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## **INTRODUCTION**

This report has been prepared in response to the terms of reference, which aims to provide assistance to the Bureau of National Statistics (BNS) of the Republic of Kazakhstan on the following issues:

- 1. Development of recommendations and questions on the National Multidimensional Poverty Index (NMPI).
- 2. Assessment of the Household Budget Survey<sup>1</sup> (HBS) in the context of SDGs requirements.
- 3. Harmonization of data from census and HBS.

It should be noted that this report was prepared in close cooperation with the Department of Labor Statistics and Living Standards (hereinafter – the Department) of the BNS, which provided all the necessary materials for the consultant, in particular, the latest up-to-date versions of the questionnaires and census forms of the National Population Census of the Republic of Kazakhstan.

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<sup>&</sup>lt;sup>1</sup> In Kazakhstan this survey is named as Household Living Standards Survey

## 1. Development of recommendations and questions on the National Multidimensional Poverty Index

## 1.1. Description of the approach

At present, the HBS does not formally contain separate sections for the formation of the national MPI. Relevant SDG indicator 1.2.2 "Proportion of men, women and children of all ages living in poverty in all its dimensions, according to national definitions", as derived from the <u>National platform "Monitoring the 2030 Sustainable Development Goals"</u> not yet developed.

Accordingly, the methodology for calculating the national MPI has not been developed either. The introduction of new questions in the HBS, according to the information of the Department's employees, requires rather lengthy procedures for coordination with higher level authorities, and the approved additions to the questionnaires, as a rule, come into force in the next years. As a result, the consultant agreed with the Department on a recommendation to develop a pilot version of the national MPI based on existing questionnaires, as well as to provide suggestions to further improve the national MPI questions.

The consultant studied the following forms:

- 1. D 002 "Quality of life of the population" (frequency once a year): 4 sections, 13 pages:
  - Part I: Satisfaction with the quality of life (22 questions plus 26 additional sub-questions).
  - Part II: Objective factors influencing the quality of life (11 questions).
  - Part III: Household deprivations (20 questions plus 4 additional sub-questions).
  - Part IV: Time spent completing the statistical form (1 question).
- 2. D 006 "Questionnaire for the main interview" (annual frequency): 5 pages, 10 questions.
- 3. D 008 "Household Checklist Form" (annual, with quarterly update): 3 pages, 9 questions.

In addition to the above, when developing the national MPI, the consultant relied on the following approaches:

- 1. The national MPI should not only create a basis for measuring the relevant SDG indicator but should also allow monitoring the socio-economic policies. In this regard, the consultant analyzed the key strategic and sectoral development documents to identify the key priorities of socio-economic policies and link them to potential variables.
- 2. While developing the index, the consultant relied on basic approaches consistent with the Alkire-Foster methodology. A description of this methodology in Russian is available in the UNECE Poverty Measurement Guide (2017). The UNICEF report "Multidimensional Poverty Assessment in the Kyrgyz Republic" (2020) that describes this methodology should also be mentioned. At the same time, for a more detailed understanding of the details of this methodology, Department staff should read the report "How to Build a National Multidimensional Poverty Index (MPI): Using the MPI to inform the SDGs" (UNDP, OPHI, University of Oxford (2019)) available in English.
- 3. For a practical understanding of the dimensions and variables included in the MPI, the consultant reviewed the methodologies of the 34 countries and organizations representing different practices in the development of this index. This approach along with the analysis of the key documents of socio-economic policy, allows one to show sufficient flexibility in the development of variables for the national MPI of Kazakhstan.

#### 1.2. Peculiarities of the development of the national MPI of Kazakhstan

The requirements and steps for developing a national MPI are well described in the above reports. Based on them the consultant implemented the following:

- Reviewed the MPI dimensions used by various countries and organizations;
- 2. Analyzed strategic and sectoral documents in various policy areas;
- 3. Described the national variables for the main dimensions such as education, health, housing and living conditions, etc.;
- 4. Analyzed the variables of the HBS of Kazakhstan and identified variables that could be included in the pilot national MPI;
- 5. Developed recommendations to improve the national MPI.

## 1.2.1. Overview of MPI dimensions used by various countries and organizations

Table 1 summarizes the main dimensions that various countries and organizations include in multidimensional poverty indices. As follows from this table, the main dimensions of the multidimensional poverty index are *education* (all countries including this dimension), *health* (33 countries included this dimension), *basic services and standard of living* (23 countries). Basic services are services such as the provision of electricity, water, heating, etc., that is, services that are included in the definition of SDG indicators 1.4.1. It should be noted that the *housing* is a separate dimension quite often, however it is included into basic services sometimes. While standard of living is listed as a separate dimension in only two countries, it is included as part of the basic services dimension in four other countries. Some dimensions such as the digital gap, the situation of children and youth, etc. are of a singular case.

Table 1. Main MPI dimensions (review of methodologies for 34 countries)

Dimension	Number of countries	Comment
Education	34	Rarely childcare is added
Health	33	Sometimes added nutrition, food security, environment
Employment	14	Sometimes social security is added
Basic services and standard of living	23	These two sections overlap a lot with each other. The
Housing	8	standard of living is indicated in four countries.
Standards of living (poverty)	2	Used as a separate dimension

*Note:* Annex 1 contains a complete table for all countries.

Source: Data for 10 countries are taken from Box 5.2 of the Poverty Measurement Guide, the remaining countries are analyzed based on data from the MPPN website, a peer network on multidimensional poverty

## 1.2.2. Strategic and sectoral development plans of the Republic Kazakhstan

To determine country priorities, the following strategic development plans of the Republic of Kazakhstan were reviewed.

## Development Strategy of the Republic of Kazakhstan until 2050 (hereinafter – Strategy 2050)

This strategy was presented in the form of the Address of the Head of State to the people of the country. This is a long-term vision of the country's development, the goal of which is the creation of a prosperous society based on a strong state, developed economy and universal labor opportunities, Kazakhstan's entry into the top thirty most developed countries in the world. This vision includes seven long-term priorities, including the economic policy of the new course, comprehensive support for entrepreneurship, new principles of social policy, key targets for the modern system of education, training and retraining of personnel.

## National Development Plan of the country until 2025 (hereinafter – NDP 2025)

The National Development Plan of the country until 2025 defines the main objectives and characteristics of the country's new economic course. The document reflects a strategic medium-term vision for the development of the most important industries, targets for improving key policies aimed at eliminating the consequences of the coronavirus crisis and ensuring sustainable, inclusive and high-quality economic development in the new economic reality and current global trends. This document includes a description of the goals and objectives for ten national priorities.

## Sectoral development plans

These documents include national projects adopted at the sector level, sector development concepts and government sectoral programs.

## 1.2.3. Description of national variables of the key MPI dimensions

## Education: Overview of the MPIs variables of the selected countries and organizations

Global MPI	Number of years of schooling: No household member aged 10 or older has completed five years of schooling			
	School Attendance: Any school age child of not attending school up to grade 8			
The World Bank	At least one school-age child before grade 8 is not enrolled in school			
	No adult in the family (age 9 or older) completed primary education			
German MPI	Primary school not completed			
(Suppa)	Less than ten books in the household			
Kyrgyzstan At least one person did not receive an education appropriate to his age				
Colombia	Level of education: Minimum 9 years of education for household members over 15 years old			
	Literacy: Percentage of people in a household who can read and write (100%)			
Pakistan	Number of years of schooling: No household member older than 10 has been in school for five years			
	School Attendance: Any child of school age (6-11 years old) is not attending school			
	Quality of school education: Any child is not attending school due to problems with quality of school education (insufficient number of teachers, remoteness of the school, excessive cost of education, lack of teachers for boys or girls, substandard schools) or is attending school, but is not satisfied with the quality of education			
Mexico  Access to Education: Child aged three to fifteen years who do not have the compulsory basic education appropriate for their age and are not attending educational center.				

	For persons born before 1982 (this is 18 years old at the time of writing the methodology). If they do not meet the minimum compulsory basic education level that prevailed at the time they should have attended primary school.  For people born after 1982 (age 18). If they have not completed secondary school
Armenia	Lack of secondary education: No household member aged 15 to 75 has any secondary education, vocational or professional education
	School Attendance: At least one school-age child aged 6 to 17 is not attending school
	Access to education: Lack of nearby access to kindergarten, complete secondary or primary (general) school
	Quality of educational services: Dissatisfaction with educational services

Sources: Here and below for similar sectoral tables:

- Poverty Measurement Guide, UNECE, 2017
- Colombia: <a href="https://mppn.org/paises\_participantes/colombia/">https://mppn.org/paises\_participantes/colombia/</a>
- Armenia: <a href="https://openknowledge.worldbank.org/handle/10986/28356">https://openknowledge.worldbank.org/handle/10986/28356</a> (definition of variables on page 37)
- Mexico: <a href="https://mppn.org/paises">https://mppn.org/paises</a> participantes/mexico/
- Kyrgyzstan: Methodological guidance to calculate the SDG indicator 1.2.2. "Proportion of men, women and children of all ages living in poverty in all its dimensions, according to national definitions". Approved by the decision of the Board of the National Statistical Committee dated March 9, 2020, No. 8

Despite the different national characteristics that lead to the corresponding national formulations, the following variables can be identified as the main variables:

- access to education;
- achieved level of education;
- quality of educational services.

