

Ukraine - Multiple Indicator Cluster Survey 2012

**United Nations Children's Fund, State Statistics Service of Ukraine, Ukrainian
Institute for Social Reforms, Statinformconsulting**

Report generated on: September 30, 2015

Visit our data catalog at: <http://ddghhsn01/index.php>

Sampling

Sampling Procedure

The sample for the Ukraine Multiple Indicator Cluster Survey (MICS 2012) was designed to provide reliable estimates of core survey indicators for the study domains: Ukraine as a whole, urban and rural areas at the national level, and five geographical regions: North, Centre, East, South and West.

A probabilistic, stratified, two-stage cluster sample design was developed for the survey. The stratification was based on geographical regions, and within regions - on three types of settlements: large cities, towns and rural areas. Firstly, selection of primary sampling units (hereinafter referred to as the PSUs) was performed within each stratum. A full listing of households was conducted in all selected PSUs, and then the households were selected for the survey at the second sampling stage.

The MICS 2012 sample represents all non-institutional households of Ukraine and their inhabitants, excluding households and individuals living in the Chernobyl-affected areas of the first and second radioactive contamination levels.

The MICS 2012 total sample size (number of households to be selected) was 12,480 households. The actual total sample size for MICS 2012 is 12,459 households instead of the 12,480 envisaged households. The key indicator "Percentage of children under two who were breastfed within one hour of birth" was used for calculating the sample size. The expected level of this indicator is 35.9% (estimated on the basis of the MICS3 results). The percentage of children under two in Ukraine is about 2% of the population (estimated by the demographic statistics data and the results of the national household surveys).

The stratification of the sampling frame was calculated by dividing every geographical region into large cities (with a population of 100,000 and more), towns (with a population of less than 100,000) and rural areas. This led to the formation of 15 strata.

At the first stage 480 PSUs were selected with probability proportional to the PSU size (PPS). On the basis of the information from the listing forms, a set of households in each PSU was stratified at the second sampling stage by those with children under 5 years as of October 01, 2012, and those without such children. Altogether, 960 secondary strata were formed (that is, two secondary strata within each sample PSU).

The sampling procedures are more fully described in "Multiple Indicator Cluster Survey 2012 - Final Report" pp.250-254.

Response Rate

Of the 12,459 sampled households, 11,871 households were occupied. Of these, 11,321 were successfully interviewed yielding a household response rate of 95.4 percent.

In the interviewed households, 8,239 women (aged 15–49 years) were identified as eligible. Of these, 8,006 were successfully interviewed yielding a response rate of 97.2% within interviewed households.

3,829 men (aged 15–49 years) were identified in the households selected for the men's questionnaire. Questionnaires were completed for 3,620 of eligible men, which corresponds to a response rate of 94.5% within interviewed households.

There were 4,402 children under the age of 5 identified in the interviewed households. Questionnaires were completed for 4,379 of these children, which corresponds to a response rate of 99.5% within interviewed households.

Overall response rates of 92.7% and 90.2% are calculated for the interviews of women and men aged 15–49, respectively. The overall response rate calculated for children under the age of 5 is slightly higher than women's and men's overall response rates, reaching 94.9%.

One should note the differentials in household response rates by the area. The response rate in rural areas is 98.6%, which is slightly higher than that in urban settlements (95.4% in towns and 92.6% – in cities). Household response rates are comparatively high in the West, the Centre and the East regions, ranging from 96.4% to 97.7%. At the same time, the response rates in the North and in the South are slightly lower – 93.2% and 91.7%, respectively.

Weighting

The sample design results in different selection probabilities for different household types by PSU. Therefore, to estimate the MICS 2012 indicators requires the use of a weighting system. The procedure for calculating the weights includes:

- Computation of the household basic weights as inverse values of the general probabilities of household selection;
- Adjustment of the basic weights in order to take into account the actual household and individuals' response rate;
- Weighting system quality assessment.

