

Analysis of household surveys and measuring poverty in the context of a pandemic

INTRODUCTION

This report presents a revised model set of questions for household budget survey (HBS) adapted to the conditions of a pandemic (Annex 1), and also considers certain issues of the transition to new methods of collecting primary data.

[According to the National Statistical Offices \(NSOs\)](#), the introduction of contact restrictions caused by the spread of the coronavirus pandemic has led to the fact that NSOs began to experience significant difficulties related to the unwillingness of respondents to work remotely, including due to the fact that the telephone survey takes more time and resources from the household. This raises the question of improving surveys by shortening them and translating additional modules to other methods of data collecting.

This revised set of questions builds on the recommendation of the 2018 [consultant's report](#), where a model set of questions was developed, but also takes into account the consultant's work in the statistical offices of Azerbaijan, Kazakhstan and Kyrgyzstan with the focus on the following aspects:

1. The need to take into account fully the disaggregation variables in line with the [Poverty Measurement: Guide to Data Disaggregation](#) (UNECE, 2020, hereinafter – Disaggregation Guide).
2. Reducing the set of questions and simplifying the questionnaires due to the need to reduce the time spent on interviews.

The authors believe that in the context of the COVID-19 pandemic, which has generated serious problems and restrictions on procedures and methods of household surveys (in particular, restrictions on physical contact between the interviewer and respondents), the following principles should be the main HBS principles:

- maximum reduction of the time of physical and telephone contacts between interviewers and respondents;
- the use of the most concise and understandable for the respondents statistical forms, which will allow respondents to fill them in on their own and make this process as easy as possible: exclusion of auxiliary questions, redundant units of measurement;
- inclusion of "hints and reminders" in questionnaires, as well as the development of detailed, understandable and well-visualized written instructions (booklets, brochures) for filling in the survey forms;
- development of video instructions for filling in the forms.

In this regard, the consultants developed proposals for the transition of individual questionnaire modules to their self-completion by the respondents, as well as the transfer of other modules to the mid-term period of the survey.

The structure of the model set of questions

The proposed model set of questions for HBS contains 4 sections:

- Part 1. Questionnaire on Household Expenditures.
- Part 2. Questionnaire on Household income.
- Part 3. Questionnaire on Household Deprivations.
- Part 4. Questionnaire on Personal Subsidiary Farm.

The consultants take into account the fact that the concrete format of the statistical forms in the household survey is left to the discretion of the NSO, however, as the study of HBS practice in many countries shows, it is effective to use the following approaches:

- Recording food expenditures, including those for meals outside the home, in *the Household Daily Expenditure Diary* (completed by the respondent).
- Recording expenditures on non-food items and services in the quarterly *Household Expenditure Journal* (completed by the respondent).
- Verification and clarification of records on expenditures for non-food goods and services and filling in the *Questionnaire for the Main Interview* (to be completed by the interviewer during the personal meeting with the respondent). This Questionnaire already includes questions on income, deprivations and personal subsidiary farm.

Inclusion of standard core disaggregation variables

The Disaggregation Guide draws attention to the need to collect data for key target groups, including those that are hard to be reached. The consultants believe that the creation of a separate module, the Household Checklist Form, which will include all core disaggregation variables, will accomplish this task as effectively as possible.

The study and analysis of the country questionnaires of Azerbaijan, Kazakhstan and Kyrgyzstan showed that similar checklist forms are already being developed in the questionnaires of the HHS of Kazakhstan and Kyrgyzstan and contain information on 5-6 disaggregation variables. The Azerbaijan questionnaire contains a number of questions on disaggregation variables, however, these questions are not collected in a single form, and their coding is not complete. Typically, current country questionnaires provide information (in whole or in part) on the following variables:

- Age.
- Sex.
- Household ownership (very incomplete).
- Degree of urbanization.
- Level of education.
- Migratory status.

The analysis also showed that the list of variables missing in the questionnaires of all three countries is practically the same; this is:

- Ethnicity.
- Household type.
- Current employment status.
- Disability status.

