

Agency for Strategic planning and reforms of the Republic of Kazakhstan Bureau of National statistics

# Results of the pilot calculation of the national multidimensional poverty index in the Republic of Kazakhstan

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Group of Experts on Measuring Poverty and Inequality Geneva (Switzerland), 7-9 December 2022

### **Poverty measurement**

- Monetary poverty calculation based on consumption expenditure on a sample of 12,000 households a year
- Quality of life index based on 11 dimensions, including living conditions, work, education, health, environment, etc.
- International recommendations for developing the national MPI
- Instructed by the National Government to calculate the MPI for the country
- Producing indicators for SDG 1.2.2 The proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
- Deprivations experienced by households according to EU-SILC methodology

- Support from UNECE and OPHI (Oxford Poverty and Human Development Initiative) for the development of the national MPI for Kazakhstan *using the Alkire-Foster method*
- Support from UNICEF on child deprivation and needs statistics in accordance with the recommendations of the international expert based on the Bristol approach to MPI calculation

#### Studying international practices

- Sectors most often included in MPI: education, health, housing and living conditions, unemployment
- As a rule, indicators must describe access to and quality of services
- Deprivation cut-off minimum level of the enjoyment of rights and needs for services

#### Analysis of strategy documents and legislation

- What documents determine priorities in addressing poverty in its individual aspects?
- What standards can be used as poverty thresholds?

### **Current Situation**

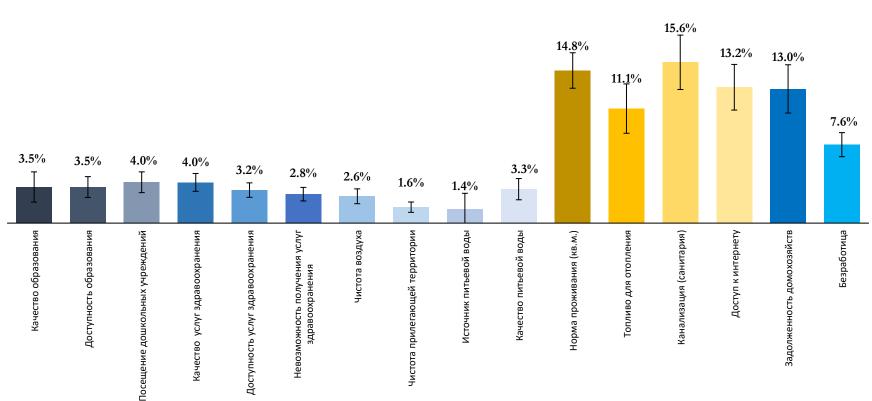
- The process of building the pilot MPI takes some time, it implies conducting trainings, consultations with state bodies, and software development
- That is why, variables and deprivation cut-offs for the pilot MPI were chosen from the current questionnaire based on the legislation in force
- Preliminary selection of dimensions, indicators and deprivation thresholds
- Formulation

