Poverty Assessment Methodologies Used over 1996-2018 by the Statistical Committee of the Republic of Armenia

The methodology for assessment of poverty in Armenia was developed by the World Bank. It was first implemented in 1996, with further revision and improvement in 2004 and 2009.

1) Since 1996, when the present Integrated Living Conditions Survey was first implemented in Armenia by the World Bank, the Statistical Committee of the Republic of Armenia (ARMSTAT) with the assistance of the World Bank, US Agency for International Development and other donor organizations, has been putting effort to continuously improve the quality of data collected through household surveys, as well as to advance its own expertise in achieving a more accurate assessment of poverty. These efforts have proven to be successful as the data collected through household surveys and the estimates of poverty rate based on such data appeared to be an important input in defining and monitoring the poverty reduction strategy, which is the responsibility of the Government.

2) In 2004, ARMSTAT undertook significant measures to improve the Integrated Living Conditions Survey (ILCS) and to update the poverty assessment methodology, which was used until 2008. With the technical assistance provided by the World Bank and due to numerous consultations and practical works: (1) the survey sample frame was updated using the 2001 Population Census database, (2) the sample size was expanded to ensure representativeness of data by regions, (3) the ILCS questionnaire was revised to reflect economic and social changes since 1998/99 up to 2003, as well as a comprehensive section on employment was added into the questionnaire, and (4) the surveying personnel underwent a more profound training.

ARMSTAT made certain adjustments to the poverty assessment methodology and improved capacities for estimating and analyzing poverty trends and the socio-economic situation. The adjusted methodology was then used in 2004-2008.

With the co-funding provided in 2007-2011 by the Millennium Challenge Account - Armenia (MCA-Armenia), a state non-commercial organization, the annual sample size of the ILCS has been expanded from 5184 households in 2006 (funded from the state budget only) to 7872 households. Nonetheless, due to the termination of activities of MCA-Armenia in 2012, the sample size was reduced back to 5184 households.

3) The findings of this report are based on the World Bank poverty assessment methodology adjusted in 2009 with the assistance of the World Bank experts. In comparison to the methodology used by ARMSTAT over 2004-2008, the adjusted methodology has certain features. In particular, the new minimum food basket has been introduced to reflect consumption structure dynamics since 2004-2008, as well as the current shares of food and non-food products and services.

The ILCS 2009 data have been used for designing the new consumption model. The newly defined minimum food basket has been used for estimating the extreme (food) and total (lower and upper) poverty lines (in transition from two- to three-tier assessment of poverty). The new basket will provide a comparison basis for estimating poverty rates for the next few years and will be adjusted for average annual inflation rates in the country.

The Armenian Integrated Living Conditions Survey

The Integrated Living Conditions Survey (ILCS) was first conducted in Armenia in 1996 (within a one-month period), followed by the survey conducted in 1998/99; thereafter, it has been conducted every year since 2001. The survey is carried out during the year with monthly shift (rotation) of households and communities. Findings of the survey are primarily used to estimate consumption-based poverty rates in the country, as well as to provide valuable information on households' living conditions by means of other indicators.

Consumption aggregate is used as a welfare measure for assessing poverty in Armenia. International practice shows that consumption – in comparison with income –provides more accurate information and is less sensitive to short-term fluctuations, particularly in low and middle income economies. Consumption aggregate is estimated on basis of the data obtained through the Integrated Living Conditions Survey and comprises the following components:

a) The value of consumed food and non-food goods, including own production goods, aid received from humanitarian organizations and other sources; and

b) The rental value of durable goods.

At household (micro) level, ARMSTAT does not count up underreported income in the total income of population in Armenia.

In fact, the Gini coefficient is higher than its estimated values as presented in the report, due to mass unwillingness of well-off people to answer interview questions and disclose shadow income and, consequently, total expenditures of households.

I. Sample Frame

The sample frame for 2018 was designed in accordance with the database of addresses of all households in the country developed on the basis of the 2011 Armenia Population Census results, with the technical assistance of the World Bank. The method of systematic representative probability sampling was used to frame the sample.

For the purpose of drawing the sample, the master sample was layered (divided) into 32 strata, of which 12 were the administrative districts of Yerevan City.

At regional level, all communities were grouped into two categories – towns and villages.

According to this division, a two-tier sample was drawn stratified across the regions and Yerevan. All regions and Yerevan, as well as all rural and urban communities were included in the sample in accordance to the shares of their resident households within the total number of households in the country. In the first round, enumeration districts – that is primary sample units to be surveyed during the year – were selected. The ILCS 2018 sample included 30 enumeration districts in urban and 18 enumeration districts in rural communities per month.

The households to be surveyed were selected in the second round. A total of 432 households were surveyed per month, of which 270 and 162 households from urban and rural communities, respectively. Every month 48 interviewers went on field work with a workload of 9 households per month.

A total of 5184 households were selected for 2018, of which 3240 from urban and 1944 households from rural communities. Survey data provided for the minimum representativeness by regions.

II. Sample Size and Communities Covered by 2008-2018 Surveys

Table 1: Number of Households Surveyed, Number of Urban and Rural Communities
Included in the Sample, 2008-2018

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of households surveyed	7872	7872	7872	7872	5184	5184	5184	5184	5184	7776	5184
Number of urban communities included in sample	44	45	46	44	37	41	36	40	43	45	45
Number of rural communities included in sample	313	313	307	312	192	202	241	214	216	316	203

Source: *ILCS 2008-2018*

III. Description of Field Work

A team of 48 interviewers and 8 team-leaders was established for conducting the fieldwork for the 2018 survey. The process of survey was supervised by the coordinator and team-leaders. Prior to launching the survey, relevant instructions were given to the field work personnel.