The consultants developed a layout of the Household Checklist Form, covering 10 variables¹ out of 11 recommended by the Disaggregation Guide (Annex 2).

The purpose of the Household Checklist Form is to draw up a general "household portrait", i.e. provision of general information necessary for further processing of the received data – generalization, grouping and disaggregation, including disaggregation of poverty in accordance with the recommendations of the Disaggregation Guide, as well as to ensure the harmonization of poverty statistics across countries. The coding of the answers to the questions is based on the provisions of the Disaggregation Guide, but also takes into account the specifics of the countries studied. This applies to such dimensions as the household type ("couple with two children" is highlighted as a separate answer), the current employment status and the migratory status (coding of answers has been expanded in comparison with the Disaggregation Guide).

It is important that the proposed model of the Household Checklist Form makes it possible to implement the principle of self-identification when answering questions about the ethnicity, the marital status and the disability status.

Revised set of consumer expenditures questions

The model set of expenditure questions is based on the following basic requirements:

- *Formation of questionnaire on expenditures in accordance with the [new version of COICOP \(2018\)](#)*: this facilitates the process of harmonizing household survey procedures and their results, making international comparisons correct.
- *Implementation of the functional-purpose approach*: aggregation in one module of questions and respective data on all consumer expenditures of households associated with a particular target consumption function;
- *Mandatory inclusion of "tips and reminders"*: it facilitates the process of filling in statistical forms by both the respondent and the interviewer.

The main differences between the new set of questions on consumer spending compared to the previously developed questionnaire are as follows:

- Based on the new structure of the COICOP, the list and structure of the sections of the questionnaire, as well as the classification and, accordingly, the coding of goods and services, have been changed.
- The number of modules in the new questionnaire has been reduced from 10 to 9. As a result, in the module II "Personal goods and services", the accounting of non-food goods for individual consumption and personal and household services is combined.
- The lists and types of expenditures for information and communication services (the module III. Housing) and other financial expenses (the module IX. Other financial expenses) have been clarified.
- Provides for the calculation of subtotals based on the total amount of consumer expenditures on goods and services, as well as on durable goods (D), semi-durables goods (SD) and non-durables goods (ND).

¹ The cash (or near cash) social transfers received is included into the set of income questions

The main recommendations for the consumer spending questionnaire in the context of a pandemic are as follows:

- Use a table format and the maximum possible reduction in the number of "binary" questions;
- Exclusion of excessive characteristics of purchased / consumed goods and services from statistical forms, independently filled in by respondents.

Revised set of income questions

The previously developed set of income questions was based on the Canberra Group Handbook with more detailed classification developed by consultant to ensure that there was no blending of incomes at the class level. This allows pursuing a consistent approach to the structure of the questions.

The proposed set of income questions differs from the previously developed set of questions as follows:

- *The number of questions for each income class has been reduced.* Reducing the number of questions requires clear guidelines/instructions to include certain types of incomes at the class level. In many cases this allows to reduce number of question for each class to two questions instead of four or five questions. For example, the questions on employment income can be reduced to a question on wages and a question on other income from employment.
- *The section on changes in household assets and liabilities has been removed.* This is possible if the NSO does not aim to balance the expenditure and income data of the household.

As total the number of income questions has been reduced from 69 to 49.

Questions about personal subsidiary farm

In the most of national questionnaires there is a section "Personal subsidiary farming", which, as a rule, includes questions about its main characteristics, equipment, the amount of harvest for agricultural crops, products obtained from animals, agricultural processing products and income from sales both in value and in kind terms.

Most of these variables have nothing to do with consumer expenditure or income. Net income from the sale of products from personal subsidiary farm should be included in gross and disposable income. To calculate it, there is need only in two questions in table format: "Expenses for a land plot, for processing products, keeping animals" and "Incomes from personal subsidiary farm", the latter includes only incomes in values. To take into account income from personal subsidiary farm in kind, the forms that *records daily consumption of products (as rule it is a Diary)* must have codes of places from where a product has been received (either from personal subsidiary farm or by barter).