# Work to build the national MPI for Kazakhstan (Alkire-Foster method)

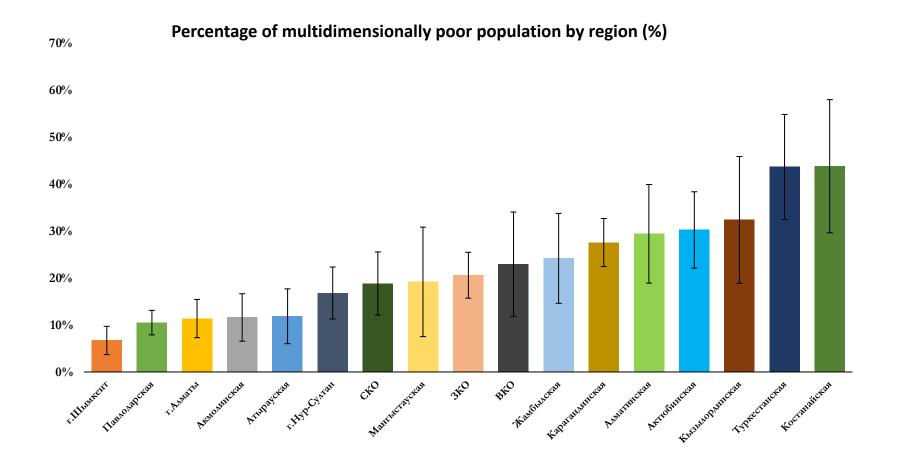
|   | Dimensions                | Indicators   | Deprivation cut-offs   |
|---|---------------------------|--|--|
| 1 | Education                 | Level of satisfaction with the quality of education  | A household is considered deprived if satisfaction level is 1-3 out of 10.   |
|   |                           | Level of satisfaction with the availability and affordability of educational services            | A household is considered deprived if satisfaction level is 1-3 out of 10.   |
|   |                           |  | A household is considered deprived if at least one child aged 1-6 years does not attend preschool because: it is expensive (1)? Preschool facility is far away (2), relatives take care of the children (5), and not registered at the address (7)   |
| 2 | Health and<br>environment | Level of satisfaction with the quality of healthcare services                                    | A household is considered deprived if satisfaction level is 1-3 out of 10.   |
|   |                           | Level of satisfaction with the availability and affordability of healthcare services             | A household is considered deprived if satisfaction level is 1-3 out of 10.   |
|   |                           |  | A household is considered deprived if at least one member aged 15+ who got ill during the year could not get access to healthcare services because of: very expensive services (3), too expensive medicines (4), long queues (5), absence of a specialist (6), medical facility too remote / not accessible (7), lack of medicines (8), low quality of services / distrust (9) |
|   |                           | Level of satisfaction with air cleanness<br>(lack of pollution, smoke, dust)                     | A household is considered deprived if satisfaction level is 1-3 out of 10.   |
|   |                           | Level of satisfaction with the cleanness of<br>adjoining territory (lack of waste or<br>garbage) | A household is considered deprived if satisfaction level is 1-3 out of 10.   |
|   |                           | Source of drinking water   | A household is deprived if a household get water from tank-cars (1) or river/pond/lake (4)   |
|   |                           | Level of satisfaction with the quality of drinking water   | A household is considered deprived if satisfaction level is 1-3 out of 10.   |

# Work to build the national MPI for Kazakhstan (Alkire-Foster method)

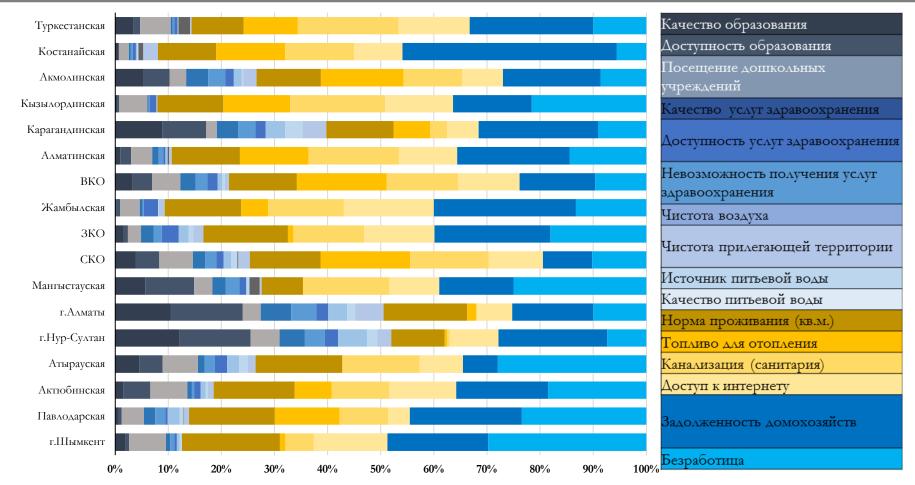
|   | Dimensions  | Indicators  | Deprivation cut-offs   |  |
|---|---|---|--|--|
| 3 | Housing and housing conditions                    | Inadequate minimum space standard (square meters per son out of gross floor area) | A household is deprived if it is less than 15 sq.m per person  |  |
|   |   | Fuel for heating  | A household is considered deprived if a household uses solid or liquid fuel for heating.   |  |
|   |   | Access to a sewerage system (sanitation)  | A household is considered deprived if it has a pit latrine without a stove (1) or without toilet (2) or a septic tank (3)                          |  |
|   |   | Personal internet access  | A household is deprived if the household does not have personal Internet access  |  |
| 4 | Standard of living,<br>financial<br>affordability | Household payment arrears   | The household had difficulty making payments two or more times for one of the following: rent, mortgage, utility bills, loan debt, instalment plan |  |
|   |   | Unemployment  | A household is considered deprived if at least one person over 15 is not working (3)   |  |



