

## **Methodologies Used by the RA National Statistical Service for Poverty Assessment in 1996-2016**

The Poverty Assessment Methodology in Armenia is developed by the World Bank. It was first implemented in 1996, and further revised and improved in 2004 and 2009.

(1) Since 1996, when the World Bank introduced in Armenia a modern methodology for household welfare survey, the National Statistical Service of the Republic of Armenia with the support of the World Bank, the US Agency for International Development (USAID) and other donor organizations, has been making continuous efforts to improve the quality of data collected at household level and strengthen its skills for more accurate assessment of poverty. Those efforts were justified, as the information collected from household surveys and the estimates of poverty rate based on such data turned to be an important input in defining and monitoring the poverty reduction strategy, which was the responsibility of the Armenian Government.

(2) In 2004, the RA NSS took sound actions to improve the Methodology for Integrated Living Conditions Survey (ILCS) and Poverty Assessment, which was used before 2008. Under the Technical Assistance of the World Bank, as a result of numerous consultations and practical work, (1) the survey sample frame was updated using the 2001 Population Census database; (2) the sample size was expanded to ensure representativeness of data at Marz level (province); (3) the ILCS questionnaire was revised to reflect economic and social changes that took place from 1998/99 to 2003; besides, the questionnaire was supplemented by a comprehensive section related to employment; and (4) a more in-depth training was provided to the team of surveyors.

The RA NSS has also adjusted the poverty rate assessment methodology and improved capacities for estimating and analyzing poverty trends and the socio-economic situation. The adjusted methodology was applied in 2004-2008.

Starting from 2007 to 2011, with co-financing of the Millennium Challenge Account-Armenia Non-Profit Organization (MCA-Armenia), the sample size was expanded on an annual basis, and compared to 5184 in 2006 (financed only from the RA State Budget) covered 7872 households. However, due to closure of MCA-Armenia in 2012, the sample size dropped back to 5184 households.

(3) Findings of this report are based on the poverty assessment methodology adjusted in 2009 with assistance of the World Bank experts. Compared to the methodology applied by the RA NSS in

2004-2008, the adjusted methodology has certain peculiarities. Particularly, a new minimum food basket has been introduced, which reflects changes in consumption structure over 2004-2008, as well as updated shares of food and non-food products and services.

The 2009 ILCS results were used to build a new consumption model. This new minimum food basket was used to calculate extreme (food) and general (lower and upper) poverty lines (a transition was made from a two- to a three-tier assessment of poverty). The new basket will be used as a comparison basis for assessment of poverty rates over the next few years, and will be adjusted taking into account the average annual national inflation.

## **Integrated Household Living Conditions Survey in Armenia**

The Integrated Living Conditions Survey (ILCS) was first conducted in Armenia in 1996 (within one month period), followed by the surveys conducted in 1998/99; since 2001 it has been conducted on annual basis. Surveys are conducted during one year with monthly substitution of households and communities (rotation). Survey results are mainly used to estimate consumption-based poverty in the country, as well as to provide valuable information on households' livelihoods using other indicators.

Consumption aggregate index is used to estimate the level of well-being in Armenia. International practice shows, that consumption provides more accurate information than income, and it is not so sensitive to short-term fluctuations, especially in countries with transition economies. Consumption aggregate is estimated on the basis of data obtained from Integrated Living Conditions Survey and includes the following components:

- (a) the value of consumed food and non-food items, including own production goods, aid received from humanitarian organizations and other sources, and
- (b) the estimated value of durable goods.

The RA NSS does not additionally calculate underreported incomes at household level (micro level) in the total income of population in Armenia.

In fact, the Gini coefficient exceeds indicators calculated and presented in the Report due to massive refusal of wealthy people to participate in interviews and disclose shadow income, hence total expenditures of households.

## (I) Sample Frame

The 2016 sampling was based on the database of addresses of all individual households in the country, which was developed with the Technical Assistance of the World Bank on the basis of the results of 2011 Population Census. The method of representative probability sampling was used to frame the sample.

In order to frame the sample, the main combination was stratified (divided) into 32 strata, including 12 administrative districts of Yerevan.

All communities at province level were divided into two categories - towns and villages. According to this division, a two-tier sample was drawn stratified by provinces and Yerevan City. All provinces and Yerevan, as well as all rural and urban communities were included in the sample in accordance with the shares of their resident households within the total number of households in the country. In the first round, enumeration areas were selected, that is, the initial sample units to be surveyed during the year. The sample of 2016 ILCS included 30 enumeration areas selected in urban communities, and 18 enumeration areas in rural communities per month.

Households to be surveyed were selected at the second stage. 432 households were surveyed every month, of which 270 were from urban and 162 – from rural communities. Every month fieldwork was conducted by 48 interviewers, each with the workload over 9 households per month.

5,184 households were selected for 2016 survey, of which 3 240 were from urban, and 1 944- from rural communities. The survey data provided a minimum representation at province level.

