

Survey on energy consumption in households in Republic of Moldova

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BIROUL NAȚIONAL DE STATISTICĂ AL REPUBLICII MOLDOVA

Survey on energy consumption in households

1. General description of the survey
2. Stages of implementation
3. Survey implementation
4. Survey tools
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General description of the survey (1)

The survey was conducted for the first time by the National Bureau of Statistics of the Republic of Moldova under the technical supervision of experts from the **Energy Institute “Hrvoje Požar”** from Croatia and financial support of the **Energy Community** and **UNDP project**.

Survey objectives:

1. Improving quality of statistical data regarding the final consumption of energy in households, in particular the consumption of biomass for energy purposes (wood, wood waste, agricultural waste, etc.)
2. Obtaining comparative data with member countries of Energy Community.

Coverage: The study was conducted over the entire territory of the country, without localities situated on the left bank of the Nistru river and Bender municipality

Observation units: only dwellings with private household.

Institutional units such as prisons, sanatoriums, retirement houses, orphanages, student residences etc. were excluded.

General description of the survey (2)

Reference period: 01.04.2015 – 01.04.2016.

For some questions regarding household, it was taken the reference situation from 01.04.2016.

Collection method: face to face interview.

The field-work was done in two successive stages:

1. Identification of the sampled houses and notification of the households living there;
2. Data recording in questionnaires.

Sample size: 3500 households.

Response rate: 83,9%.

Stages of implementation

- The studying of the international recommendations
- The development of the tools
- Testing the tools in the field
- Training of the NBS specialists
- Launching the survey in the field
- Processing, verification and validation of collected information
- Data analysis
- Preparation and dissemination of the publication

Survey implementation (1)

1. 150 interviewers - collection, verification and transmission of data

The information was collected in:

- 28 urban localities;
- 97 rural localities.

The interviewers' task were:

- 22 households in rural and urban localities (small towns);
- 30 households - in big towns (mun. Chisinau and Balti).

2. 10 controllers - initial validation of the collected information, data entry and logical verification of data input;

3. The survey is representative at the levels of **residence area** (rural/urban) and **statistical zones** (North, Centre, South, mun. Chisinau).

Survey implementation (2)

The level of representativeness of the survey at the level of statistical zones



Survey tools (1)

- Statistical questionnaire – “Survey on energy consumption”;
- Instructions for filling in the questionnaire;
- The list of households selected in the survey.

Survey tools (2)

Questionnaire content:

- Identification data;
- Household participation in the study;
- Chapter I. Data on the household's dwelling;
 1. Type of dwelling;
 2. The construction material of the dwelling walls;
 3. Insulation works;
 4. Period of construction of the dwelling;
 5. Total surface and the heated surface;
 6. Type of heating system installed in the dwelling;
 7. Type of domestic water heating system;
 8. Cooking food method;
 9. Availability of the air conditioning system;
 10. Number of equipments /goods existing in dwelling;
 11. The availability of transport means and their consumption of energy sources.

Survey tools (3)

- Chapter II. Data on the method of obtaining energy resources in the household
 1. Amount of energy resources purchased and received as gift ;
 2. Amount of energy resources obtained by own collection;
 3. Consumption of energy resources for domestic needs;
 4. Quantities of available resources in stocks in the households.

