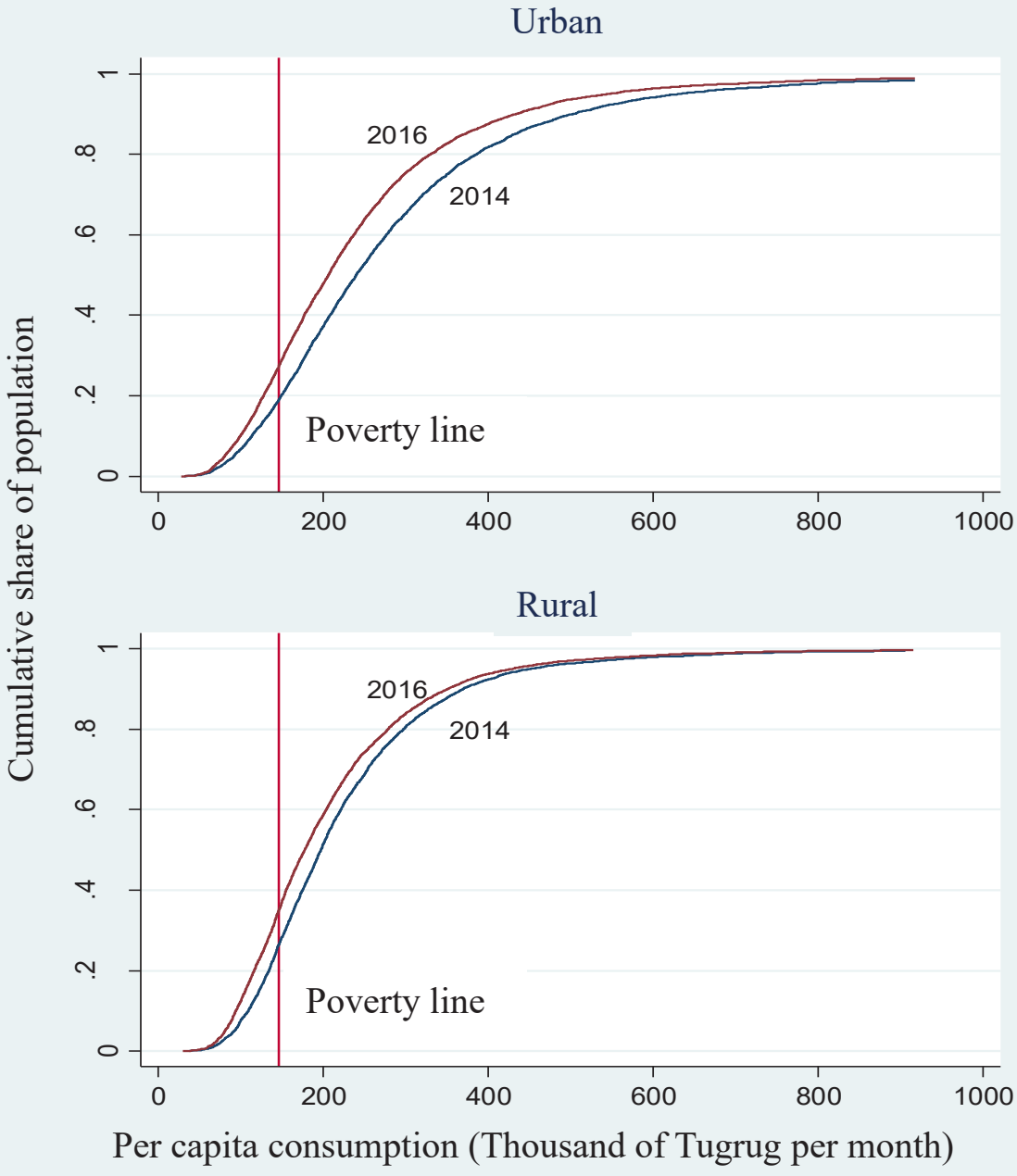
Note: Deciles were constructed separately for each domain. They comprise 10% of the population of the respective region.
Sources: HSES 2016.

Tables D.4. Share of total consumption by decile

	National	Urban	Rural	Analytical domains				Regions			
				Ulaanbaatar	Aimag centers	Sum centers	Countryside	Western	Khangai	Central	Eastern
I	3.3	3.2	3.8	3.1	3.3	3.5	4.0	3.8	3.8	3.2	3.8
II	4.7	4.6	5.1	4.6	4.7	4.9	5.3	5.1	5.0	4.8	5.1
III	5.7	5.6	6.1	5.6	5.8	6.0	6.3	6.2	6.1	5.8	6.0
IV	6.7	6.6	7.0	6.6	6.9	6.9	7.2	7.3	6.9	6.8	6.9
V	7.7	7.7	7.9	7.6	7.9	7.9	8.0	8.2	7.9	7.9	8.0
VI	8.9	8.9	9.1	8.8	9.1	9.2	9.1	9.2	9.1	9.1	9.3
VII	10.3	10.3	10.4	10.2	10.5	10.5	10.4	10.6	10.4	10.4	10.6
VIII	12.1	12.0	12.2	12.0	12.2	12.3	12.0	12.2	12.2	12.2	12.2
IX	14.9	15.1	14.8	15.0	15.0	14.9	14.6	14.8	14.9	14.9	14.8
X	25.6	26.1	23.6	26.5	24.6	23.8	23.1	22.7	23.7	25.0	23.3
Нийт	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

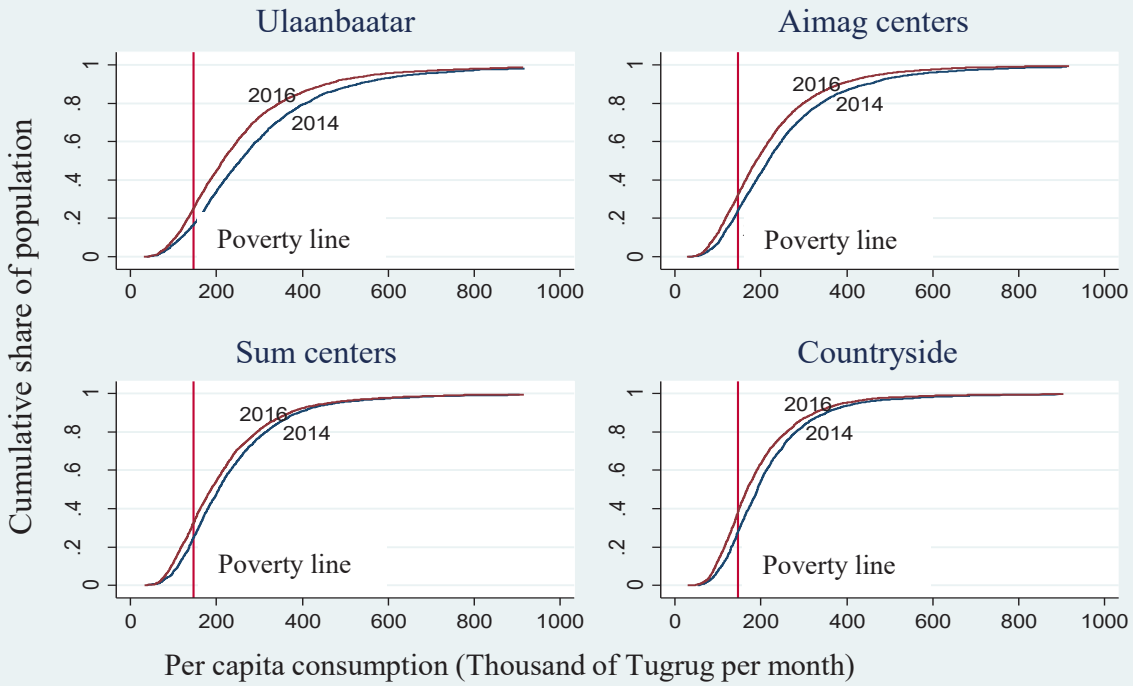
Note: Deciles were constructed separately for each domain. They comprise 10% of the population of the respective region.
Sources: HSES 2016.

Figure D.1. First-order stochastic dominance: Cumulative distribution of per capita consumption by urban and rural areas 2014, 2016



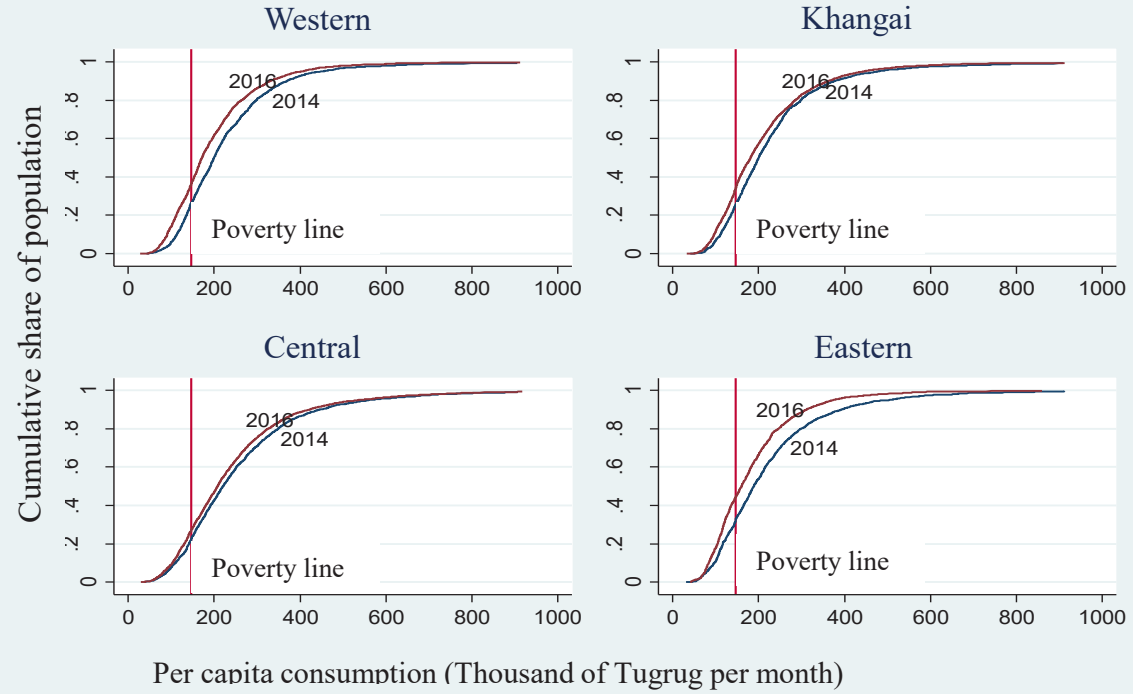
Source: HSES 2014 and HSES 2016

Figure D.2. First-order stochastic dominance: Cumulative distribution of per capita consumption by analytical domain, 2014, 2016



Source: HSES 2014 and HSES 2016

Figure D.3. First-order stochastic dominance: Cumulative distribution of per capita consumption by region, 2014, 2016



Source: HSES 2014 and HSES 2016

Table D.5. Poverty profile by characteristics of the household head and urban and rural areas

	Poverty headcount			Share of population			Share of poor		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Total	27.1	34.9	29.6	100.0	100.0	100.0	100.0	100.0	100.0
Gender									
Male	26.3	35.4	29.5	77.8	86.7	80.7	75.5	88.0	80.2
Female	30.0	31.6	30.3	22.2	13.3	19.3	24.5	12.0	19.8
Age									
Less than 30 years	22.9	35.3	27.0	12.0	12.2	12.0	10.1	12.4	11.0
Between 30 and 39	33.0	42.9	36.2	28.7	29.6	29.0	34.9	36.4	35.5
Between 40 and 49	27.3	36.3	30.3	27.2	29.5	27.9	27.4	30.7	28.6
Between 50 and 59	25.2	27.6	26.0	18.9	17.7	18.5	17.6	14.0	16.2
60 years and older	20.7	20.7	20.7	13.2	11.0	12.5	10.1	6.5	8.7
Educational attainment									
None	65.3	49.0	52.8	1.0	7.1	3.0	2.5	10.0	5.3
Primary	52.1	43.0	45.7	3.3	15.8	7.3	6.3	19.5	11.3
Lower secondary	46.6	41.9	43.9	9.8	28.9	15.9	16.8	34.8	23.6
Higher secondary	36.6	33.4	35.7	27.5	21.5	25.5	37.0	20.6	30.8
Vocational	28.2	24.0	27.4	22.4	10.8	18.7	23.3	7.4	17.3
Technical secondary	19.4	18.6	19.2	7.4	5.0	6.6	5.3	2.7	4.3
Degree or higher education diploma	8.7	14.1	9.5	10.2	3.5	8.1	3.3	1.4	2.6
Bachelor	9.1	18.0	10.6	16.2	7.0	13.3	5.5	3.6	4.8
Master	0.3	6.0	0.8	1.7	0.4	1.3	0.0	0.1	0.0
Doctor	0.0	0.0	0.0	0.5	0.0	0.3	0.0	0.0	0.0
Employment									
Labor force participation									
Employed	23.6	34.9	27.6	67.6	77.4	70.7	58.8	77.4	65.9
Unemployed	49.9	46.1	48.7	6.5	6.1	6.4	11.9	8.1	10.5
Out of the labor force	30.6	30.6	30.6	26.0	16.5	22.9	29.3	14.5	23.7
Among those employed,									
Economic activity									
Agriculture	39.6	39.0	39.1	3.0	44.2	16.3	4.4	49.4	21.4
Industry	30.1	39.9	31.7	24.4	10.4	19.9	27.0	11.9	21.3
Services	18.5	24.7	19.8	40.2	22.8	34.6	27.4	16.2	23.2
Sector of employment									
Herders	30.9	38.5	37.8	1.9	40.3	14.3	2.2	44.5	18.2
Private	25.8	35.7	27.5	49.0	21.3	40.1	46.6	21.8	37.2
Public	16.4	24.7	19.2	12.9	14.0	13.2	7.8	9.9	8.6
State	15.9	24.2	17.5	3.7	1.9	3.1	2.2	1.3	1.8

Source: HSES 2016.

Table D.6. Poverty profile by characteristics of the household head and analytical domain

	Poverty headcount				Share of population				Share of poor			
	Ulaan-baatar	Aimag centers	Sum centers	Country-side	Ulaan-baatar	Aimag centers	Sum centers	Country-side	Ulaan-baatar	Aimag centers	Sum centers	Country-side
Total	24.8	31.8	32.3	38.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gender												
Male	23.9	31.0	32.7	38.4	77.2	79.0	84.1	89.8	74.5	76.9	85.1	90.9
Female	27.7	34.9	30.3	33.9	22.8	21.0	15.9	10.2	25.5	23.1	14.9	9.1
Age												
Less than 30 years	17.6	34.6	34.4	36.4	12.3	11.3	12.2	12.2	8.7	12.2	13.0	11.7
Between 30 and 39	30.1	38.4	39.6	46.2	28.3	29.6	27.2	32.4	34.4	35.6	33.4	39.4
Between 40 and 49	25.1	31.4	34.6	38.5	26.9	27.8	30.0	29.0	27.3	27.4	32.1	29.3
Between 50 and 59	24.0	27.7	23.6	33.1	18.7	19.3	18.7	16.4	18.1	16.8	13.7	14.3
60 years and older	20.6	20.8	21.3	19.9	13.7	12.1	11.9	9.9	11.4	7.9	7.8	5.2
Educational attainment												
None	70.3	62.9	60.9	43.9	0.5	2.1	3.9	11.0	1.4	4.1	7.4	12.7
Primary	53.0	51.5	46.3	41.4	1.9	6.0	9.4	23.4	4.1	9.7	13.5	25.5
Lower secondary	47.6	45.6	44.9	39.6	7.4	14.5	23.5	35.5	14.2	20.9	32.6	37.0
Higher secondary	35.8	37.9	30.9	37.8	25.6	31.1	24.9	17.3	37.0	37.1	23.8	17.3
Vocational	27.8	29.6	22.6	26.7	25.7	15.9	13.5	7.6	28.8	14.8	9.5	5.3
Technical secondary	18.6	20.7	18.1	20.8	6.9	8.5	7.3	2.2	5.2	5.5	4.1	1.2
Degree or higher education diploma	8.4	9.7	14.6	11.2	11.8	7.1	5.4	1.2	4.0	2.2	2.5	0.4
Bachelor	7.5	13.4	18.3	15.6	17.6	13.5	11.5	1.6	5.3	5.7	6.5	0.7
Master	0.0	1.4	7.5	0.0	1.9	1.2	0.5	0.2	0.0	0.0	0.1	0.0
Doctor	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Employment												
Labor force participation												
Employed	20.7	29.4	30.7	38.9	67.2	68.3	69.1	87.3	56.2	63.0	65.6	89.4
Unemployed	48.5	52.1	46.2	45.2	6.0	7.5	9.7	1.8	11.7	12.3	13.9	2.2
Out of the labor force	29.7	32.5	31.3	29.2	26.8	24.2	21.2	10.9	32.2	24.8	20.5	8.4
Among those employed,												
Economic activity												
Agriculture	32.2	43.0	37.0	39.5	1.4	6.3	15.3	78.8	1.8	8.4	17.5	81.8
Industry	27.0	36.4	38.8	47.9	24.7	23.6	16.6	2.9	27.0	27.0	20.0	3.6
Services	16.5	22.8	24.5	27.0	41.0	38.4	37.2	5.6	27.3	27.5	28.2	4.0
Sector of employment												
Herders	30.2	31.2	33.1	39.4	0.8	4.2	10.7	75.7	1.0	4.1	11.0	78.6
Private	22.7	33.5	34.3	42.6	52.2	42.6	32.7	7.6	47.8	44.9	34.8	8.5
Public	13.4	20.3	25.3	20.1	11.0	16.6	22.7	3.5	6.0	10.6	17.8	1.9
State	11.1	22.1	22.3	38.3	3.1	4.9	3.0	0.5	1.4	3.4	2.1	0.5

Source: HSES 2016.