## (II) Sample Size and Communities Covered by 2008-2016 Surveys

**Table 1. Number of Surveyed Households and Number of Rural and Urban Communities Included in the Sample, 2008-2016**

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number of surveyed households	7 872	7 872	7 872	7 872	5 184	5 184	5 184	5 184	5 184
Number of urban communities included in the sample	44	45	46	44	37	41	36	40	43
Number of rural communities included in the sample	313	313	307	312	192	202	241	214	216

Source. RA ILCS 2008- 2016

### (III) Description of Fieldwork

A team of 48 interviewers and 8 team leaders was established to conduct the fieldwork for 2016 Survey. Implementation of the survey was supervised by the coordinator and team leaders. Prior to starting the survey, relevant instructions were given to the field work personnel.

Each interviewer worked in 12 clusters (enumeration districts) throughout the year, visiting 9 households per month. After completing the work in each cluster, interviewers submitted completed questionnaires and diaries for data verification and codification along with the sample-related report. All collected information was codified, logically tested; data entered by different operators were cross-compared, after which processed using software logical test and adjusted on the basis of the list of recorded errors. Every household surveyed in 2016 received AMD 1.500 for filling in the diary during a month. Based on the entered information, a database was developed using a special data entry software. During the field work, interviewers visited a total of 10763 addresses; the average national level of registered refusals amounted to 9.8% (Table 2).

**Table 2. Number of Surveyed Huseholds and Refusal Rates by Yerevan and Provinces, 2016**

Marzes (provinces)	Number of completed questionnaires in 2016	Refusal rates in 2016	Refusal rates in 2015	Refusal rates in 2008
Yerevan	1 404	19.7	19.5	18.9
Aragatsotn	324	0.8	0.8	2.6
Ararat	432	6.1	10.1	7.5
Armavir	432	7.2	5.3	10.6
Gegharkunik	324	0.6	1.4	0.6
Lori	540	5.3	4.9	4.6
Kotaik	324	6.9	6.1	2.3
Shirak	432	5.3	7.3	4.0
Syunik	324	0,5	0.2	2.2
Vayots Dzor	324	3.6	0.8	2.7
Tavush	324	5.1	7.7	2.9
<b>Total in Armenia</b>	<b>5 184</b>	<b>9.8</b>	<b>9.6</b>	<b>7.5</b>

Source. RA ILCS 2016 (2008, 2015)

Note. Refusal rate was calculated as the ratio of refusals and the number of visited addresses.

The share of refusals to participate in the survey, which is calculated as the ratio of refusals and the total number of visited addresses, significantly differs from a province to province. The highest rate of refusals was recorded in Yerevan – 19.7%, and the lowest 0.5% - in Syunik province. It is interesting, that in comparison with 2008, the nationwide refusal rate increased by 30.7%. Compared to 2008, there was a significant increase in refusal rates in Kotayk region (3.0 times), Tavush province (1.8 times), Shirak and Vayots Dzor provinces (1.3 times) and Lori province (1.2 times). As in previous surveys, the 2016 survey registered also refusals by relatively well-off households.

#### **(IV) Description of Survey Tools**

The following survey tools were used for implementation of the survey: Questionnaire of the Integrated Living Conditions Survey, «Current Expenses, Consumption, and Income» Diary, and «Interviewer Guide». In addition, all surveyed households were provided with a brochure «Where and How the Results of Household Integrated Living Conditions Survey Are Applied», which demonstrates that the answers given by the surveyed households are used only in aggregated and anonymous form.

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

In 2016 the following sections were revised and some changes made in the questionnaire: «List of Household Members», «Housing and Dwelling Conditions», «Employment», «Education», and «Subjective Assessment of Quality of Life». In 2016 a new «Social Exclusion Module» section was also added to the questionnaire under the Twinning project "Strengthening the National Statistical System of Armenia - II Phase".

Thus, the 2016 survey questionnaire includes the following sections: (1) The list of household members; (2) migration; (3) housing and living conditions; (4) employment; (5) education; (6) agriculture; (7) food production; (8) cash and commodity flows between households; (9) health

(general) and health care; (10) debts; (11) subjective assessment of quality of life; (12) provision of services; (13) social assistance; (14) households' activities as employers for service personnel; (15) household energy consumption during the month surveyed; and (16) social exclusion module.

**«Current Expenditures, Consumption and Income» Diary** is completed by the household during a month. Every day households would register all their expenditures for purchasing food, non-food products, and services, giving a detailed description of the purchases; for instance, for food products - the name of the products, weight, value, and the place where the goods were purchased. Additionally, in the Diary households indicate both the food stuff received and used from their own land and livestock, as well as food obtained from other sources (gift, humanitarian aid). Non-food products and services purchased and received for free are also recorded in the Diary. In the Diary households record also incomes earned during the month. At the end of the month information on rarely used food products and durable goods or ceremonies is also filled in the Diary. Records in the Survey Diary are verified by the interviewer during the five mandatory visits to the households during the survey month. Survey Diary consists of the following sections: (1) food products purchased during the day; (2) foods consumed at home during the day; (3) expenditures on food consumed away from home; (4) purchased non-food products and services; (5) non-food products and services received for free; (6) household income and cash inflows; (7) food products, which are normally consumed in small quantities during the day; (8) list of real estate, durable goods, and ceremonies.

**Interviewer's Guide/Manual** provides detailed instructions on how to complete the questionnaire and the diary. Prior to the launch of the survey, the questionnaire, diary, and interviewer's guide were revised and updated.

Starting from 2012, data recorded in the diary are codified according to "Classification of Individual Consumption by Purpose" (COICOP).