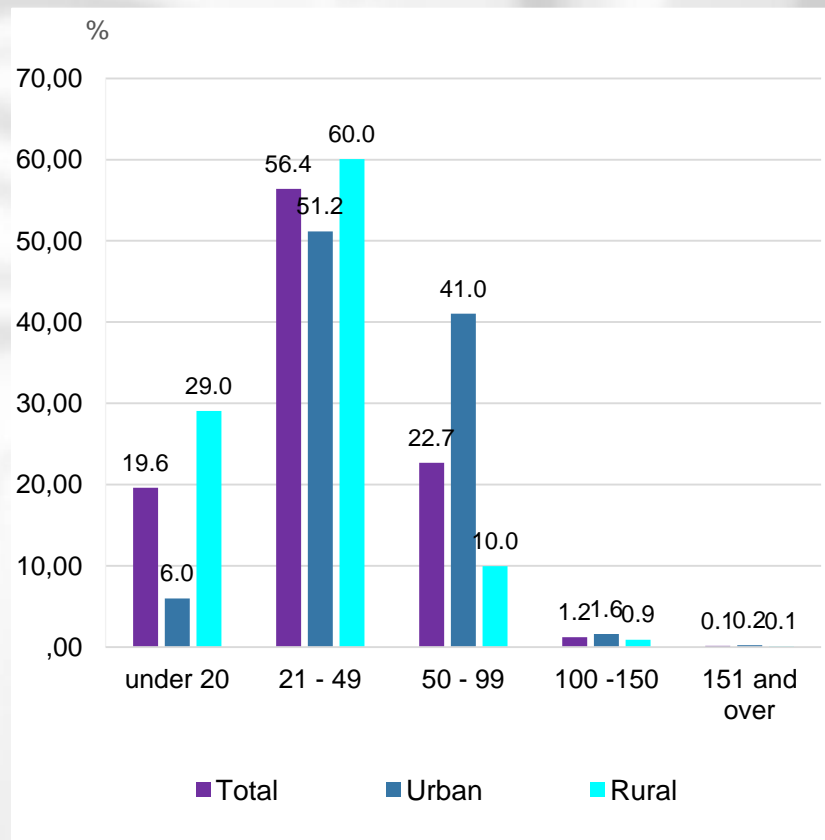
- Chapter III. Economic activities within the household

Selected survey results (1)