## Overview of education priorities in strategic national development plans

The **Strategy 2050** states that knowledge and professional skills are the key landmarks of the modern system of education, training and retraining of personnel

## NDP 2025 in the National Priority 3. Quality education, identifies five objectives:

- Objective 1. Ensuring access and equity in education.
- Objective 2. Creation of favorable conditions and environment for learning.
- Objective 3. Improving the quality of education.
- Objective 4. Improving the efficiency of management and financing of education.
- Objective 5. Development of human capital for the digital economy.

The "Quality Education – Educated Nation" National Project adopted for the implementation of these strategic documents defines the following five objectives:

- Objective 1. Ensuring the availability and quality of preschool education and training.
- Objective 2. Improving the quality of secondary education: reducing the gap in the quality of education between regions, urban and rural schools in Kazakhstan (PISA).

- Objective 3. Providing schools with a comfortable, safe and modern educational environment.
- Objective 4. Providing affordable and high-quality technical and vocational education.
- Objective 5. Increasing the competitiveness of Kazakh universities.

It should be underlined that both the NDP 2025 and the National Project set the level of public satisfaction with the quality of preschool/secondary education as one of the strategic indicators.

#### Questions on education from the HBS forms of Kazakhstan

## The Form D002. Quality of life of the population

#### Part 1:

Question 17. How satisfied are you with the quality of educational services? The question asked about four levels of education: pre-school, general secondary (school), secondary vocational (special), higher and postgraduate.

Answer: a 10-point Likert scale: 1-3 – not satisfied, 4-7 – partially satisfied, 8-10 – satisfied

Question 18. How satisfied are you with the availability of educational services? The question and answer variables are the same as for the question 17.

#### Part 3:

Question 17. Does your household have a preschool age child, who is not attending preschool?

Answer: yes/no

Question 18. If yes, what is the reason for not attending? (there may be several answers)

Answers: too expensive / no pre-school centers at the place of residence / unsuitable age / illness / relatives look after the child / a nanny looks after the child / no registration / no need / other reasons

## The form D008. Household Checklist Form

Question 7. The highest level of education completed as of January 1

Answers: 1 - pre-school education / 2 - primary education / 3 - basic secondary education / 4 - secondary education (general secondary education, technical and vocational education) / 5 - higher education / 6 - postgraduate education / 7 - no education

## Possible questions for the national MPI

Based on the above review of strategic and sectoral documents in the education sector, as well as the analysis of the current HBS questions, the following variables can be proposed for inclusion in the pilot multidimensional poverty index

#### Possible MPI Variables for the Education Dimension

MPI Variables	Deprivation threshold	Comment
Level of satisfaction with the quality of education  Form D 002, Part 1, Question 17	Dissatisfaction 1–3 points	Applicable to levels up to secondary (general and special) education if there are children of the appropriate age

The level of satisfaction of the population with the availability of educational services  Form D 002, Part 1, Question 18	Dissatisfaction 1–3 points	Applicable to levels up to secondary (general and special) education if there are children of the appropriate age
3. Visiting a preschool Form D 002, Part 3, Question 18	Expensive, not nearby, no residence permit, relatives	No secondary school question
4. Completed level of education for adults or a child  Form D 008, Question 7	Secondary education, appropriate level completed for the child (primary education or basic secondary education)	

The overall level of deprivation should be associated with the completion of secondary school, including secondary general and special education. As for children, deprivation will be determined if the child has not completed the level of education appropriate to his age.

Note that the third possible variable only describes only preschool attendance and therefore does not identify deprivation regarding secondary school. The completed level of education for children also does not quite accurately determine deprivation, since it does not allow us to consider the situation when the student has not completed the class corresponding to his age.

Health: Overview of the MPIs variables in the selected countries and organizations

Global MPI	Child mortality: Any child has died in the family in the five-year period preceding the survey		
	Nutrition: Any adult under the age of 70 or any child for whom nutritional information is available is malnourished		
World Bank (extended version)	Any woman aged 15-49 with a live birth in the last 36 months did not deliver at a health facility		
	Any child aged 12–59 months has not received DPT3 vaccination		
	Any child aged 0–59 months is stunted (HAZ < -2)		
	Any woman aged 15–49 is undernourished (BMI <18.5)		
German MPI	Partial or severe disable		
(Ѕирра)	Two out of four health issues. These issues include:  i) a strong limitation climbing stairs,  ii) a strong limitation for tiring activities  iii) physical pain occurred always or often during the last 4 weeks, and  iv) the health condition limited always or often socially		
	Body mass index larger than 30		
Kyrgyzstan (food security added)	Handwashing practices: A person is considered deprived if they live in a household that does not have a place to wash their hands with water and soap		
	Indoor Air Pollution: A person is considered deprived if they live in a household where the main kitchen appliance is a stove (kerosene or oil stove) or fireplace		
	Calorie intake was less than 2100 kcal per day per capita		
	Household consumes less than 7 food groups out of 10		
Colombia Health insurance: Household members who are insured with the Social St. Health System (100%)			

Access to healthcare: Access to healthcare institution when needed	
Pakistan	Access to health facilities/clinics/basic health facilities. Deprived if health facilities are not used at all. Or are only used once in a while, because of access constraints (too far away, too costly, unsuitable, lack of tools/staff, not enough facilities)
	Vaccination: Deprived if any child under the age of 5 is not fully immunized according to the vaccinations calendar (households with no children under 5 are considered nondeprived)
	Antenatal care: Deprived if any woman in the household who has given birth in the last 3 years did not receive ante-natal check-ups (households with no woman who has given birth are considered non-deprived).
	Assisted delivery: Deprived if any woman in the household has given birth in the last 3 years attended by untrained personnel (family member, friend, traditional birth attendant, etc.) or in an inappropriate facility (home, other) (households with no woman who has given birth are considered non - deprived).
Mexico	Access to health care: Persons not covered by any health care system (public or private) and not eligible to participate in it;
Armenia	Affordability of health services: Household who do not have the means to pay for the necessary medical services (except for a dentist) in a health institution, such as tests, examinations and procedures prescribed by a doctor.
	Access to health services: Households in rural areas that do not have access to a health care facility, emergency ambulance services or pharmacies in the neighborhood (20 minute drive).
	Dissatisfaction with the quality of medical services
	Termination of normal work activities due to illness, injury, or poor health

Various country characteristics lead to significant variations in the national formulations. however, it can be noted that the following variables are relatively common:

- access to health care;
- dissatisfaction with the quality of health services.

Variables such as nutrition, access to medical services, vaccinations, and health issues should also be noted.

## Key policy documents and programs in the health sector

## Strategy 2050

The 2050 Strategy establishes the following key priorities in the **section "New principles of social policy** – **social guarantees and personal responsibility":** 

- Ensure the provision of quality and affordable medical services.
- Ensure the improved diagnosis and treatment of the wide range of diseases. Preventive medical care should become the key tool in the prevention of diseases.
- Introduce new approaches to ensuring the health of our children. Cover all children under the age of 16 with the full range of health care.
- Improve the medical education system

## **NDP 2025**

## National Priority 2: Affordable and Efficient Health System

Objective 2. Increasing the affordability and quality of medical services.

- Objective 3. Development of human resources and scientific medicine.
- Objective 4. Formation of a healthy lifestyle.

## Strategic indicators:

- Life expectancy at birth.
- Infant mortality.
- Maternal mortality.
- The level of satisfaction of the population with the quality and availability of health services provided by health care institutions.

## Health questions from the Kazakhstan HBS forms

#### **The Form D002. Quality of life of the population,** part 1:

- Question 3. How satisfied are you with your health?
- Question 15. How satisfied are you with the quality of healthcare services? The question is asked separately about public and private health institutions?
- Question 16. How satisfied are you with the availability of health care services?
- Question 19.4. How satisfied are you with the quality of services provided by ambulance stations (departments)?
- Answerы to above questions: a 10-point Likert scale: 1-3 not satisfied, 4-7 partially satisfied, 8-10 satisfied
- Question 19. Were there times during the year when you were unable to access health care services?

  Answer: Yes / no / no, because there was no need
- Question 20. For what reason were you unable to use health services during the year? (there may be several answers).
- Answer: 1. I was self-medicating /2. I decided that I would recover anyway / 3. high cost of services /4. too expensive medicine / 5. long queues / 6. lack of a specialist / 7. health facilities are far away / there is no way to get there / 8. lack of medicines / 9. poor service / do not trust / 10. other reasons

## The form D 008 Household Composition Control Card

Question 9. The status of your main activity (persons aged 15 and over) as of January 1st.