Revised set of questions on deprivations

The Poverty Measurement Guide (2018) recommends developing and harmonizing a unified multidimensional poverty index for the countries of the region in the medium term. The previously developed set of questions on deprivations consisted of three main subsections, which were based on the relevant EU SILC questions and various questions that were already included in the questionnaires of the countries of the region. Among them those are on material deprivations, housing conditions and self-assessment of poverty.

The developed set of questions on deprivations contained a fairly large number of questions, and only a few of them were later included in the country questionnaires. The restrictions caused by the coronavirus pandemic dictate the need to reduce the number of questions on deprivations, and at the same time, the objective to harmonize questionnaires is still kept.

An analysis of three national questionnaires under the current project showed that harmonization of questions on deprivations and the multidimensional poverty index based on national questionnaires is practically impossible due to significant differences in both the quantity and the value of the variables. In this regard, it is proposed to take as a basis for harmonizing questionnaires on deprivations already tested surveys used in a number of countries. In particular, these are questions of the EU SILC material and social deprivations and questions related to the Global Multidimensional Poverty Index (MPI).

With regard to questions on material and social deprivations, it should be noted that from 2021 the material and social deprivations rate is calculated as the proportion of people living in households that cannot afford *at least five out of thirteen items*. At the same time, the severe material and social deprivation rate is calculated for *at least seven out of thirteen items*.

It is also important that seven questions on deprivations are asked at the household level, and the remaining six at the level of household members. More information on these issues can be found in the [Methodological guidelines and description of EU-SILC target variables](#), 2021 operation. The consultant also conducted a comparative analysis of deprivation issues between the EU SILC questionnaires and the questionnaires of Azerbaijan, Kazakhstan and Kyrgyzstan, where the description of variables from the above guidelines was used.

Regarding the questions of the global MPI index published by UNDP, it includes a relatively small number of questions, which at the same time partly overlap with the questions of the EU SILC and some of the variables can be obtained from the proposed Household Checklist Form. This index is already being calculated for eight countries of the former USSR. However, it should be noted that the value of the global index for all eight countries is insignificant, which means that it is almost impossible to use this index for developing the socio-economic policies of these countries.

However, this does not mean that questions related to the global MPI should be dropped. The further development could be considered. Countries introduce all the global MPI questions and get agreement on new deprivation thresholds to allow for comparable calculation of the national multidimensional poverty indices. This work can be carried out under the leadership of the CIS Statistical Committee with the support of UNECE.

The revised model set of questions identifies the source of the question (corresponding EU SILC and global MPI question numbers) and some questions have been edited in Russian to better understand their meaning. It should also be noted that excluding other questions from the model set does not mean that the NSO should not consider it as a potential questions. This is entirely within the competence of the national statistical office.

Transfer of the survey to new methods of information collection

Discussion of new methods of collecting information with the NSOs showed that only a few of them (Kazakhstan and Kyrgyzstan) conducted pilot surveys on their own websites on selected small HBS topics. Moreover, after some mitigation of the pandemic, they immediately returned to personal interview mode. The NSOs also suggested that this method will remain prevalent, even despite the possible deterioration of the epidemiological situation.

In these circumstances, the consultant focused on developing specific recommendations for NSOs aimed at reducing the time of contact between the respondent and the interviewer. Such recommendations, which are summarized here in this short report, include:

- *Measures should be taken to prevent the expansion of the range of tasks assigned to the HBS.* This recommendation also applies to the personal interview mode, and even more so to the remote mode.
- *Priorities for the HBS should be identified.* Other objectives should be addressed through other surveys, possibly with less coverage of respondents and possibly through surveys on the NSC website and / or social media.
- *Shorten and simplify questionnaires* by eliminating redundant questions and auxiliary modules and transfer some modules to the mid-term period of the survey.
- *Try to avoid filling in the forms by respondent and interviewer together.* To do so please transfer some forms to self-filling by the respondents, provide him/her with detailed and clear instructions. And also ensure that interviewers can control remotely the filling in of such forms.
- *Timing of the survey should be carried out for each module.* This will make it possible to more accurately plan the survey taking and find reserves in case of need to further shorten the questionnaires.