Table D.7. Poverty profile by characteristics of the household head and region

	Poverty headcount					Share of population					Share of poor				
	Western	Khangai	Central	Eastern	Ulaanbaatar	Western	Khangai	Central	Eastern	Ulaanbaatar	Western	Khangai	Central	Eastern	Ulaanbaatar
Total	36.0	33.6	26.8	43.9	24.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gender															
Male	37.3	33.0	26.1	43.9	23.9	88.7	82.7	80.7	81.8	77.2	91.9	81.5	78.7	81.7	74.5
Female	25.9	36.1	29.6	44.0	27.7	11.3	17.3	19.3	18.2	22.8	8.1	18.5	21.3	18.3	25.5
Age															
Less than 30 years	36.6	35.8	26.6	49.2	17.6	9.8	11.6	13.2	13.3	12.3	9.9	12.4	13.1	14.9	8.7
Between 30 and 39	45.3	40.9	33.4	49.7	30.1	29.9	29.2	29.7	29.7	28.3	37.6	35.7	36.9	33.6	34.4
Between 40 and 49	37.6	34.3	26.3	44.5	25.1	30.4	29.3	27.1	28.1	26.9	31.7	29.9	26.7	28.5	27.3
Between 50 and 59	26.6	28.7	23.2	36.9	24.0	18.6	18.7	18.0	17.7	18.7	13.7	16.0	15.5	14.8	18.1
60 years and older	22.5	18.1	17.3	32.3	20.6	11.3	11.2	12.0	11.2	13.7	7.0	6.1	7.7	8.2	11.4
Educational attainment															
None	54.8	43.5	46.8	65.2	70.3	6.8	5.0	3.1	6.2	0.5	10.3	6.5	5.4	9.2	1.4
Primary	49.3	43.8	31.1	50.0	53.0	16.5	13.4	5.7	11.7	1.9	22.5	17.5	6.6	13.4	4.1
Lower secondary	46.2	42.5	32.3	55.1	47.6	19.4	27.0	19.1	27.8	7.4	24.9	34.2	23.0	34.9	14.2
Higher secondary	37.4	32.2	36.3	40.8	35.8	21.7	27.3	26.4	25.7	25.6	22.6	26.3	35.7	23.9	37.0
Vocational	27.5	30.0	22.6	34.0	27.8	14.2	10.4	17.3	7.7	25.7	10.9	9.3	14.5	6.0	28.8
Technical secondary	17.4	15.6	18.2	36.6	18.6	5.2	4.4	10.1	6.2	6.9	2.5	2.0	6.9	5.1	5.2
Degree or higher education diploma	16.5	9.4	8.1	19.6	8.4	3.2	3.1	8.4	6.0	11.8	1.5	0.9	2.5	2.7	4.0
Bachelor	14.2	13.1	15.1	25.9	7.5	12.1	8.7	9.5	8.0	17.6	4.8	3.4	5.3	4.7	5.3
Master	0.0	4.8	0.0	8.0	0.0	0.9	0.8	0.5	0.6	1.9	0.0	0.1	0.0	0.1	0.0
Doctor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Employment															
Labor force participation															
Employed	37.0	33.7	23.6	42.2	20.7	75.8	75.9	71.3	68.6	67.2	77.7	76.2	62.7	65.9	56.2
Unemployed	44.1	46.8	49.4	59.9	48.5	6.9	6.4	6.2	7.9	6.0	8.5	9.0	11.4	10.8	11.7
Out of the labor force	28.8	28.2	30.8	43.7	29.7	17.3	17.7	22.5	23.4	26.8	13.8	14.8	25.9	23.3	32.2
Among those employed, Economic activity															
Agriculture	49.2	39.7	22.6	43.0	32.2	31.0	34.9	19.5	26.9	1.4	42.3	41.3	16.4	26.3	1.8
Industry	44.8	35.8	29.2	57.3	27.0	12.2	16.3	19.3	14.0	24.7	15.2	17.4	21.0	18.2	27.0
Services	22.4	23.8	20.8	33.8	16.5	32.6	24.6	32.5	27.7	41.0	20.3	17.5	25.2	21.3	27.3
Sector of employment															
Herders	48.6	39.3	17.1	38.9	30.2	28.5	32.9	15.4	21.8	0.8	38.4	38.5	9.8	19.3	1.0
Private	35.7	32.4	29.3	51.2	22.7	27.6	29.5	34.1	27.5	52.2	27.4	28.5	37.3	32.0	47.8
Public	22.5	24.3	17.8	30.6	13.4	18.6	11.8	15.3	16.3	11.0	11.6	8.5	10.1	11.3	6.0
State	11.7	13.5	22.0	46.7	11.1	1.1	1.7	6.6	3.1	3.1	0.4	0.7	5.4	3.3	1.4

Source: HSES 2016.

Table D.8. Poverty profile by characteristics of the dwelling and urban and rural areas

	Poverty headcount			Share of population			Share of poor		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Total	27.1	34.9	29.6	100.0	100.0	100.0	100.0	100.0	100.0
Dwelling									
Ger	48.9	40.2	44.5	28.4	61.9	39.2	51.3	71.4	58.9
Apartment	6.8	17.7	7.2	32.7	2.7	23.1	8.2	1.4	5.6
House	27.7	26.8	27.4	36.9	33.9	35.9	37.7	26.0	33.3
Other 1/	39.0	28.8	36.3	2.0	1.5	1.8	2.8	1.2	2.2
Water supply									
Central, hot and cold	7.5	16.8	7.9	34.6	3.2	24.5	9.5	1.5	6.5
Central, only cold	36.3	35.2	36.1	43.4	13.5	33.8	58.0	13.6	41.2
Protected well	37.5	34.2	35.5	11.7	37.5	20.0	16.1	36.7	23.9
Unprotected well	42.9	33.0	40.3	9.1	6.9	8.4	14.4	6.5	11.4
Tanker trucks 2/	39.9	35.2	35.8	1.0	15.1	5.5	1.5	15.2	6.7
Other 3/	54.6	38.6	38.9	0.2	23.9	7.8	0.4	26.4	10.3
Imported water sources 4/									
No	42.9	36.7	38.7	10.3	45.8	21.7	16.3	48.2	28.4
Yes	25.3	33.4	27.1	89.7	54.2	78.3	83.7	51.8	71.6
Improved sanitation 5/									
No	53.1	39.6	41.2	2.4	39.4	14.3	4.8	44.7	19.9
Yes	26.5	31.8	27.7	97.6	60.6	85.7	95.2	55.3	80.1
Heating									
Central	7.5	15.9	7.9	34.5	3.7	24.6	9.5	1.7	6.6
Sample unit 6/	39.1	36.4	37.9	59.6	93.3	70.4	85.8	97.3	90.2
Other 7/	21.3	12.1	19.6	5.9	3.0	5.0	4.7	1.0	3.3
Electricity									
Central	26.9	32.3	28.1	99.0	59.4	86.3	98.3	55.1	82.0
Local	53.1	17.6	43.1	0.3	0.2	0.2	0.5	0.1	0.3
Solar	37.6	38.3	38.3	0.6	38.5	12.8	0.8	42.3	16.5
Other 8/	49.3	51.4	51.1	0.1	1.4	0.5	0.2	2.1	0.9
None	91.9	35.1	45.5	0.0	0.4	0.2	0.2	0.4	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.
Source: HSES 2016.

Table D.9. Poverty profile by characteristics of the dwelling and analytical domain

	Poverty headcount				Share of population				Share of poor			
	Ulaan-baatar	Aimag centers	Sum centers	Country-side	Ulaan-baatar	Aimag centers	Sum centers	Хөдөө нутаг	Ulaan-baatar	Aimag centers	Sum centers	Country-side
Total	24.8	31.8	32.3	38.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dwelling												
Ger	49.3	48.2	42.3	38.9	26.3	32.8	44.3	83.0	52.3	49.7	58.0	85.0
Apartment	5.5	10.8	17.8	16.3	36.8	24.5	4.7	0.3	8.2	8.3	2.6	0.1
House	25.9	30.8	24.9	33.6	35.0	40.7	48.9	15.9	36.5	39.4	37.8	14.0
Other 1/	38.1	40.8	26.0	37.8	1.9	2.0	2.1	0.8	3.0	2.6	1.7	0.8
Water supply												
Central, hot and cold	5.9	11.6	17.3	10.6	37.8	28.3	5.5	0.5	9.1	10.3	2.9	0.1
Central, only cold	35.4	39.5	35.1	36.7	50.9	28.4	22.9	2.2	72.6	35.3	24.8	2.2
Protected well	35.7	38.2	33.3	36.6	4.7	25.6	51.4	20.9	6.8	30.7	53.0	20.1
Unprotected well	43.0	42.8	32.0	35.3	6.5	14.2	9.0	4.3	11.3	19.1	8.9	4.0
Tanker trucks 2/	55.6	39.2	31.9	36.2	0.1	2.9	6.2	25.8	0.2	3.5	6.1	24.6
Other 3/	50.0	54.8	26.6	40.2	0.0	0.6	5.2	46.3	0.0	1.0	4.3	49.0
Imported water sources 4/												
No	43.2	42.6	30.6	38.6	6.6	17.7	20.3	76.4	11.5	23.7	19.3	77.6
Yes	23.5	29.5	32.7	36.1	93.4	82.3	79.7	23.6	88.5	76.3	80.7	22.4
Improved sanitation 5/												
No	53.3	53.0	44.6	39.0	1.4	4.5	7.8	77.1	3.0	7.5	10.8	79.1
Yes	24.4	30.8	31.3	34.6	98.6	95.5	92.2	22.9	97.0	92.5	89.2	20.9
Heating												
Central	5.9	11.8	16.3	10.3	37.6	28.2	6.4	0.5	8.9	10.4	3.2	0.1
Sample unit 6/	37.9	41.0	34.5	38.3	55.0	68.7	89.1	98.4	84.1	88.5	95.3	99.3
Other 7/	23.5	11.0	10.6	19.5	7.4	3.1	4.5	1.1	7.0	1.1	1.5	0.6
Electricity												
Central	24.7	31.5	32.0	34.6	99.4	98.1	95.5	16.3	99.1	97.1	94.7	14.8
Local	52.4	53.7	4.8	43.7	0.2	0.4	0.3	0.1	0.3	0.7	0.0	0.2
Solar	20.1	44.2	38.2	38.3	0.2	1.3	3.7	80.2	0.2	1.8	4.4	80.9
Other 8/	35.7	71.6	57.1	50.6	0.1	0.1	0.3	2.7	0.2	0.3	0.6	3.6
None	100.0	73.2	48.4	31.2	0.0	0.0	0.2	0.7	0.2	0.1	0.3	0.6

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.
Source: HSES 2016.

Table D.10. Poverty profile by characteristics of the dwelling and region

	Poverty headcount					Share of population					Share of poor				
	Western	Khangai	Central	Eastern	Ulaanbaatar	Western	Khangai	Central	Eastern	Ulaanbaatar	Western	Khangai	Central	Eastern	Ulaanbaatar
Total	36.0	33.6	26.8	43.9	24.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dwelling															
Ger	44.6	42.9	33.4	52.7	49.3	52.2	55.8	41.0	49.5	26.3	64.5	71.4	51.1	59.4	52.3
Apartment	3.4	5.1	12.0	28.0	5.5	4.6	9.0	20.7	12.9	36.8	0.4	1.4	9.3	8.2	8.2
House	29.3	25.6	28.0	36.2	25.9	42.8	34.5	35.4	33.7	35.0	34.8	26.3	37.0	27.8	36.5
Other 1/	18.5	44.4	23.6	52.1	38.1	0.5	0.7	3.0	3.9	1.9	0.2	0.9	2.6	4.6	3.0
Water supply															
Central, hot and cold	3.5	6.8	12.6	26.9	5.9	5.8	9.7	24.3	14.9	37.8	0.6	2.0	11.5	9.1	9.1
Central, only cold	34.7	36.0	31.2	53.0	35.4	7.7	29.2	15.7	26.4	50.9	7.4	31.3	18.3	31.8	72.6
Protected well	34.8	35.5	29.6	46.5	35.7	49.3	22.9	27.6	36.5	4.7	47.6	24.2	30.5	38.7	6.8
Unprotected well	43.1	36.2	39.3	37.7	43.0	4.5	6.9	19.2	7.6	6.5	5.4	7.5	28.2	6.5	11.3
Tanker trucks 2/	41.8	40.6	20.8	40.7	55.6	9.8	9.3	9.3	14.2	0.1	11.3	11.2	7.2	13.1	0.2
Other 3/	43.5	36.3	30.5	70.7	50.0	22.9	22.0	3.8	0.5	0.0	27.7	23.8	4.4	0.8	0.0
Imported water sources 4/															
No	43.0	37.3	32.9	40.3	43.2	37.2	38.2	32.4	22.2	6.6	44.4	42.5	39.8	20.4	11.5
Yes	31.9	31.2	23.9	45.0	23.5	62.8	61.8	67.6	77.8	93.4	55.6	57.5	60.2	79.6	88.5
Improved sanitation 5/															
No	50.2	38.3	29.2	46.2	53.3	26.1	31.0	17.4	23.6	1.4	36.4	35.4	18.9	24.8	3.0
Yes	31.0	31.4	26.3	43.2	24.4	73.9	69.0	82.6	76.4	98.6	63.6	64.6	81.1	75.2	97.0
Heating															
Central	3.3	6.4	12.7	27.9	5.9	6.2	9.7	24.7	15.5	37.6	0.6	1.8	11.7	9.8	8.9
Sample unit 6/	39.3	36.9	32.7	48.0	37.9	89.5	88.8	71.7	81.5	55.0	97.6	97.6	87.6	88.9	84.1
Other 7/	15.2	12.7	5.2	17.6	23.5	4.3	1.5	3.6	3.0	7.4	1.8	0.6	0.7	1.2	7.0
Electricity															
Central	31.2	31.1	27.7	44.7	24.7	71.8	69.0	85.1	77.8	99.4	62.3	63.9	87.9	79.2	99.1
Local	22.9	33.6	49.1	0.0	52.4	0.2	0.1	0.7	0.2	0.2	0.1	0.1	1.3	0.0	0.3
Solar	48.1	38.6	19.6	40.3	20.1	27.4	29.6	13.6	19.0	0.2	36.6	34.1	10.0	17.5	0.2
Other 8/	63.9	54.1	49.5	49.0	35.7	0.5	0.8	0.4	2.7	0.1	0.8	1.3	0.8	3.1	0.2
None	44.3	41.5	7.8	60.5	100.0	0.1	0.5	0.2	0.2	0.0	0.2	0.6	0.1	0.3	0.2

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.
Source: HSES 2016.

Table D.11. Highest educational attainment of the population 18 years and older (%)

	None	Primary	Lower secondary	Higher secondary	Vocational	Technical secondary	Degree or higher education diploma	Bachelor	Master	Doctor	Total
National	2.9	6.1	13.4	29.6	13.9	7.1	8.7	16.7	1.5	0.2	100.0
Location											
Urban	1.3	2.9	8.2	30.9	16.3	7.7	10.8	19.7	1.9	0.3	100.0
Rural	6.4	12.9	24.6	26.8	8.7	5.6	4.2	10.4	0.5	0.0	100.0
Ulaanbaatar	0.8	1.9	6.5	29.9	18.4	7.2	11.9	20.8	2.2	0.4	100.0
Aimag centers	2.5	5.0	11.5	33.0	11.9	8.8	8.5	17.5	1.4	0.1	100.0
Sum centers	3.6	8.1	18.8	29.0	10.1	8.0	6.1	15.5	0.8	0.0	100.0
Countryside	9.7	18.7	31.6	24.1	7.1	2.8	1.8	4.1	0.1	0.0	100.0
Western	5.9	12.6	16.3	28.8	10.2	5.2	3.8	16.0	1.1	0.0	100.0
Khangai	4.7	11.3	22.7	30.6	8.2	4.9	3.8	12.9	1.0	0.0	100.0
Central	3.1	4.9	15.8	28.7	13.0	11.2	9.7	12.8	0.6	0.0	100.0
Eastern	6.3	10.0	22.3	28.6	8.3	5.9	7.4	10.6	0.6	0.0	100.0
Gender											
Men	3.3	6.2	14.7	30.0	17.5	5.4	7.5	14.1	1.1	0.3	100.0
Women	2.6	6.0	12.3	29.2	10.7	8.6	9.7	19.1	1.8	0.1	100.0
Quantile											
Poorest	6.2	9.3	22.8	34.9	13.4	4.0	2.7	6.7	0.1	0.0	100.0
Q2	4.1	7.8	17.9	33.3	15.5	4.8	5.1	11.2	0.3	0.0	100.0
Q3	2.7	6.0	13.7	30.4	15.5	6.9	7.9	16.3	0.6	0.1	100.0
Q4	2.0	5.2	10.2	28.0	13.6	8.6	10.6	20.1	1.5	0.2	100.0
Richest	0.9	3.4	6.2	23.9	11.8	9.6	14.4	25.1	4.1	0.6	100.0
Poverty											
Non-poor	2.1	5.1	10.8	27.9	13.7	8.1	10.5	19.6	1.9	0.3	100.0
Poor	5.4	8.9	21.3	34.8	14.4	4.0	3.2	7.9	0.1	0.0	100.0

Sources: HSES 2016.

Table D.12. Highest educational attainment of the population 18 years and older by poverty status (%)

	None	Primary	Lower secondary	Higher secondary	Vocational	Technical secondary	Degree or higher education diploma	Bachelor	Master	Doctor	Total
National	2.9	6.1	13.4	29.6	13.9	7.1	8.7	16.7	1.5	0.2	100.0
Poverty											
Non-poor	2.1	5.1	10.8	27.9	13.7	8.1	10.5	19.6	1.9	0.3	100.0
Poor	5.4	8.9	21.3	34.8	14.4	4.0	3.2	7.9	0.1	0.0	100.0
Location											
Urban non-poor	0.8	2.3	6.1	28.2	15.7	8.6	12.8	22.8	2.5	0.4	100.0
Urban poor	3.1	4.9	15.4	40.3	18.3	5.0	4.0	9.0	0.1	0.0	100.0
Rural non-poor	5.1	11.7	21.9	27.2	9.1	7.0	5.1	12.1	0.7	0.0	100.0
Rural poor	9.3	15.6	31.2	25.7	7.8	2.3	2.0	6.1	0.1	0.0	100.0
Ulaanbaatar non-poor	0.5	1.5	4.7	26.8	17.5	8.0	13.9	23.9	2.8	0.6	100.0
Ulaanbaatar poor	1.8	3.4	13.9	41.8	21.8	4.3	4.4	8.7	0.1	0.0	100.0
Aimag centers non-poor	1.5	4.2	9.2	31.2	11.6	9.9	10.3	20.4	1.8	0.1	100.0
Aimag centers poor	5.1	7.2	17.7	38.0	12.9	6.0	3.3	9.7	0.2	0.0	100.0
Sum centers non-poor	2.5	7.0	15.8	29.2	10.3	9.5	7.2	17.5	1.0	0.0	100.0
Sum centers poor	6.7	11.0	27.3	28.6	9.5	3.6	3.2	9.9	0.3	0.0	100.0
Countryside non-poor	8.7	18.0	30.0	24.7	7.6	3.6	2.3	5.0	0.2	0.0	100.0
Countryside poor	12.1	20.3	35.2	22.7	6.0	0.9	0.7	2.2	0.0	0.0	100.0
Western non-poor	4.7	10.6	13.3	29.6	10.3	6.6	4.3	19.1	1.5	0.0	100.0
Western poor	8.8	17.4	23.4	26.9	10.0	2.1	2.5	8.7	0.1	0.0	100.0
Khangai non-poor	3.8	10.2	19.7	30.7	7.9	6.1	4.7	15.4	1.3	0.1	100.0
Khangai poor	6.9	13.8	30.4	30.2	8.7	2.0	1.3	6.5	0.2	0.0	100.0
Central non-poor	2.3	4.9	14.9	26.2	13.1	12.1	11.6	14.1	0.8	0.0	100.0
Central poor	6.0	5.0	19.2	37.6	12.4	8.2	3.2	8.4	0.0	0.0	100.0
Eastern non-poor	4.2	9.1	18.0	29.5	8.4	7.2	9.6	13.1	0.9	0.0	100.0
Eastern poor	9.7	11.4	29.4	27.2	8.1	3.9	3.8	6.4	0.2	0.0	100.0
Gender											
Men non-poor	2.3	5.0	12.2	29.1	17.6	6.1	9.1	16.8	1.4	0.4	100.0
Men poor	6.4	9.9	22.4	32.8	17.1	3.1	2.7	5.5	0.1	0.0	100.0
Women non-poor	1.9	5.3	9.6	26.8	10.2	9.9	11.7	22.1	2.4	0.2	100.0
Women poor	4.6	8.0	20.3	36.5	12.0	4.7	3.6	10.0	0.2	0.0	100.0

Sources: HSES 2016.