One of the answers: 7 – temporarily or permanently disabled

## Possible questions for the national MPI

Variables HBS	Deprivation Threshold
Satisfaction with the quality of healthcare services	Dissatisfaction 1–3 points
Form D002, Part 1, Question 15	
2. satisfaction with the availability of services Form D 002, Part 1, Question 16	Dissatisfaction 1–3 points
3. Inability to access health services Form D 002, Part 3, Questions 19/20	All answers except self-medicating, I will recover and other reasons

Based on the above review of strategic and sectoral documents in the health sector, as well as the analysis of the current questions of the Kazakhstan HBS, it can be assumed that these variables can be included in the pilot multidimensional poverty index

# Housing and Living Conditions: an overview of the MPI variables in the selected countries and organizations

Global MPI	Electricity: There is no access to electricity in the household			
	Improved sanitation systems: The household's sanitation facility is not improved, or it is improved but shared with other households			
	Improved drinking water sources: Household does not have access to an improved drinking water (in line with MDG guidelines) or it takes 30 minute walk to and from a safe drinking water source			
	Flooring: The floor is made of dirt, sand, dung or other similar material.			
	Cooking fuel: The household uses dung, wood or charcoal as cooking fuel			
The World Bank	No access to drinking water according to SDG guidelines			
	No access to improved sanitation according to SDG guidelines			
	No electricity			
German MPI	House requires major renovation or ready for demolition			
(Suppa)	any of the following are absent: bath, shower, kitchen, warm water, toilet			
	Overcrowding (less than one room per person)			
Kyrgyzstan	Availability of hot water			
	Overcrowding (less than 18 square meters per person)			
	Reliability of power supply (shutdown at least once a month)			
	Drinking water (not having access to an improved indoor or outdoor drinking water source)			
	Sanitation (the household is not connected to an existing sewerage system)			
Colombia	Access to water source: City – no access to public water supply. Village – water used for cooking is obtained from wells, rainwater, spring, water tank, water carrier or other sources			
	Sewer Disposal: City – no access to public sewerage system. Village - toilet without sewer connection, latrine or simply do not have a sewer system			
	Flooring: Households with dirt floors, etc. are considered to be deprived			
	External walls: Depending on the material of the walls and their existence			
	Critical overcrowding: Number of people living in a room (3)			
Pakistan	Access to an improved water source according to MDG standards (30 min)			
	Access to adequate sanitation according with MDG standards			
	Walls: Depending on the material of the walls			
	Overcrowding: 4 people per room			
	Access to electricity			
	,			
	Fuel for cooking			

	The roof of dwellings: Depending on the material		
	Walls: Depending on the material		
	Overcrowding: 2.5 people per room		
Armenia	Satisfaction with housing conditions		
	Adequate housing: Housing needs major repairs; located in a dump or a slum or old; floors and walls are substandard		
	Overcrowding: Less than 20 sq. m per person		
	Healthy heating: Depends on the type of heating		
	Centralized water supply system		
	Centralized sanitation and waste disposal		
	Hot water		
	Quality of paid public services: dissatisfaction with 33% of services: water supply, sewerage, waste disposal, telephone, electricity, post office, banking, irrigation, public transport		
	Access to transportation: poor or no transportation and road networks, especially all-year roads		

## Key strategic and policy documents in the sector

#### Strategy 2050

The document emphasizes in the **section "New principles of social policy"** that the state, especially in the context of the global crisis, must guarantee citizens a minimum social standard.

#### **NDP 2025**

By setting the **National Priority 1. Fair social policy in Task 2. "Ensuring social well-being"**, the NDP indicates that the minimum social standards linked with economic growth and budgetary opportunities will gradually approach international counterparts.

Article 17 The minimum social standard "The subsistence minimum" of the <u>Law of the Republic of Kazakhstan "On minimum social standards and their guarantees"</u> indicates that the state guarantees that pensions and state social benefits for disability in the event of loss of a breadwinner will be calculated based on the subsistence minimum. The latter is calculated considering the cost of basic services.

## State Program for Housing and Communal Development "Nurly Zher" for 2020–2025

The Program goal is to increase the affordability and comfort of housing and the development of housing infrastructure.

Among the objectives of the program are the following: the implementation of a unified housing policy, the rational provision of the population with high-quality drinking water and sanitation services, major repairs and renovation of the housing stock.

## Target indicators include:

by 2025 provision of dwelling area - 26 sq. m per person;

- by 2025, 100% access of the population to water supply services in cities and villages;
- by 2025, a reduction in the share of houses requiring major repairs to 18.1%.

#### **Questions from the Kazakhstan HBS Forms**

## The Form D002 Quality of life of the population

#### Part 1:

Question 9. How satisfied are you with the quality of the housing you live in?

Question 10. Please rate your satisfaction with the situation in your place of residence:

10.1 cleanliness of the territory adjacent to the housing (absence of household garbage (waste))

10.2. air cleanliness (absence of emissions, smoke, dust, and dirt)

10.3. drinking water quality

Question 11. How satisfied are you with the level of outside noise in your home?

Question 12. How do you assess your ability to independently purchase housing (improve your housing conditions)?

Question 13. How do you assess the support of the state in the purchasing housing (improvement of housing conditions)?

Answers: For answers to the questions 9, 10.1-10.3, 11-13, a 10-point Likert scale: 1-3 – not satisfied, 4-7 – partially satisfied, 8-10 – satisfied

#### Part 3:

Question 2. Can your household afford to pay for and keep the heat in the house at a sufficient level?

Answer: yes/no

## The Form D 006. Questionnaire for the main interview

Question 3. Could you please tell us the area of your dwelling?

Answers: Total area, in square meters / Living area, in square meters

Question 4. How many rooms does your household occupy in the dwelling?

Answer: Number of living rooms (except kitchen, bathroom, toilet, hallway, storerooms)

Question 5. What types of amenities are available in your housing?

Answer: all types of amenities are listed with details

## Possible questions for the national MPI

HBS variables	Deprivation threshold	Comment
Level of satisfaction with the quality of housing  Form D 002, Part 1, Question 9	Dissatisfaction 1–3 points	Too general. This dimension needs more detail
Non-compliance with housing standards in terms of area (sq. m. per person)	Below the standard	

Form D 006, Question 3		
Basic services:		
Form D 006, Question 5		
3. Electricity	Below 100%	This does not include blackouts
4. Heating	Solid or liquid fuel	Requires alignment of definition with SDG 7.1.2 indicator
5. Water supply	Water carrier, spring, etc.	Requires alignment of definition with SDG 6.1.1 indicator
6. Toilet	Pit toilet, no toilet, other sewerage	Definition needs to be aligned with SDG 6.2.1 indicators
7. Personal Internet Access Form D 002 Part 3 Questions 15-16	Answers: No provider / Can't afford / Don't know anything about it	Requires alignment of definition with SDG 17.8.1 indicator

Most of these variables could be included in a national MPI pilot project. However, Question 1. "The level of satisfaction with the quality of housing" is too general, since it does not take into account individual characteristics of housing, and so it should be excluded.

Regarding the second question, it is necessary to clarify the standards of dwelling area below which the average total area per person will be considered as deprivation. The Article 75 of the <a href="Law of the Republic of Kazakhstan" "On Housing Relations"" states that "a dwelling from the state housing stock or a dwelling rented by a local executive body in a private housing stock is provided in the size between fifteen and eighteen square meters of total area per person", which can be the basis for this calculation.

The definitions of other variables may differ somewhat from the SDG standards, which, accordingly, will require clarification of the wording of the answers in the future.

# Employment/unemployment: An overview of the MPI variables in the selected countries and organizations

Although, as already noted, employment/unemployment dimensions are included in the calculations of multidimensional poverty indices at the country level on a smaller scale than the previously considered dimensions, however, the analysis of this dimension is also useful in case if a decision to include questions on employment in the national MPI of Kazakhstan would be made.

#### Overview of key variables in global and national MPIs

Global MPI	No
The World Bank	No
German MPI	Unemployed
(Suppa)	involuntarily, less than 30 hours worked
	Precariously employed (including temporary work)
Kyrgyzstan	No
Colombia	Long-term unemployed (more than 12 months)
	Working pensioner (by age)

Pakistan	No
Mexico	No
Armenia	Participation in the labor market: more than half of working-age household members do not participate in the labor market
	Long-term unemployment: at least one household member is long-term unemployed
	Decent job: works as an entrepreneur or otherwise informally
	Underemployment: lack of access to a fulltime position in the labor market

As follows from the above questions, the main ones are different types of unemployment. However, in some cases pensioners' work/work in the informal sector is highlighted.