Distribution of dwellings by total dwelling's surface and residence

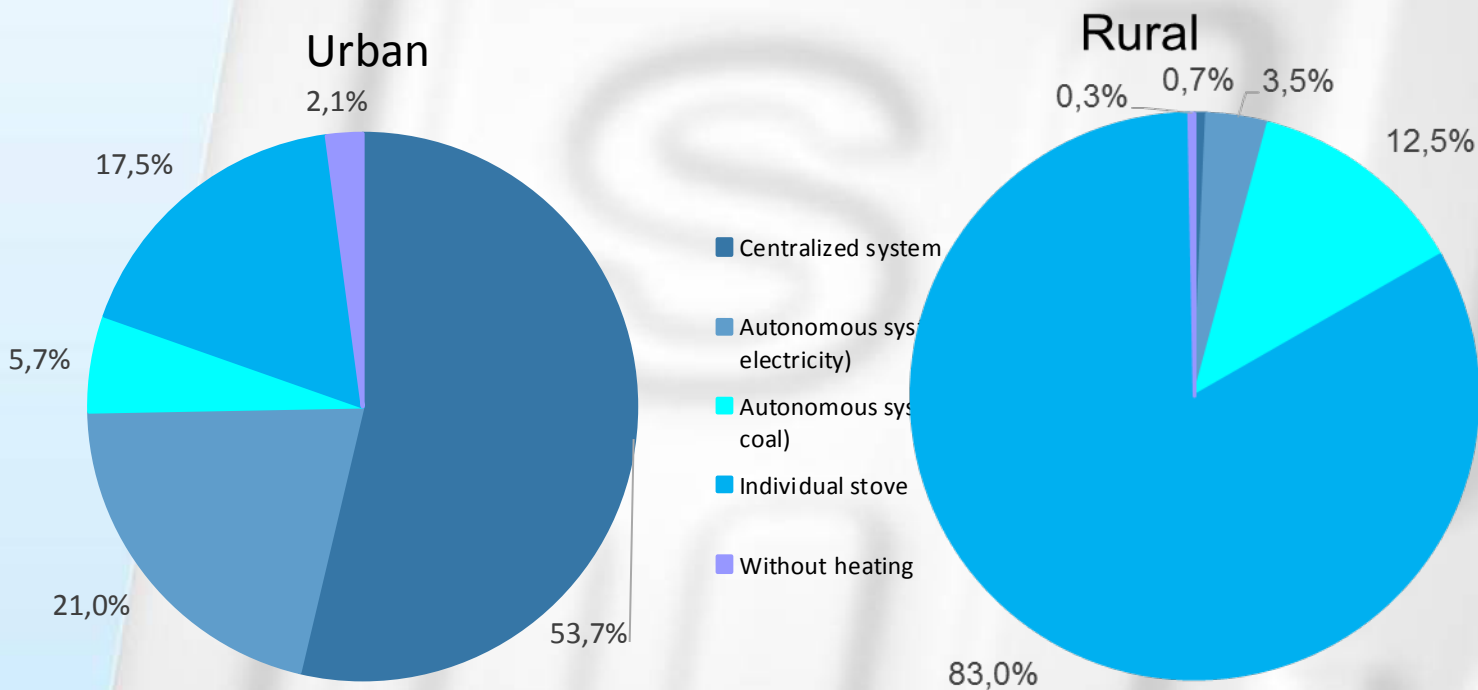


Distribution of dwellings by dwelling's heated surface and residence



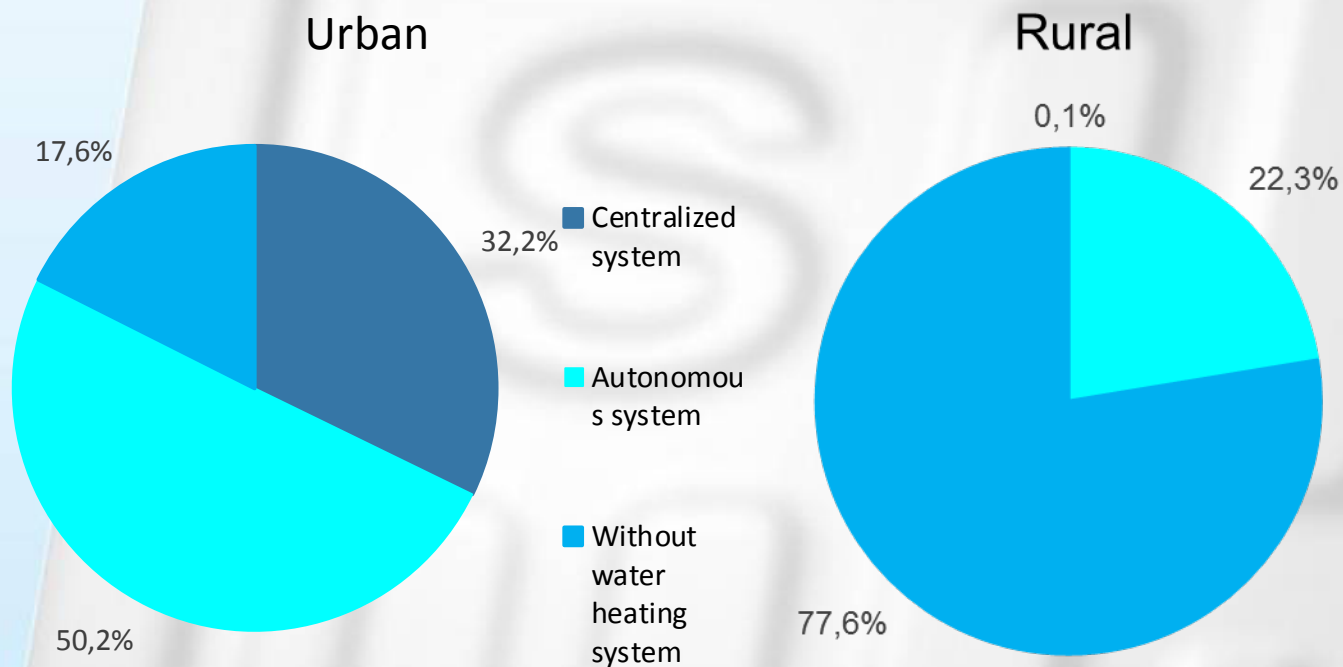
Selected survey results (2)

