

**PROJECT INFORMATION DOCUMENT (PID)
IDENTIFICATION/CONCEPT STAGE**

Report No.: PIDC54685

Project Name	Strengthening Armenia's Integrated Living Conditions Survey
Region	EUROPE AND CENTRAL ASIA
Country	Armenia
Lending Instrument	IPF
Project ID	P159054
Borrower Name	National Statistical Service
Implementing Agency	National Statistical Servie
Environment Category	C - Not Required
Date PID Prepared	04-Oct-2016
Estimated Date of Approval	01-Dec-2016
Initiation Note Review Decision	The review did authorize the preparation to continue

I. Introduction and Context

Country Context

Armenia is a lower middle income country with a GNI per capita of USD 4,020 in 2014. Since the collapse of the Soviet Union, the country has undergone significant structural shift towards a market oriented economy. The country experienced significant poverty reduction in the 2000s, underpinned by robust economic growth of about 12 percent per annum and well-targeted redistributive programs. However, the economic crisis in 2008 halted these gains in poverty reduction as growth slowed down. In just two years, between 2008 and 2010, about a third of poverty reduction achieved in the preceding decade (1999 to 2008) was reversed. Poverty incidence rose from 27.6 percent in 2008 to 35.8 percent in 2010. Urban areas other than Yerevan experienced the largest increase in poverty incidence. The Government's counter-cyclical fiscal policy helped protect the poor and maintain jobs. However, the pace of recovery has been slow with a GDP per capita growth rate of 2.3 percent in 2010, and 2.9 percent in 2014. In 2014, the latest year for which data are available, poverty rate was 30 percent - a decline of about 5.8 percentage points from 2010. This regular tracking of poverty in the country has been made possible due to the household survey data collected annually by the National Statistical Service of the Republic of Armenia (NSSRA).

Sectoral and Institutional Context

The NSSRA together with the State Council on Statistics, is the lead agency responsible for official statistical data, including for poverty measurement and monitoring. The agency plays an important role in timely data collection and dissemination. As evident from the poverty figures presented above, Armenia has a good poverty measurement system in place using an internationally recommended methodology (Cost of Basic Needs) using consumption data collected from the Integrated Living Conditions Survey (ILCS). The NSSRA also produces an annual publication --

Social Snapshot and Poverty in Armenia --presenting analysis of poverty and other social indicators (including poverty by gender of the household head). This report is publicly available and used by line ministries such as the Ministry of Labor and Social Issues which is responsible for administering the national targeted social assistance program (Family Benefit Program). Poverty estimates produced by the NSSRA are important inputs into monitoring the poverty reduction strategy of the Government.

The ILCS is a multi-topic household budget survey fielded each year from January to December. The NSSRA publishes the ILCS data and documentation through the website www.armstat.am. Since 1996, when the ILCS was first implemented, the NSSRA has collaborated with the World Bank, USAID and other donor organizations to ensure the quality of data collected and to advance its own expertise in poverty measurement. For example, the NSSRA and World Bank have recently collaborated on developing a measure of multidimensional poverty tailored to the country context.

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: (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 field team underwent extensive training. A further revision the poverty measurement methodology was adopted starting 2009 survey and this methodology continues to be used today.

The ILCS is financed from the government budget with a sample size of 5,184 households each year. For a short period between 2007 and 2011 the NSSRA received co-financing from the Millennium Challenge Account - Armenia (MCA-Armenia) to additional rural households to the sample, bringing the total sample size to 7,872 households. The recent rounds of the ILCS through 2014 have been based on the 2001 Census frame. The ILCS follows a stratified two-stage sample design, with census enumeration areas (EAs) selected within each stratum with probability proportional to size (PPS) at the first sampling stage and 8 to 9 households are selected within each sample EA at the second stage. The field work is carried out by a team of 48 enumerators who are responsible for making 5 visits to selected households over a period of a month. Consumption and income are recorded by households in a diary kept for the period of 1 month.

As noted earlier, the survey is the official source of data for poverty monitoring and measuring social indicators such as the coverage and targeting performance of social safety net programs and the benefit incidence of social spending in the country. These analyses using the ILCS inform policy decision-making in Armenia and serves as primary source of information on living standards and social programs for international organizations. Consequently, it is imperative to address any data quality issues with the ILCS that will in turn affect the reliability of poverty monitoring using the survey. Grant activities will focus on the 2017 round of the ILCS and it is expected that the NSSRA will be able to use the lessons learnt to inform future rounds of the ILCS hence bringing a sustained improvement in quality of poverty statistics.

Relationship to CAS/CPS/CPF

The Armenia Development Strategy (ADS) (2014-2025) aims to eradicate extreme poverty, create jobs to improve living standards, deepen human capital, improve access to basic services, and

modernize public administration and governance. The World Bank's Country Partnership Strategy (FY2014 to FY2017) is designed to support the country's development strategy in key areas. Improving the quality of poverty monitoring is therefore crucial and the grant will enable the household survey division of the NSS to implement measures that improve the design of the ILCS and in turn enhance the quality of poverty estimates.

Although the grant-supported 2017 ILCS data will come too late to influence the forthcoming Systematic Country Diagnostic, data from the 2017 round and subsequent rounds of the ILCS will be useful for monitoring progress on the twin goals poverty under the new Country Partnership Framework. The grant will also support improved capacity within NSSRA for implementing a high quality household survey in turn providing data users and stakeholders with evidence-based data for better design of development policies at all levels of government.

II. Project Development Objective(s)

Proposed Development Objective(s)

The development objective of this activity is to strengthen poverty monitoring in Armenia via improvements to the quality of microdata (ILCS) collected by the National Statistical Service (NSSRA).

