

## Poverty Assessment Methodologies Used over 1996-2012 by the National Statistical Service of the Republic of Armenia

1) Since 1996, when the present Integrated Living Conditions Survey was first implemented in Armenia, the National Statistical Service of the Republic of Armenia (NSS) with the assistance of the World Bank, USAID 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 arriving at 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, the NSS 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 consultancies 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, (4) the surveying personnel underwent a more profound training.

The NSS 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 within the period of 2007-2011 by the Millennium Challenge Account - Armenia (MCA-Armenia), a state non-commercial organization, the sample size of the ILCS has been expanded to include 7,872 households annually as compared to the relevant indicator at 5,184 in 2006 (funded from the state budget only). Nonetheless, due to the termination of activities of MCA-Armenia in 2012, the sample size was reduced back to 5,184 households.

3) The findings of this report are based on the poverty assessment methodology updated in 2009 with the assistance of the World Bank experts. In comparison to the methodology used by the NSS over 2004-2008, the adjusted methodology has certain features. In particular, the new minimum food basket has been introduced, which reflects changes in the consumption structure 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.

## **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 substitution (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.

In Armenia, consumption aggregate is used for assessing the level of well-being. In international practice consumption – in comparison with income – is recognized as an indicator providing more accurate information and being less sensitive to short-term shocks, especially as far as countries with a transitional economy are concerned. Consumption aggregate is calculated on basis of the data obtained through the Integrated Living Conditions Survey and comprises the following constituents; a) the value of consumed food and non-food goods, including own production goods, the assistance received from humanitarian organizations and other sources, and b) the estimated value of durable goods.

The NSS does not recalculate undeclared income at household (micro-) level relative to the income of the entire population of Armenia.

In fact, the Gini coefficient is higher than its estimated values as presented in the report, due to the mass refusal of the rich to be interviewed and to the households' propensity to hide undeclared income.

### **I. Sample Frame**

The sample frame for 2012 was designed in accordance with the database of addresses of all households in the country developed on basis of the 2001 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 divided into 32 strata including 12 communities of Yerevan City (currently, the administrative districts).

According to this division, a two-tier sample was drawn stratified by regions and by Yerevan. All regions and Yerevan, as well as all urban and rural 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 2012 sample included 32 enumeration districts in urban and 16 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 288 and 144 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 5,184 households were selected for 2012, of which 3,456 and 1,728 households from urban and rural communities, respectively. Survey data provided for the minimum representativeness by regions.

## II. Sample Size and Communities Covered by 2008-2012 Surveys

**Table 1: Number of Households Surveyed and of Urban and Rural Communities Included in the Sample, 2008-2012**

	2008	2009	2010	2011	2012
Number of households surveyed	7872	7872	7872	7872	5184
Number of urban communities included in sample	44	45	46	44	37
Number of rural communities included in sample	263	313	307	312	192

Source: *ILCS 2008-2009*

According to ILCS 2012, in terms of resident population, the average size of a household was 3.92 members, with 3.76 and 4.25 members in urban and rural communities, respectively. In terms of current population, the average size of a household (by surveyed sample) was 3.65 members, with 3.54 and 3.86 members in urban and rural communities, respectively.

## III. Description of Field Work

A team of 48 interviewers and 9 team-leaders was established for conducting the fieldwork for the 2012 survey. The process of survey was supervised by coordinators, quality controllers, as well as 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 2012, each surveyed household received AMD 1.500 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 10,670 addresses were visited by interviewers in the course of field works, while the average refusal rate totaled 9.3% (Table 2).

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

Regions	Number of completed questionnaires, 2012	Refusal rate, 2012	Refusal rate, 2008
Yerevan	1404	21.1	18.9
Aragatsotn	324	0.8	2.6
Ararat	432	6.9	7.5
Armavir	432	3.1	10.6
Gegharkunik	324	0.0	0.6
Lori	540	6.3	4.6
Kotayk	324	3.4	2.3
Shirak	432	5.6	4.0
Syunik	324	0.6	2.2
Vayotz Dzor	324	0.7	2.7
Tavush	324	3.7	2.9
<b>Total</b>	<b>5184</b>	<b>9.3</b>	<b>7.5</b>

Source: *ILCS 2012 (2008)*

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 (21.1%) and the lowest in Syunik region (0.6%). No refusals were recorded in Gegharkunik region. Interestingly, the nationwide refusal rate had increased by 24% as compared to 2008. Such increase in refusal rates was significant in Kotayk region (by 1.5 times), Shirak and Lori regions (by 1.4 times), and Tavush region (27.6%). Other regions demonstrated decreasing refusal rates. The 2012 survey, just as the previous ones, saw higher refusal rates among relatively well-off households.

#### IV. Description of Survey Tools

The following tools are used to conduct the survey: the questionnaire, the diary, and the interviewer's manual.

The *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 condition of the members, availability and use of land, livestock, and agricultural machinery, monetary and commodity flows between households, and other information.

Certain changes were made into the 2012 questionnaire. Particularly, the section "*Children's Needs*" was removed, the sections "*Migration*", "*Employment*", "*Education*", "*Health (General) and Healthcare*", "*Savings and Debts*", "*Social Capital and Provision of Services*", "*Household Monthly Consumption of Energy Resources*" were revised, and the annex "*List of European and CIS Countries*" was added into the questionnaire. Thus, the 2012 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) "*Monetary and Commodity Flows between Households*", (8) "*Health (General) and Healthcare*", (9) "*Debts*", (10) "*Subjective Assessment of Living Conditions*", (11) "*Provision of Services*", (12) "*Social Assistance*", (13) "*Households as Employers for Service Personnel*", and (14) "*Household Monthly Consumption of Energy Resources*".

The *diary* is completed directly 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 from other sources (e.g. gifts, 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. Starting from 2012, data are codified under the "*Classification of Individual Consumption by Purpose*" (COICOP) classifier.