The main objective of the basic weighting procedures is to take into account the actual sample design in the indicator estimation processes. The MICS 2012 sample design determines the following components of the basic weights calculation:

- Probability of PSU selection;
- Probability of segment selection;
- Probability of household selection

In order to take into account the household and individuals' non-response, the basic weights were adjusted by the strata formed in the process of the sample design development (five regions and three settlement types), that in this case are also the weighting classes.

The adjustment of the basic weights was used for cases where no information was received from an individual or a household due to the following reasons: refusal to participate in the survey; absence of the household members that could have taken part in the survey during the interviewers' visit; absence of all household members during a long period of time; only partial information provided in the interview.

The quality of the weighting system was determined after each stage of their computation and correction. At the same time the variability of the weights was assessed and their minimum and maximum values were controlled.

The final weights were normalised so that at the national level the weighted number households and individuals (households, women, men and children) was equal to the corresponding unweighted number of sample cases with completed questionnaires.

Questionnaires

Overview

The questionnaires for the Generic MICS were structured questionnaires based on the MICS4 model questionnaire with some modifications and additions. Household questionnaires were administered in each household, which collected various information on household members including sex, age and relationship. The household questionnaire includes Household Listing Form, Education, Water and Sanitation, Household Characteristics, Child Labour, Child Discipline, Salt Iodization.

In addition to a household questionnaire, questionnaires were administered in each household for women age 15-49, children under age five and men age 15-49. For children, the questionnaire was administered to the mother or primary caretaker of the child.

The women's questionnaire includes Woman's Background, Access to Mass Media and Use of Information/Communication Technology, Child Mortality, Pregnancy History, Desire for Last Birth, Maternal and Newborn Health, Post-Natal Health Checks, Illness Symptoms, Contraception, Marriage / Union, Unmet Need for Contraception, Attitudes toward Domestic Violence, Sexual Behaviour, HIV/AIDS, Tobacco and Alcohol Use, Life Satisfaction.

The children's questionnaire includes Child's Age, Birth Registration, Early Childhood Development, Breastfeeding, Care of Illness, Immunization.

The men's questionnaire includes Man's Background, Access to Mass Media and Use of Information/Communication Technology, Child Mortality, Contraception, Attitudes toward Domestic Violence, Marriage / Union, Fertility Preferences, Sexual Behaviour, HIV/AIDS, Life Satisfaction.

The questionnaires were developed in English from the MICS4 Model Questionnaires, and were translated into Ukrainian and Russian languages. Similarly, instructions for interviewers and guidelines for completing and editing questionnaires were translated into Ukrainian.

Upon recommendations of the United States Agency for International Development and taking into account the need to collect additional information on household living conditions and on the situation of children, women and men in Ukraine, standard questionnaires were supplemented with modules and individual questions from the Demographic and Health Survey (DHS) mostly related to reproductive health and sexual behaviour. A 13-day pre-test training for supervisors on August 1-13, 2012 was combined with the pre-test exercise. The questionnaires were pretested in August 2012 in the city of Kyiv and in several rural communities of Kyiv oblast. Based on the results of pretest, modifications were made to the wording of some questions, and to questionnaire format.

In addition to administration of questionnaires, field teams tested the salt used for cooking in the households for iodine content; and visited child health facilities to obtain information about immunization of children under five, if the immunization card was not available in the household.

Data Collection

Data Collection Dates

Start	End	Cycle
2012-09-28	2012-12-31	N/A

Data Collection Mode

Face-to-face [f2f]

DATA COLLECTION NOTES

Training for the fieldwork was conducted throughout September 10–21, 2012.

Training included lectures on interviewing techniques and the contents of questionnaires, as well as mock interviews among trainees to gain practice in interviewing. Towards the end of the training, trainees spent 2 days practicing interviewing in the city of Kyiv, in the town of Bucha, and in Kyiv-Sviatoshyn rayon of Kyiv oblast.