Key Results

The key results include

- a) Improved ability to assess regional (marz) level poverty in Armenia.
- b) Improved knowledge among recipient of sampling, size, design and implementation methods that lead to more precise estimates of poverty especially at the regional level.

III. Preliminary Description

Concept Description

This grant project aims to improve the quality of the ILCS.

First, the ILCS survey last underwent improvements in 2004, more than 10 years ago. A review of the sampling design and survey procedures would be important to undertake so that the survey design can be updated.

Second, over the last decade the country has experienced population shifts and changes in structure of economic activity which should be reflected in the ILCS survey design. Non-response has emerged as a concern with the highest rate of refusal (18 percent) in the capital city, Yerevan. Up until the 2013 survey, ILCS was using a sampling frame (database of addresses) based on the 2001 population census which contributed to the non-response rate. From 2014 round, the NSSRA has begun to use the list of addresses (sampling frame) derived from the 2011 population census. Given the population dynamics in the country, it is important to understand the extent to which this list of addresses is still current 6 years after the census was conducted. Because any selected household that refuses to be interviewed is replaced from a list of reserve addresses, use of an outdated sampling frame will exacerbate non-response because the reserve address might no longer exist and new housing units created after 2011 will not be represented. Procedures to address this issue will have to be developed.

Third, there appears to be underreporting of consumption expenditures in the ILCS perhaps in some

part due to better off households refusing to participate in the survey. Consumption estimated from the ILCS is only about a third of private consumption calculated from the national accounts. Such discrepancies between household and national accounts based consumption estimates are common across the world but the discrepancy tends to be much smaller than what we observe in the ILCS. This underreporting in the survey could arise from richer households refusing to participate and/or from responding households not fully reporting income/consumption. Training of field teams will help address underreporting or concealing of consumption and income by responding households given that they visit households 5 times during the month of interview and recording of consumption and income. Analysis of the characteristics of those who refuse to participate in the survey will help understand to what extent selective refusal by the better off is affecting the survey.

Finally, working with the NSSRA, the World Bank's poverty team in Armenia has identified the precision of poverty estimates produced by the ILCS as a key concern. The ILCS is designed to produce consumption-based poverty estimates at the national, rural-urban, and 11 regional (or marz) levels. Having precise and reliable estimates of poverty at all these levels is important for informing government's development policies especially at the regional level. Statistically, precision or degree of reliability of poverty estimates is represented by the standard error of the point estimate of poverty (the number that is usually reported) and the associated 95 percent confidence intervals which indicate the range of poverty estimates within which the actual poverty rates must lie. One rule of convention used by statisticians is that this confidence range should not be too wide: if the point estimate of poverty is z then the confidence range should not exceed $2*0.05z$. Although poverty estimates at the national and rural-urban level are estimated with some precision (that is, low standard errors and narrow 95 percent confidence intervals), marz-level poverty estimates tend to be less precisely estimated. In 2014, the national poverty estimate was 30 percent with a confidence interval of 27.9 percent and 32 percent implying that the actual poverty rate was somewhere within this range with 95 percent certainty. At the marz level this confidence interval varies widely making it difficult to rank regions by their poverty rates or estimating the number of poor. For example, both Ararat and Armavir marzes are estimated to have a poverty rate of 29 percent but the confidence interval for the latter ranges from 19 percent to 38 percent while that of the former ranges from 23.5 percent to 34.6 percent.

Expanding the sample size is important for improving reliability of poverty estimates. The accuracy or precision of the poverty estimates depends on both the sampling error, which can be measured through variance estimates, and the nonsampling error, which results from all other sources of error, including response and measurement errors as well as coding, keying and processing errors. The sampling error is inversely proportional to the square root of the sample size and hence expanding sample size is one way in which precision of poverty estimates can be improved. Expansion of sample size would be particularly important for the regions where the ILCS currently reports very wide confidence intervals.

The grant will provide additional resources to NSSRA to enhance the quality of 2017 ILCS data by addressing the issues identified above. This grant will be complemented with a Bank-executed technical assistance supporting a review of survey design and processes, identifying the updates/changes needed, and providing training to NSSRA staff on these topics. The recipient executed grant will support a) implementation of updates to the survey design and training for field teams; and b) expansion of the sample size. For the given budget and costs, the grant can support the addition of 2,600 households, taking the total sample to 7,784 households. The expansion of the ILCS sample will come from addition of enumeration areas (primary sampling units) rather than

increases in the number of households interviewed within each enumeration area.

The proposed activities will build on the World Bank's ongoing engagement with NSSRA and will be complemented through a Bank-executed technical assistance for reviewing and updating sampling design and survey implementation. These enhancements will be implemented with the 2017 ILCS round.

The grant has two components:

1) Component 1 (\$190,000, expanded ILCS sample) will implement a sampling design with expanded the sample size. The revised sampling design will be supported through a separated Bank-executed TA to the NSSRA. Based on early discussions with NSSRA, the grant could finance additional field personnel needed (consultant services), training of the additional personnel and printing of additional interview material (questionnaire, field manuals etc).

2) Component 2 (\$10,000, Project Management) will finance the operating costs of the Grant.

IV. Safeguard Policies that Might Apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01		x	
Natural Habitats OP/BP 4.04		x	
Forests OP/BP 4.36		x	
Pest Management OP 4.09		x	
Physical Cultural Resources OP/BP 4.11		x	
Indigenous Peoples OP/BP 4.10		x	
Involuntary Resettlement OP/BP 4.12		x	
Safety of Dams OP/BP 4.37		x	
Projects on International Waterways OP/BP 7.50		x	
Projects in Disputed Areas OP/BP 7.60		x	

V. Financing (in USD Million)

Total Project Cost:	0.2	Total Bank Financing:	0
Financing Gap:	0		
Financing Source			Amount
Trust Fund for Statistical Capacity Building			0.2

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