Table D.13. Population 18 years and older by highest educational attainment (%)

	None	Primary	Lower secondary	Higher secondary	Vocational	Technical secondary	Degree or higher education diploma	Bachelor	Master	Doctor	Total
National	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Location											
Urban	31.2	32.5	41.6	71.2	80.0	74.7	84.7	80.3	89.2	100.0	68.2
Rural	68.8	67.5	58.4	28.8	20.0	25.3	15.3	19.7	10.8	0.0	31.8
Ulaanbaatar	12.2	14.0	22.3	46.1	60.6	46.6	62.7	56.7	68.7	95.0	45.7
Aimag centers	19.0	18.5	19.3	25.1	19.4	28.1	22.0	23.6	20.5	5.0	22.5
Sum centers	21.4	23.2	24.6	17.1	12.7	19.7	12.4	16.2	9.5	0.0	17.5
Countryside	47.4	44.2	33.8	11.6	7.3	5.6	3.0	3.5	1.3	0.0	14.3
Western	26.2	27.1	15.9	12.7	9.6	9.6	5.6	12.4	9.3	0.8	13.0
Khangai	29.5	34.3	31.4	19.1	10.9	12.9	8.1	14.3	12.3	3.3	18.5
Central	16.7	12.8	18.5	15.2	14.6	24.9	17.5	12.0	6.7	0.9	15.6
Eastern	15.3	11.8	11.9	6.9	4.3	6.0	6.1	4.5	3.1	0.0	7.2
Gender											
Men	52.9	47.7	51.3	47.4	59.0	35.6	40.5	39.3	34.2	68.2	46.8
Women	47.1	52.3	48.7	52.6	41.0	64.5	59.5	60.7	65.8	31.8	53.2
Quantile											
Poorest	34.0	24.9	27.5	19.1	15.6	9.1	5.0	6.4	0.9	0.0	16.2
Q2	25.7	23.5	24.5	20.6	20.5	12.6	10.8	12.3	3.2	0.0	18.3
Q3	18.0	19.8	20.4	20.6	22.3	19.5	18.2	19.5	7.8	6.4	20.0
Q4	14.6	18.3	16.4	20.3	21.1	26.0	26.2	25.8	22.4	19.3	21.5
Richest	7.7	13.4	11.2	19.4	20.5	32.8	39.8	36.0	65.7	74.3	24.1
Poverty											
Non-poor	54.3	63.8	60.8	71.0	74.5	86.2	90.9	88.3	97.9	100.0	75.3
Poor	45.7	36.2	39.3	29.0	25.6	13.8	9.1	11.7	2.1	0.0	24.7

Source: HSES 2016.

Table D.14. Population 18 years and older by highest educational attainment and poverty status (%)

	None	Primary	Lower secondary	Higher secondary	Vocational	Technical secondary	Degree or higher education diploma	Bachelor	Master	Doctor	Total
National	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Poverty											
Non-poor	54.3	63.8	60.8	71.0	74.5	86.2	90.9	88.3	97.9	100.0	75.3
Poor	45.7	36.2	39.3	29.0	25.6	13.8	9.1	11.7	2.1	0.0	24.7
Location											
Urban non-poor	14.9	20.2	23.9	50.2	59.6	63.9	77.6	72.0	87.9	100.0	52.8
Urban poor	16.3	12.4	17.7	21.0	20.4	10.8	7.1	8.3	1.3	0.0	15.4
Rural non-poor	39.5	43.6	36.9	20.8	14.9	22.3	13.2	16.3	10.0	0.0	22.5
Rural poor	29.4	23.9	21.5	8.0	5.2	3.0	2.1	3.4	0.8	0.0	9.3
Ulaanbaatar non-poor	6.4	8.7	12.6	32.9	45.8	40.9	58.0	51.9	68.0	95.0	36.3
Ulaanbaatar poor	5.8	5.3	9.8	13.3	14.8	5.7	4.8	4.9	0.7	0.0	9.4
Aimag centers non-poor	8.5	11.4	11.3	17.4	13.8	23.0	19.7	20.1	19.9	5.0	16.5
Aimag centers poor	10.5	7.1	8.0	7.7	5.6	5.1	2.3	3.5	0.6	0.0	6.0
Sum centers non-poor	10.8	14.8	15.1	12.6	9.5	17.3	10.6	13.4	8.8	0.0	12.8
Sum centers poor	10.6	8.5	9.5	4.5	3.2	2.4	1.7	2.8	0.8	0.0	4.7
Countryside non-poor	28.6	28.9	21.8	8.1	5.3	5.0	2.6	2.9	1.3	0.0	9.7
Countryside poor	18.8	15.4	12.0	3.5	2.0	0.6	0.4	0.6	0.0	0.0	4.6
Western non-poor	14.5	15.9	9.0	9.1	6.8	8.5	4.5	10.4	9.0	0.8	9.1
Western poor	11.8	11.2	6.8	3.6	2.8	1.2	1.1	2.0	0.3	0.0	3.9
Khangai non-poor	17.4	22.5	19.6	13.8	7.6	11.4	7.3	12.3	11.7	3.3	13.3
Khangai poor	12.1	11.8	11.8	5.3	3.3	1.5	0.8	2.0	0.6	0.0	5.2
Central non-poor	9.7	9.9	13.5	10.8	11.5	20.9	16.2	10.3	6.6	0.9	12.2
Central poor	7.0	2.8	5.0	4.4	3.1	4.0	1.3	1.7	0.1	0.0	3.5
Eastern non-poor	6.4	6.7	6.0	4.5	2.7	4.5	4.9	3.5	2.7	0.0	4.5
Eastern poor	8.9	5.1	5.9	2.5	1.6	1.5	1.2	1.0	0.4	0.0	2.7
Gender											
Men non-poor	28.2	29.2	32.2	34.8	45.0	30.5	36.9	35.6	33.6	68.2	35.4
Men poor	24.7	18.6	19.1	12.6	14.0	5.1	3.6	3.7	0.6	0.0	11.4
Women non-poor	26.1	34.6	28.5	36.2	29.5	55.7	53.9	52.7	64.3	31.8	39.9
Women poor	21.0	17.6	20.2	16.4	11.5	8.8	5.6	8.0	1.5	0.0	13.3

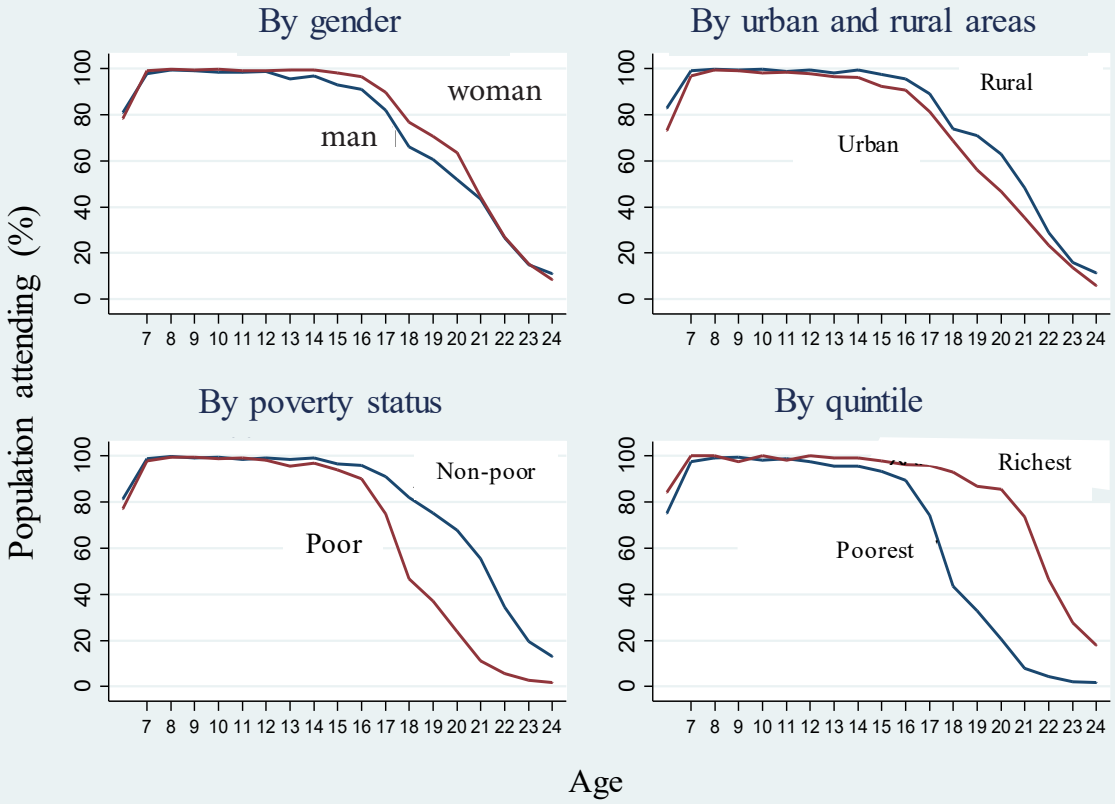
Source: HSES 2016.

Table D.15. Enrollment rates for primary and lower secondary (%)

	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	92.4	92.7	92.0	85.4	85.1	85.7	69.5	72.9	62.8	98.3	98.2	98.4	94.7	94.6	94.7	81.5	85.2	74.2
Location																		
Urban	93.3	93.2	93.3	86.8	85.9	88.4	70.3	73.7	62.9	98.0	97.7	98.5	95.1	94.9	95.5	82.0	85.8	73.8
Rural	90.7	91.4	90.0	82.7	83.5	81.6	68.1	71.4	62.6	98.8	99.4	98.2	93.9	94.2	93.4	80.6	84.2	74.6
Ulaanbaatar	93.0	92.5	93.9	87.5	85.7	91.0	69.1	72.3	61.2	97.3	96.7	98.5	95.5	94.5	97.5	80.1	84.0	70.3
Aimag centers	93.8	94.7	92.4	85.7	86.3	84.8	72.3	76.4	65.1	99.3	99.8	98.5	94.3	95.6	92.7	85.3	89.1	78.5
Sum centers	91.5	92.1	90.6	86.1	86.3	85.8	73.2	78.0	64.4	98.6	99.9	97.0	95.9	95.7	96.1	85.1	91.1	74.0
Countryside	89.9	90.5	89.3	78.8	80.1	77.5	62.2	63.3	60.8	99.1	98.8	99.4	91.6	92.3	90.8	75.6	75.8	75.3
Western	90.3	90.1	90.5	83.9	85.0	82.5	75.0	77.0	71.3	98.2	96.8	99.7	95.2	97.4	92.7	91.3	94.3	86.0
Khangai	92.6	93.5	91.5	83.0	84.9	80.8	67.3	72.9	58.6	100.1	100.5	99.6	95.0	96.6	92.9	78.2	82.6	71.3
Cantral	93.0	93.5	92.3	83.2	83.0	83.5	67.8	71.8	58.6	99.5	100.9	97.2	90.9	90.8	91.2	79.7	83.5	71.0
Eastern	91.4	95.1	88.0	87.5	88.0	87.2	68.6	69.3	67.9	96.7	98.8	94.8	95.5	93.8	96.8	79.9	82.7	77.1
Gender																		
Men	92.7	93.1	92.1	85.1	84.8	85.4	64.8	69.2	56.5	98.4	98.5	98.2	93.4	93.5	93.4	75.9	81.1	65.8
Women	92.1	92.3	91.9	85.7	85.4	86.1	74.0	76.5	69.0	98.1	97.9	98.5	96.0	95.9	96.1	87.0	89.3	82.5

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 2016.

Figure D.4. Participation rates



Source: HSES 2016.

Table D.16. Educational level attended by current students (%)

	Primary	Lower secondary	Upper secondary	Vocational	College, university	Other	Total
National	39.1	23.6	16.9	2.8	16.9	0.8	100.0
Location							
Urban	38.8	22.9	16.1	3.0	18.2	1.0	100.0
Rural	39.8	25.0	18.3	2.3	14.4	0.3	100.0
Ulaanbaatar	38.4	22.3	15.2	3.3	19.5	1.3	100.0
Aimag centers	39.5	24.0	18.0	2.4	15.7	0.5	100.0
Sum centers	38.8	24.4	18.5	2.1	15.9	0.3	100.0
Countryside	41.0	25.8	18.2	2.4	12.4	0.3	100.0
Western	35.1	25.0	19.8	1.8	17.6	0.7	100.0
Khangai	41.0	24.9	18.1	2.1	13.7	0.1	100.0
Central	42.0	23.0	17.1	2.9	14.6	0.3	100.0
Eastern	41.5	26.1	16.9	2.6	12.5	0.3	100.0
Gender							
Men	40.4	24.4	15.6	3.5	15.4	0.7	100.0
Women	37.9	22.8	18.1	2.0	18.4	0.9	100.0
Quintile							
Poorest	47.2	30.1	14.5	4.9	3.0	0.2	100.0
Q2	44.0	26.0	18.7	3.2	7.9	0.2	100.0
Q3	38.7	24.7	18.2	2.2	15.8	0.3	100.0
Q4	35.0	19.9	17.5	2.0	24.6	1.1	100.0
Richest	28.4	15.6	15.5	0.9	37.2	2.3	100.0
Poverty							
Non-poor	35.5	21.0	17.3	2.1	23.1	1.1	100.0
Poor	46.6	29.0	15.9	4.2	4.0	0.2	100.0

Source: HSES 2016.

Table D.17. Educational level attended by current students by poverty status (%)

	Primary	Lower second-ary	Upper second-ary	Voca-tional	College, university	Other	Total
National	39.1	23.6	16.9	2.8	16.9	0.8	100.0
Poverty							
Non-poor	35.5	21.0	17.3	2.1	23.1	1.1	100.0
Poor	46.6	29.0	15.9	4.2	4.0	0.2	100.0
Location							
Urban non-poor	35.9	20.3	16.5	2.1	24.0	1.3	100.0
Urban poor	45.7	29.0	15.3	5.1	4.5	0.4	100.0
Rural non-poor	34.6	22.5	19.3	1.9	21.2	0.5	100.0
Rural poor	48.1	29.1	16.8	2.8	3.3	0.0	100.0
Ulaanbaatar non-poor	35.3	20.0	15.6	2.5	25.0	1.7	100.0
Ulaanbaatar poor	47.0	28.7	14.0	5.5	4.5	0.4	100.0
Aimag centers non-poor	37.1	21.0	18.4	1.3	21.7	0.6	100.0
Aimag centers poor	43.9	29.6	17.2	4.5	4.6	0.3	100.0
Sum centers non-poor	33.5	21.9	19.8	1.6	22.7	0.5	100.0
Sum centers poor	48.4	29.1	16.0	3.0	3.5	0.0	100.0
Countryside non-poor	36.1	23.4	18.5	2.4	19.2	0.5	100.0
Countryside poor	47.8	29.0	17.7	2.5	3.0	0.0	100.0
Western non-poor	28.9	22.0	20.8	1.4	25.9	1.0	100.0
Western poor	45.6	30.1	18.0	2.5	3.5	0.2	100.0
Khangai non-poor	37.8	22.3	18.7	1.4	19.7	0.1	100.0
Khangai poor	46.4	29.2	17.2	3.4	3.7	0.2	100.0
Central non-poor	38.7	21.4	18.0	2.1	19.2	0.5	100.0
Central poor	49.3	26.7	15.1	4.8	4.2	0.0	100.0
Eastern non-poor	39.2	21.3	16.7	1.7	20.6	0.5	100.0
Eastern poor	44.0	31.4	17.2	3.6	3.7	0.1	100.0
Gender							
Men non-poor	36.9	21.7	16.3	2.7	21.6	0.9	100.0
Men poor	47.6	30.2	14.1	5.2	2.7	0.2	100.0
Women non-poor	34.1	20.3	18.4	1.4	24.7	1.2	100.0
Women poor	45.7	27.9	17.6	3.2	5.3	0.2	100.0

Source: HSES 2016.

Table D.18. Current students by educational level attended (%)

	Primary	Lower secondary	Upper second-ary	Vocational	College, university	Other	Total
National	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Location							
Urban	66.8	65.3	64.4	73.4	72.3	87.3	67.3
Rural	33.3	34.7	35.6	26.7	27.8	12.7	32.7
Ulaanbaatar	43.3	41.7	39.7	53.0	50.7	73.0	44.1
Aimag centers	23.5	23.6	24.7	20.4	21.6	14.2	23.2
Sum centers	18.0	18.8	19.9	13.8	17.1	7.6	18.1
Countryside	15.3	15.9	15.7	12.9	10.7	5.1	14.6
Western	14.4	17.0	18.7	10.5	16.6	14.6	16.0
Khangai	18.9	19.1	19.4	14.0	14.6	3.3	18.0
Cantral	16.2	14.7	15.3	16.1	13.0	6.3	15.1
Eastern	7.3	7.6	6.9	6.5	5.1	2.8	6.9
Gender							
Men	51.2	51.4	45.9	63.4	45.2	44.1	49.6
Women	48.8	48.6	54.1	36.6	54.8	55.9	50.4
Quintile							
Poorest	26.9	28.4	19.1	39.9	4.0	6.0	22.3
Q2	23.5	23.0	23.2	24.4	9.8	4.8	20.9
Q3	19.1	20.2	20.8	15.6	18.0	8.4	19.3
Q4	17.3	16.3	20.1	14.1	28.1	26.9	19.4
Richest	13.3	12.1	16.8	6.1	40.2	54.0	18.3
Poverty							
Non-poor	61.2	60.0	69.4	50.1	92.3	91.1	67.5
Poor	38.8	40.1	30.6	49.9	7.7	9.0	32.5

Source: HSES 2016.