The data was collected by 26 teams; each team comprised of 2 to 4 interviewers (depending on the number of clusters in the oblast), one supervisor, one editor, and one driver. Overall, 26 supervisors, 26 editors, 78 interviewers and 25 drivers were involved in the fieldwork. The fieldwork began on September 28, 2012, and concluded on December 31, 2012. The duration of the survey in the regions with 9 to 15 clusters was 2 months; with 16–25 clusters – 2.5 months; and with 26–32 clusters – 3 months.

Data Collectors

Name	Abbreviation	Affiliation
State Statistics Service of Ukraine		

SUPERVISION

There is one supervisor for each of the 26 data collection teams in the field.

Data Processing

Data Editing

The data was entered using CSPro software. The data was entered on 14 computers by 24 data entry operators and 3 supervisors working in two shifts. In order to ensure quality control, all questionnaires were double-entered, and internal consistency checks were performed. Procedures and standard programs developed under the global MICS4 programme adapted to the Ukraine questionnaire were used throughout. Data processing began almost simultaneously with data collection at the beginning of October 2012. Data entry was completed on January 14, 2013, while editing of the primary database was completed in February 2013. In parallel with the data entry process, MICS team proceeded with adaptation and finalisation of MICS syntax for DHS modules, included in survey questionnaires. Data was analysed using the Statistical Package for Social Sciences (SPSS) software, and the model syntax and tabulation plans, adapted to Ukraine questionnaires were used for this purpose.

MICS tabulations were finalised in March 2013. In April 2013, preliminary findings of the survey analysis were submitted to the experts of academic, non-governmental and international organisations for their critical review.

Data Appraisal

Estimates of Sampling Error

The sample of respondents selected in the Ukraine Multiple Indicator Cluster Survey is only one of the samples that could have been selected from the same population, using the same design and size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between the estimates from all possible samples. The extent of variability is not known exactly, but can be estimated statistically from the survey data.

The following sampling error measures are presented in this appendix for each of the selected indicators:

- Standard error (se): Sampling errors are usually measured in terms of standard errors for particular indicators (means, proportions etc). Standard error is the square root of the variance of the estimate. The Taylor linearization method is used for the estimation of standard errors.
- Coefficient of variation (se/r) is the ratio of the standard error to the value of the indicator, and is a measure of the relative sampling error.
- Design effect (deff) is the ratio of the actual variance of an indicator, under the sampling method used in the survey, to the variance calculated under the assumption of simple random sampling. The square root of the design effect (deff) is used to show the efficiency of the sample design in relation to the precision. A deff value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a deff value above 1.0 indicates an increase in the standard error due to the use of a more complex sample design.
- Confidence limits are calculated to show the interval within which the true value for the population can be reasonably assumed to fall, with a specified level of confidence. For any given statistic calculated from the survey, the value of that statistic will fall within a range of plus or minus two times the standard error ($r + 2.se$ or $r - 2.se$) of the statistic in 95 percent of all possible samples of identical size and design.

For the calculation of sampling errors from MICS data, SPSS Version 18 Complex Samples module has been used. The results are shown in the tables that follow. In addition to the sampling error measures described above, the tables also include weighted and unweighted counts of denominators for each indicator. Sampling errors are calculated for indicators of primary interest, for the national level, for urban and rural areas, and for the regions. One of the selected indicators is based on households, 8 are based on household members, 29 are based on women, 12 are based on men and 14 are based on children under 5. All indicators presented here are in the form of proportions.

