

## BELARUS – Population census 2019 with agricultural module – Metadata review

### 1. Historical outline

The population census with agriculture module (PC) of the Republic of Belarus in 2019, to which the metadata review and data presented here refer, is the third population census since the country gained independence in 1991. The previous censuses were conducted in 1999 and 2009.

An agricultural module was integrated for the first time in the PC 2019.

### 2. Legal basis and organization

#### *Legal framework*

The general legislation for the Population Census is given by the Law on the Population Census from 2006. The implementation of the 2019 Population Census is further regulated by a set of decrees and resolutions which contain the overall census plan, its organization, as well as measures to be undertaken to ensure protection of personal information in the census data.

The Government Decree from 28 June 2018, on approval of the 2019 PC program also covers the scope of the agriculture related questions. List of data items are given in the decree of the National Statistical Committee of the Republic of Belarus from 29 November 2018.

#### *Institutional framework and international collaboration*

The main agency responsible for the PC is the National Statistical Committee of the Republic of Belarus (Belstat), which implemented the census in close collaboration with other state institutions. A temporary national commission was established under the leadership of the First Deputy Prime Minister of the Republic of Belarus for the facilitation of the census organization and implementation. Temporary commissions were also created at the regional and district levels, in cities of regional subordination, administrative districts of Minsk and Mogilev.

World Bank provided a grant to the PC 2019. The United Nations Population Fund (UNFPA) sponsored the production of promotional videos. Support has also been received from national organizations and enterprises. As a result, almost 90 percent of the need for hardware was covered by international technical assistance and sponsors. And, the share of the state budget allocations to the 2019 PC decreased to 30 percent, while in the 2009 census it was 95 percent. FAO provided technical assistance with regard to the development of the agriculture module.

#### *Census staff*

The census staff included employees of Belstat, employees of organizations that carried out the census of certain categories of the population, as well as temporary census personnel. Belstat engaged 12 500 temporary enumeration staff to conduct the enumeration, including 1 100 people for enumeration centres heads and their assistants.

### 3. Reference date and period

**Reference day:** 1 October 2019 for fruit and berry plantations and number of livestock.

**Reference period:** 2019 for the availability of land plots and their area, and for area under agricultural crops (temporary crops – potatoes, cereals, legumes, etc).

### 4. Enumeration period

The census enumeration fieldwork was conducted from 4 to 30 October 2019.

## 5. Scope of the census and definition of the statistical unit

The **census scope** of the agricultural module covered only households (family holdings) engaged in crop production and livestock rearing activities. The non-household sector, such as agricultural organizations (e.g. collective and state holdings) and other juridical holdings which account for most of the agricultural land in the country, was not covered.

The **statistical unit** in the PC 2019 was the household (family holdings only). The Law on PC defines a household as a group of individuals who live together in a residential area, provide themselves with everything necessary for life, run a common household, fully or partially pooling and spending their funds, or one person living independently and providing himself with everything necessary for life.

For census purposes, distinction was made between private and collective households. Private households comprised households living in residential premises - flats, single-family houses, garden houses (dachas), dormitories, other residential premises and non-residential premises used for habitation. A collective household is a group of persons permanently residing in specialised social and health care institutions, barracks, detention centres and religious organisations. Collective households were enumerated on form 1-institution and did not fill in form 1CX.

### ***Community-level data***

No community survey was conducted.

## 6. Census coverage

### ***Geographic coverage***

The Population Census 2019 covered the entire country.

### ***Cut-off threshold and other exclusions***

Not applicable.

## 7. Methodology

### ***Methodological modality for conducting the census and relation to other censuses***

Information on agricultural activities was collected within the framework of the PC 2019 by including an agricultural module with six questions.

### ***Frames***

For the PC 2019, the country was divided into Enumeration Areas (EA), the smallest statistical unit in which complete enumeration of all households, including those with agricultural activities, was conducted.

### ***Complete or/and sample enumeration methods***

Complete enumeration of all households was used in the PC 2019.

### ***Sample design (if sampling was used)***

Not applicable.

### ***Data collection methods***

While in the previous census interviews the PC used paper based questionnaire (PAPI), the 2019 census involved a stepwise enumeration using internet questionnaires (CAWI), enumeration in stationary and mobile enumeration centres, and enumeration at the place of residence using tablets (CAPI).

The approximate distribution of respondents enumerated through the different modes was: 22 percent through internet, 28 percent through mobile and stationary enumeration centres and 48 percent at the place of residence (CAPI). Personal data on household members who were absent from their place of residence during the census period or who were minors, in the absence of adult household members,

guardians or custodians, were collected on the basis of information about them available from administrative sources: government authorities or other organisations (two percent). For the internet questionnaire, individuals identified themselves using a system of bank-id, or alternatively with the passport-id together with a code received by SMS. The internet questionnaire was partly prefilled with data based on the identification provided. For CAPI, the enumerators received tablets with preloaded maps containing addresses and dwellings in their EAs. Some information was prefilled from the population register, thus reducing the interview time. Some logical controls were also introduced in the questionnaires.

### **Questionnaire(s) and items covered**

Based on the PC 2019, four census questionnaires and one form of the census documentation were approved. Census questionnaires: 1-dwelling "Composition of households permanently residing in the premises, characteristics of the premises used for habitation"; 2H "Census questionnaire"; 3BH "Census questionnaire for persons temporarily residing (staying) in the Republic of Belarus"; 1CX "Questionnaire on agricultural activities".