Table D.19. Current students by educational level attended and poverty status (%)

	Primary	Lower second-ary	Upper secondary	Voca-tional	College, university	Other	Total
National	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Poverty							
Non-poor	61.2	60.0	69.4	50.1	92.3	91.1	67.5
Poor	38.8	40.1	30.6	49.9	7.7	9.0	32.5
Location							
Urban non-poor	43.3	40.7	46.3	36.1	66.9	78.3	47.3
Urban poor	23.4	24.7	18.1	37.3	5.3	9.0	20.0
Rural non-poor	17.9	19.3	23.1	14.0	25.4	12.7	20.2
Rural poor	15.4	15.4	12.5	12.6	2.4	0.0	12.5
Ulaanbaatar non-poor	29.0	27.2	29.8	29.1	47.5	67.6	32.2
Ulaanbaatar poor	14.3	14.5	9.9	23.9	3.1	5.5	11.9
Aimag centers non-poor	14.3	13.5	16.5	7.0	19.4	10.8	15.1
Aimag centers poor	9.1	10.2	8.3	13.4	2.2	3.5	8.1
Sum centers non-poor	10.1	10.9	13.8	6.8	15.8	7.6	11.8
Sum centers poor	7.9	7.8	6.0	7.0	1.3	0.0	6.4
Countryside non-poor	7.8	8.4	9.3	7.2	9.6	5.1	8.4
Countryside poor	7.5	7.6	6.4	5.6	1.1	0.0	6.1
Western non-poor	7.4	9.4	12.4	5.1	15.4	13.1	10.0
Western poor	6.9	7.6	6.4	5.4	1.2	1.5	6.0
Khangai non-poor	10.9	10.7	12.5	5.7	13.2	2.0	11.3
Khangai poor	8.0	8.4	6.9	8.3	1.5	1.4	6.8
Central non-poor	10.3	9.5	11.1	8.0	11.9	6.3	10.4
Central poor	5.8	5.2	4.2	8.0	1.2	0.0	4.6
Eastern non-poor	3.6	3.2	3.5	2.2	4.4	2.2	3.6
Eastern poor	3.7	4.4	3.3	4.3	0.7	0.6	3.3
Gender							
Men non-poor	31.5	30.7	32.4	32.8	42.6	39.1	33.4
Men poor	19.7	20.7	13.5	30.7	2.6	5.0	16.2
Women non-poor	29.7	29.2	37.1	17.4	49.7	51.9	34.0
Women poor	19.1	19.3	17.1	19.2	5.1	4.0	16.3

Source: HSES 2016.

Table D.20. Share of current students in public institutions by educational level (%)

	Primary	Lower secondary	Upper secondary	Vocational	College, university	Other	Total
National	96.1	96.7	94.7	83.6	71.1	79.9	91.3
Location							
Urban	94.4	95.3	92.4	79.8	69.1	78.4	89.1
Rural	99.4	99.4	99.0	94.0	76.1	90.4	95.8
Ulaanbaatar	93.0	94.2	90.1	72.6	65.2	77.5	86.5
Aimag centers	97.1	97.3	96.0	98.6	78.3	82.9	94.0
Sum centers	99.5	99.4	98.6	89.8	76.0	92.8	95.4
Countryside	99.2	99.3	99.6	98.5	76.4	86.7	96.4
Western	97.7	97.0	95.7	91.5	80.2	89.2	93.9
Khangai	98.7	99.2	98.8	99.2	74.3	100.0	95.5
Cantral	98.6	99.0	98.5	97.7	77.4	77.5	95.5
Eastern	99.0	99.5	99.1	92.2	74.0	76.0	95.7
Gender							
Men	96.0	96.8	95.3	86.0	71.2	69.3	91.7
Women	96.2	96.6	94.3	79.4	70.9	88.3	90.9
Quintile							
Poorest	99.5	99.6	100.0	87.3	66.8	53.3	97.9
Q2	99.2	99.3	99.4	76.1	64.7	62.1	95.7
Q3	97.6	97.2	97.3	90.9	70.5	60.0	92.9
Q4	96.5	97.5	94.2	85.5	70.9	79.7	89.6
Richest	80.9	83.1	79.9	66.1	73.4	87.7	78.3
Poverty							
Non-poor	94.0	94.9	92.6	81.2	71.7	83.0	88.4
Poor	99.3	99.4	99.7	86.0	63.5	48.4	97.3

Source: HSES 2016.

Table D.21. Share of current students in public institutions by educational level and poverty status (%)

	Primary	Lower secondary	Upper secondary	Voca-tional	College, university	Other	Total
National	96.1	96.7	94.7	83.6	71.1	79.9	91.3
Poverty							
Non-poor	94.0	94.9	92.6	81.2	71.7	83.0	88.4
Poor	99.3	99.4	99.7	86.0	63.5	48.4	97.3
Location							
Urban non-poor	91.8	92.9	89.6	76.6	69.8	81.8	85.9
Urban poor	99.3	99.3	99.5	82.8	60.3	48.4	96.5
Rural non-poor	99.3	99.1	98.5	92.8	76.7	90.4	94.2
Rural poor	99.5	99.7	100.0	95.3	70.5	0.0	98.6
Ulaanbaatar non-poor	89.8	91.3	86.9	71.4	66.3	81.1	83.1
Ulaanbaatar poor	99.5	99.6	100.0	73.9	48.6	33.3	95.7
Aimag centers non-poor	95.9	96.2	94.5	98.3	78.4	86.4	91.9
Aimag centers poor	98.9	98.8	99.0	98.7	77.1	72.1	97.8
Sum centers non-poor	99.5	99.0	98.0	88.0	77.1	92.8	93.8
Sum centers poor	99.6	100.0	100.0	91.5	61.8	0.0	98.2
Countryside non-poor	99.2	99.2	99.3	97.4	75.9	86.7	94.7
Countryside poor	99.3	99.4	100.0	100.0	80.7	0.0	98.9
Western non-poor	96.9	96.0	94.1	88.9	80.1	95.4	91.7
Western poor	98.6	98.2	98.7	93.8	81.4	36.4	97.6
Khangai non-poor	98.0	98.9	98.2	97.9	75.3	100.0	93.7
Khangai poor	99.6	99.7	100.0	100.0	64.9	100.0	98.4
Central non-poor	98.2	98.5	97.9	98.3	78.2	77.5	94.2
Central poor	99.3	100.0	100.0	97.1	69.5	0.0	98.2
Eastern non-poor	98.2	98.8	98.2	85.9	72.2	69.5	92.6
Eastern poor	99.7	100.0	100.0	95.5	85.2	100.0	99.1
Gender							
Men non-poor	94.1	95.1	93.4	85.1	71.8	76.2	89.0
Men poor	99.1	99.4	99.6	87.0	62.0	15.4	97.4
Women non-poor	94.0	94.7	91.8	73.8	71.6	88.2	87.8
Women poor	99.6	99.5	99.8	84.4	64.2	90.3	97.2

Source: HSES 2016.

Table D.22. Spending per pupil in public schools (per month, tugrug)

	Books Stationary	Room, Dormitory	Uniform	Transport	Other	Total
National	4 638	7	2 929	736	1 258	9 657
Location						
Urban	4 325	-	3 147	781	1 599	9 969
Rural	5 236	19	2 513	651	608	9 063
Ulaanbaatar	3 969	-	3 363	862	1 887	10 256
Aimag centers	4 952	-	2 765	638	1 091	9 461
Sum centers	5 331	16	2 686	218	554	8 869
Countryside	5 124	22	2 310	1 162	673	9 292
Western	5 715	-	1 749	472	214	8 183
Khangai	4 626	-	2 517	743	842	8 727
Cantral	5 415	40	3 066	903	1 293	10 744
Eastern	4 590	-	3 566	164	785	9 191
Gender						
Men	4 703	13	3 028	801	1 214	9 781
Women	4 570	-	2 824	668	1 305	9 527
Quintile						
Poorest	3 714	-	2 290	437	859	7 303
Q2	4 469	-	2 680	646	1 178	8 973
Q3	4 792	8	3 091	760	1 158	9 853
Q4	5 292	11	3 354	965	1 543	11 210
Richest	6 025	27	4 117	1 279	2 162	14 259
Poverty						
Non-poor	5 067	11	3 266	918	1 440	10 850
Poor	3 998	-	2 425	464	987	7 876

Source: HSES 2016.

Table D.23. Spending per pupil in public schools by poverty status (per month, tugrug)

	Books Stationary	Room, Dormitory	Uniform	Transport	Other	Total
National	4 638	7	2 929	736	1 258	9 657
Poverty						
Non-poor	5 067	11	3 266	918	1 440	10 850
Poor	3 998	-	2 425	464	987	7 876
Location						
Urban non-poor	4 681	-	3 476	936	1 746	11 023
Urban poor	3 714	-	2 583	515	1 348	8 164
Rural non-poor	5 930	36	2 797	878	756	10 462
Rural poor	4 430	-	2 183	388	437	7 438
Ulaanbaatar non-poor	4 297	-	3 693	1 002	2 058	11 321
Ulaanbaatar poor	3 370	-	2 759	605	1 574	8 308
Aimag centers non-poor	5 408	-	3 065	811	1 156	10 461
Aimag centers poor	4 257	-	2 306	373	992	7 937
Sum centers non-poor	6 156	29	2 979	318	691	10 288
Sum centers poor	4 275	-	2 310	89	378	7 051
Countryside non-poor	5 637	44	2 560	1 605	841	10 687
Countryside poor	4 593	-	2 050	703	500	7 845
Western non-poor	6 216	-	1 957	616	286	9 128
Western poor	5 188	-	1 530	319	138	7 189
Khangai non-poor	5 060	-	2 754	980	1 028	9 821
Khangai poor	4 045	-	2 201	426	593	7 266
Central non-poor	6 134	62	3 450	1 102	1 320	12 111
Central poor	4 158	-	2 395	554	1 247	8 354
Eastern non-poor	5 357	-	3 815	196	833	10 378
Eastern poor	3 857	-	3 327	133	739	8 057
Gender						
Men non-poor	5 157	21	3 379	1 023	1 304	10 919
Men poor	4 013	-	2 495	463	1 078	8 053
Women non-poor	4 971	-	3 146	807	1 585	10 776
Women poor	3 983	-	2 352	466	893	7 694

Source: HSES 2016.

Table D.24. Spending per pupil in public lower secondary schools (per month, tugrug)

	Books Stationary	Room, Dormitory	Uniform	Transport	Other	Total
National	5 115	4	2 807	1 197	1 493	10 685
Location						
Urban	4 694	-	3 001	1 367	1 938	11 094
Rural	5 875	11	2 458	892	691	9 947
Ulaanbaatar	4 382	-	3 039	1 593	2 240	11 359
Aimag centers	5 226	-	2 935	981	1 421	10 642
Sum centers	5 943	-	2 528	226	587	9 310
Countryside	5 794	25	2 375	1 677	813	10 698
Western	6 343	-	1 532	923	370	9 229
Khangai	5 215	21	2 568	1 162	1 057	10 023
Cantral	5 812	-	3 464	933	1 589	11 902
Eastern	4 654	-	3 708	337	962	9 661
Gender						
Men	5 059	8	2 814	1 138	1 530	10 585
Women	5 174	-	2 800	1 260	1 454	10 791
Quintile						
Poorest	4 131	-	2 109	754	1 133	8 126
Q2	4 886	-	2 575	1 194	1 159	9 824
Q3	5 497	20	2 816	1 490	1 524	11 378
Q4	5 666	-	3 567	1 061	2 151	12 680
Richest	6 783	-	4 083	2 098	2 168	15 341
Poverty						
Non-poor	5 685	7	3 235	1 456	1 729	12 229
Poor	4 300	-	2 196	828	1 156	8 479

Source: HSES 2016.

Table D.25. Spending per pupil in public lower secondary schools by poverty status (per month, tugrug)

	Books Stationary	Room, Dormitory	Uniform	Transport	Other	Total
National	5 115	4	2 807	1 197	1 493	10 685
Poverty						
Non-poor	5 685	7	3 235	1 456	1 729	12 229
Poor	4 300	-	2 196	828	1 156	8 479
Location						
Urban non-poor	5 212	-	3 420	1 614	2 195	12 598
Urban poor	3 894	-	2 353	985	1 540	8 773
Rural non-poor	6 621	20	2 870	1 144	809	11 501
Rural poor	4 946	-	1 945	578	543	8 012
Ulaanbaatar non-poor	4 899	-	3 396	1 757	2 562	12 781
Ulaanbaatar poor	3 489	-	2 424	1 309	1 685	8 907
Aimag centers non-poor	5 813	-	3 467	1 338	1 489	12 246
Aimag centers poor	4 473	-	2 252	521	1 334	8 581
Sum centers non-poor	6 739	-	2 817	307	648	10 555
Sum centers poor	4 844	-	2 129	115	503	7 590
Countryside non-poor	6 467	47	2 938	2 236	1 020	12 735
Countryside poor	5 052	-	1 753	1 060	586	8 451
Western non-poor	7 088	-	2 068	1 328	491	11 087
Western poor	5 448	-	888	435	224	6 995
Khangai non-poor	5 689	37	3 054	1 467	1 352	11 598
Khangai poor	4 617	-	1 954	778	684	8 033
Central non-poor	6 562	-	3 927	1 081	1 295	13 027
Central poor	4 476	-	2 640	669	2 113	9 899
Eastern non-poor	5 288	-	3 846	526	1 241	10 901
Eastern poor	4 191	-	3 608	199	758	8 756
Gender						
Men non-poor	5 605	13	3 263	1 325	1 780	12 047
Men poor	4 284	-	2 178	874	1 176	8 513
Women non-poor	5 769	-	3 206	1 594	1 676	12 422
Women poor	4 316	-	2 215	778	1 135	8 444

Source: HSES 2016.

Table D.26. Spending per pupil in public upper secondary schools (per month, tugrug)

	Books Stationary	Room, Dormitory	Uniform	Transport	Other	Total
National	6 146	176	3 096	1 599	1 718	13 640
Location						
Urban	5 470	6	3 258	1 854	2 230	14 083
Rural	7 290	463	2 824	1 169	853	12 893
Ulaanbaatar	5 024	-	3 263	2 360	2 707	15 283
Aimag centers	6 141	14	3 249	1 092	1 511	12 274
Sum centers	7 058	593	3 060	696	1 016	12 953
Countryside	7 581	299	2 528	1 761	648	12 817
Western	8 067	288	2 453	1 139	678	12 870
Khangai	6 176	354	2 431	1 240	1 447	11 648
Cantral	6 958	311	3 512	1 246	1 289	14 133
Eastern	5 110	-	4 867	605	971	11 553
Gender						
Men	6 082	173	3 051	1 597	1 755	13 669
Women	6 201	178	3 135	1 602	1 686	13 615
Quintile						
Poorest	4 644	-	2 277	779	899	8 599
Q2	5 554	120	2 775	1 414	1 394	11 266
Q3	6 413	27	3 236	1 590	1 631	13 055
Q4	6 953	504	3 235	2 033	1 800	15 758
Richest	7 761	280	4 410	2 488	3 453	22 777
Poverty						
Non-poor	6 741	226	3 430	1 867	2 031	15 630
Poor	4 894	68	2 394	1 037	1 058	9 451

Source: HSES 2016.

Table D.27. Spending per pupil in public upper secondary schools by poverty status (per month, tugrug)

	Books Stationary	Room, Dormitory	Uniform	Transport	Other	Total
National	6 146	176	3 096	1 599	1 718	13 640
Poverty						
Non-poor	6 741	226	3 430	1 867	2 031	15 630
Poor	4 894	68	2 394	1 037	1 058	9 451
Location						
Urban non-poor	6 129	8	3 552	2 251	2 584	16 339
Urban poor	3 955	-	2 583	943	1 416	8 897
Rural non-poor	7 857	624	3 209	1 166	1 024	14 337
Rural poor	6 254	167	2 120	1 174	539	10 255
Ulaanbaatar non-poor	5 585	-	3 609	2 810	3 118	17 784
Ulaanbaatar poor	3 550	-	2 353	1 178	1 625	8 707
Aimag centers non-poor	7 036	22	3 455	1 320	1 694	13 931
Aimag centers poor	4 443	-	2 859	659	1 165	9 126
Sum centers non-poor	7 546	857	3 458	678	1 125	14 429
Sum centers poor	5 961	-	2 167	737	771	9 636
Countryside non-poor	8 315	281	2 843	1 885	877	14 200
Countryside poor	6 530	325	2 075	1 584	322	10 836
Western non-poor	8 809	264	2 714	1 002	929	14 094
Western poor	6 686	333	1 967	1 394	211	10 591
Khangai non-poor	6 725	552	2 761	1 487	1 811	13 336
Khangai poor	5 196	-	1 843	800	797	8 635
Central non-poor	7 569	430	3 920	1 323	1 131	15 501
Central poor	5 356	-	2 443	1 044	1 705	10 549
Eastern non-poor	5 887	-	5 331	772	1 228	13 218
Eastern poor	4 303	-	4 386	432	705	9 825
Gender						
Men non-poor	6 652	181	3 517	1 874	2 107	15 792
Men poor	4 803	155	2 003	973	964	8 898
Women non-poor	6 821	267	3 353	1 860	1 964	15 485
Women poor	4 966	-	2 702	1 087	1 133	9 888

Source: HSES 2016.

Table D.28. Population reporting health complaints

	National	Urban	Rural	Analytical domains				Regions			
				Ulaan-baatar	Aimag centers	Sum centers	Coun-tryside	Western	Khangai	Central	Eastern
Complaints (% population)	6.4	7.0	5.1	7.8	5.5	5.5	4.6	5.5	5.1	5.7	4.3
Among those with complaints (%)											
Type of health complaint a/											
Respiratory system	42.3	46.8	29.3	50.3	36.6	29.8	28.5	27.3	31.3	36.1	37.9
Digestive system	9.1	7.5	13.8	6.6	9.9	12.8	15.3	11.8	14.6	10.8	9.3
Urinary/sexual organ	5.0	4.5	6.5	3.9	6.1	6.7	6.1	12.2	5.2	3.4	3.7
Blood circulation	20.8	20.3	22.3	19.9	21.2	23.9	20.1	24.5	22.7	18.7	21.7
Damage/intoxication by external impact	11.6	10.0	16.3	9.7	10.8	14.6	18.8	12.6	11.1	18.4	13.2
Other	19.0	18.3	20.8	17.0	22.1	21.6	19.6	25.8	18.7	20.7	20.1
Sought treatment? (%)	76.3	77.0	74.2	76.5	78.3	80.6	65.1	66.6	71.7	91.5	67.3
Among them, place of treatment was											
Central hospital or clinic	23.4	26.6	13.9	31.3	13.5	14.8	12.3	8.3	11.3	18.5	15.7
Aimag or district clinic	29.3	31.0	24.0	19.9	62.0	21.3	28.8	43.3	42.5	39.6	35.4
Sum center family clinic	38.8	32.3	58.4	37.7	17.1	60.6	54.4	42.5	41.0	36.5	44.2
Private	8.4	10.0	3.4	10.9	7.4	2.9	4.3	5.6	5.2	5.0	4.8
Abroad	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0
Other, private hospital	0.1	0.0	0.2	0.0	0.0	0.3	0.2	0.2	0.0	0.3	0.0
Not sought treatment (%)	23.7	23.0	25.8	23.5	21.7	19.4	34.9	33.4	28.3	8.5	32.7
Reasons for not seeking											
Not serious enough	65.6	66.8	62.4	66.1	69.0	63.2	61.7	49.6	79.7	52.4	73.4
Treated myself	23.3	26.1	16.0	26.6	24.8	24.5	9.3	26.8	10.3	30.9	16.7
Lack of budget	2.4	2.4	2.2	2.6	2.0	2.4	2.0	3.5	0.4	3.7	1.8
Other	8.7	4.6	19.5	4.7	4.2	9.9	27.1	20.1	9.5	12.9	8.2

a/ Combines up to two responses.
Source: HSES 2016.