Each interviewer worked in 12 clusters (enumeration districts) during the year, by visiting 9 households per month. Upon finishing the work in each cluster, the interviewers presented the completed questionnaires and diaries for data check and codification, along with the sampling reports. All collected data were codified, logically tested, cross-compared by different operators, processed through a software logical test and corrected on basis the list of recorded errors. In 2018, each surveyed household received AMD 1500 for filling in the diary during the month. Based on the entered data, a relevant database was developed by means of special data entry software. A total of 9592 addresses were visited by interviewers in the course of field works, while the national average refusal rate totaled 14.9% (Table 2).

Table 2: Number of Surveyed Households and Refusal Rates,
by Regions and in Yerevan, 2018

Regions	Number of completed questionnaires, 2018	Refusal rate, 2018	Refusal rate, 2017	Refusal rate, 2016	Refusal rate, 2008
Yerevan	1 404	32.3	30.4	19.7	18.9
Aragatsotn	324	1.3	1.6	0.8	2.6
Ararat	432	10.8	12.2	6.1	7.5
Armavir	432	11.3	9.4	7.2	10.6
Gegharkunik	324	1.4	1.5	0.6	0.6
Lori	540	8.3	12.7	5.3	4.6
Kotayk	324	16.6	11.8	6.9	2.3
Shirak	432	8.0	10.7	5.3	4.0

Regions	Number of completed questionnaires, 2018	Refusal rate, 2018	Refusal rate, 2017	Refusal rate, 2016	Refusal rate, 2008
Syunik	324	1.6	2.8	0,5	2.2
Vayotz Dzor	324	4.1	5.4	3.6	2.7
Tavush	324	1.7	3.4	5.1	2.9
Total	**5 184**	**14.9**	**16.3**	**9.8**	**7.5**

Source: *ILCS 2018 (2008, 2016-2018)*

Note: *Refusal rate is defined as the ratio of refusals and the total number of visited addresses.*

Refusal rates defined as the ratio of refusals and the total number of visited addresses significantly varied by regions. Refusal rates were the highest in Yerevan (32.3%) and the lowest in Aragatsotn region (1.3%). Among the total number of households which refused to participate, 11.4% lived in detached houses, 15.6% in small houses, 71.2% in apartments, and 1.8% in other dwelling (wagon-houses, temporary dwelling etc.). Interestingly, the nationwide refusal rate had increased by around 2.0 times compared to 2008. Such increase in refusal rates was significant in Kotayk region (by 7.2 times), Gegharkunik region (2.3 times), Shirak region (2.0 times), Lori region (by 1.8 times), and Syunik region (1.5 times). The 2018 survey, just as the previous ones, faced higher refusal rates among relatively well-off households.

IV. Description of Survey Tools

The following tools are used to conduct the survey: the Integrated Living Conditions Survey Questionnaire, the Diary of Current Expenses, Consumption and Income, and the Interviewer's Manual.

The ***Integrated Living Conditions Survey Questionnaire*** is filled in by the interviewer in the course of at least five visits to households per month. During face-to-face interviews with the household head or another knowledgeable adult member, the interviewer collects information on the composition and housing conditions of the household, the employment status, educational level and health status of the members, availability and use of land, livestock, and agricultural machinery, monetary and commodity flows between households, and other information.

Certain revisions and changes were made to the sections *"List of Household Members", "Migration", "Employment" and "Education"* of the 2018 questionnaire. Also, a new section *"Food Security"* was added to the questionnaire.

Accordingly, the 2018 survey questionnaire had the following sections: (1) "*List of Household Members*", (2) "*Migration*", (3) "*Housing and Dwelling Conditions*", (4) "*Employment*", (5) "*Education*", (6) "*Agriculture*", (7) "*Food Production*", (8) "*Monetary and Commodity Flows between Households*", (9) "*Health (General) and Healthcare*", (10) "*Debts*", (11) "*Subjective Assessment of Living Conditions*", (12) "*Provision of Services*", (13) "*Social Assistance*", (14) "*Households as Employers for Service Personnel*", (15) "*Household Monthly Consumption of Energy Resources*", and (16) "*Food Security*".

The ***Diary of Current Expenses, Consumption and Income*** is completed by the household during one month. Every day the household would record all its expenditures on food, non-food products and services, also giving a detailed description of such purchases; e.g. for food products the name, quantity, cost, and place of purchase of the product is recorded. Besides, the household records its consumption of food products received and used

from its own land and livestock, as well as obtained from other sources (e.g. gift, humanitarian aid). Non-food products and services purchased or received for free are also recorded in the diary. Then, the household records its income received during the month. At the end of the month, information on rarely used food products, durable goods and ceremonies is recorded, as well. The records in the diary are verified by the interviewer in the course of 5 mandatory visits to the household during the survey month.

The survey diary has the following sections: (1) food purchased during the day, (2) food consumed at home during the day, (3) expenditures on food consumed away from home, (4) non-food products purchased and services obtained, (5) non-food products and services received free of charge, (6) household income and monetary inflows, (7) food products, which are usually consumed in small quantities during the day, (8) list of real estate, durable goods, and ceremonies.

The *Interviewer's Manual* provides detailed instructions for completing the questionnaire and the diary.

The questionnaire, the diary and the interviewer's manual are revised and adjusted, as appropriate, prior to the launch of the survey.