The structure of dwellings by type of heating and place of residence



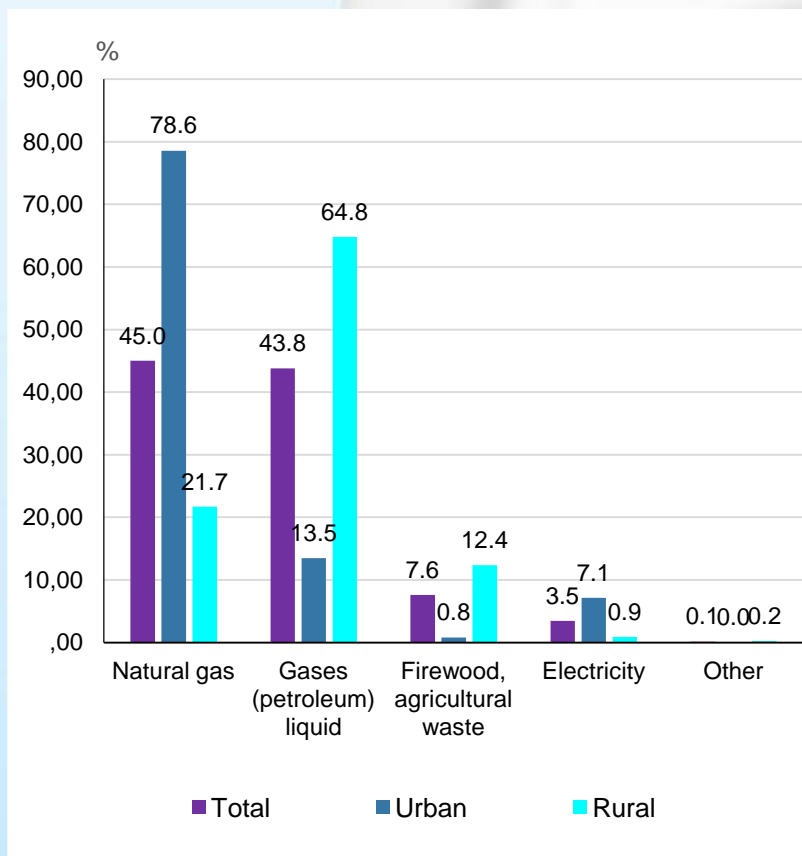
Selected survey results (3)

The structure of dwellings by the used heating domestic water system and place of residence

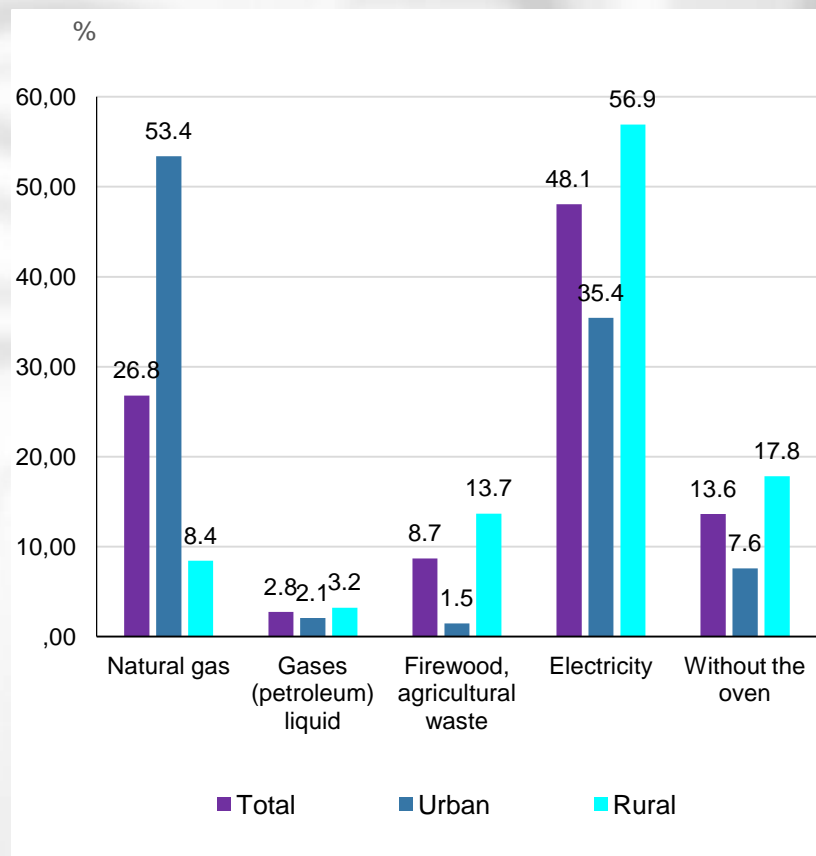


Selected survey results (4)

The distribution of households by energy resources used for food preparation on cooker and place of residence