Table D.29. 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)	7.3	4.1	7.7	5.0	6.4	2.6
Among those with complaints (%)						
Type of health complaint a/						
Respiratory system	41.3	46.7	45.5	52.0	29.2	29.8
Digestive system	9.4	7.8	7.8	6.4	14.2	12.1
Urinary/sexual organ	5.0	4.9	4.6	4.3	6.4	6.7
Blood circulation	22.1	15.0	22.0	13.0	22.5	21.5
Damage/intoxication by external impact	11.2	13.5	9.1	13.7	17.1	12.9
Other	19.2	18.0	18.9	15.9	19.9	24.8
Sought treatment? (%)	77.1	72.7	77.7	73.9	75.4	68.8
Among them, place of treatment was						
Central hospital or clinic	24.6	18.3	27.8	21.5	15.2	7.3
Aimag or district clinic	28.6	32.2	30.1	35.3	24.5	21.7
Sum center family clinic	36.9	47.1	30.3	40.6	56.2	69.2
Private	9.7	2.4	11.7	2.6	3.8	1.8
Abroad	0.1	0.0	0.1	0.0	0.1	0.0
Other, private hospital	0.1	0.0	0.0	0.0	0.3	0.0
Not sought treatment (%)	22.9	27.3	22.3	26.1	24.6	31.2
Reasons for not seeking						
Not serious enough	66.4	62.9	67.9	63.3	62.5	61.9
Treated myself	24.0	20.9	26.6	24.4	17.3	11.5
Lack of budget	1.6	5.1	1.6	5.2	1.4	4.9
Other	8.0	11.2	3.9	7.1	18.8	21.8

a/ Combines up to two responses.
Source: HSES 2016.

Table D.30. Population reporting health complaints by analytical domain and poverty status

	National		Ulaanbaatar		Aimag centers		Sum centers		Countryside	
	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor
Complaints (% population)	7.3	4.1	8.3	6.1	6.5	3.3	6.8	2.7	5.9	2.5
Among those with complaints (%)										
Type of health complaint a/										
Respiratory system	41.3	46.7	49.1	55.4	35.3	42.4	30.1	28.3	27.7	31.6
Digestive system	9.4	7.8	6.6	6.7	11.0	5.6	13.0	11.8	16.0	12.5
Urinary/sexual organ	5.0	4.9	4.0	3.6	6.1	6.3	6.7	6.9	6.0	6.5
Blood circulation	22.1	15.0	21.9	11.8	22.3	16.5	23.9	23.7	20.3	19.2
Damage/intoxication by external impact	11.2	13.5	8.6	13.9	10.3	13.2	15.2	11.4	19.9	14.6
Other	19.2	18.0	17.7	14.4	22.5	20.3	21.2	23.8	17.9	25.8
Sought treatment? (%)	77.1	72.7	76.3	77.5	81.7	63.6	81.5	75.9	66.2	61.0
Among them, place of treatment was										
Central hospital or clinic	24.6	18.3	33.2	23.9	13.6	13.2	15.1	12.6	15.2	0.0
Aimag or district clinic	28.6	32.2	18.4	25.8	60.7	68.9	21.1	22.2	30.6	21.1
Sum center family clinic	36.9	47.1	35.3	47.7	17.4	15.4	60.0	64.1	49.2	76.1
Private	9.7	2.4	13.0	2.6	8.4	2.4	3.2	1.1	4.7	2.8
Abroad	0.1	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Other, private hospital	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0
Not sought treatment (%)	22.9	27.3	23.7	22.5	18.3	36.4	18.5	24.1	33.8	39.0
Reasons for not seeking										
Not serious enough	66.4	62.9	67.8	59.1	68.2	70.8	60.2	75.3	64.4	52.7
Treated myself	24.0	20.9	27.0	25.0	25.5	23.4	28.5	8.5	8.0	13.5
Lack of budget	1.6	5.1	1.6	6.8	1.9	2.2	2.3	2.9	0.7	6.2
Other	8.0	11.2	3.7	9.1	4.5	3.6	9.0	13.3	26.9	27.6

a/ Combines up to two responses.
Source: HSES 2016.

Table D.31. Population reporting health complaints by region and poverty status

	National		Western		Khangai		Central		Eastern		Ulaanbaatar	
	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor
Complaints (% population)	7.3	4.1	6.5	3.7	6.6	2.0	6.6	3.1	5.4	3.0	8.3	6.1
Among those with complaints (%)												
Type of health complaint a/												
Respiratory system	41.3	46.7	25.4	33.1	31.7	29.0	34.7	44.6	38.8	35.7	49.1	55.4
Digestive system	9.4	7.8	13.1	7.7	15.6	7.8	10.6	12.3	9.2	9.6	6.6	6.7
Urinary/sexual organ	5.0	4.9	12.2	12.2	5.1	5.6	3.8	1.6	3.9	3.4	4.0	3.6
Blood circulation	22.1	15.0	26.1	19.5	23.3	18.6	18.1	21.7	24.1	16.4	21.9	11.8
Damage/intoxication by external impact	11.2	13.5	13.7	9.3	10.6	14.4	19.3	13.5	11.1	17.9	8.6	13.9
Other	19.2	18.0	24.6	29.6	17.8	24.6	21.6	15.6	21.5	17.1	17.7	14.4
Sought treatment? (%)	77.1	72.7	69.8	56.5	72.4	67.0	92.3	87.2	71.8	57.0	76.3	77.5
Among them, place of treatment was												
Central hospital or clinic	24.6	18.3	9.4	4.2	11.7	7.8	18.9	16.3	17.6	10.2	33.2	23.9
Aimag or district clinic	28.6	32.2	43.3	43.2	42.3	44.3	38.8	44.3	37.0	30.6	18.4	25.8
Sum center family clinic	36.9	47.1	41.1	47.9	40.1	47.1	36.1	38.8	39.7	57.2	35.3	47.7
Private	9.7	2.4	5.9	4.7	5.9	0.7	5.8	0.6	5.7	1.9	13.0	2.6
Abroad	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0
Other, private hospital	0.1	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Not sought treatment (%)	22.9	27.3	30.2	43.5	27.6	33.0	7.7	12.8	28.2	43.0	23.7	22.5
Reasons for not seeking												
Not serious enough	66.4	62.9	45.2	58.9	81.0	72.4	45.2	77.9	76.0	69.5	67.8	59.1
Treated myself	24.0	20.9	32.0	15.6	8.1	22.5	37.0	9.7	15.6	18.3	27.0	25.0
Lack of budget	1.6	5.1	3.7	3.1	0.5	0.0	1.2	12.4	0.0	4.5	1.6	6.8
Other	8.0	11.2	19.1	22.3	10.3	5.1	16.6	0.0	8.4	7.8	3.7	9.1

a/ Combines up to two responses.
Source: HSES 2016.

Table D.32. Population reporting health complaints by gender and poverty status

	National		Men		Women	
	Men	Women	Men	Women	Men	Women
Complaints (% population)	5.4	7.3	6.1	3.8	8.5	4.4
Among those with complaints (%)						
Type of health complaint a/						
Respiratory system	48.5	38.0	47.5	52.4	37.1	42.1
Digestive system	7.8	10.1	8.1	6.3	10.3	8.9
Urinary/sexual organ	3.7	5.9	4.0	2.4	5.7	6.9
Blood circulation	15.1	24.7	16.4	10.2	26.0	19.0
Damage/intoxication by external impact	13.3	10.4	12.5	16.1	10.2	11.4
Other	17.7	19.9	17.1	19.6	20.5	16.7
Sought treatment? (%)	75.6	76.8	76.0	73.9	77.9	71.8
Among them, place of treatment was						
Central hospital or clinic	22.9	23.8	24.2	17.9	24.8	18.6
Aimag or district clinic	27.9	30.3	26.8	31.8	29.8	32.5
Sum center family clinic	41.0	37.3	39.2	47.8	35.4	46.5
Private	8.2	8.5	9.7	2.4	9.7	2.4
Abroad	0.1	0.1	0.1	0.0	0.1	0.0
Other, private hospital	0.0	0.1	0.0	0.0	0.1	0.0
Not sought treatment (%)	24.4	23.2	24.0	26.1	22.1	28.2
Reasons for not seeking						
Not serious enough	67.5	64.2	68.8	62.9	64.6	62.9
Treated myself	23.4	23.3	23.5	22.9	24.4	19.3
Lack of budget	1.0	3.3	0.5	2.8	2.4	6.8
Other	8.1	9.2	7.2	11.4	8.7	11.0

a/ Combines up to two responses.
Source: HSES 2016.

Table D.33. Disabilities

	National	Urban	Rural	Analytical domains				Regions			
				Ulaanbaatar	Aimag centers	Sum centers	Countryside	Western	Khangai	Central	Eastern
Disabilities (% population)	4.0	3.9	4.2	3.5	4.7	4.3	4.0	5.1	4.0	4.1	4.7
Among those (%)											
Sight	9.5	9.1	10.5	7.6	11.2	9.9	11.2	10.6	11.7	9.2	12.3
Speaking	4.2	3.8	4.9	4.0	3.4	3.5	6.8	4.7	3.2	4.8	4.6
Hearing	8.4	8.6	8.0	10.1	6.5	7.8	8.2	4.8	10.7	5.4	8.7
Physical	27.5	27.6	27.3	26.9	28.6	29.1	25.0	33.0	24.8	27.4	25.3
Mental	20.6	19.8	22.1	19.0	20.9	20.9	23.7	17.7	25.4	20.5	23.4
Other	29.8	31.2	27.1	32.4	29.3	28.8	25.1	29.3	24.2	32.6	25.7

Source: HSES 2016.

Table D.34. Disabilities by urban and rural areas and poverty status

	National		Urban		Rural	
	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor
Disabilities (% population)	3.8	4.5	3.6	4.8	4.3	4.1
Among those (%)						
Sight	9.7	9.1	8.7	9.7	11.7	8.1
Speaking	4.0	4.5	3.2	4.8	5.5	3.9
Hearing	7.6	10.0	7.1	11.8	8.7	6.6
Physical	29.4	23.7	30.2	22.4	27.9	26.2
Mental	17.2	27.4	16.9	25.5	17.6	30.9
Other	32.1	25.2	33.9	25.7	28.6	24.3

Source: HSES 2016.

Table D.35. Disabilities by analytical domain and poverty status

	National		Ulaanbaatar		Aimag centers		Sum centers		Countryside	
	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor
Disabilities (% population)	3.8	4.5	3.2	4.3	4.3	5.5	4.2	4.6	4.3	3.6
Among those (%)										
Sight	9.7	9.1	7.4	8.1	11.0	11.6	11.9	6.3	11.6	10.4
Speaking	4.0	4.5	3.5	5.2	2.8	4.4	4.2	2.0	7.0	6.4
Hearing	7.6	10.0	8.0	14.8	5.5	8.2	7.9	7.7	9.7	5.3
Physical	29.4	23.7	29.8	20.0	30.7	25.2	30.9	25.7	24.1	26.9
Mental	17.2	27.4	17.0	23.7	16.8	27.7	16.4	29.5	19.2	32.7
Other	32.1	25.2	34.3	28.2	33.3	22.8	28.7	28.9	28.5	18.3

Source: HSES 2016.

Table D.36. Disabilities by regions and poverty status

	National		Western		Khangai		Central		Eastern		Ulaanbaatar	
	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor
Disabilities (% population)	3.8	4.5	5.2	4.9	3.9	4.3	3.7	5.0	5.0	4.5	3.2	4.3
Among those (%)												
Sight	9.7	9.1	10.9	10.0	12.6	10.3	9.7	8.0	13.4	10.7	7.4	8.1
Speaking	4.0	4.5	4.5	5.1	2.4	4.6	5.6	3.3	5.8	2.8	3.5	5.2
Hearing	7.6	10.0	5.5	3.4	10.3	11.3	5.4	5.6	8.3	9.3	8.0	14.8
Physical	29.4	23.7	35.3	28.5	25.8	22.8	28.9	24.4	23.1	28.6	29.8	20.0
Mental	17.2	27.4	13.7	25.2	20.8	33.5	16.2	29.2	19.2	29.2	17.0	23.7
Other	32.1	25.2	30.1	27.9	28.0	17.5	34.2	29.5	30.3	19.3	34.3	28.2

Source: HSES 2016.

Table D.36. Disabilities by gender and poverty status

	National		Urban		Rural	
	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor
Disabilities (% population)	4.7	3.4	4.4	5.2	3.1	3.9
Among those (%)						
Sight	10.9	7.7	10.3	12.2	9.0	5.3
Speaking	4.4	3.9	4.0	5.0	3.9	3.9
Hearing	8.9	7.7	8.8	9.2	6.0	11.1
Physical	28.0	26.9	29.7	24.5	29.0	22.8
Mental	19.2	22.4	16.2	25.2	18.4	30.1
Other	28.6	31.3	30.9	24.0	33.7	26.8

Source: HSES 2016.

Table D.38. Health spending per person per month (tugrug)

	Outpatient visits		Self-prescribed medicines	Hospitalizations						Total
				In public hospitals		In private hospitals		In hospitals abroad		
	Service, medicines	Transportation, gifts, food		Service	Transportation, gifts	Service, medicines	Transportation, gifts, food	Service	Transportation, gifts	
National	4 969	866	3 133	1 083	279	615	59	333	47	11 383
Location										
Urban	5 428	793	3 471	979	200	651	58	440	38	12 057
Rural	3 999	1 020	2 419	1 304	446	539	60	105	68	9 960
Ulaanbaatar	5 665	504	3 424	952	112	725	47	547	32	12 008
Aimag centers	4 956	1 372	3 565	1 032	374	502	80	227	48	12 157
Sum centers	4 587	1 081	2 933	1 500	484	406	58	182	74	11 306
Countryside	3 295	947	1 804	1 069	399	698	63	13	61	8 349
Western	3 826	1 217	3 429	1 710	605	429	91	32	4	11 344
Khangai	3 659	1 065	3 188	943	305	390	35	258	136	9 978
Cantral	6 159	1 404	2 594	1 210	405	769	75	81	23	12 718
Eastern	3 546	810	1 769	813	367	514	99	288	52	8 257
Gender										
Men	4 184	862	2 626	824	256	533	51	165	58	9 560
Women	5 701	870	3 605	1 325	300	691	66	489	37	13 084
Quintile										
Poorest	633	124	718	319	95	43	5	-	-	1 937
Q2	1 042	181	1 452	503	135	198	29	-	-	3 539
Q3	1 838	326	1 878	706	236	194	27	-	-	5 206
Q4	3 170	590	2 910	1 248	382	531	74	26	-	8 930
Richest	18 161	3 110	8 707	2 640	546	2 107	158	1 637	238	37 304
Poverty										
Non-poor	6 757	1 180	4 053	1 409	355	841	79	472	67	15 215
Poor	720	120	947	309	97	76	9	-	-	2 278

Source: HSES 2016.

Table D.39. Health spending per person per month by poverty status (tugrug)

	Outpatient visits		Self-prescribed medicines	Hospitalizations						Total
				In public hospitals		In private hospitals		In hospitals abroad		
	Service, medicines	Transportation, gifts, food		Service	Transportation, gifts	Service, medicines	Transportation, gifts, food	Service	Transportation, gifts	
National	4 969	866	3 133	1 083	279	615	59	333	47	11 383
Poverty										
Non-poor	6 757	1 180	4 053	1 409	355	841	79	472	67	15 215
Poor	720	120	947	309	97	76	9	-	-	2 278
Location										
Urban non-poor	7 110	1 045	4 365	1 250	248	863	77	604	52	15 614
Urban poor	911	118	1 070	249	70	81	6	-	-	2 505
Rural non-poor	5 924	1 501	3 316	1 785	608	791	84	161	105	14 275
Rural poor	407	122	744	406	142	68	16	-	-	1 906
Ulaanbaatar non-poor	7 147	615	4 227	1 185	132	932	61	727	43	15 069
Ulaanbaatar poor	1 164	166	987	244	51	98	4	-	-	2 714
Aimag centers non-poor	7 028	1 992	4 669	1 394	503	711	113	333	70	16 814
Aimag centers poor	517	44	1 200	257	99	54	9	-	-	2 180
Sum centers non-poor	6 540	1 539	3 947	1 986	642	564	75	270	110	15 671
Sum centers poor	494	121	808	482	154	74	21	-	-	2 155
Countryside non-poor	5 118	1 452	2 492	1 522	564	1 088	96	20	99	12 452
Countryside poor	319	123	679	329	130	62	11	-	-	1 653
Western non-poor	5 643	1 827	4 619	2 364	885	609	128	51	6	16 133
Western poor	601	136	1 316	550	108	110	24	-	-	2 845
Khangai non-poor	5 372	1 560	4 226	1 277	403	570	50	388	204	14 049
Khangai poor	265	85	1 132	281	112	35	4	-	-	1 915
Central non-poor	8 196	1 898	3 402	1 547	504	1 022	99	110	31	16 810
Central poor	595	54	386	289	134	77	8	-	-	1 543
Eastern non-poor	6 021	1 378	2 678	1 258	525	898	162	514	92	13 526
Eastern poor	387	86	609	244	165	24	19	-	-	1 534
Gender										
Men non-poor	5 631	1 176	3 458	1 069	329	738	68	235	83	12 785
Men poor	731	113	643	239	82	45	9	-	-	1 862
Women non-poor	7 810	1 185	4 610	1 727	380	939	90	695	53	17 488
Women poor	710	126	1 229	373	112	105	10	-	-	2 664

Source: HSES 2016.

Table D.40. Population by labor force status

	As % of the variable of interest				As % of the labor force status			
	Employed	Unemployed	Out of the labor force	Total	Employed	Unemployed	Out of the labor force	Total
National	61.9	9.4	28.7	100.0	100.0	100.0	100.0	100.0
Location								
Urban	59.2	9.4	31.4	100.0	64.8	68.3	73.9	67.7
Rural	67.6	9.2	23.2	100.0	35.3	31.7	26.1	32.3
Ulaanbaatar	59.2	8.3	32.4	100.0	43.2	40.2	51.0	45.1
Aimag centers	59.2	11.6	29.2	100.0	21.6	28.1	23.0	22.6
Sum centers	59.0	14.0	27.0	100.0	16.7	26.3	16.5	17.5
Countryside	77.8	3.5	18.7	100.0	18.5	5.5	9.6	14.8
Western	61.3	11.4	27.3	100.0	13.4	16.5	12.8	13.5
Khangai	68.0	9.7	22.3	100.0	20.5	19.4	14.5	18.7
Central	63.1	9.4	27.5	100.0	15.8	15.6	14.9	15.5
Eastern	61.6	10.9	27.5	100.0	7.2	8.4	6.9	7.2
Quantiles								
Poorest	51.1	15.9	33.0	100.0	14.8	30.5	20.5	17.9
Q2	59.0	11.6	29.4	100.0	18.2	23.7	19.6	19.1
Q3	63.3	9.2	27.5	100.0	20.4	19.6	19.0	19.9
Q4	64.3	7.2	28.5	100.0	21.6	16.0	20.6	20.8
Richest	69.6	4.3	26.1	100.0	25.1	10.2	20.3	22.3
Poverty								
Non-poor	65.0	7.4	27.6	100.0	76.7	57.7	70.2	73.1
Poor	53.5	14.7	31.8	100.0	23.3	42.3	29.9	27.0
Gender								
Men	67.6	10.7	21.8	100.0	54.2	56.7	37.6	49.6
Women	56.4	8.1	35.6	100.0	45.8	43.3	62.4	50.4
Age								
16-24	25.4	12.0	62.6	100.0	9.6	29.9	50.9	23.4
25-34	71.7	9.1	19.2	100.0	33.8	28.5	19.4	29.2
35-44	78.1	7.4	14.5	100.0	31.0	19.5	12.4	24.6
45-54	71.4	8.7	19.9	100.0	22.6	18.3	13.6	19.6
55-59 a/	56.9	10.8	32.4	100.0	3.0	3.8	3.7	3.3
Education								
None	58.6	8.7	32.8	100.0	2.5	2.4	3.0	2.6
Primary	74.0	8.7	17.4	100.0	4.7	3.6	2.4	3.9
Lower secondary	50.9	7.7	41.4	100.0	14.1	14.1	24.6	17.1
Higher secondary	49.1	10.9	40.0	100.0	24.6	36.2	43.2	31.0
Vocational	73.8	9.7	16.6	100.0	15.5	13.5	7.5	13.0
Technical secondary	71.5	9.1	19.4	100.0	6.0	5.1	3.5	5.2
Degree or higher education diploma	73.4	8.7	17.9	100.0	9.1	7.1	4.8	7.7
Bachelor	73.9	9.2	16.9	100.0	21.2	17.4	10.5	17.8
Master	87.8	3.0	9.3	100.0	2.1	0.5	0.5	1.5
Doctor	94.4	1.7	3.9	100.0	0.2	0.0	0.0	0.2

a/ Includes only men
Source: HSES 2016.