Form of the census documentation; 1-Institution "List of persons residing (staying) in specialised institutions or organisations, of homeless persons". The 1CX questionnaire was completed when one or more household members owned, held or used land plots or parts of land plots, or farm animals.

The questionnaire covered 13 out of 23 essential items<sup>1</sup> recommended in the WCA 2020.

Several essential items could be tabulated/cross-tabulated with other items of different modules of the PC questionnaire<sup>2</sup> on demographic and social-economic characteristics of households.

## **8. Use of technology**

Belstat used the population register combined with the address register and resolved discrepancies between the two sources. The cartography was prepared using the geographic information system (GIS) "Population Census" and was an electronic map indicating the boundaries of registration, census and EAs, as well as houses located within the boundaries of these areas. Registration areas were formed for each city, urban-type settlement, large rural settlement (with a population of 3 000 people or more), census and EAs - for all settlements.

CAWI (online) and CAPI (tablets) methods were used for data collection. All fieldworkers were provided with tablets with built-in maps and census questionnaires in electronic format.

The special software "Registrator" for the compilation of the list of houses and for working with cartographic material and the software for personal data collection "*Perepischik*" (enumerator), as well as for data processing, were developed in-house.

## **9. Data processing**

Belstat was responsible for the enumeration, coding, editing, verification and processing of all data collected during the PC. The data was processed using ad-hoc software. Summary data generation program included 169 standard tables, of which 121 tables contained socio-demographic characteristics and 48 tables about the agricultural activities of the population.

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<sup>1</sup> The following essential items were not covered: (i) 0203 Area of holding according to land tenure types; (ii) 0302 Area of land actually irrigated: fully controlled and partially controlled irrigation; (iii) 0406 Area of productive and non-productive permanent crops in compact plantations (for each permanent crop type); (iv) 0411 Use of each type of fertilizer; (v) 0501 Type of livestock system; (vi) 0503 Number of female breeding animals. (vii) 0601 Use of agricultural pesticides; (viii) 0902 Working time on the holding; (ix) 0903 Number and working time of employees on the holding by sex; and; (x) 1201 Presence of aquaculture on the holding. Regarding 0503, the questionnaire specified the number of females of selected types of animals without the indication of the purpose of their use; With respect to 0406, there are only data on the area of berry plantations.

<sup>2</sup> 0101 Identification and location of agricultural holding; 0103 Legal status of agricultural holder (type of holder); 0104 Sex of agricultural holder; 0105 Age of agricultural holder; 0108 Other economic activities of the household; 0801 Household size by sex and age groups; and 0901 Whether working on the holding is the main activity.

## 10. Quality assurance

In order to assess the completeness and correctness of the population enumeration, after the completion of the census, control activities were carried out. Heads of enumeration areas together with enumerators conducted a control tour of the randomly selected dwellings of each enumeration area during six days (from 1 to 6 November 2019). Sampling for the control tour of premises addresses was carried out by constructing a three-stage stratified sample using a probability-based method of selecting ten percent of the addresses of the premises from the general sample. Also, the data entered were subjected to logical and arithmetical controls to avoid errors in the process of completing the census questionnaires.

## 11. Data and metadata archiving

Census documentation on paper and electronic media is subject to storage in the archives of state statistics bodies for no more than three years. Upon expiration of the established period of temporary storage, the census records on electronic media are to be transferred for permanent storage to state archive institutions in accordance with the procedure defined by the legislation of the Republic of Belarus. Anonymized personal data on electronic media is stored in state statistics bodies until no longer needed.

PC data anonymization was part of data processing, control, editing and aggregation.

## 12. Data reconciliation

Results from the PC 2019 are used to recalculate annual population data, and derived demographic indicators, retrospectively, as well as data on agricultural activities of households.

## 13. Dissemination of census results and microdata

Results of the Population Census were disseminated in the following way:

Statistical books based on the results at national and regional level of PC were published. These publications are available in pdf format on Belstat's website at <http://www.belstat.gov.by>.

The census results are also available in the information and analytical system "Population censuses data of the Republic of Belarus" at <https://census.belstat.gov.by/>. Thematic maps with census data are part of this system.

Methodology of the PC 2019 is given in Volume 1 "Main Organizational and Methodological Provisions of the 2019 Population Census of the Republic of Belarus". A technical report of the Agriculture module of the PC 2019 was published in 2021 and available online.

## 14. Data sources

**National Statistical Committee of the Republic of Belarus (Belstat).** 2021. *Main Organizational and Methodological Provisions of the 2019 Population Census of the Republic of Belarus, Volume 1 (in Belarusian and Russian)*. Minsk, Belarus, 2021. (also

<https://www.belstat.gov.by/upload/iblock/d8a/0668thy201q72cd5desu9tzpk0otua51.pdf>

**National Statistical Committee of the Republic of Belarus (Belstat).** 2021. *Agricultural activity of the population in the Republic of Belarus (based on the 2019 Population Census of the Republic of Belarus, in Russian)*. Minsk, Belarus, 2021. (also

<https://www.belstat.gov.by/upload/iblock/ff3/ff366db0bb7d7b3139efee08e592b2da.pdf>

<https://www.census.belstat.gov.by>

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