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NATIONAL STATISTICAL SERVICE OF RA

ARMENIA COUNTRY PAPER

Current Issues of Measuring the Informal Sector

Measuring the Informal Sector,
Inception and Planning Workshop,
ADB Headquarters, Manila, 20-23 May 2008



STRUCTURE OF THE PAPER

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**Selected
Issues of
Informal
Employment
Measurement
in Armenia**

**Sources and
Estimation
Methods
used in
National
Accounts**

**The Armenian
Integrated
Living
Conditions
Survey**

INFORMAL EMPLOYMENT MEASUREMENT ISSUES (1)

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Recent data sources and disseminated key estimates.

The indicator of the informal employment is estimated according to LFS, conducted since 2001.

Key disseminated estimates/indicators are following:

Hidden (informal) employed, per cent to total employed,
of which:

Hired employees on oral agreement:

- a) to total employed,
- b) to total hired employees,

Employers and self-employed performing unregistered activity:

- a) to total employed,
- b) to total employers and self-employed.

INFORMAL EMPLOYMENT MEASUREMENT ISSUES (2)

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Main publications:

- “Socio-economic Situation of Armenia in January-...” monthly informational reports,
- “Labor Market in Armenia, 2002-2005” statistical bulletin (available in English),
- “Labor Force in the Republic of the Armenia, 2001-2006 (based on the results of Labor Force Sample Survey in the Households)” statistical bulletin (will be available in English soon) etc.

INFORMAL EMPLOYMENT MEASUREMENT ISSUES (3)

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The definition of informal employment used in Armenia.

Methodology of survey is mostly corresponding to the ILO definition (and concepts of the 15th International Conference of Labor Statistics). The exception: only main job is included in employment estimate.

Hidden (informal) employment includes hired employees working on an oral agreement with an employer (without a contract, hiring decision or other documents) and those employers and self employed who carry out unregistered economic activities (except for agricultural activity).

Structural rather than absolute data are disseminated usually which describe only the sample population.

INFORMAL EMPLOYMENT MEASUREMENT ISSUES (4)

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LABOUR FORCE SAMPLE SURVEY

- First LFSS by NSS RA in 1996 (UNDP and ILO assistance).
- Since 1999 the LFSS has been combined with household ILCS (except for LFSS 2004 within the scopes of EU TACIS).
- Unlike ILCS, LFSS covers 6 months in a year (except for 2004 (August) and 2005 (November-December)).

In 2001 survey sample was comprised of 2064 households,
In 2002 and 2003 the size was 2322 households,
In 2004 - 2539 households,
in 2005 - about 773 and
in 2006 - 2547 households.

Since 2007 the LFSS is conducted within the Household ILCS. In 2007 and 2008 sample size was decided to be 7872 households.

Reserve sample to replace non response cases.

Survey results are representative on a national level.

INFORMAL EMPLOYMENT MEASUREMENT ISSUES (5)

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Key questions in ILCS on employment:

What is your employment status (in your second job/activity)?

- Employee by a written agreement
- Employee by oral agreement
- Employer
- Own-account worker (Self-employed)
- Unpaid family worker/relative in a family farm or enterprise
- Production/consumer cooperative member
- Other (*specify*)

Did you register your business (specify)?

- Yes
- No

If you worked at peasant farm, you produced

- Only for own use
- Partly, for own use, sale or exchange
- Only for sale or exchange

What kind of job/activity do you have (main job/activity)? (specify)

- Permanent
- Temporary
- Seasonal
- Occasional



INFORMAL SECTOR ISSUES IN NATIONAL ACCOUNTS (1)

GENERAL OVERVIEW

Non-observed economy estimates since 1994 in NA
(including hidden and informal economy).

Estimations are based on following sources:

- employment data,
- labour force survey,
- households survey,
- other special surveys,
- other indirect methods.

Single Sample surveys:

- first round in 1997-1998: enterprises, labour force and self-employment
- other focus surveys: healthcare, non commercial organisations, trade, transport



INFORMAL SECTOR ISSUES IN NATIONAL ACCOUNTS (2)

Main Methodological principles for estimating the hidden and non recorded activities in the economy.

Use of data by industries:

- Number of persons employed by regular statistical reports
- Number of persons engaged actual in production process

Value added for non-recorded part of the economy is determined by:

- Labour productivity estimates and
- Total number of employment (including non-recorded part)

Peculiarities in agriculture:

Use of coefficients from annual checks on reliability in agriculture for:

- Data on number of livestock
- Areas sown to crop



INFORMAL SECTOR ISSUES IN NATIONAL ACCOUNTS (3)

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Estimating value added from the number of listed unemployed persons with a gainful occupation

Data on unemployment by State Employment Service – 7.5%,
LFS data on unemployment – 27.8 %

Data on labour productivity and the number of persons shown in official records as unemployed (but occupied as employers or self-employed) that have been derived from surveys for the respective industries are used to calculate the gross value added attributable to this category of workers.