Table D.41. Population by labor force status and poverty status

	As % of the variable of interest				As % of the labor force status			
	Employed	Unemployed	Out of the labor force	Total	Employed	Unemployed	Out of the labor force	Total
National	61.9	9.4	28.7	100.0	100.0	100.0	100.0	100.0
Poverty								
Non-poor	65.0	7.4	27.6	100.0	76.7	57.7	70.2	73.1
Poor	53.5	14.7	31.8	100.0	23.3	42.3	29.9	27.0
Location								
Urban non-poor	63.2	7.4	29.4	100.0	52.1	40.5	52.3	51.1
Urban poor	47.1	15.6	37.3	100.0	12.6	27.7	21.6	16.6
Rural non-poor	69.4	7.3	23.3	100.0	24.6	17.1	17.8	22.0
Rural poor	63.8	13.2	23.0	100.0	10.7	14.6	8.3	10.3
Ulaanbaatar non-poor	63.1	6.7	30.2	100.0	35.8	25.1	36.9	35.1
Ulaanbaatar poor	45.8	14.0	40.2	100.0	7.4	15.1	14.0	10.0
Aimag centers non-poor	63.4	9.0	27.6	100.0	16.4	15.4	15.4	16.0
Aimag centers poor	49.0	18.0	33.0	100.0	5.2	12.7	7.6	6.6
Sum centers non-poor	62.8	10.8	26.4	100.0	12.6	14.3	11.4	12.4
Sum centers poor	50.0	21.7	28.4	100.0	4.2	12.0	5.1	5.2
Countryside non-poor	77.9	2.8	19.4	100.0	12.0	2.8	6.5	9.6
Countryside poor	77.7	4.8	17.6	100.0	6.5	2.6	3.2	5.2
Western non-poor	62.0	9.3	28.7	100.0	9.2	9.1	9.1	9.2
Western poor	60.0	15.8	24.2	100.0	4.3	7.4	3.7	4.4
Khangai non-poor	70.1	7.9	22.0	100.0	14.5	10.8	9.9	12.9
Khangai poor	63.2	13.8	23.0	100.0	5.9	8.6	4.7	5.8
Central non-poor	67.2	7.3	25.5	100.0	12.7	9.1	10.4	11.7
Central poor	50.4	15.9	33.7	100.0	3.1	6.5	4.5	3.8
Eastern non-poor	66.3	7.7	26.0	100.0	4.6	3.5	3.9	4.3
Eastern poor	54.8	15.6	29.7	100.0	2.6	4.9	3.0	2.9
Gender								
Men non-poor	69.5	8.8	21.8	100.0	41.1	34.3	27.8	36.7
Men poor	62.2	16.1	21.7	100.0	13.0	22.4	9.8	13.0
Women non-poor	60.5	6.0	33.5	100.0	35.6	23.4	42.4	36.4
Women poor	45.4	13.4	41.2	100.0	10.26	19.97	20.05	13.98

Source: HSES 2016.

Table D.42. Labor force participation rate and unemployment rate by poverty status

	Labor force participation force			Unemployment rate		
	Non-poor	Poor	Total	Non-poor	Poor	Total
National	72.4	68.2	71.3	10.2	21.6	13.1
Location						
Urban	70.6	62.7	68.6	10.5	24.9	13.7
Rural	76.7	77.0	76.8	9.5	17.2	12.0
Ulaanbaatar	69.8	59.8	67.6	9.6	23.5	12.3
Aimag centers	72.4	67.0	70.8	12.5	26.9	16.4
Sum centers	73.6	71.6	73.0	14.7	30.3	19.2
Countryside	80.6	82.4	81.3	3.4	5.8	4.3
Western	71.3	75.8	72.8	13.1	20.8	15.7
Khangai	78.0	77.0	77.7	10.1	17.9	12.5
Central	74.5	66.3	72.5	9.8	23.9	13.0
Eastern	74.0	70.4	72.5	10.4	22.2	15.0
Gender						
Men	78.2	78.3	78.2	11.2	20.6	13.7
Women	66.6	58.8	64.4	9.0	22.7	12.5
Age						
16-24	34.2	45.5	37.4	27.4	40.8	32.0
25-34	83.8	73.6	80.8	9.1	17.6	11.3
35-44	87.8	80.1	85.5	6.0	15.5	8.7
45-54	81.9	73.2	80.1	8.3	21.9	10.9
55-59 a/	68.6	63.0	67.6	14.1	25.7	15.9
Education						
None	67.5	67.0	67.2	6.4	19.2	12.9
Primary	82.2	83.1	82.6	6.6	14.5	10.5
Lower secondary	57.5	60.3	58.6	9.0	18.9	13.2
Higher secondary	57.5	65.8	60.0	14.5	26.0	18.2
Vocational	85.9	77.4	83.5	8.9	19.3	11.6
Technical secondary	81.9	74.1	80.6	8.9	24.3	11.3
Degree or higher education diploma	83.2	71.9	82.1	9.6	20.6	10.6
Bachelor	84.6	71.9	83.1	9.6	23.5	11.0
Master	91.1	73.8	90.7	3.3	-	3.3
Doctor	96.1	-	96.1	1.7	-	1.7

a/ Includes only men
Source: HSES 2016.

Table D.43. Labor force participation rate and unemployment rate by gender

	Labor force participation force			Unemployment rate		
	Men	Women	Total	Men	Women	Total
National	78.2	64.4	71.3	13.7	12.5	13.1
Location						
Urban	76.8	60.9	68.6	14.6	12.7	13.7
Rural	81.0	72.2	76.8	11.9	12.1	12.0
Ulaanbaatar	77.2	58.5	67.6	13.8	10.5	12.3
Aimag centers	76.0	65.8	70.8	16.2	16.6	16.4
Sum centers	77.3	68.6	73.0	19.6	18.7	19.2
Countryside	85.2	76.7	81.3	3.9	4.7	4.3
Western	76.8	68.6	72.8	14.1	17.6	15.7
Khangai	82.4	72.8	77.7	12.6	12.4	12.5
Central	77.3	67.6	72.5	13.1	12.7	13.0
Eastern	78.3	66.5	72.5	16.0	13.9	15.0
Gender						
Men	78.2	66.6	72.4	11.2	9.0	10.2
Women	78.3	58.8	68.2	20.6	22.7	21.6
Age						
16-24	44.3	30.8	37.4	31.3	33.1	32.0
25-34	92.2	70.3	80.8	11.2	11.5	11.3
35-44	91.7	79.7	85.5	9.6	7.7	8.7
45-54	85.4	75.7	80.1	11.3	10.5	10.9
55-59 a/	67.6	-	67.6	15.9	-	15.9
Education						
None	74.7	55.9	67.2	11.9	15.0	12.9
Primary	87.4	74.1	82.6	9.5	12.5	10.5
Lower secondary	65.6	50.5	58.6	12.8	13.8	13.2
Higher secondary	68.1	52.2	60.0	19.2	17.0	18.2
Vocational	88.9	74.4	83.5	10.7	13.5	11.6
Technical secondary	85.6	77.0	80.6	13.6	9.5	11.3
Degree or higher education diploma	90.1	76.5	82.1	12.8	8.8	10.6
Bachelor	93.1	76.5	83.1	11.9	10.3	11.0
Master	93.9	89.0	90.7	5.2	2.1	3.3
Doctor	100.0	90.1	96.1	2.7	-	1.7

a/ Includes only men
Source: HSES 2016.

Table D.44. Industry, sector of employment and occupation by poverty status

	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	7.2	3.8	51.8	67.0	56.4	18.6	34.5	22.3
Industry	28.1	38.8	30.2	10.3	11.9	10.8	22.4	26.5	23.4
Services	68.9	54.1	66.0	37.8	21.1	32.8	59.0	39.0	54.3
Agriculture, herding	3.0	7.2	3.8	51.8	67.0	56.4	18.6	34.5	22.3
Mining	5.5	5.5	5.5	4.2	3.6	4.0	5.0	4.6	4.9
Manufacturing	9.4	11.4	9.8	2.6	3.8	3.0	7.2	7.9	7.4
Electricity, water	3.0	2.9	3.0	1.1	0.8	1.0	2.4	1.9	2.3
Construction	10.3	19.0	12.0	2.5	3.8	2.9	7.8	12.1	8.8
Trade	17.2	16.5	17.0	5.6	2.6	4.7	13.5	10.1	12.7
Hotels, restaurants, tourism	4.6	7.4	5.2	1.2	1.6	1.3	3.5	4.8	3.8
Transportation	7.6	6.5	7.4	2.8	1.3	2.3	6.0	4.1	5.6
Financial, insurance, real estate	3.5	0.9	3.0	2.0	0.5	1.5	3.0	0.8	2.5
Public administration	9.9	6.2	9.2	7.5	3.5	6.3	9.1	4.9	8.2
Education	10.1	5.2	9.2	11.6	7.0	10.2	10.6	6.0	9.5
Health	4.8	3.0	4.5	4.1	1.9	3.5	4.6	2.5	4.1
Other	11.2	8.3	10.7	3.1	2.7	3.0	8.6	5.7	8.0
Sector									
Private	70.8	81.9	73.0	73.1	85.7	76.9	71.5	83.7	74.4
Public	24.6	15.3	22.8	24.7	13.0	21.1	24.6	14.2	22.2
State	4.6	2.8	4.3	2.2	1.3	2.0	3.9	2.1	3.5
Occupation									
Managers, senior officials and legislators	9.4	0.9	7.8	4.5	0.7	3.4	7.9	0.8	6.2
Professionals	24.7	6.9	21.2	12.9	4.5	10.4	20.9	5.8	17.4
Technicians and associate professionals	4.0	1.6	3.6	2.3	0.8	1.8	3.5	1.2	2.9
Clerks	5.1	2.7	4.6	2.7	1.3	2.2	4.3	2.0	3.8
Service workers, shop and market salespeople	20.6	21.7	20.8	8.0	5.2	7.2	16.6	14.2	16.0
Skilled agricultural and fishery workers	2.6	6.7	3.4	50.8	66.3	55.5	18.0	34.0	21.7
Craft and related trader workers	12.2	22.2	14.2	4.4	6.4	5.0	9.7	15.0	11.0
Plant and machine operators	11.6	11.8	11.6	5.6	2.6	4.7	9.7	7.6	9.2
Elementary occupations	8.8	24.8	12.0	8.0	12.0	9.2	8.6	18.9	11.0
Others	0.9	0.7	0.9	0.9	0.2	0.7	0.9	0.5	0.8

Source: HSES 2016.

Table D.45. Industry, sector of employment and occupation by gender

	Urban			Rural			National		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Industry									
Agriculture	4.4	3.1	3.8	59.9	52.2	56.4	24.2	20.1	22.3
Industry	39.6	19.3	30.2	15.0	5.7	10.8	30.8	14.6	23.4
Services	56.1	77.6	66.0	25.1	42.1	32.8	45.0	65.3	54.3
Agriculture, herding	4.4	3.1	3.8	59.9	52.2	56.4	24.2	20.1	22.3
Mining	8.3	2.2	5.5	5.9	1.6	4.0	7.4	2.0	4.9
Manufacturing	9.3	10.4	9.8	2.9	3.0	3.0	7.0	7.8	7.4
Electricity, water	3.7	2.1	3.0	1.5	0.4	1.0	2.9	1.5	2.3
Construction	18.3	4.6	12.0	4.6	0.8	2.9	13.4	3.3	8.8
Trade	14.2	20.3	17.0	3.6	6.0	4.7	10.4	15.4	12.7
Hotels, restaurants, tourism	2.3	8.6	5.2	0.5	2.3	1.3	1.6	6.4	3.8
Transportation	11.4	2.7	7.4	3.3	1.1	2.3	8.5	2.1	5.6
Financial, insurance, real estate	2.3	3.8	3.0	1.0	2.2	1.5	1.8	3.3	2.5
Public administration	10.1	8.1	9.2	6.9	5.6	6.3	8.9	7.3	8.2
Education	4.3	14.9	9.2	5.1	16.4	10.2	4.6	15.4	9.5
Health	1.5	7.9	4.5	1.5	5.8	3.5	1.5	7.2	4.1
Other	10.1	11.3	10.7	3.3	2.7	3.0	7.7	8.3	8.0
Sector									
Private	77.7	67.5	73.0	82.8	69.8	76.9	79.5	68.3	74.4
Public	17.3	29.1	22.8	14.9	28.7	21.1	16.5	29.0	22.2
State	5.0	3.5	4.3	2.3	1.5	2.0	4.0	2.8	3.5
Occupation									
Managers, senior officials and legislators	8.3	7.2	7.8	3.4	3.3	3.4	6.5	5.8	6.2
Professionals	14.2	29.4	21.2	5.1	16.8	10.4	10.9	25.0	17.4
Technicians and associate professionals	3.7	3.3	3.6	1.5	2.3	1.8	2.9	3.0	2.9
Clerks	1.8	7.9	4.6	1.3	3.4	2.2	1.6	6.3	3.8
Service workers, shop and market salespeople	14.5	28.3	20.8	3.6	11.6	7.2	10.6	22.5	16.0
Skilled agricultural and fishery workers	3.8	2.9	3.4	58.8	51.5	55.5	23.4	19.8	21.7
Craft and related trader workers	19.9	7.5	14.2	6.8	2.7	5.0	15.3	5.9	11.0
Plant and machine operators	20.3	1.6	11.6	8.0	0.7	4.7	15.9	1.3	9.2
Elementary occupations	11.9	12.0	12.0	10.6	7.5	9.2	11.5	10.4	11.0
Others	1.6	0.1	0.9	1.0	0.3	0.7	1.4	0.2	0.8

Source: HSES 2016.

Table D.46. Poverty profile by savings and loan and urban and rural areas

	Poverty headcount			Share of population			Share of poor		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Total	27.1	34.9	29.6	100.0	100.0	100.0	100.0	100.0	100.0
Savings									
No	32.0	38.5	34.1	73.4	73.1	73.3	86.5	80.6	84.3
Yes	13.7	25.1	17.4	26.6	26.9	26.7	13.5	19.4	15.7
Loan									
No	32.0	45.0	35.3	53.0	38.8	48.4	62.5	50.0	57.8
Yes	21.7	28.5	24.3	47.0	61.2	51.6	37.5	50.0	42.2
Loan type									
Salary									
No	22.8	32.5	26.8	54.4	61.7	57.2	57.2	70.3	63.1
Yes	20.3	22.1	20.9	45.6	38.3	42.8	42.8	29.7	36.9
Pension									
No	19.9	29.3	23.6	80.0	84.2	81.6	73.6	86.6	79.4
Yes	28.6	24.3	27.2	20.0	15.8	18.4	26.4	13.4	20.6
Housing									
No	25.0	28.9	26.6	82.2	97.5	88.0	94.9	98.7	96.6
Yes	6.2	14.5	6.9	17.8	2.5	12.0	5.1	1.3	3.4
Household consumption									
No	20.9	28.1	23.8	90.6	96.4	92.8	87.7	94.9	91.0
Yes	28.4	40.4	30.7	9.4	3.6	7.2	12.3	5.1	9.0
Herders'									
No	21.6	25.7	22.7	98.4	61.1	84.2	98.1	55.0	78.7
Yes	26.9	33.0	32.6	1.6	38.9	15.8	1.9	45.0	21.3
Business									
No	22.3	29.2	25.0	93.7	96.0	94.6	96.3	98.3	97.2
Yes	12.6	12.4	12.5	6.3	4.0	5.4	3.7	1.7	2.8
Other									
No	20.8	27.3	23.4	85.1	89.6	86.8	81.8	85.8	83.6
Yes	26.4	38.9	30.2	14.9	10.4	13.2	18.2	14.2	16.4

Source: HSES 2016.

Table D.47. Poverty profile by savings and loan and analytical domains

	Poverty headcount				Share of population				Share of poor			
	Ulaan-baatar	Aimag centers	Sum centers	Country-side	Ulaan-baatar	Aimag centers	Sum centers	Country-side	Ulaan-baatar	Aimag centers	Sum centers	Country-side
Total	24.8	31.8	32.3	38.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Savings												
No	29.8	36.2	36.5	40.8	72.6	74.9	73.7	72.3	87.4	85.3	83.4	77.7
Yes	11.4	18.7	20.4	30.5	27.4	25.1	26.3	27.7	12.6	14.7	16.6	22.3
Loan												
No	28.4	43.4	45.8	44.3	60.5	38.1	33.0	45.7	69.3	52.0	46.7	53.3
Yes	19.3	24.7	25.7	32.7	39.5	61.9	67.0	54.3	30.7	48.0	53.3	46.7
Loan type												
Salary												
No	19.7	27.7	30.4	34.1	60.2	47.1	43.3	88.8	61.6	52.8	51.3	92.5
Yes	18.6	22.0	22.1	22.0	39.8	52.9	56.7	11.2	38.4	47.2	48.7	7.5
Pension												
No	16.8	23.8	26.3	33.4	79.6	80.5	81.2	88.7	69.4	77.7	83.3	90.5
Yes	28.9	28.3	22.9	27.6	20.4	19.5	18.8	11.3	30.6	22.3	16.7	9.5
Housing												
No	23.6	26.7	26.1	32.9	78.6	86.8	96.1	99.5	96.1	93.7	97.6	100.0
Yes	3.5	11.8	15.7	0.0	21.4	13.2	3.9	0.5	3.9	6.3	2.4	0.0
Household consumption												
No	19.0	23.4	25.0	32.5	90.4	90.9	95.0	98.6	89.1	86.3	92.4	97.9
Yes	22.0	37.1	38.7	49.3	9.6	9.1	5.0	1.4	10.9	13.7	7.6	2.1
Herders'												
No	19.2	24.7	25.0	29.2	99.8	96.7	85.5	25.1	99.4	96.8	83.2	22.4
Yes	66.7	24.2	29.8	33.9	0.2	3.3	14.5	74.9	0.6	3.2	16.8	77.6
Business												
No	19.8	25.5	26.6	32.9	94.9	92.2	93.8	99.3	97.6	95.1	97.1	99.6
Yes	8.9	15.6	12.1	16.0	5.1	7.8	6.2	0.7	2.4	4.9	2.9	0.4
Other												
No	18.6	23.4	23.8	32.3	82.4	88.5	87.5	92.6	79.7	83.9	81.1	91.3
Yes	22.3	34.5	39.0	38.6	17.6	11.5	12.5	7.4	20.3	16.1	18.9	8.7

Source: HSES 2016.