Proportion of poor and deprived population per each indicator (%)



#### Experimental calculations of the national MPI for Kazakhstan (Alkire-Foster method)



#### Experimental calculations of the national MPI for Kazakhstan (Alkire-Foster method)

| Poverty cut-off (k)                                      | Value  | Value | Confidence Interval (95%) |       |  |
|--|--|-------|---------------------------|-------|--|
|  | MPI  | 0.076 | 0.067                     | 0.085 |  |
| k-value = 25%<br>(deprived along 1 dimension or<br>more) | % of multidimensional poor population (H, %) | 23.6% | 21.0%                     | 26.2% |  |
|  | Poverty intensity (A, %)                     | 32.2% | 31.4%                     | 32.9% |  |

- <u>Almost every fourth person (23.6%)</u> in Kazakhstan is multidimensionally poor.
- Poverty intensity means that every poor person is on average 32.2% deprived on a weighted basis.
- National MPI = 0.076, indicating that poor people experience 7.6% of all possible deprivations.

#### Working with ministries

 Assistance to the BNS in the selection and refinement of indicators, identification of deprivation cutoffs for individual sectoral indicators

What indicators describe poverty beyond monetary poverty in your sectors? Which sectoral strategic documents and indicators should be given special attention? What standards can help in determining deprivation cut-offs for individual indicators?

- Establishing a task group with the representatives of ministries
- Work to discuss indicators
- Adoption and reinforcing the decision on the set of indicators
- Calculation and presentation of the final MPI



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| әрбір бала үшін | for every child | для каждого ребенка



#### Work stages:

- "Work plan to improve the collection, processing and dissemination of data about children for 2022-2023".
- UNICEF expert Dimitri Gugushvili.
- Pilot survey using the household sample survey of living standards network
- Making changes to the statistical form



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**Object of study** – a household with a child (children). Citizensof the Republic of Kazakhstan 18 and older.

**Subject of study** - assessment of the level of multidimensional poverty of children in Kazakhstan.

**Research geography:** Astana city, East Kazakhstan region, Karaganda region, Mangistau region, North Kazakhstan region, Turkestan region.

Field work was carried out from March 19 to June 30, 2022.

Sample size – 500 respondents.

# Work on MPI-children for Kazakhstan - Bristol approach was chosen

| N       | Dimension           | Indicator   | Questions and answer options in the Bureau's forms  |
|---------|---------------------|---|---|
| 1       | Nutrition           | % of children deprived of healthy<br>nutrition  | Can your household afford to eat hot meals with fish or meat or chicken or equivalent vegetarian food (legumes, nuts, etc.) at least once every two days? |
| 2       | Water               | % of children deprived of access to<br>quality water                                  | Please rate your satisfaction with the situation in your place of residence: dissatisfaction with the quality of drinking water                           |
| 3       | Sanitary conditions | % of children deprived of access to<br>fixed wash basins                              | What types of amenities are available in the housing you occupy: a stationary bath or shower ( <i>lack</i> )  |
| 4       | Healthcare          | % of children deprived of access to<br>health care                                    | Why were you unable to use healthcare services during the year?   |
| 5       | Education           |   | To what extent are you satisfied with accessibility and affordability of educational services?  |
| prescho |                     |   | preschool   |
|         |                     |   | General swcondary (school)  |
|         |                     |   | Higher and post-graduate  |
| 6       | Housing             | % of children living in families<br>dissatisfied with the quality of their<br>housing | To what extent are you satisfied with the quality of housing you live in?   |
| 7       | Information         | % of children not having access to<br>Internet when needed                            | Is there personal access to Internet in your housing?   |