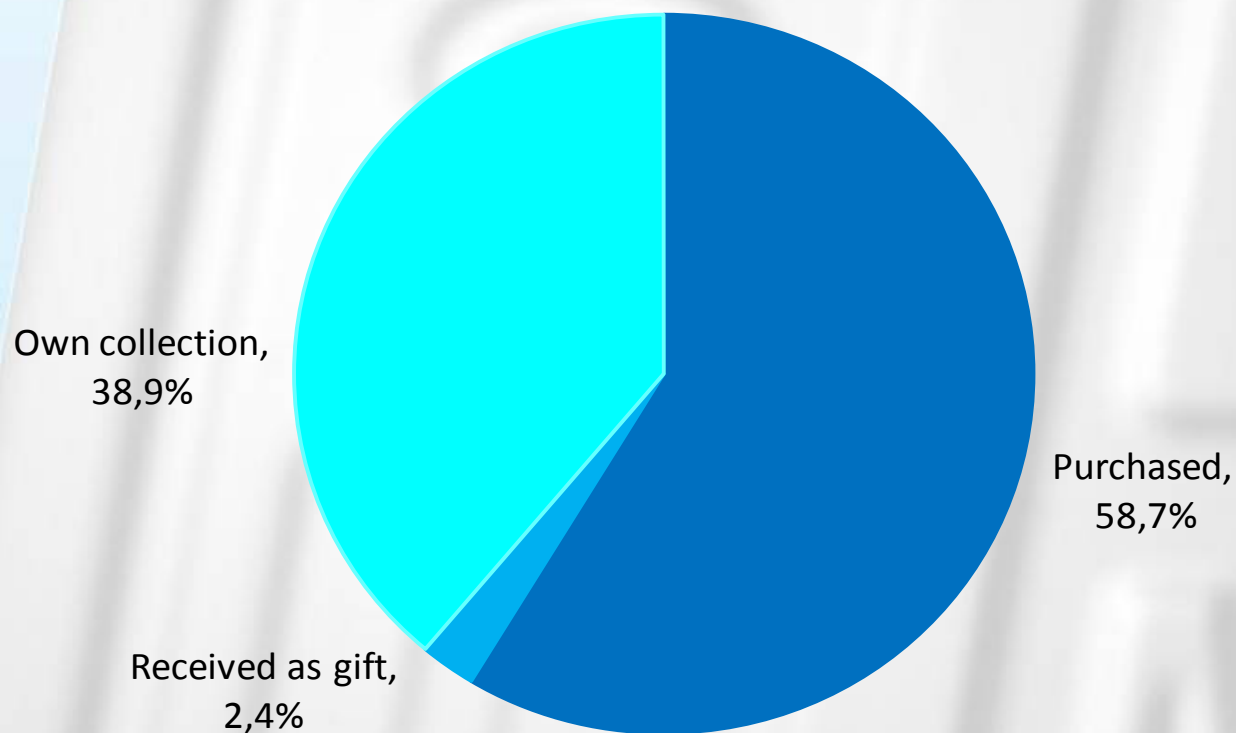


The distribution of households by energy resources used for food preparation in oven and place of residence



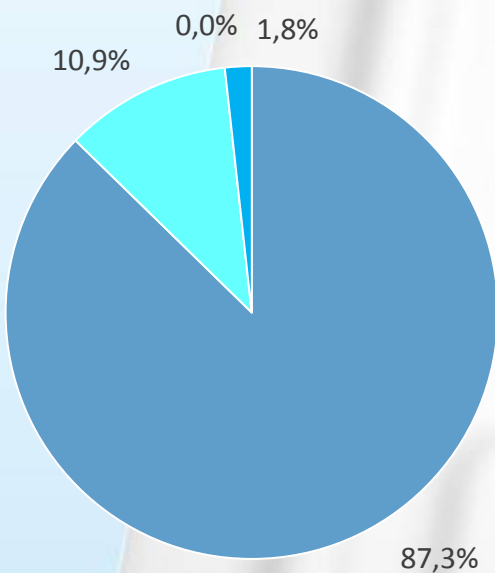
Selected survey results (5)

The structure of ways of obtaining biofuel (except of briquettes and pellets) in households, %