Other forms of Data Appraisal

A series of data quality tables are available to review the quality of the data and include the following:

- Age distribution of the household population
- Age distribution of eligible and interviewed women
- Age distribution of eligible and interviewed men
- Age distribution of children under 5 in household and children under 5 questionnaires
- Women's completion rates by socio-economic characteristics of households
- Men's completion rates by socio-economic characteristics of households
- Completion rates for under-5 questionnaires by socio-economic characteristics of households
- Completeness of reporting
- Observation of under-5s birth certificates
- Observation of vaccination cards
- Presence of mother in the household and the person interviewed for the under-5 questionnaire
- Selection of children age 2-14 years for the child discipline module
- School attendance by single age
- Sex ratio at birth among children ever born and living
- Births by calendar years
- Reporting of age at death in days
- Reporting of age at death in months

The results of each of these data quality tables are shown in appendix D in document "Multiple Indicator Cluster Survey 2012 - Final Report" pp.286-297.

Related Materials

Questionnaires

Ukraine Multiple Indicator Cluster Survey 2012 - Questionnaire

Title	Ukraine Multiple Indicator Cluster Survey 2012 - Questionnaire
Country	Ukraine
Language	English
Table of contents	Household questionnaire modules Household member questionnaire modules Women questionnaire modules Children questionnaire modules Men questionnaire modules
Filename	UKR_2012_MICS4_Questionnaire_En.pdf

MICS4 Changes To Questionnaires v2.1 to v3.0

Title	MICS4 Changes To Questionnaires v2.1 to v3.0
Language	English
Filename	http://www.childinfo.org/mics4_questionnaire.html

MICS4 Questionnaire Form For Child Disability v3.0

Title	MICS4 Questionnaire Form For Child Disability v3.0
Language	English
Filename	http://www.childinfo.org/mics4_questionnaire.html

MICS4 Questionnaire Form For Vaccinations At Health Facility v3.0

Title	MICS4 Questionnaire Form For Vaccinations At Health Facility v3.0
Language	English
Filename	http://www.childinfo.org/mics4_questionnaire.html

Reports

Ukraine Multiple Indicator Cluster Survey 2012 Report (English)

Title	Ukraine Multiple Indicator Cluster Survey 2012 Report (English)
Date	2011-12-01
Country	Ukraine
Language	English
Filename	https://mics-surveys-prod.s3.amazonaws.com/MICS4/Central%20and%20Eastern%20Europe%20and%20the%20Commonwealth%20of%20Independent%20States/Ukraine/2012/Final/Ukraine%202012%20MICS_English.pdf

Ukraine Multiple Indicator Cluster Survey 2012 Report (Ukrainian)

Title	Ukraine Multiple Indicator Cluster Survey 2012 Report (Ukrainian)
Date	2011-12-01
Country	Ukraine
Language	Ukrainian
Filename	https://mics-surveys-prod.s3.amazonaws.com/MICS4/Central%20and%20Eastern%20Europe%20and%20the%20Commonwealth%20of%20Independent%20States/Ukraine/2012/Final/Ukraine%202012%20MICS_Ukrainian.pdf

Ukraine Multiple Indicator Cluster Survey 2012 Key Findings (English)

Title Ukraine Multiple Indicator Cluster Survey 2012 Key Findings (English)
 Date 2011-12-01
 Country Ukraine
 Language English
 Filename https://mics-surveys-prod.s3.amazonaws.com/MICS4/Central%20and%20Eastern%20Europe%20and%20the%20Commonwealth%20of%20Independent%20States/Ukraine/2012/Key%20findings/Ukraine%202012%20MICS%20KFR_English.pdf

Technical documents

Changes to MICS Tabulation Plan, Data Quality Tabulations, and Sampling Error Tables since Version 2.1

Title Changes to MICS Tabulation Plan, Data Quality Tabulations, and Sampling Error Tables since Version 2.1
 Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 01 Household Sample and Survey Characteristics (HH)

Title MICS4 01 Household Sample and Survey Characteristics (HH)
 Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 02 Child Mortality (CM)

Title MICS4 02 Child Mortality (CM)
 Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 03 Nutrition (NU)

Title MICS4 03 Nutrition (NU)
 Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 04 Child Health (CH)