## Key strategic and policy documents in the sector

## Strategy 2050

The **section "New principles of social policy"** refers to the need to modernize the of employment policy (clause 1.4). It is emphasized that the actual employment should be provided by all programs implemented in the country, both state and sectoral, and not just some part of them.

#### **NDP 2025**

NDP 2025 defines the essence of the **National Priority 1. Fair social policy as the promotion of productive employment of the population** as the fulfillment of all obligations on social payments and state benefits aimed at supporting families.

Accordingly, the objective 1. Development of productive employment states that to restore the labor market after the pandemic and reduce unemployment, actions will be taken to modernize existing jobs and create new jobs, including through incentives for of employers. The creation of jobs, especially high-tech ones, will become the main criterion for providing state support for the implementation of projects.

The strategic indicator of the TB3 2025 is the unemployment rate indicator.

## State Program for the Development of Productive Employment and Mass Entrepreneurship for 2017 – 2021 "Еңбек"

The program goal is to promote productive employment of the population and involve citizens in entrepreneurship. Objective 9 indicates a need to implement active actions to promote employment of the population and implement social professional orientation for the unemployed and certain categories of employed persons, identified by the Government of the Republic of Kazakhstan. One of the target indicators of the program is the unemployment rate.

#### **Questions from the Kazakhstan HBS Forms**

The HBS includes only one question, which is in the Household Checklist Form (Form D008).

Question 9. Status of your main activity (persons aged 15 and over) as of January 1st. Please point the changes in the status of your main activity for 1-4 quarters.

Answers: 1 – employed (under a written contract or oral agreement) / 1.1 – employed by individual / 2 – self-employed (own enterprise, / individual entrepreneur) / 3 – unemployed and looking for job (unemployed) /4 – pensioner (non-working pensioner) /5 – student / 6 –

doing housework, caring for children or other persons / 7 – temporarily or permanently disabled /8 – not working and not looking for work for other reasons.

## Possible questions for the national MPI

The number of questions and the detail of the answers to the above question regarding the status of the main activity does not allow determining the type of unemployment and its cause, that is, setting the deprivation threshold.

# Living Standards / Affordability: an overview of the MPI variables in the selected countries and organizations

Global MPI	Asset ownership: Household has no more than one radio, television, telephone, bicycle, motorcycle, or refrigerator and no car or truck
The World Bank	Monetary poverty: Daily consumption or income is less than \$1.90 per person
German MPI (Suppa)	Reporting of two of the four goods missing for financial reasons: these are types of material deprivation from EU-SILC
	Any of the following are absent: life insurance, pension, house or apartment ownership
Kyrgyzstan	Living in absolute poverty
Colombia	No
Pakistan	Assets: Deprived if the household has no more than two small assets (radio, TV, iron, hair dryer, sewing machine, VCR, chair, clock, air cooler, bicycle) OR no large assets (refrigerator, air conditioner, tractor, computer, motorcycle) AND has no car
	Land and livestock (rural areas only): less than the minimum size of land and livestock
Mexico	Population whose income is lower than the wellbeing threshold.
Armenia	Extreme poverty: lack of access to the minimum food needed (in accordance with the national poverty measurement methodology and FAO recommendations).
	Life in dignity: lack of funds to buy necessary food or clothing.
	Humanitarian aid: Dependence on outside assistance to ensure basic life functions.
	Dependence on remittances: the need for remittances to ensure basic liay functions.

Approaches to the definition of variables for this dimension are quite different, but the variables of the monetary poverty and ownership of non-financial assets should be mentioned.

## Key strategic and policy documents in the sector

The issues of increasing the level of well-being are included in almost all strategic documents, however, since the development of a national MPI involves working with poverty issues, inclusion of poverty reduction issues in relevant documents should be reviewed.

## Strategy 2050

As already noted above, the section "New principles of social policy – social guarantees and personal responsibility" says about the creation of new minimum social standards and targeted social support. It also emphasizes that the problems of social imbalances must be resolved in the regions.

#### **NDP 2025**

The **National Priority 1.** A fair social policy defines Objective 2. "Ensuring social well-being" and sets as a target indicator the share of income of the poorest 40% in the total income of the population which corresponds to relevant SDG indicator 10.1.1.

## The Social Development Concept of the Republic of Kazakhstan until 2030

This document sets **priority 2. Poverty reduction** through an effective system of conditional social support. It sets target – by 2030 the share of the population with incomes below the subsistence level will not exceed 5% of the total population.

#### **Questions from the Kazakhstan HBS Forms**

**Forms D 003 Daily Expenditure Diary** and **D 004 Journal of quarterly household expenditures and income** are designed to calculate the national poverty line and allow identifying the proportion of a population living below the official poverty line, disaggregated by sex and age.

## The Form D 002. Quality of life of the population

Question 1. Indicate to what level of material security (well-being) do you consider yourself?

Answers: 1. low level of well-being (low-income) / 2. well-being below the average level /

- 3. average level of well-being (middle class) / 4. well-being slightly above average /
- 5. sufficient level of well-being (relatively wealthy) / 6. high level well-being

Questions 5-11 from the Part 2 and Questions 1-16 from the Part 3 measure material deprivations, i.e., inability to afford a product, service, or activity due to lack of funds.

From these questions, the following question (Form D002 Part 3 Question 1) appears to be a potential candidate for inclusion in the pilot national MPI:

Question 1. In the past 12 months, has your household been unable to pay for:

- 1.1 rent or mortgage payments
- 1.2 utility bills
- 1.3 interest payments, loan debt
- 1.4 installment payments

Answers: yes, once / yes, two or more times / no / not relevant

#### The Form D006. Questionnaire for the main interview

Question 2. Please tell me who owns the housing where you live (rent)?

Answer: One of the answers assumes the ownership of the members of the household

Question 8. Please provide details of the agricultural land to which you (aged 18 and over) have access:

Answer: One of the answers assumes the ownership of the members of the household

Question 9. Please indicate the number of durable goods you have:

Answer: a large list of durable goods is indicated

## Possible questions on standard of living/affordability

HBS variables	Deprivation threshold
Arrears in payments	Yes, two or more times
Form D 002 Part 3 Question 1	

Commentary: As shown above, the poverty reduction policies are included in all the above key policy documents, however, there are some pros for inclusion of monetary poverty variables in the national multidimensional poverty index but there even more cons. As part of the discussion on this issue, it is recommended to read the section "5.5.6 Should income be included in the MPI?" of the Poverty Measurement Guide. However, the final decision should be the one of the relevant state agencies of the Republic of Kazakhstan. Questions regarding the ownership of a limited list of assets are not included in the list of possible ones, since it seems that the level of well-being of citizens of Kazakhstan is high enough not to raise this issue as a relevant one.

## 1.2.4. Composition of the pilot national MPI

Annex 2 lists all the variables to be included in the Kazakhstan pilot MPI that were listed above in the respective dimensions. Here, we should also discuss possible options for the composition of the pilot MPI.

Practice shows that the dimensions "Education", "Health" and "Housing" are included in the multidimensional poverty indices with equal weights, while in relation to the variables "Standard of living / Affordability" it is decided either to enter it as a separate dimension, or as separate variables to another dimension, for example, to the Housing dimension. The latter is done to reduce the impact of the absolute poverty variable on the overall value of the MPI. Then two options for the structure of the pilot MPI are possible:

Options for the composition of the pilot MPI

		Option I			Option II		
Dimension	Weight	Number of variables	Weight of each variable	Weight	Number of variables	Weight of each variable	
Education	1/4	3	1/12	1/3	3	1/9	
Health	1/4	3	1/12	1/3	3	1/9	
Housing	1/4	6	1/24				
Standard of living / Affordability	1/4	2	1/8	1/3	8	1/24	

Explanation: In the first option, there are four dimensions with weight of 1/4. Then the weight of each variable depends on the weight of the dimension and the number of variables in that dimension. So, for example, the variable "Absolute poverty" gets a weight of 1/8 = (1/4)/2.

In the second version, there are three dimensions, and the weight of each dimension is 1/3. Since the living standards/affordability variables are included in the housing dimension, in this case the weight of the variable for "absolute poverty" will be 1/24 = (1/3)/(6+2)

## 1.2.5. Suggestions for further Improvement of the National Multidimensional Poverty Index

1. The first step towards improving the national multidimensional poverty index should be to calculate the value of pilot national multidimensional poverty index in retrospective to understand the trends of both the index itself and its dimensions, which will provide additional information on the directions of such improvement.