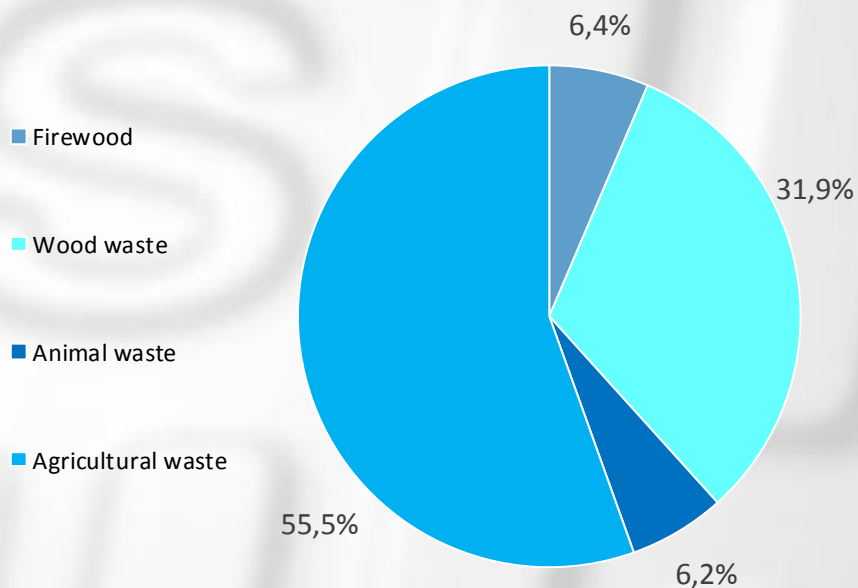


Selected survey results (6)

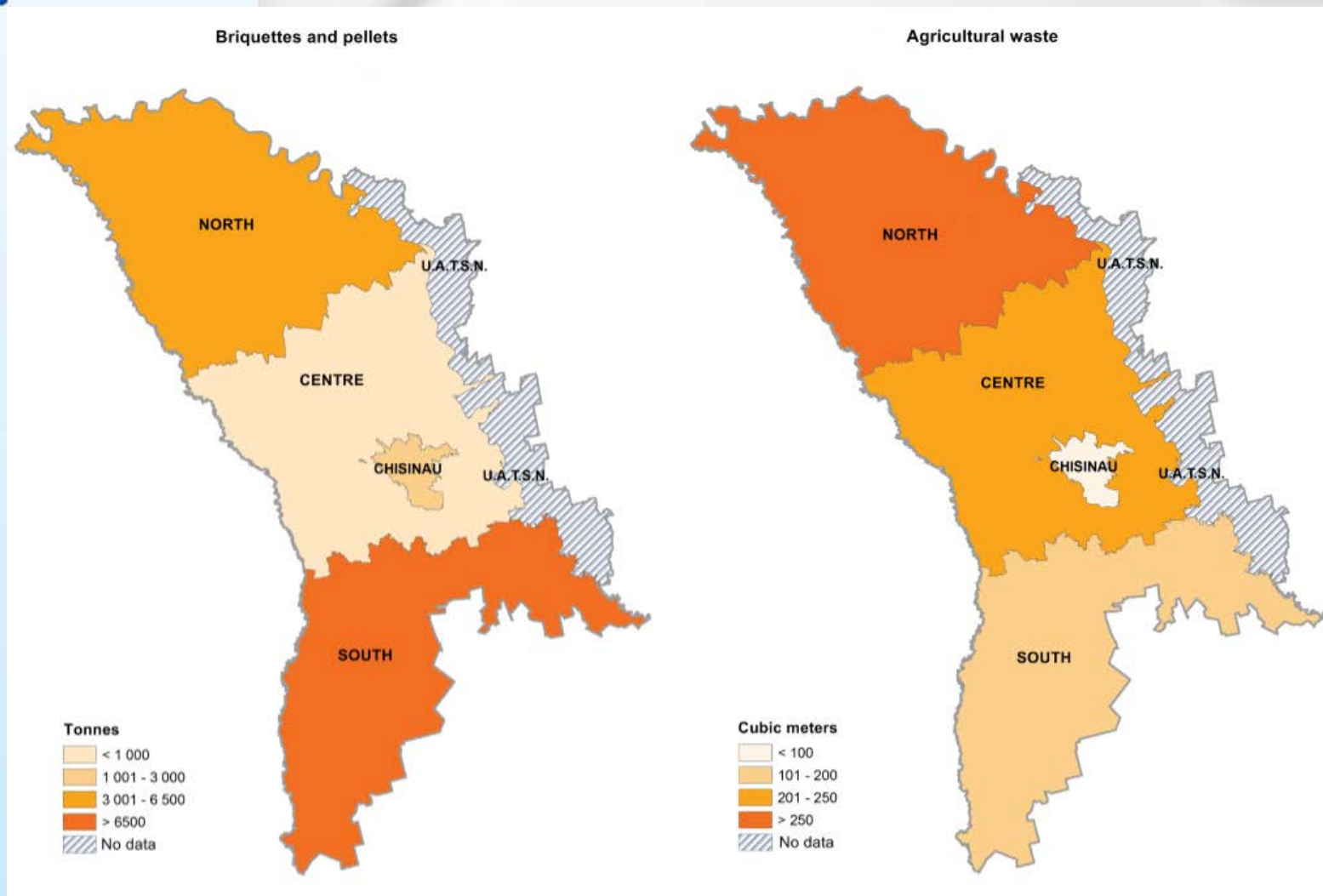
**Procurement of biofuels
(except of briquettes and
pellets)**