Title MICS4 04 Child Health (CH)
 Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 05 Water and Sanitation (WS)

Title MICS4 05 Water and Sanitation (WS)
 Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 06 Reproductive Health (RH)

Title MICS4 06 Reproductive Health (RH)
 Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 07 Child Development (CD)

Title MICS4 07 Child Development (CD)
 Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 08 Education (ED)

Title MICS4 08 Education (ED)
 Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 09 Child Protection (CP)

Title MICS4 09 Child Protection (CP)
 Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 10 HIV-AIDS, Sexual Behaviour and Orphanhood (HA)

Title MICS4 10 HIV-AIDS, Sexual Behaviour and Orphanhood (HA)
 Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 11 Access to Mass Media and ICT Technology (MT)

Title MICS4 11 Access to Mass Media and ICT Technology (MT)
 Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 12 Subjective Well-Being (SW)

Title MICS4 12 Subjective Well-Being (SW)
 Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 13 Tobacco and Alcohol Use (TA)

Title MICS4 13 Tobacco and Alcohol Use (TA)
 Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 Data Quality Tabulation Plan (DQ)

Title MICS4 Data Quality Tabulation Plan (DQ)
 Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 Sampling Errors (SE)

Title MICS4 Sampling Errors (SE)

Language English
 Filename http://www.childinfo.org/mics4_plan.html

MICS4 Changes To Indicator List v2.1 to v3.0

Title MICS4 Changes To Indicator List v2.1 to v3.0
 Language English
 Filename http://www.childinfo.org/mics4_questionnaire.html

MICS4 List of Indicators v3.0

Title MICS4 List of Indicators v3.0
 Language English
 Filename http://www.childinfo.org/mics4_questionnaire.html

MICS4 Manual-Anthropometry

Title MICS4 Manual-Anthropometry
 Language English
 Filename http://www.childinfo.org/mics4_manual.html

MICS4 Manual-Data Editing Guidelines

Title MICS4 Manual-Data Editing Guidelines
 Language English
 Filename http://www.childinfo.org/mics4_manual.html

MICS4 Manual-Designing and Selecting the Sample

Title MICS4 Manual-Designing and Selecting the Sample
 Language English
 Filename http://www.childinfo.org/mics4_manual.html

MICS4 Manual-Designing the Questionnaires

Title MICS4 Manual-Designing the Questionnaires
 Language English
 Filename http://www.childinfo.org/mics4_manual.html

MICS4 Manual-Getting Started

Title MICS4 Manual-Getting Started
 Language English
 Filename http://www.childinfo.org/mics4_manual.html

MICS4 Manual-Global Positioning Systems

Title MICS4 Manual-Global Positioning Systems
 Language English
 Filename http://www.childinfo.org/mics4_manual.html

MICS4 Manual-Instructions for Interviewers

Title MICS4 Manual-Instructions for Interviewers
 Language English
 Filename http://www.childinfo.org/mics4_manual.html

MICS4 Manual-Instructions for Supervisors Editors and Measurers

Title MICS4 Manual-Instructions for Supervisors Editors and Measurers
 Language English
 Filename http://www.childinfo.org/mics4_manual.html

MICS4 Manual-Model Questionnaires

Title MICS4 Manual-Model Questionnaires
 Language English
 Filename http://www.childinfo.org/mics4_manual.html

MICS4 Manual-Preparing for Data Collection and Conducting Fieldwork

Title MICS4 Manual-Preparing for Data Collection and Conducting Fieldwork
 Language English
 Filename http://www.childinfo.org/mics4_manual.html

MICS4 Manual-Processing the Data

Title MICS4 Manual-Processing the Data
 Language English
 Filename http://www.childinfo.org/mics4_manual.html

MICS4 Manual-Salt Iodization Testing

Title MICS4 Manual-Salt Iodization Testing
 Language English
 Filename http://www.childinfo.org/mics4_manual.html