# Work on MPI-children for Kazakhstan - Bristol approach was chosen

#### • Amended statistical form D 002 "Life Quality of the Population"

| CHILDREN NE   | EDS                     |           |                                       |                         |                |  |  |
|---|-------------------------|-----------|---------------------------------------|-------------------------|----------------|--|--|
| 4. Which of the following, in your opinion, should every child in Kazakhstan have to live well and grow normally? |                         |           |                                       |                         |                |  |  |
|   | Absolutely<br>necessary | Necessary | Preferably,<br>but it's not necessary | At all<br>not necessary | Do not<br>know |  |  |
| 4.1 new (not second-hand) clothes that fit  | 1                       | 2         | 3                                     | 4                       | 9              |  |  |
| 4.2 two pairs of comfortable and seasonal footwear (one for each season) for each child in the household          | 1                       | 2         | 3                                     | 4                       | 9              |  |  |
| 4.3 eat fresh vegetables and fruit every day  | 1                       | 2         | 3                                     | 4                       | 9              |  |  |
| 4.4 a meal of meat, poultry, or fish (or equivalent vegetarian food) at least once a day                          | 1                       | 2         | 3                                     | 4                       | 9              |  |  |
| 4.5 educational games and books, for each child in the household, appropriate for their age                       | 1                       | 2         | 3                                     | 4                       | 9              |  |  |
| 4.6 equipment for outdoor activities (e.g. bicycles, roller skates, sports equipment, etc.)                       | 1                       | 2         | 3                                     | 4                       | 9              |  |  |
| 4.7 indoor games (e.g. educational toys for children, blocks, board games, computer games, etc.)                  | 1                       | 2         | 3                                     | 4                       | 9              |  |  |
| 4.8 a suitable place to study or do homework  | 1                       | 2         | 3                                     | 4                       | 9              |  |  |
| 4.9 regular leisure   | 1                       | 2         | 3                                     | 4                       | 9              |  |  |
| 4.10 children's parties on special occasions (birthday, etc.)   | 1                       | 2         | 3                                     | 4                       | 9              |  |  |
| 4.11 the ability to invite friends to your home   | 1                       | 2         | 3                                     | 4                       | 9              |  |  |
| 4.12 participating in school trips and paid school activities   | 1                       | 2         | 3                                     | 4                       | 9              |  |  |
| 4.13 a leave with parents away from home for at least a week per year   | 1                       | 2         | 3                                     | 4                       | 9              |  |  |
| 4.14 extracurricular activities such as crafts, music, or private lessons   | 1                       | 2         | 3                                     | 4                       | 9              |  |  |

# Work on MPI-children for Kazakhstan - Bristol approach was chosen

| DEPRIVATIONS   |              |   |                          |                |  |
|--|--------------|---|--------------------------|----------------|--|
| 5. Do the children living in your household have access to each of these items?                          |              |   |                          |                |  |
|  | Yes          | No. Would like to have but<br>currently we cannot afford it | No need at the<br>moment | Do not<br>know |  |
| 5.1 new (not second-hand) clothes that fit   | 1            | 2   | 3                        | 9              |  |
| 5.2 two pairs of comfortable and seasonal footwear (one for each season) for each child in the household | 1            | 2   | 3                        | 9              |  |
| 5.3 eat fresh vegetables and fruit every day   | 1            | 2   | 3                        | 9              |  |
| 5.4 a meal of meat, poultry, or fish (or equivalent vegetarian food) at least once a day                 | 1            | 2   | 3                        | 9              |  |
| 5.5 educational games and books, for each child in the household, appropriate for their age              | 1            | 2   | 3                        | 9              |  |
| 5.6 equipment for outdoor activities (e.g. bicycles, roller skates, sports equipment, etc.)              | 1            | 2   | 3                        | 9              |  |
| 5.7 indoor games (e.g. educational toys for children, blocks, board games, computer games, etc.)         | 1            | 2   | 3                        | 9              |  |
| 5.8 a suitable place to study or do homework   | 1            | 2   | 3                        | 9              |  |
| 5.9 regular leisure  | 1            | 2   | 3                        | 9              |  |
| 5.10 children's parties on special occasions (birthday, etc.)  | 1            | 2   | 3                        | 9              |  |
| 5.11 the ability to invite friends to their home   | 1            | 2   | 3                        | 9              |  |
| 5.12 participating in school trips and paid school activities  | 1            | 2   | 3                        | 9              |  |
| 5.13 a leave with parents away from home for at least a week per year                                    | 1            | 2   | 3                        | 9              |  |
| 5.14 extracurricular activities such as crafts, music, or private lessons                                | 1            | 2   | 3                        | 9              |  |
| 6. In the past 12 months, have you had at least one time when your child/your children could not ge      | t the treatm | ent or medicine they needed?                                |                          | 1              |  |
| no, during this time they did not need any treatment and / or medicine                                   |              |   |                          | 1              |  |
| no, they received treatment and/or medicine when they needed it  |              |   |                          | 2              |  |
| yes, we could not pay for the treatment and/or medicines that the child/children needed                  |              |   |                          | 3              |  |
| yes, the necessary treatment and/or medicine was not available where we live                             |              |   |                          | 4              |  |
| Do not know  |              |   |                          | 5              |  |