INFORMAL SECTOR ISSUES IN NATIONAL ACCOUNTS (4)

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Methods of estimates of informal individual activities of households differ across industries and depend on available source data:

- Estimates for industrial activities are based on Household surveys (ILCS).
- Construction – data from individual housing construction surveys.
- Agriculture - on the basis of checks on the number of livestock and areas sown to crops.
- Trade - data on the number of persons engaged in individual entrepreneurship and the number of persons engaged in non-registered activities as derived from LFS.
- Transport - by reference to the share of the private sector in total transport operations.
- In Healthcare, Education and other – specialized enterprise and household surveys



INFORMAL SECTOR ISSUES IN NATIONAL ACCOUNTS (5)

Shares of non-observed economy by industries in GVA

	2001	2002	2003	2004	2005
GDP	28.2	29.4	28.9	29.0	27.3
Industry	38	36	37	35	30
Agriculture	22	25	23	27	24
Construction	54	44	41	38	36
Trade	55	58	55	56	56
Transport	29	29	30	30	19
Health care	30	61	59	53	57
NGOs	1	59	43	63	64
Science	27	27	27	21	27
Utilities	23	26	26	24	25



INTEGRATED LIVING CONDITIONS SURVEY (1)

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The Integrated Living Conditions Survey (ILCS)
was introduced in Armenia in 1996
Second survey 1998/99
Annually since 2001.

These surveys were conducted during the year with monthly rotation of households and settlements.

The surveys results serve primarily to assess the level of consumption-based poverty in the country.

Armenia's Programmatic Poverty Monitoring wins WB Award in 2008



INTEGRATED LIVING CONDITIONS SURVEY (2)

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Survey Tools

1. Questionnaire,
2. Diary
3. Interviewers' manual.

QUESTIONNAIRE IS COMPLETED BY INTERVIEWERS

- *Interviewer visits the household minimum five times in a month.*

DIARY IS COMPLETED BY THE HOUSEHOLD

- *During the month.*



INTEGRATED LIVING CONDITIONS SURVEY (2)

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Structure of the Questionnaire:

- (1) Household roster
- (2) Migration
- (3) Housing conditions
- (4) Occupation
- (5) Education
- (6) Agriculture
- (7) Self Employment
- (8) Transfers between households
- (9) Health (general) and healthcare
- (10) Savings and loans
- (11) Self assessment of wellbeing
- (12) Social capital and serving of the services
- (13) Social assistance
- (14) Activities of households for own use



INTEGRATED LIVING CONDITIONS SURVEY (3)

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Structure of the Diary:

- (1) Food products purchased during the day**
- (2) Food consumed at home during the day**
- (3) Expenditures on food consumed outside**
- (4) Non food products purchased and services received**
- (5) All other non food products and services received free of charge**
- (6) Household income and revenues**
- (7) List of real estate, durable goods and ritual services**



INTEGRATED LIVING CONDITIONS SURVEY (4)

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Sampling frame (case of 2007)

The sampling frame was designed according to the database of addresses for the 2001 Census (developed with the World Bank technical assistance).

The sampling frame consists of two samples:

Core sample:

- There are 11 marzes in Armenia: the capital city (Yerevan) and 10 other marzes.
- This subdivision results in 48 strata: Yerevan - 12 strata; big towns - 16 strata; villages and other towns - 10 strata each.
- Within sampling strata defined by marz and urban/rural, Enumeration Areas (EAs) were selected using PPS method.

Rural over sample:

- Rural over sample was designed according to the list of villages for the Millennium Challenge Account-Armenia (MCA) roads project.
- There are 85 over-sample strata.
- Within the sampling strata Enumeration Areas (EAs) were selected using PPS method, by removing from the selection pool those MCA road project EAs that have already been selected in the core sample .

Two stage sampling:

1. EA selection
2. Housing units selection



INTEGRATED LIVING CONDITIONS SURVEY (5)

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Description of the field work (the case of 2006)

- Each interviewer was working in 12 PSU (enumeration area) during a year
- Visiting 9 households every month
- Each interviewed household received AMD 1000 (in 2006 it was a bit more than 2 USD) for keeping a diary during the month of the survey.
- Once the interviewer finished the work in a given cluster he/she presented the completed questionnaires and diaries for data control and coding together with a report on sample results .
- The field work was under thorough supervision and numerous control interviews were conducted.
- The collected information was coded, logically tested
- The information was entered into the data base using special software for data entry,
- The data were verified, passed logical test and corrected according to the list of mistakes recorded in the program.