Table D.48. Poverty profile by savings and loan and region

	Poverty headcount					Share of population					Share of poor				
	Western	Khangai	Central	Eastern	Ulaanbaatar	Western	Khangai	Central	Eastern	Ulaanbaatar	Western	Khangai	Central	Eastern	Ulaanbaatar
Total	36.0	33.6	26.8	43.9	24.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Savings															
No	38.9	37.8	31.2	49.6	29.8	74.3	73.5	76.8	67.1	72.6	80.2	82.8	89.6	75.7	87.4
Yes	27.9	21.8	12.1	32.4	11.4	25.7	26.5	23.2	32.9	27.4	19.8	17.2	10.4	24.3	12.6
Loan															
No	48.9	41.6	39.5	55.3	28.4	35.4	42.8	37.5	35.6	60.5	48.0	53.1	55.2	44.8	69.3
Yes	29.0	27.5	19.2	37.7	19.3	64.6	57.2	62.5	64.4	39.5	52.0	46.9	44.8	55.2	30.7
Loan type															
Salary															
No	34.2	31.7	19.5	42.4	19.7	59.3	61.2	47.0	54.0	60.2	69.8	70.4	47.7	60.6	61.6
Yes	21.5	21.0	19.0	32.4	18.6	40.7	38.8	53.0	46.0	39.8	30.2	29.6	52.3	39.4	38.4
Pension															
No	31.1	27.9	18.7	35.8	16.8	82.8	84.9	82.2	78.6	79.6	88.7	85.9	79.8	74.5	69.4
Yes	19.1	25.7	21.7	45.0	28.9	17.2	15.1	17.8	21.4	20.4	11.3	14.1	20.2	25.5	30.6
Housing															
No	30.4	28.6	20.1	38.4	23.6	92.0	94.2	92.1	94.4	78.6	96.3	97.9	96.5	96.0	96.1
Yes	13.4	9.8	8.6	26.6	3.5	8.0	5.8	7.9	5.6	21.4	3.7	2.1	3.5	4.0	3.9
Household consumption															
No	28.4	27.2	18.7	36.2	19.0	91.1	95.6	95.8	92.8	90.4	89.3	94.5	93.1	88.8	89.1
Yes	35.1	34.4	32.0	58.3	22.0	8.9	4.4	4.2	7.2	9.6	10.7	5.5	6.9	11.2	10.9
Herders'															
No	25.0	24.2	20.2	38.8	19.2	75.3	69.5	83.3	76.1	99.8	64.9	61.1	87.5	78.2	99.4
Yes	41.2	35.1	14.4	34.4	66.7	24.7	30.5	16.7	23.9	0.2	35.1	38.9	12.5	21.8	0.6
Business															
No	29.8	28.0	20.1	38.5	19.8	92.9	95.6	93.7	96.1	94.9	95.4	97.4	98.0	97.9	97.6
Yes	18.7	16.7	6.0	20.6	8.9	7.1	4.4	6.3	3.9	5.1	4.6	2.6	2.0	2.1	2.4
Other															
No	27.3	25.9	18.6	37.3	18.6	88.6	90.1	89.1	88.0	82.4	83.5	84.6	86.2	86.8	79.7
Yes	42.0	42.7	24.2	41.3	22.3	11.4	9.9	10.9	12.0	17.6	16.5	15.4	13.8	13.2	20.3

Source: HSES 2016.

Table D.49. Loan amount in last 12 months by loan type (thousand tugrug)

	National	Loan*						
		Salary	Pension	Housing	Household consumption	Herders'	Business	Other
National	4 995.3	4 568.1	2 567.0	36 549.8	3 759.6	3 168.1	10 917.2	4 067.3
Location								
Urban	5 861.4	4 711.2	2 630.6	40 471.7	3 990.	3 094.5	11 206.7	4 632.3
Rural	4 057.8	4 386.5	2 466.2	22 238.2	3 062.3	3 172.8	10 268.9	3 008.3
Ulaanbaatar	6 210.8	4 534.2	2 605.3	49 885.4	3 706.7	3 000.	11 694.2	5 331.5
Aimag centers	5 486.8	4 864.5	2 660.5	29 890.8	4 331.8	3 101.1	10 773.2	3 460.1
Sum centers	4 511.8	4 375.1	2 588.9	20 565.3	3 274.5	3 283.5	10 464.3	2 804.5
Countryside	3 399.2	4 480.1	2 156.6	35 234.2	2 101.3	3 140.8	7 917.2	3 444.4
Western	4 647.9	4 771.7	2 796.3	17 914.5	3 916.9	2 552.4	12 457.8	3 164.4
Khangai	4 028.4	4 614.7	2 293.4	31 942.4	3 363.7	2 785.2	8 630.8	3 390.7
Central	5 052.4	4 529.1	2 718.4	29 418.	4 668.1	3 995.8	10 853.4	3 540.9
Eastern	4 537.5	4 320.5	2 349.4	32 164.4	3 064.0	4 065.0	7 317.0	2 213.4
Quantiles								
Poorest	2 267.7	2 444.9	1 948.0	20 945.7	1 703.1	1 859.8	3 711.4	1 760.6
Q2	3 081.1	3 209.3	2 484.0	22 272.9	2 623.9	2 406.6	5 477.6	2 251.8
Q3	3 795.6	3 970.6	2 680.5	31 425.7	3 074.7	2 926.9	5 660.5	2 344.3
Q4	5 444.9	4 659.9	2 985.3	33 304.6	4 587.5	3 619.8	6 417.5	3 409.5
Richest	8 561.8	5 862.8	3 283.7	46 218.2	5 312.1	4 275.5	17 149.	7 600.7
Poverty								
Non-poor	5 520.5	4 801.9	2 682.2	37 092.7	4 131.5	3 502.2	11 610.7	4 883.7
Poor	2 754.6	3 146.1	1 937.4	28 873.0	2 630.7	2 252.5	3 567.8	1 969.5

**- Estimated only households with particular loan.*
Source: HSES 2016.

Table D.50. Loan spending by loan purpose

	Household consumption	Purchase of a car	Running a private business	Purchase of land	Purchase of durable goods	Building and buying an accommodation	Sending household members abroad	Other
National	69.4	8.3	5.9	0.8	4.0	15.8	1.7	15.8
Location								
Urban	62.2	10.1	6.8	1.0	4.1	21.9	1.8	16.8
Rural	80.7	5.6	4.5	0.4	4.0	6.1	1.4	14.3
Ulaanbaatar	53.2	12.1	6.2	1.1	3.8	26.4	1.6	14.8
Aimag centers	73.1	7.6	7.4	0.8	4.4	16.6	2.1	19.3
Sum centers	78.9	5.5	6.6	0.2	4.4	8.0	1.6	13.5
Countryside	83.6	5.6	1.0	0.7	3.2	3.1	1.3	15.5
Western	76.7	5.1	7.3	0.6	3.1	11.2	4.0	11.1
Khangai	78.3	4.8	4.8	0.5	1.6	9.4	0.8	18.7
Central	74.7	9.1	6.0	0.7	3.4	12.0	1.2	15.8
Eastern	83.3	6.2	4.3	0.3	13.3	8.4	1.3	20.9
Quantiles								
Poorest	86.5	1.3	1.9	0.7	2.3	3.9	1.6	15.3
Q2	80.2	4.4	4.7	0.3	3.9	8.1	1.5	14.9
Q3	72.7	8.8	5.0	0.9	3.7	13.1	1.5	13.4
Q4	65.9	10.4	6.6	0.8	4.1	17.9	1.0	15.7
Richest	53.3	12.5	8.8	0.9	5.2	27.9	2.6	19.0
Poverty								
Non-poor	66.2	9.2	6.2	0.8	4.1	17.9	1.8	16.7
Poor	83.2	4.4	4.2	0.6	3.6	6.6	1.2	12.0

Source: HSES 2016.

Table D.51. Loan spendings by loan purpose and poverty status

	Household consumption	Purchase of a car	Running a private business	Purchase of land	Purchase of durable goods	Building and buying an accommodation	Sending household members abroad	Other
National	69.4	8.3	5.9	0.8	4.0	15.8	1.7	15.8
Poverty								
Non-poor	66.2	9.2	6.2	0.8	4.1	17.9	1.8	16.7
Poor	83.2	4.4	4.2	0.6	3.6	6.6	1.2	12.0
Location								
Urban non-poor	59.0	10.9	6.9	1.0	4.2	24.4	1.9	17.6
Urban poor	78.7	5.7	5.9	0.8	3.6	9.2	1.7	12.6
Rural non-poor	78.5	6.4	5.1	0.4	4.1	6.8	1.7	15.1
Rural poor	88.5	2.8	2.3	0.3	3.6	3.5	0.7	11.2
Ulaanbaatar non-poor	49.8	12.9	6.4	1.2	4.2	29.3	1.4	15.5
Ulaanbaatar poor	73.4	7.3	5.2	1.0	1.6	9.4	2.6	10.4
Aimag centers non-poor	70.7	8.4	7.6	0.8	4.2	18.3	2.4	20.3
Aimag centers poor	83.6	4.2	6.5	0.5	5.6	9.0	0.8	14.7
Sum centers non-poor	77.2	6.1	7.3	0.2	4.3	8.7	1.8	14.3
Sum centers poor	85.9	3.1	4.0	0.3	5.0	5.1	0.5	10.4
Countryside non-poor	80.8	6.7	1.2	0.8	3.6	3.5	1.4	16.7
Countryside poor	91.6	2.6	0.3	0.3	2.0	1.7	0.8	12.1
Western non-poor	73.8	6.0	8.1	0.7	3.2	13.2	4.6	11.9
Western poor	85.9	2.2	4.8	0.2	3.0	4.5	2.2	8.6
Khangai non-poor	75.8	5.4	5.4	0.6	1.6	10.4	1.0	20.0
Khangai poor	87.8	2.7	2.9	0.5	1.6	5.7	0.0	13.8
Central non-poor	73.2	9.9	6.2	0.7	3.4	12.9	1.4	16.4
Central poor	83.4	4.9	4.6	0.5	3.5	6.6	0.2	12.3
Eastern non-poor	80.7	7.0	4.6	0.4	14.1	9.5	1.6	23.1
Eastern poor	89.3	4.3	3.4	0.3	11.5	5.7	0.6	15.6

Source: HSES 2016.

Table D.52. Durable goods

	Computer	Refrigerator	Washing machine	Electric Gen-set	Television	Motorcycle	Truck, Large truck	Car	Ger	House, Dwelling
National	23.6	80.9	71.4	9.0	92.1	13.2	7.8	30.9	42.3	49.5
Location										
Urban	30.7	93.5	83.2	1.9	95.6	1.7	3.8	34.9	29.3	59.3
Rural	9.3	55.3	47.3	23.4	84.8	36.6	15.9	22.7	68.7	29.5
Ulaanbaatar	35.5	95.4	85.6	2.3	95.7	0.2	3.0	37.4	25.9	63.9
Aimag centers	21.5	90.0	78.5	1.1	95.5	4.6	5.3	30.1	35.6	50.6
Sum centers	14.7	82.0	70.1	3.9	90.7	20.4	11.1	27.1	53.0	40.7
Countryside	2.7	22.1	19.1	47.6	77.5	56.8	21.8	17.3	88.2	15.7
Western	16.1	65.3	54.7	22.8	82.9	30.5	11.0	30.2	74.7	42.4
Khangai	12.7	62.6	53.3	14.5	90.3	29.3	11.7	23.0	58.2	39.8
Central	17.9	79.6	71.2	9.1	92.7	14.8	11.6	27.3	41.2	35.6
Eastern	7.9	71.8	61.8	11.6	88.8	16.6	11.9	22.2	47.1	33.2
Poverty										
Non-poor	28.7	84.0	74.9	8.3	93.3	12.0	8.4	35.9	37.0	55.2
Poor	5.7	69.9	58.9	11.5	87.8	17.6	5.5	13.2	61.2	29.2

Source: HSES 2016.

ANNEX E.

STANDARD ERRORS AND CONFIDENCE INTERVALS OF POVERTY ESTIMATES

Table E.1. Poverty by urban and rural areas

			Observations	16,451
			Strata	3
			PSUs	1,836
	Estimate	Standard error	[95% confidence interval]	Obs.
Poverty headcount				
National	29.6	0.7	28.3 31.0	16 451
Urban	27.1	0.9	25.3 28.9	8 967
Rural	34.9	0.9	33.0 36.7	7 484
Poverty gap				
National	7.7	0.2	7.3 8.2	16 451
Urban	7.2	0.3	6.6 7.9	8 967
Rural	8.8	0.3	8.2 9.5	7 484
Poverty severity				
National	2.9	0.1	2.7 3.1	16 451
Urban	2.8	0.2	2.5 3.1	8 967
Rural	3.2	0.1	2.9 3.5	7 484

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

Table E.2. Poverty by analytical domain

			Observations	16,451
			Strata	3
			PSUs	1,836
	Estimate	Standard error	[95% confidence interval]	Obs.
Poverty headcount				
Ulaanbaatar	24.8	1.3	22.3 27.2	3 573
Aimag centers	31.8	1.2	29.6 34.1	5 394
Sum centers	32.3	1.1	30.1 34.5	4 297
Countryside	38.0	1.5	35.0 40.9	3 187
Poverty gap				
Ulaanbaatar	6.4	0.4	5.6 7.3	3 573
Aimag centers	8.8	0.4	8.0 9.6	5 394
Sum centers	8.5	0.4	7.7 9.2	4 297
Countryside	9.2	0.5	8.2 10.2	3 187
Poverty severity				
Ulaanbaatar	2.5	0.2	2.0 2.9	3 573
Aimag centers	3.4	0.2	3.0 3.8	5 394
Sum centers	3.2	0.2	2.8 3.5	4 297
Countryside	3.2	0.2	2.8 3.7	3 187

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

Table E.3. Poverty by region

				Observations	16,451
				Strata	3
				PSUs	1,836
	Estimate	Standard error	[95% confidence interval]		Obs.
Poverty headcount					
Western	36.0	1.4	33.3	38.8	3 119
Khangai	33.6	1.3	31.0	36.1	3 907
Central	26.8	1.4	24.1	29.5	3 981
Eastern	43.9	1.7	40.6	47.3	1 871
Ulaanbaatar	24.8	1.3	22.3	27.2	3 573
Poverty gap					
Western	9.7	0.5	8.7	10.8	3 119
Khangai	8.2	0.4	7.4	9.1	3 907
Central	7.0	0.5	6.0	7.9	3 981
Eastern	12.5	0.7	11.2	13.8	1 871
Ulaanbaatar	6.4	0.4	5.6	7.3	3 573
Poverty severity					
Western	3.7	0.2	3.2	4.2	3 119
Khangai	2.9	0.2	2.5	3.3	3 907
Central	2.7	0.2	2.2	3.1	3 981
Eastern	4.8	0.3	4.1	5.4	1 871
Ulaanbaatar	2.5	0.2	2.0	2.9	3 573

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

Table E.4. Poverty by aimags and capital

	Poverty headcount					Poverty gap				
	Estimate	Standard error	[95% confidence interval]		Obs.	Estimate	Standard error	[95% confidence interval]		Obs.
National	29.6	0.7	28.3	31.0	16 451	7.7	0.2	7.3	8.2	16 451
Western										
Bayan-Ulgii	34.4	2.9	28.8	40.1	624	9.0	1.1	6.9	11.0	624
Govi-Altai	43.3	3.1	37.2	49.4	623	12.2	1.2	9.9	14.6	623
Zavkhan	47.5	3.5	40.7	54.4	624	14.6	1.3	12.0	17.2	624
Uvs	24.2	2.2	19.9	28.5	624	6.0	0.7	4.6	7.5	624
Khovd	36.8	3.1	30.7	42.8	624	9.3	1.2	7.0	11.6	624
Khangai										
Arkhangai	37.6	2.6	32.5	42.8	623	8.4	0.8	6.9	10.0	623
Bayankhongor	38.8	3.2	32.5	45.1	623	8.2	1.2	5.9	10.5	623
Bulgan	31.4	2.9	25.8	37.1	624	7.0	0.9	5.2	8.8	624
Orkhon	23.5	2.8	18.0	28.9	600	6.6	1.0	4.7	8.5	600
Uvurkhangai	41.1	3.0	35.3	46.8	718	11.7	1.1	9.4	13.9	718
Khuvsgul	29.1	3.4	22.5	35.7	719	6.9	1.0	4.9	8.9	719
Central										
Govisumber	52.4	4.5	43.6	61.3	312	17.5	2.3	13.0	21.9	312
Darkhan-Uul	33.4	3.6	26.3	40.4	552	8.1	1.1	5.9	10.2	552
Dornogovi	23.2	2.7	18.0	28.5	622	6.3	1.0	4.3	8.4	622
Dundgovi	22.9	2.2	18.5	27.3	623	5.4	0.7	4.1	6.8	623
Umnugovi	15.4	2.2	11.2	19.7	624	2.6	0.5	1.6	3.5	624
Selenge	36.4	4.0	28.5	44.4	624	11.0	1.5	8.2	13.9	624
Tuv	17.3	2.0	13.3	21.4	624	3.7	0.6	2.7	4.8	624
Eastern										
Dornod	41.5	3.6	34.5	48.5	623	12.3	1.4	9.5	15.1	623
Sukhbaatar	47.0	2.8	41.4	52.5	624	13.7	1.0	11.8	15.6	624
Khentii	43.8	2.3	39.3	48.4	624	11.7	0.9	10.0	13.5	624
Ulaanbaatar	24.8	1.3	22.3	27.2	3 573	6.4	0.4	5.6	7.3	3 573