#### Q.: "HOW MANY CHILDREN UNDER 18 YEARS LIVE IN THIS HOUSEHOLD?"

|            | Frequency | Per cent |
|------------|-----------|----------|
| 1 child    | 173       | 34.6     |
| 2 children | 182       | 36.4     |
| 3 children | 77        | 15.4     |
| 4 children | 47        | 9.4      |
| 5 children | 15        | 3.0      |
| 6 children | 2         | 0.4      |
| 7 children | 2         | 0.4      |
| 8 children | 2         | 0.4      |
| Total      | 500       | 100.0    |

#### SEX OF CHILDREN LIVING IN THE HOUSEHOLD

|        | Frequency | Per cent |
|--------|-----------|----------|
| Male   | 371       | 74.2     |
| Female | 342       | 68.4     |

# Q.: "IN THE PAST 12 MONTHS, HAVE YOU HAD AT LEAST ONE TIME WHEN YOUR CHILD (CHILDREN) COULD NOT GET THE TREATMENT OR MEDICINE THEY NEEDED?", (%)

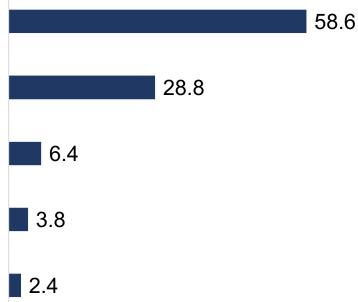
no, during this time they did not need any treatment and / or medicine

no, they received treatment and/or medicine when they needed it

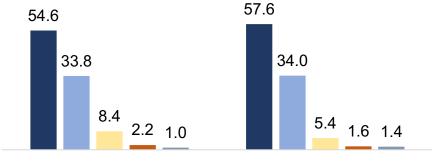
yes, we could not pay for the treatment and/or medicines that the child/children needed

yes, the necessary treatment and/or medicine was not available where we live

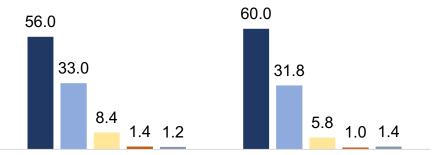
Отказ от ответа



# Q.: "Which of the following, in your opinion, should every child in Kazakhstan have to live well and grow normally?", (%)



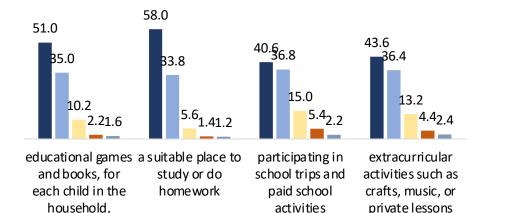
new (not second-hand) clothes that fit two pairs of comfortable and seasonal footwear (one for each season) for each child in the household



eat fresh vegetables and fruit a meal of meat, poultry, or fish every day (or equivalent vegetarian food) at least once a day

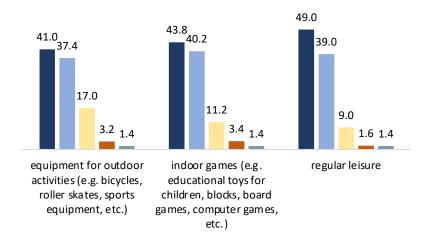
- Absolutely necessary (everyone should have it)
- Necessary
- Preferable but not necessary
- Not at all necessary
- Refusal to answer

# Q.: "Which of the following, in your opinion, should every child in Kazakhstan have to live well and grow normally?", (%)