- 2. A decision needs to be made as to whether it is appropriate to include an absolute poverty variable. It is possible that, based on the results of the calculations, a decision will be made to exclude this variable or change the deprivation threshold.
- 3. Since the completed level of education for children (primary education or lower secondary education) does not quite accurately identify deprivation, it is desirable to add sub-question 7a "What class/grade your child completed?" in the Household Checklist Form.
- 4. The answers for the variables included in the dimension "Housing" should be aligned with the global metadata used in the calculation of SDG indicators 7.1.2, 6.1.1, 6.2.1, 17.8.1. For example, when calculating indicator 6.1.1 "Percentage of the population using safely managed water services", the list of improved drinking water sources includes protected sources of melted water and rainwater. There is no such answer option for the corresponding question 5 of Form D002.
- 5. Consideration should be given to introducing dimension with employment variables. Questions from the Kazakhstan Employment Sample Survey (Form T-001) can be included in HBS questionnaires to identify respondents who work part-time and (questions 41 and 42 of the questionnaire) or who are unemployed (questions 74 and 75), as well as explain the reasons for the respective employment status.

## 2. Assessment of the Household Budget Survey in the context of SDGs requirements.

Currently, the <u>National Platform for Reporting on the UN Sustainable Development Goals</u> until 2030 (https://kazstat.github.io/sdg-site-kazstat) (hereinafter referred to as the National Platform) provides data on 276 SDG indicators:

- data on 186 indicators are published with metadata;
- data on 17 are published data but lack metadata;
- 58 indicator is under development;
- 15 indicators were mentioned as irrelevant for Kazakhstan.

It should be noted that there is another page on the BNS website called Monitoring of Sustainable Development Goals until 2030 (hereinafter referred to as the Monitoring page). The data is mostly the same, but there are some differences. The difference lies in the fact that the data on the National Platform is visualized, while on the platform page it is given only in a tabular format. The National Platform also provides more information regarding national metadata. At the time of the development of this report, the National Platform was updated on December 3, 2021 (however, some data later), and the Monitoring page on February 9, 2022. Even though the data of the National Platform were taken as the basis for the work, in order to clarify data sources and metadata MDG 1 and MDG 10 the consultant used both databases.

Analysis of metadata and data sources for published SDG indicators showed that the HBS is indicated as a data source for seven SDG indicators:

1.1.1	Proportion of population living below the international poverty line, disaggregated by sex, age, employment status and geographic location (urban/rural)
1.2.1	Proportion of the country's population living below the official poverty line, by sex and age
2.1.1	Prevalence of undernourishment (living standard estimate)
2.1.2	Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)
3.8.2	Proportion of population with large household expenditures on health as a share of total household expenditure or income
5.4.1	Proportion of time spent on unpaid domestic and care work, by sex, age and location
10.1.1	Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population

Explanation: The HBS is listed as the source for the first six indicators on the National Platform; The HBS is listed as a source on the Monitoring page for the seventh indicator (indicator 10.1.1)

A comparative analysis of the level of disaggregation of the main (six) national indicators and global metadata showed that the required level of disaggregation was practically achieved **for indicators 1.1.1**, **1.2.1 and 2.1.1** (Table 1). However, the ILO recommends that indicator 1.1.1 be disaggregated by those employed and living in poverty, and that indicator 2.1.1 be disaggregated by major regions of the country by FAO.

Regarding the disaggregation of indicator 1.1.1 on the employment status, there is currently no clear World Bank metadata for this variable. The ILO metadata mention the need for such a survey, which can simultaneously identify both the poverty status of a household and the activity status of its members.

There are currently two different HBS and LFS (Labor Force Survey) surveys being conducted in Kazakhstan, so it is not possible to accurately estimate the proportion of those employed living in poverty. However, it is recommended that the department conduct a pilot poverty assessment by status in employment considering the coding of answers to question 9 of the Household Checklist Form, which describes the main employment status (persons aged 15 and over) of the respondents. This will allow developing approaches for further expansion of issues related to the employment status.

Table 1. Disaggregation of SDG indicators for which the data source is the HBS

Indicator name	Country disaggregation	Global metadata
1.1.1 Proportion of population living below the international poverty line, disaggregated by sex, age, employment status and geographic location (urban/rural)	<ul> <li>according to the poverty line (\$1.9 / \$3.2 / \$5.5)</li> <li>by gender</li> <li>by area (urban / rural)</li> <li>by regions</li> </ul>	Disaggregation (World Bank and ILO): The World Bank is developing a disaggregated poverty assessment Working poverty rate (percentage of employed living in poverty) by sex and age (ILO)
1.2.1 Proportion of the country's population living below the official poverty line, by sex and age	<ul><li>by gender</li><li>by area (urban / rural)</li><li>by regions</li></ul>	Disaggregation (World Bank): The only disaggregation is rural and urban areas
2.1.1 Prevalence of undernourishment (living standard estimate)	– by area (urban / rural)	Disaggregation (UN FAO): can be calculated for any specific population group if sufficiently accurate information is available.
2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)	<ul> <li>by degree of food insecurity (acute / moderate and acute)</li> </ul>	Disaggregation (UN FAO): can be measured in any population for which the survey is representative: location, household income, composition (including for example presence and number of small children, members with disabilities, elderly members, etc.), sex, age and education of the household head, etc.
3.8.2 Proportion of population with large household expenditures on health as a share of total household expenditure or income	<ul> <li>not disaggregated</li> </ul>	Disaggregation (WHO):  - Age and gender composition of the household  - Geographic location (rural/urban)  - Quintiles of the household welfare measures (total household consumption expenditure or income)
5.4.1 Proportion of time spent on unpaid domestic and care work, by sex, age and location	<ul><li>by gender</li><li>by area (urban / rural)</li></ul>	Disaggregation (UN Statistics Division): should be disaggregated by the following dimensions: sex, age, and location:  - Sex: female/male;  - Age: the recommended age groups are 15+, 15-24, 25-44, 45-54, 55-64 and 65+  - Location: urban/rural
10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population	<ul> <li>not disaggregated</li> </ul>	Disaggregation (World Bank): is not provided

Sources: The National Platform for Reporting on the UN Sustainable Development Goals

SDG Indicators: Metadata repository

For the remaining three indicators, the level of disaggregation is either incomplete (for example, for 5.4.1 there is no disaggregation by age) or not provided. Thus, there is no disaggregation of indicator 3.8.2; indicator 2.1.2 is disaggregated by food insecurity only, while the UN FAO global metadata recommends using a much broader range of variables – location, household income, composition (including, for example, the presence and number of young children, members with disabilities, older members etc.), sex, age, and education of the head of household, etc.

For indicator **2.1.2** Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES), it is possible to achieve the required disaggregation, since the Questionnaire (Form D 002, part 2) contains all the required eight questions (from 4 to 11) corresponding to the eight questions of the Global Metadata Food Security Scale. The information contained in the Household Checklist Form allows for the coding of responses and the required disaggregation.

To disaggregate indicator **3.8.2 Proportion of population with large household expenditures on health** as a share of total household expenditure or income, WHO recommends disaggregation by age and gender of the household.

For the age composition of the household, WHO uses the following groups:

- "only adults" includes households composed of people aged between 20 and 59 years old;
- multigenerational households (include adults living with people below 20 years old (children and/or adolescents) as well as people aged 60 years old or more -older adults);
- "younger households" include adults living with children (0 to 9 years old) and/or adolescents (10 to 19 years old); and
- "older households" include household composed of adults living with at least one older person (60 years and older) or exclusively composed of older people

The WHO global metadata also recommend disaggregating this indicator by location (rural/urban) and by level of household wealth indicators by quintiles (level of total consumption expenditure or household income). The Household Checklist format allows this.

For indicator **5.4.1 Proportion of time spent on unpaid domestic and care work, by sex, age and location**, we note that the BNS conducts a one-time module survey "Use of the time budget by the population" once every 5 years for persons aged 10 years and older (the last such survey was conducted in 2018). The <u>Bulletin "Population's Use of Time"</u> (2018) published on the website contains data on employment status, type of locality, gender, education and age. The NSO may include the missing dimensions (age, education and employment status) in the National Platform.

For indicator 10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population, the World Bank global metadata does not require disaggregation for this indicator. The National Platform publishes data on household income and expenditure per capita among the entire population, as well as household income and expenditure per capita among the poorest 40% of the population.

Indicator 10.2.1 Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities is closely related to indicators 1.1.1, 1.2.1 and 10.1.1.

According to the global metadata, indicator 10.2.1 is measured based on the national distribution of consumption or per capita income derived from surveys. The indicator is measured using the national distribution per capita measure of consumption or income, as derived from surveys. The indicator is calculated by estimating the share (in percent) of the population living on less than 50% of median of

the national distribution of income or consumption. The median is estimate from the same distribution as the indicator is estimated from, thus the 50% of median threshold will vary over time. Per capita income or consumption is estimated using total household income or consumption divided by the total household size.

The World Bank is currently working on improving the methodology and disaggregation of poverty and inequality measures by subgroup. Until methodological issues are resolved, disaggregation below the country level will not be considered.

To study the experience of national statistical offices (hereinafter referred to as NSOs) on the use of household budget survey data to measure SDG indicators, a review of NSO websites and national platforms for collecting and providing data on indicators of sustainable development goals was carried out<sup>2</sup>. A review of the sites showed that the HBS is the data source for many of the SDG indicators (Table 2).