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

Table E.4. Poverty by aimags and capital

			Observations	16,451
			Strata	3
			PSUs	1,836
	Poverty severity			
	Estimate	Standard error	[95% confidence interval]	Obs.
National	2.9	0.1	2.7 3.1	16 451
Western				
Bayan-Ulgii	3.4	0.5	2.4 4.4	624
Govi-Altai	4.7	0.6	3.5 5.8	623
Zavkhan	5.7	0.7	4.4 7.1	624
Uvs	2.3	0.3	1.6 3.0	624
Khovd	3.4	0.6	2.3 4.5	624
Khangai				
Arkhangai	2.8	0.3	2.1 3.5	623
Bayankhongor	2.8	0.6	1.6 4.1	623
Bulgan	2.2	0.4	1.5 3.0	624
Orkhon	2.5	0.4	1.7 3.3	600
Uvurkhangai	4.4	0.5	3.3 5.4	718
Khuvsgul	2.4	0.4	1.6 3.3	719
Central				
Govisumber	7.9	1.3	5.4 10.4	312
Darkhan-Uul	2.9	0.5	1.8 3.9	552
Dornogovi	2.6	0.5	1.5 3.6	622
Dundgovi	1.8	0.3	1.3 2.4	623
Umnugovi	0.8	0.2	0.4 1.1	624
Selenge	4.6	0.7	3.2 6.1	624
Tuv	1.3	0.3	0.8 1.8	624
Eastern				
Dornod	4.8	0.7	3.3 6.2	623
Sukhbaatar	5.4	0.5	4.4 6.3	624
Khentii	4.3	0.5	3.4 5.2	624
Ulaanbaatar	2.5	0.2	2.0 2.9	3 573

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

Table E.5. Poverty by quarter

			Observations	16,451
			Strata	3
			PSUs	1,836
	Estimate	Standard error	[95% confidence interval]	Obs.
Poverty headcount				
Jan - Mar	30.2	1.4	27.4 33.0	4 114
Apr - Jun	28.9	1.3	26.3 31.5	4 107
Jul - Sep	28.9	1.4	26.2 31.6	4 114
Oct - Dec	30.5	1.5	27.7 33.4	4 116
Poverty gap				
Jan - Mar	7.8	0.5	6.8 8.7	4 114
Apr - Jun	7.6	0.5	6.6 8.5	4 107
Jul - Sep	7.4	0.5	6.4 8.3	4 114
Oct - Dec	8.2	0.5	7.2 9.2	4 116
Poverty severity				
Jan - Mar	2.9	0.2	2.5 3.4	4 114
Apr - Jun	2.9	0.2	2.4 3.4	4 107
Jul - Sep	2.7	0.2	2.3 3.2	4 114
Oct - Dec	3.1	0.2	2.6 3.5	4 116

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

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

			Observations	16,451
			Strata	3
			PSUs	1,836
	Estimate	Standard error	[95% confidence interval]	Obs.
Poverty headcount				
<30	27.0	1.4	24.3 29.6	2 160
30-39	36.2	1.1	34.0 38.4	4 138
40-49	30.3	1.1	28.2 32.5	4 057
50-59	26.0	1.2	23.6 28.4	3 300
60+	20.7	1.3	18.1 23.3	2 796
Poverty gap				
<30	6.4	0.4	5.6 7.3	2 160
30-39	9.6	0.4	8.8 10.4	4 138
40-49	8.1	0.4	7.3 8.9	4 057
50-59	7.0	0.5	6.1 7.9	3 300
60+	4.9	0.5	4.1 5.8	2 796
Poverty severity				
<30	2.2	0.2	1.8 2.6	2 160
30-39	3.6	0.2	3.3 4.0	4 138
40-49	3.1	0.2	2.7 3.5	4 057
50-59	2.7	0.2	2.3 3.2	3 300
60+	1.7	0.2	1.3 2.2	2 796

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

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

			Observations	16,451
			Strata	3
			PSUs	1,836
	Estimate	Standard error	[95% confidence interval]	Obs.
National				
Poverty headcount				
Men	29.5	0.7	28.0	30.9	12 577.0
Women	30.3	1.2	27.9	32.8	3 874.0
Poverty gap				
Men	2.8	0.1	2.6	3.0	12 577.0
Women	3.3	0.2	2.8	3.8	3 874.0
Poverty severity				
Men	2.8	0.1	2.6	3.0	12 577.0
Women	3.3	0.2	2.8	3.8	3 874.0
Urban, rural				
Poverty headcount				
Men urban	26.3	1.0	24.4	28.2	6 567.0
Men rural	35.4	1.0	33.4	37.4	6 010.0
Women urban	30.0	1.5	27.0	33.0	2 400.0
Women rural	31.6	1.7	28.3	34.9	1 474.0
Poverty gap				
Men urban	6.9	0.3	6.2	7.5	6 567.0
Men rural	9.0	0.3	8.3	9.6	6 010.0
Women urban	8.4	0.6	7.3	9.6	2 400.0
Women rural	7.8	0.6	6.7	9.0	1 474.0
Poverty severity				
Men urban	2.6	0.2	2.3	2.9	6 567.0
Men rural	3.2	0.2	2.9	3.6	6 010.0
Women urban	3.4	0.3	2.8	4.0	2 400.0
Women rural	2.9	0.3	2.3	3.5	1 474.0

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

Table E.8. Poverty by highest educational attainment of the household head

				Observations	16,451
				Strata	3
				PSUs	1,836
	Estimate	Standard error	[95% confidence interval]		Obs.
Poverty headcount					
None	52.8	2.5	47.8	57.7	679
Primary	45.7	1.7	42.4	49.1	1 692
Lower secondary	43.9	1.3	41.4	46.4	3 102
Higher secondary	35.7	1.2	33.3	38.1	4 091
Vocational	27.4	1.3	24.8	30.0	2 420
Technical secondary	19.2	1.8	15.7	22.7	1 186
Degree or higher education diploma	9.5	1.3	7.0	11.9	1 143
Bachelor	10.6	1.0	8.7	12.6	1 935
Master	0.8	0.6	-0.4	2.1	176
Doctor	0.0	0.0	0.0	0.0	27
Poverty gap					
None	15.7	1.1	13.6	17.9	679
Primary	12.7	0.7	11.4	14.0	1 692
Lower secondary	12.6	0.5	11.6	13.6	3 102
Higher secondary	9.2	0.5	8.3	10.1	4 091
Vocational	6.5	0.4	5.6	7.4	2 420
Technical secondary	5.0	0.6	3.7	6.2	1 186
Degree or higher education diploma	2.0	0.4	1.2	2.8	1 143
Bachelor	2.1	0.2	1.6	2.5	1 935
Master	0.0	0.0	0.0	0.1	176
Doctor	0.0	0.0	0.0	0.0	27
Poverty severity					
None	6.3	0.6	5.1	7.5	679
Primary	5.0	0.3	4.3	5.6	1 692
Lower secondary	5.0	0.3	4.5	5.6	3 102
Higher secondary	3.4	0.2	3.0	3.9	4 091
Vocational	2.3	0.2	1.9	2.7	2 420
Technical secondary	1.8	0.3	1.2	2.4	1 186
Degree or higher education diploma	0.6	0.2	0.3	0.9	1 143
Bachelor	0.6	0.1	0.4	0.8	1 935
Master	0.0	0.0	0.0	0.0	176
Doctor	0.0	0.0	0.0	0.0	27

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

Table E.9. Poverty by ownership of livestock

				Observations	16,451
				Strata	3
				PSUs	1,836
	Estimate	Standard error	[95% confidence interval]		Obs.
National					
Poverty headcount					
Non-herder	28.8	0.8	27.2	30.5	11 107
Herder	31.9	1.0	29.8	33.9	5 344
Poverty gap					
Non-herder	7.7	0.3	7.2	8.3	11 107
Herder	7.7	0.3	7.0	8.4	5 344
Poverty severity					
Non-herder	3.0	0.1	2.7	3.3	11 107
Herder	2.7	0.2	2.4	3.0	5 344
Urban, rural					
Poverty headcount					
Non-herder urban	27.3	1.0	25.5	29.2	8 073
Non-herder rural	37.8	1.3	35.3	40.4	3 034
Herder urban	24.3	2.0	20.4	28.2	894
Herder rural	33.4	1.2	31.1	35.8	4 450
Poverty gap					
Non-herder urban	7.3	0.3	6.6	7.9	8 073
Non-herder rural	10.5	0.5	9.5	11.4	3 034
Herder urban	6.3	0.7	5.0	7.6	894
Herder rural	8.0	0.4	7.2	8.8	4 450
Poverty severity					
Non-herder urban	2.8	0.2	2.5	3.1	8 073
Non-herder rural	4.1	0.3	3.6	4.6	3 034
Herder urban	2.3	0.3	1.7	3.0	894
Herder rural	2.8	0.2	2.4	3.1	4 450

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

Table E.10. Poverty by possession of savings

				Observations	16,451
				Strata	3
				PSUs	1,836
	Estimate	Standard error	[95% confidence interval]		Obs.
National					
Poverty headcount					
Non-saver	34.1	0.8	32.5	35.7	12 393
Saver	17.4	0.9	15.7	19.1	4 058
Poverty gap					
Non-saver	9.2	0.3	8.6	9.8	12 393
Saver	3.7	0.2	3.2	4.2	4 058
Poverty severity					
Non-saver	3.5	0.1	3.3	3.8	12 393
Saver	1.2	0.1	1.0	1.4	4 058
Urban, rural					
Poverty headcount					
Non-saver urban	32.0	1.1	29.9	34.1	6 696
Non-saver rural	38.5	1.1	36.4	40.5	5 697
Saver urban	13.7	1.1	11.6	15.8	2 271
Saver rural	25.1	1.5	22.3	28.0	1 787
Poverty gap					
Non-saver urban	8.8	0.4	8.0	9.5	6 696
Non-saver rural	10.1	0.4	9.4	10.9	5 697
Saver urban	3.0	0.3	2.4	3.6	2 271
Saver rural	5.3	0.4	4.5	6.0	1 787
Poverty severity					
Non-saver urban	3.4	0.2	3.1	3.8	6 696
Non-saver rural	3.8	0.2	3.4	4.1	5 697
Saver urban	0.9	0.1	0.7	1.2	2 271
Saver rural	1.7	0.2	1.4	2.0	1 787

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

Table E.11. Poverty by loan status

				Observations	16,451
				Strata	3
				PSUs	1,836
	Estimate	Standard error	[95% confidence interval]		Obs.
National					
Poverty headcount					
Non loaner	35.3	1.0	33.4	37.3	7 655
Loaner	24.3	0.7	22.9	25.7	8 796
Poverty gap					
Non loaner	9.8	0.4	9.1	10.5	7 655
Loaner	5.8	0.2	5.3	6.2	8 796
Poverty severity					
Non loaner	3.9	0.2	3.5	4.2	7 655
Loaner	2.0	0.1	1.8	2.2	8 796
Urban, rural					
Poverty headcount					
Non loaner urban	32.0	1.3	29.5	34.5	4 463
Non loaner rural	45.0	1.3	42.4	47.6	3 192
Loaner urban	21.7	1.0	19.8	23.5	4 504
Loaner rural	28.5	1.0	26.5	30.5	4 292
Poverty gap					
Non loaner urban	9.0	0.4	8.2	9.9	4 463
Non loaner rural	12.2	0.5	11.2	13.1	3 192
Loaner urban	5.2	0.3	4.6	5.8	4 504
Loaner rural	6.7	0.3	6.1	7.3	4 292
Poverty severity					
Non loaner urban	3.6	0.2	3.2	4.0	4 463
Non loaner rural	4.6	0.2	4.1	5.1	3 192
Loaner urban	1.8	0.1	1.6	2.1	4 504
Loaner rural	2.3	0.1	2.0	2.6	4 292

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

Table E.12. Poverty by type of dwelling

			Observations	16,451
			Strata	3
			PSUs	1,836
	Estimate	Standard error	[95% confidence interval]	Obs.
National				
Poverty headcount				
Ger	44.5	0.9	42.6	46.3	7 616
Apartment	7.2	0.7	5.8	8.7	3 018
House	27.4	1.0	25.5	29.4	5 493
Other	36.3	4.0	28.6	44.1	324
Poverty gap				
Ger	12.3	0.4	11.6	13.1	7 616
Apartment	1.3	0.2	1.0	1.7	3 018
House	6.8	0.3	6.1	7.5	5 493
Other	8.8	1.7	5.6	12.1	324
Poverty severity				
Ger	4.8	0.2	4.4	5.2	7 616
Apartment	0.4	0.1	0.3	0.5	3 018
House	2.5	0.2	2.1	2.8	5 493
Other	3.4	0.9	1.7	5.1	324
Urban, rural				
Poverty headcount				
Ger urban	48.9	1.4	46.1	51.7	2 946
Ger rural	40.2	1.2	37.9	42.5	4 670
Apartment urban	6.8	0.8	5.4	8.3	2 670
Apartment rural	17.7	2.9	12.0	23.4	348
House urban	27.7	1.3	25.2	30.2	3 175
House rural	26.8	1.5	23.9	29.7	2 318
Other urban	39.0	5.1	29.1	49.0	176
Other rural	28.8	5.1	18.8	38.8	148
Poverty gap				
Ger urban	14.5	0.6	13.2	15.7	2 946
Ger rural	10.2	0.4	9.4	11.0	4 670
Apartment urban	1.2	0.2	0.9	1.6	2 670
Apartment rural	3.9	0.9	2.3	5.6	348
House urban	6.8	0.4	5.9	7.6	3 175
House rural	6.8	0.5	5.8	7.8	2 318
Other urban	9.8	2.2	5.5	14.1	176
Other rural	6.1	1.4	3.4	8.8	148
Poverty severity				
Ger urban	5.9	0.4	5.2	6.6	2 946
Ger rural	3.7	0.2	3.3	4.1	4 670
Apartment urban	0.4	0.1	0.2	0.5	2 670
Apartment rural	1.4	0.4	0.6	2.2	348
House urban	2.4	0.2	2.0	2.9	3 175
House rural	2.5	0.3	2.0	3.0	2 318
Other urban	3.9	1.2	1.6	6.2	176
Other rural	1.9	0.6	0.8	3.0	148

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

Tablw E.13. Poverty by access to improved water sources

				Observations	16,451
				Strata	3
				PSUs	1,836
	Estimate	Standard error	[95% confidence interval]		Obs.
National					
Poverty headcount					
No	38.7	1.2	36.2	41.1	4 430
Yes	27.1	0.8	25.6	28.7	12 021
Poverty gap					
No	9.9	0.5	9.0	10.8	4 430
Yes	7.1	0.3	6.6	7.7	12 021
Poverty severity					
No	3.6	0.2	3.2	4.1	4 430
Yes	2.7	0.1	2.5	3.0	12 021
Urban, rural					
Poverty headcount					
No urban	42.9	2.4	38.2	47.5	1 172
No rural	36.7	1.4	33.9	39.4	3 258
Yes urban	25.3	1.0	23.4	27.2	7 795
Yes rural	33.4	1.1	31.2	35.6	4 226
Poverty gap					
No urban	12.3	1.0	10.4	14.2	1 172
No rural	8.8	0.5	7.8	9.7	3 258
Yes urban	6.6	0.3	6.0	7.3	7 795
Yes rural	8.9	0.4	8.1	9.6	4 226
Poverty severity					
No urban	4.9	0.5	4.0	5.9	1 172
No rural	3.0	0.2	2.6	3.4	3 258
Yes urban	2.5	0.2	2.2	2.8	7 795
Yes rural	3.3	0.2	3.0	3.7	4 226

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

Table E.14. Poverty by access to improved sanitation

				Observations	16,451
				Strata	3
				PSUs	1,836
	Estimate	Standard error	[95% confidence interval]		Obs.
National					
Poverty headcount					
No	41.2	1.4	38.3	44.0	3 049
Yes	27.7	0.8	26.2	29.2	13 402
Poverty gap					
No	10.5	0.5	9.5	11.5	3 049
Yes	7.3	0.3	6.8	7.8	13 402
Poverty severity					
No	3.8	0.2	3.3	4.3	3 049
Yes	2.8	0.1	2.5	3.0	13 402
Urban, rural					
Poverty headcount					
No urban	53.1	4.1	45.1	61.1	293
No rural	39.6	1.5	36.6	42.6	2 756
Yes urban	26.5	0.9	24.7	28.3	8 674
Yes rural	31.8	1.1	29.8	33.9	4 728
Poverty gap					
No urban	17.8	2.0	13.8	21.8	293
No rural	9.5	0.5	8.5	10.5	2 756
Yes urban	7.0	0.3	6.3	7.6	8 674
Yes rural	8.4	0.4	7.6	9.1	4 728
Poverty severity					
No urban	7.7	1.2	5.4	10.1	293
No rural	3.3	0.2	2.9	3.7	2 756
Yes urban	2.6	0.2	2.3	2.9	8 674
Yes rural	3.1	0.2	2.8	3.5	4 728

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

Table E.15. Poverty by access to electricity

				Observations	16,451
				Strata	3
				PSUs	1,836
	Estimate	Standard error	[95% confidence interval]		Obs.
National					
Poverty headcount					
No	38.9	1.5	35.9	41.8	2 943
Yes	28.2	0.8	26.7	29.7	13 508
Poverty gap					
No	9.4	0.5	8.4	10.4	2 943
Yes	7.5	0.3	7.0	8.0	13 508
Poverty severity					
No	3.3	0.2	2.9	3.8	2 943
Yes	2.8	0.1	2.6	3.1	13 508
Urban, rural					
Poverty headcount					
No urban	42.8	5.9	31.3	54.3	124
No rural	38.7	1.6	35.7	41.8	2 819
Yes urban	27.0	0.9	25.2	28.8	8 843
Yes rural	32.3	1.1	30.2	34.4	4 665
Poverty gap					
No urban	11.0	2.5	6.2	15.9	124
No rural	9.4	0.5	8.4	10.4	2 819
Yes urban	7.2	0.3	6.6	7.8	8 843
Yes rural	8.4	0.4	7.7	9.2	4 665
Poverty severity					
No urban	4.1	1.1	1.9	6.3	124
No rural	3.3	0.2	2.8	3.7	2 819
Yes urban	2.8	0.2	2.5	3.1	8 843
Yes rural	3.1	0.2	2.8	3.5	4 665

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.

Table E.16. Poverty by access to improved water sourcces and improved sanitation

				Observations	16,451
				Strata	3
				PSUs	1,836
	Estimate	Standard error	[95% confidence interval]		Obs.
National					
Poverty headcount					
No	39.5	1.1	37.3	41.7	5 315
Yes	26.2	0.8	24.6	27.8	11 136
Poverty gap					
No	10.3	0.4	9.5	11.1	5 315
Yes	6.8	0.3	6.3	7.4	11 136
Poverty severity					
No	3.8	0.2	3.4	4.2	5 315
Yes	2.6	0.1	2.3	2.8	11 136
Urban, rural					
Poverty headcount					
No urban	43.8	2.1	39.5	48.0	1 351
No rural	37.5	1.3	35.0	40.0	3 964
Yes urban	24.8	1.0	23.0	26.7	7 616
Yes rural	31.7	1.2	29.3	34.0	3 520
Poverty gap					
No urban	12.9	0.9	11.2	14.7	1 351
No rural	9.1	0.4	8.3	10.0	3 964
Yes urban	6.4	0.3	5.8	7.1	7 616
Yes rural	8.4	0.4	7.6	9.3	3 520
Poverty severity					
No urban	5.2	0.5	4.3	6.1	1 351
No rural	3.2	0.2	2.8	3.6	3 964
Yes urban	2.4	0.2	2.1	2.7	7 616
Yes rural	3.2	0.2	2.8	3.6	3 520

Notes: Poverty measures were calculated taking into account the survey design i.e. strata, primary sampling units and population weights.
Sources: HSES 2016.