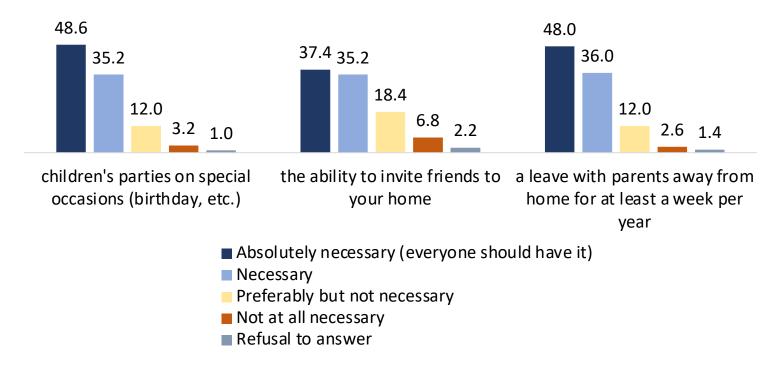
appropriate for

their age

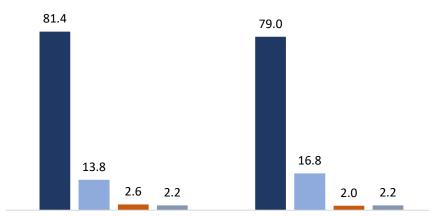


- Absolutely necessary (everyone should have it)
- Necessary
- Preferable but not necessary
- Not at all necessary
- Refusal to answer

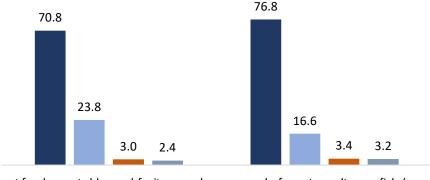
# Q.: "Which of the following, in your opinion, should every child in Kazakhstan have to live well and grow normally?", (%)



# Q.: "DO THE CHILDREN LIVING IN YOUR HOUSEHOLD HAVE ACCESS TO EACH OF THESE ITEMS?", (%)



new (not second-hand) clothes that fit two pairs of comfortable and seasonal footwear (one for each season) for each child in the household



eat fresh vegetables and fruit every day

a meal of meat, poultry, or fish (or equivalent vegetarian food) at least once a day

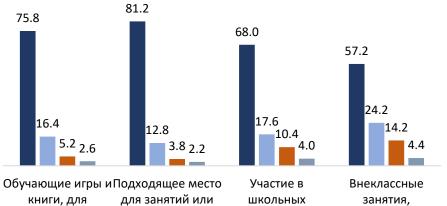
- Yes
- No. Would like to have but cannot afford now
- No need now
- Refusal to answer

# Q.: "DO THE CHILDREN LIVING IN YOUR HOUSEHOLD HAVE ACCESS TO EACH OF THESE ITEMS?", (%)

(например, велосипед,

ролики, спортивный

инвентарь и т.д.)



книги, для , каждого ребенка в домохозяйстве, соответствующие его возрасту дходящее место Уч ля занятий или ш выполнения экс домашних платны заданий мер

Участие в Внеклассные школьных занятия, экскурсиях и например, платных школьных ремёсла, музыка, мероприятиях или частные уроки



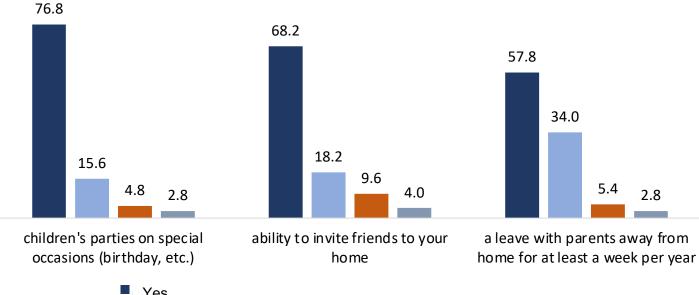
детские игрушки, кубики,

настольные игры,

компьютерные игры и т.д.)

- Yes
- No. Would like to have but cannot afford now
- No need now
- Refusal to answer

# Q.: "DO THE CHILDREN LIVING IN YOUR HOUSEHOLD HAVE ACCESS TO EACH **OF THESE ITEMS?**", (%)



- Yes
- No. Would like to have but cannot afford now
- No need now
- Refusal to answer

# According to the 2023 Statistical work plan

- D002 Survey "Life Quality of the Population" is scheduled for 11 March 2023
- Survey results are scheduled for 20 June 2023.

Thank you for your attention!