Table 2. List of SDG indicators for which country HBS are the data source

Indicator	Kazakhstan	Kyrgyzstan	Tajikistan	Uzbekistan	Armenia	Belarus
1.1.1	1.1.1	1.1.1	1.1.1		1.1.1	1.1.1
1.2.1	1.2.1	1.2.1	1.2.1		1.2.1	1.2.1
1.2.2	irrelevant	1.2.2			1.2.2	
1.4.1	in developing				1.4.1	
2.1.1	2.1.1	2.1.1	2.1.1		2.1.1	
2.1.2	2.1.2				2.1.2	
3.8.2	3.8.2			3.8.2.	3.8.2	3.8.2.
3.a.1	global survey			3.a.1		3.a.1
4.4.1.	ICT survey			4.4.1.		4.4.1.
5.4.1	5.4.1					
5.b.1	ICT survey	5.b.1		5.b.1	5.b.1	5.b.1
6.1.1	administrative data	6.1.1				
6.2.1	administrative data	6.2.1				
7.1.1	JSC «KEGOC»	7.1.1	7.1.1.	7.1.1		
7.1.2	JSC «KEGOC»	7.1.2	7.1.2.			
8.10.2	in developing	8.10.2				
10.1.1	10.1.1	10.1.1		10.1.1	10.1.1	
10.2.1	in developing	10.2.1		10.2.1		10.2.1
11.2.1	in developing	11.2.1		11.2.1		11.2.1
16.6.2	in developing				16.6.2	
17.8.1	ICT survey	17.8.1			17.8.1.a	17.8.1
TOTAL:	7	14	5	8	11	9

<sup>&</sup>lt;sup>2</sup> The absence of a "passport" and metadata in Russian / English on the websites of the NSOs of Azerbaijan, Georgia, Moldova, Turkmenistan, and Ukraine did not allow us to accurately identify data sources for SDG indicators. On the website of the NSO of Russia, the Office of Living Standards Statistics and Household Surveys is indicated as a data source, which conducts a number of other studies in addition to the HBS, which also does not allow one to unequivocally identify that the HBS as a data source for the SDGs.

Source: Kazakhstan - Household Living Standards Survey;

Kyrgyzstan – Integrated Sample Survey of Household Budgets and Labor Force

Uzbekistan – Sample Households Survey

Tajikistan – Integrated Sample Survey of Household Budgets and Labor Force

Armenia – Integrated Survey of Living Standards (Conditions) of Households

Belarus – Sample survey of households by standard of living

A review of the national SDG platforms showed that the potential of the HBS questionnaires for obtaining SDG data is revealed in the HBS of Kyrgyzstan (14 indicators are being developed based on the HBS) and Armenia (11 indicators). In this regard, the experience of the NSOs of Kyrgyzstan and Armenia is of practical interest.

Although indicator **1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions, according to national definitions**, is defined on the National Platform as irrelevant, the consultant's research showed that the National Multidimensional Poverty Index can be developed for Kazakhstan (section 1 of this Report).

Regarding indicator **1.4.1 Proportion of the population living in households with access to basic services**, UN global metadata show the link of this indicator with a wide range of other indicators. Calculation of this indicator should be based on the following indicators and depends on their disagregation:

- 6.1.1 Proportion of population using safely managed drinking water services
- 6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water
- 7.1.1 Proportion of population with access to electricity
- 7.1.2 Proportion of population with primary reliance on clean fuels and technology
- 5.b.1 Proportion of individuals who own a mobile telephone, by sex
- 11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities

According to the global metadata, **access to basic services (indicator 1.4.1)** implies the availability of sufficient and affordable services of adequate quality:

Improved Service Characteristics	Core SDG indicator
Access to Basic Drinking Water Services refers to the use of drinking water from an improved source that is available with a collection time of not more than 30 minutes for a round trip, including queuing.  Improved sources include piped water, boreholes or tube wells, protected dug wells, protected springs, and packaged or delivered water.	SDG 6.1
Access to Basic Sanitation Services refers to the use of improved facilities that are not shared with other households.  Improved facilities include flush/pour flush to piped sewer systems, septic tanks or pit latrines; ventilated improved pit latrines, composting toilets or pit latrines with slabs.	SDG 6.2

Access to Basic Hygiene Facilities refers to availability of a handwashing facility on premises with soap and water.  Handwashing facilities may be fixed or mobile and include a sink with tap water, buckets with taps, tippy-taps, and jugs or basins designated for handwashing.  Soap includes bar soap, liquid soap, powder detergent, and soapy water but does not include ash, soil, sand, or other handwashing agents.	SDG 6.2
Access to Clean Fuels and Technology refers to use of fuels and technology that are defined by the emission rate targets and specific fuel recommendations (i.e., against unprocessed coal and kerosene) included in the normative guidance WHO guidelines for indoor air quality: household fuel combustion.	SDG 7.1
Access to Basic Mobility refers to having convenient access to transport in a rural context or having convenient access to public transport in an urban context.	SDG 9.1.1 SDG 11.2.1

Indicators 1.4.1 and 11.2.1 are currently under development; indicators 6.1.1–6.2.1 are based on administrative data supplied by the Committee for Construction, Housing and Communal Services of the Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan; The data source for indicators 7.1.1–7.1.2 is KEGOC JSC (Kazakhstan Electricity Grid Operating Company). The lack of national metadata makes it difficult to unambiguously assess whether this classification of improved services is being used by data provider organizations.

Since all these indicators are interconnected, it is necessary to harmonize national metadata on them; the understanding of improved services (objects) should be based on global metadata.

It is important that the Questionnaire for the main interview (the form D 006) already includes a question that allows you to obtain general data on the indicators under development:

Question 5. What types of amenities are available in your housing?

Heating	<ul> <li>central heating</li> <li>autonomous heating (heating from individual installations, boilers)</li> <li>stove heating</li> <li>solid fuel</li> <li>liquid fuel</li> <li>on gas</li> <li>from electricity</li> <li>from renewable energy sources</li> <li>solar radiation energy</li> <li>wind energy</li> <li>hydrodynamic energy of water</li> <li>landfill fuel</li> </ul>
Water supply	<ul> <li>plumbing in the house (building or apartment)</li> <li>water supply outside the house (buildings or apartments)</li> <li>a well, an outside water tap or an identical source of water supply</li> <li>water carrier</li> <li>spring, river, lake, pond</li> </ul>
Toilet	<ul> <li>toilet with central sewerage system</li> <li>toilet with individual sewerage system (septic tank)</li> <li>ventilated improved pit latrines</li> <li>other (composting toilets)</li> <li>there is no toilet</li> </ul>
Sewerage	<ul><li>central sewerage</li><li>other sewerage</li></ul>

Questions on indicators that characterize in more detail the access of households to basic services can also be included by the BNS in the HBS Questionnaires, as is done by the NSOs of some countries.

For example, the Armenia HBS Core Questionnaire in section 13 Housing provides data for indicator **1.4.1 Proportion of the population living in households with access to basic services** through the following questions:

13.12 What is the main source of water you use for drinking?
Centralized water supply / Spring water / Own system of water supply / River, lake / Delivered water / Bought water / Rainwater / Other specify
13.15 Where is your water tap located?  In the dwelling / In the yard / In the street
13.18 What is the source of electricity that you use most of the time in your household?  National grid connection / Local mini grid / Diesel generator / Solar panels / Other, specify
13.20-13.21 = questions about power outages
In a typical day, how many outages/blackouts happen?
In a typical day, on average how many minutes does each outage/blackout last?
13.25 Does the dwelling have an internet connection through an internet service provider (i.e. not just through the smartphone)?  Yes / No
13.27 What is the primary method used to heat the dwelling?
Electric stove / Electric heater (oil battery) / Gas stove (kitchen) / Self-made heater / Manufactured heater (Iranian, European, other) / Local-individual boiler (BAXI, etc.) / Local-collective boiler for the block / Centralized heating / Solar accumulator / Other, specify / Didn't heat the dwelling
13.28 Do you use any of the following sources to heat the dwelling? Yes / No Central heating / Electricity / Natural gas / Liquefied gas / Diesel / Wood / Coal
13.27 What is the principal method of garbage disposal used by the household?  Rubbish evacuation system / Collected by a dust-cart / Dumped by household members / Burned by household members / Buried by household members / Other, specify
13.39 What type of toilet facility is used by the household?
Flush, piped sewer system / Flush, septic tank / Flush, pit latrine / Flush, other / Improved pit latrine / Pit latrine with slab
13.44 Does your dwelling have any of the following?
Hot running water (tank, Ariston, geyser) / Bathtub or shower / Kitchen / Centralized gas supply

For indicator **6.1.1 Proportion of the population using safely managed water services**, the NSO of Azerbaijan (the Form 1 "Questionnaire for the main interview", section II "Housing conditions") asks the following questions<sup>3</sup>:

Question 10. Where does your family get water for drinking and cooking?

From a well in your yard / From a block tap / From a common well / From a spring, a river / A water carrier delivers

Question 11. How far is the water source from the dwelling?

Less than 50m / 50-100m / 100-200m / 200-500m / Over 500m

There are also additional questions about the state of the public water supply:

- 1. How many hours a day, on average, is water supplied to your home? \_\_\_\_\_ hours
- 4. Have you had issues with water supply (circle the top 5 problems)?

Sometimes there are interruptions in the cold water supply / The water pressure in the pipes is low / Often the water does not reach our floor / The pipes often fail / There is no water supply in the house / You have to go far for water / The quality of drinking water is very poor and needs to be cleaned / Drinking water must be delivered from another location / We have not experienced major problems / Central line needs to be repaired / Other (specify)

Rank issues according to their importance: 1	2	3 _	4	_ 5
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Questionnaire for the main interview in Belarus (the Form 1-dx) contains the following question for indicator 6.1.1:

Question 1.8. How long does it take members of your household to walk to a water source, get water, and return home?

Household members do not go for water / Up to 30 minutes / 31-60 minutes / More than 1 hour / Don't know, no answer

Indicator **6.2.1** Proportion of population using (a) safely managed sanitation services and (b) a handwashing facility with soap and water in the HBS of Kyrgyzstan (Questionnaire No. 7 "Availability of personal property in the household and living conditions") asks:

Question 34. Please show where members of your household usually wash their hands?

Water and detergent available (soap, liquid soap, liquid, powder) / Only water available / Only detergent available / Water and detergent not available / No place to wash hands / Not allowed to inspect

It should be noted that the HBS already now makes it possible to obtain data on indicator **7.1.1 Proportion of the population with access to electricity** through *Question 5. What types of amenities are available in your housing?* Questionnaire for the main interview (the Form D 006), where "Electricity" is indicated as a possible answer.

For indicator **7.1.2 Proportion of the population using mostly clean fuels and technologies**, there is also general information already available in the *Question 5 "What amenities are available in your home?"* 

<sup>&</sup>lt;sup>3</sup> Similar questions are included in the Questionnaire for the main interview in Belarus (Form 1-dx, Questions 1.5 and 1.9) and in Questionnaire 7 "The presence of personal property in the household and living conditions" in Kyrgyzstan (Questions 25-27)

The NSO of Kyrgyzstan (the Questionnaire No. 7 The presence of personal property in the household and living conditions), in order to detail the answer to the question about clean fuels and technologies, also asks the following questions:

Question 36. What do you use for cooking?

36.1 Primus / 36.2 Gas stove with central gas pipeline / 36.3 Gas stove with bottled gas / 36.4 Electric floor stove / 36.5 Hotplate / 36.6 Stove, open fire / 36.7 Microwave oven / 36.8 Other

Question 36. a. Which of the following sources is the main one? [specify]

Indicator **11.2.1** Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities in the Kyrgyz questionnaire is calculated based on the following questions:

annual Questionnaire No. 7 "Availability of assets in the household and living conditions", section 1 "Housing"

annual questionnaire No. 2 "Sociodemographic characteristics of persons in the household", section V "Access to services and feeling of safety"

37. How long does it take you to walk to the nearest public transport stop?

less than 5 minutes / 6-15 minutes / 16-30 minutes / 31-60 minutes / more than 1 hour

- 2. Do you find (NAME) comfortable access to public transport? Answers: yes / no
  - 2.1. Directions to the nearest public transport stop
  - 2.2. Interval of public transport
  - 2.3. Condition and comfort of public transport

The data source for indicator **5.b.1** Proportion of people with a mobile phone, disaggregated by sex, is currently a representative national survey on ICT household use based on a sample survey. The same survey is the source of data for indicators **4.4.1** Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill and **17.8.1** Proportion of individuals using the Internet.

According to the global metadata, for countries that collect this data on the proportion of individuals using the Internet through an official survey, and if data allow breakdown and disaggregation, the indicator can be broken down by region (geographic and/or urban/rural), by sex, by age group, by educational level, by labour force status, and by occupation.

The National Platform currently provides disaggregation by gender, location and region. The study of form H-020 "Questionnaire for household survey on the use of information and communication technologies" showed that there are all opportunities for a more detailed disaggregation of the three above.

For indicator **8.10.2** Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider the NSO of Kyrgyzstan collects data in the following questions of the annual questionnaire No. 2 "Socio-demographic characteristics of persons in the household":

SECTION IV. Knowledge and skills of household members

Question 2. How does (NAME) use a cell phone?

Answers: Calls / Mobile banking / E-mail / Payment for services / Internet / Social networks / Games (please select all possible options)

SECTION V. Access to Services and Feeling Safe

Question 1. Does (NAME) have a bank account (including a payroll project) or other financial institution, or use a mobile financial service provider?

Answers: Yes / No

An important indicator of household access to basic services is indicator **16.6.2 Proportion of population satisfied with their last experience of public services**, which is currently under development in Kazakhstan.

According to global metadata, this indicator measures levels of public satisfaction with people's last experience with public services, in the three service areas of healthcare, education and government services (i.e., services to obtain government-issued identification documents and services for the civil registration of life events such as births, marriages and deaths). This is a survey-based indicator which emphasizes citizens' experiences over general perceptions, with an eye on measuring the availability and quality of services as they were actually delivered to survey respondents.

It is recommended that survey results be at least disaggregated by sex, income and place of residence (urban/rural, administrative districts). To the extent possible, every effort should be made to disaggregate results by disability status and by "nationally significant populations".

The NSO of Armenia collects data for the indicator in section 13. Housing and section 16. Social assistance of the Core Questionnaire through the following questions:

13.45 Are you satisfied with [SERVICE]? Yes / No / Don't k								
13.46 Have there been any changes in [SERVICE] in the last 12 months? Yes / No / Don't know								
13.47 Did the changes improve or worsen the [SERVICE]? Yes / No / Don't know								
13.48 Did anyon	e in the household contact the authoritie	s if the [SERV	ICE] was not operating? Yes / No					
13.49 <i>Did the au</i>	thorities take steps to fix the problem?		Yes / No					
The survey is con-	ducted on the following types of services	s:						
1.	Water supply	1.	Health Services					
2.	Sanitation	2.	Education					
3.	Garbage collection	3.	Public Transportation					
4.	Fixed telephone	4.	Obtaining a passport					
5.	Electricity supply	5.	Birth registration					
6.	Post	6.	Marriage registration					
	Banking	7.	Death registration					

Finally, with respect to indicator **3.a.1.** Age-standardized prevalence of current tobacco use among persons aged **15** years and older, it should be that not all countries collect data for this indicator based on the HBS. Kazakhstan has developed Form D 007, Adult Tobacco Survey, which randomly interviews one household member aged **15** years and over. The National platform provides data at a fairly low frequency (data available for 2014 and 2019).

According to global metadata, WHO conducts these assessments every two years after consultation with countries. While a country has the authority to set its own survey calendar, in order to better harmonize national and global approaches, consideration should be given to increasing the frequency of the survey.

#### 3. Reconciliation of HBS and census data

The national population census of the Republic of Kazakhstan involves filling in five questionnaires, which cover the census of housing, persons living or staying in houses, housing conditions, personal information of respondents, ethno-cultural characteristics, education and literacy, migration, employment, sources of livelihood, etc. Analysis of the content of the census sheets showed that census forms can provide a range of information for disaggregation.

The proposed recommendations are based on those proposed by the Guide to Measuring Poverty. Data Disaggregation (2020)" (hereinafter referred to as the Disaggregation Guide) of the variables for disaggregating data on poverty of SDG indicators. Also, these recommendations consider census issues from the point of view of improving the proposed pilot national MPI. We also emphasize that these recommendations should be considered after a quantitative analysis of the census results on these issues.

Recommendations for the possible inclusion of census questions in HBS questionnaires

# Recommendation 1: Include the question of exterior wall materials for residential buildings in the Housing dimension of the national MPI

**Census question:** Question 4: Specify the materials of the exterior walls of residential buildings (residential buildings)

Answers: 1. Brick, stone / 2. Large-panel / 3. Frame-panel / 4. Volumetric-block / 5. Large-block /

- 6. Wood, sleepers /7. Monolithic concrete (reinforced concrete) /8. Cellular concrete /
- 9. Saman /10. Frame-reed /11. Other wall materials

Explanation: As shown in Section 1, the issue of exterior wall material is included in some national MPIs. Therefore, after receiving data on the percentage of the above answers, one can consider the possibility of including the relevant questions in the dimension "Housing and living conditions", where the deprivation threshold may be the answers: 9. Saman / 10. Frame-reed /11. Other wall materials

## Recommendation 2: Include the variable "Ethnicity" into the Household Checklist Form

**Census question:** Section 2 "Ethno-cultural characteristics". Question 10: Indicate your nationality (ethnicity)

Answers: "Kazakh / Russian / other (specify) / not specified"

*Explanation:* The inclusion of this question in the checklist by the consultant was already recommended in the previous report, as it is in line with the recommendation of the Disaggregation Guide to include the Ethnicity variable in the HBS variables.

## Recommendation 3: Expand the number of answers by level of education in the Household Checklist Form

**Census question:** Section 3 "Education and Literacy". Question 16: Indicate your level of education attained (for respondents aged 10 and over).

Answers: 1. Primary education / 2. Basic secondary education / 3. General secondary education / 4. Primary vocational education / 5. Secondary vocational (special) education / 6. Technical and vocational education / 7. Incomplete higher education / 8. Higher education / 9. Postgraduate education / 10. I have no education

Explanation: The number of answers (10 items) in the census question is higher than in the HBS (7 items). This will increase the analytical capacity of the HBS on the study of the causes of poverty.

## Recommendation 4. Include the question of attending educational institutions in HBS

Census question: Question 17. Do you attend educational institutions? (from 1 year and older)

Answers: 1. Pre-school education and training (for children 1-6 years old) / 2. Secondary education: 2.1. Primary education (grades 1–4) /2.2. Basic secondary education (grades 5–9) / 2.3. General secondary education (10–11(12) class) /3. Technical and professional / 4. Higher education /5. Postgraduate /6. Refresher courses (retraining) / 7. I do not attend

*Explanation:* This question can serve as an alternative to the consultant's proposed response coding for deprivation of students at the secondary education levels and below in regards to the pilot national MPI.

## Recommendation 5: Develop questions about migration status based on the analysis of census responses.

Census questions: Questions 18-21.1. Section 4 "Migration"

Explanation: Determining the migratory status of respondents is also a variable recommended by the Disaggregation Guidelines for inclusion in the HBS variables. The section on migration includes 4 questions and 3 sub-questions on migrants. Additionally, section 8 "Sources of livelihood" allows determining the sources of livelihood of the respondent and estimate the approximate income for the last month.

Conducting a cross-sectional analysis of responses to these two sections of the census will help to assess the general population of the sample of migrants and further develop questions regarding migration status to be included in the HBS.

## Recommendation 6: Include activity limitations in the health dimension of the national MPI

Census Questions: Section 9 Activity Limitations, for respondents 5 years of age and older

Question 36: Do you have limitation seeing even if you wear glasses or lenses?

Question 37: Do you have limitation hearing even if you use a hearing aid?

Question 38: Do you have limitation walking or climbing stairs?

Question 39: Do you have limitation with memory and/or concentration?

Answers to these questions: 1. No, I don't have any limitations / 2. Yes, I am experiencing minor limitations / 3. Yes, I am experiencing great limitations / 4. Yes, I am completely limited in my actions

Explanation: These questions can be included in the health dimension to further improve the national index of multidimensional poverty. This approach was taken in the development of proposals for the German national MPI (Suppa), which proposed considering four health issues and indicated that two of the four health issues where the respondent experiences serious limitations can become the deprivation threshold. In the case of Kazakhstan, the deprivation threshold can be determined based on the analysis of the census results.

#### **CONCLUSION**

As shown in the report, the HBS questionnaires contain a significant number of questions that allow the development of a pilot national MPI based on the Alkire-Foster method. It is already possible to outline ways to improve this pilot index, however, the first step should be to make calculations in order to more clearly assess the relevance of the proposed variables.

A similar consideration should be made for the inclusion of questions from the population census in the HBS forms. The census forms contain a certain number of such questions. However, the results of the census should be analyzed to assess the general population, for example, for migrants, persons with disabilities, etc., in order to then decide on the relevance of such variables to the HBS.

Analysis of the SDG indicators on the National Platform, metadata and the HBS forms and other surveys suggests that the BNS has the potential to increase the indicators calculated based on its surveys and related disaggregation variables. In some cases, it is necessary to expand the number of published survey variables, follow the SDG metadata more closely, introduce pilot calculations into the practice and rely on the experience of other countries when calculating some individual SDG indicators.

The country	Education	Health	Employment	Basic needs / standard of living	Housing	Digital gap and public relations	Childhood and youth condition	Access to food	Access to social security	Income level	Environm ent and sanitation	Shocks	Social services and economic activity
Afghanistan	X	Х	Х	Х								Х	
Angola	Х	Х	Х		Х								
Armenia	Х	Х	Х	Х	Х								
Butane	Х	Х		Х									
Vietnam	Х	Х		х	Х	Access to the information							
Guatemala	х	Health, nutrition and food security	Х	Access to services	Х								
Honduras	Х	Х	Х		Х								
Dominican Republic	Education and childcare	х	Employment and livelihood		Housing and environment	х							
India	Х	Х		Х									
Iraq	х	Health and nutrition	х	Basic services									
Kyrgyzstan	Х	Х			Х			Х		Х			
Colombia	Х	Х	х		Housing and government services		х						
Costa Rica	х	Х	Employment and welfare	Basic standard of living									
Malaysia	Х	Х		Х						Income			
Maldives	Education and information	Х		Х									

The country	Education	Health	Employment	Basic needs / standard of living	Housing	Digital gap and public relations	Childhood and youth condition	Access to food	Access to social security	Income level	Environm ent and sanitation	Shocks	Social services and economic activity
Maldives	Education and information	Х		Х									
Morocco	Х	Х		Х									
Mexico	Х	Access to health services		Access to utilities in households	Housing quality and spaces			х	Х	Income			
Mozambique	Х	Х		Х									
Namibia	Х	Х		Х									
Nepal	Х	Х		Х									
Nigeria	Х	Х	Unemployment	Х									
Pakistan	Х	Х		Х									
Panama	Х	х	Х	Housing, bas	sic services access	and internet					Х		
Paraguay	х	Health and environment	Employment and social protection	Housing and services									
Rwanda	Х			Utility services	Х								Χ
El Salvador	Education and childcare	Health and food security	X		X						Habitat		
Seychelles	Х	Х	Х	Х									
Sierra Leone	Х	Х		Х	Х								
Thailand	Х	Х			X							Financial security	
Philippines	Х	Health and nutrition	X		Housing, water and sanitation								

The country	Education	Health	Employment	Basic needs / standard of living	Housing	Digital gap and public relations	Childhood and youth condition	Access to food	Access to social security	Income level	Environm ent and sanitation	Shocks	Social services and economic activity
Chile	Х	Х	Employment and social security	Basic standard of living	Housing and local environment	Network and social cohesion							
Ecuador	Х	Health, water and nutrition	Employment and social security		Housing and public services								
ECLAC	Х		Employment and social protection	Basic services / standard of living	Х								
South Africa	Х	Х		Х									

Annex 2. Variables of the pilot national MPI of Kazakhstan

Dimension	Variable	Deprivation threshold	Form and Question	
Education	Level of satisfaction with the quality of education	Dissatisfaction with the quality of education (1–3 points) at the secondary level (general and special) if there are children of the appropriate age	Form D002 Part 1 Question 17	
	The level of satisfaction of the population with the availability of educational services	Dissatisfaction with the availability of educational services (1–3 points) at the secondary level (general and special) if there are children of the appropriate age	FormD002 Part 1 Question 18	
	Achieved level of education for adults or children	For an adult – if there is no secondary education, for a child – if the appropriate level of education has not been completed (primary education or basic secondary education)	Form D008 Question 7	
Health	Level of satisfaction with the quality of healthcare services	Dissatisfaction with the quality of health care services (1–3 points)	Form D002 Part 1 Question 15	
	The level of satisfaction of the population with the availability of services	Dissatisfaction with the availability of health care services (1–3 points)	Form D002 Part 1 Question 16	
	Inability to access healthcare services	Inability to access health care services for reasons	Form D002 Part 3 Questions 19-20	
Housing	Non-compliance with living standards (sq. m per person)	Below the established norm (15 square meters) per person	Form D006 Question 3	
	Access to electricity	No electricity	Form D006 Question 5	
	Fuel for heating	Solid or liquid fuel used	Form D006 Question 5	
	Source of drinking water	Source – water carrier, spring, river, lake, pond	Form D006 Question 5	
	Sewer access	Pit latrine, no toilet, other sewerage	Form D006 Question 5	
	Personal internet access	No provider / Can't afford / Don't know anything about it	Form D002 Part 3 Questions 15-16	
Standard of living / Financial affordability	Absolute poverty	By national poverty rate	Calculation according to the Forms D003 and D004	
	Household debt on payments	Positive answer "yes, two or more times" for the payments:  1. rent or mortgage payments  2. utility bills  3. interest payments, loan debt  4. installment payments	Form D002 Part 3 Question 1	