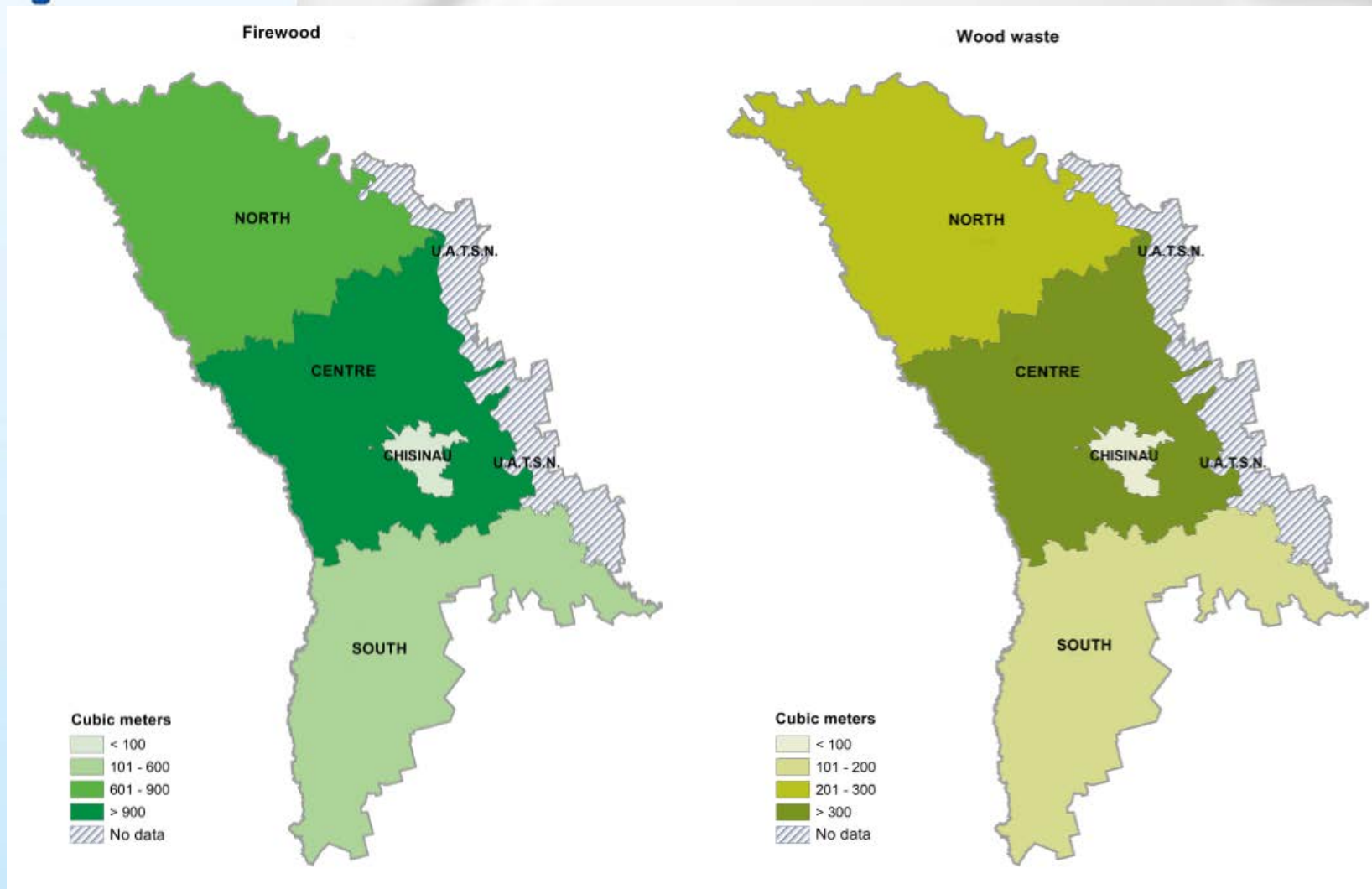
Own biofuels collection



Selected survey results (7)

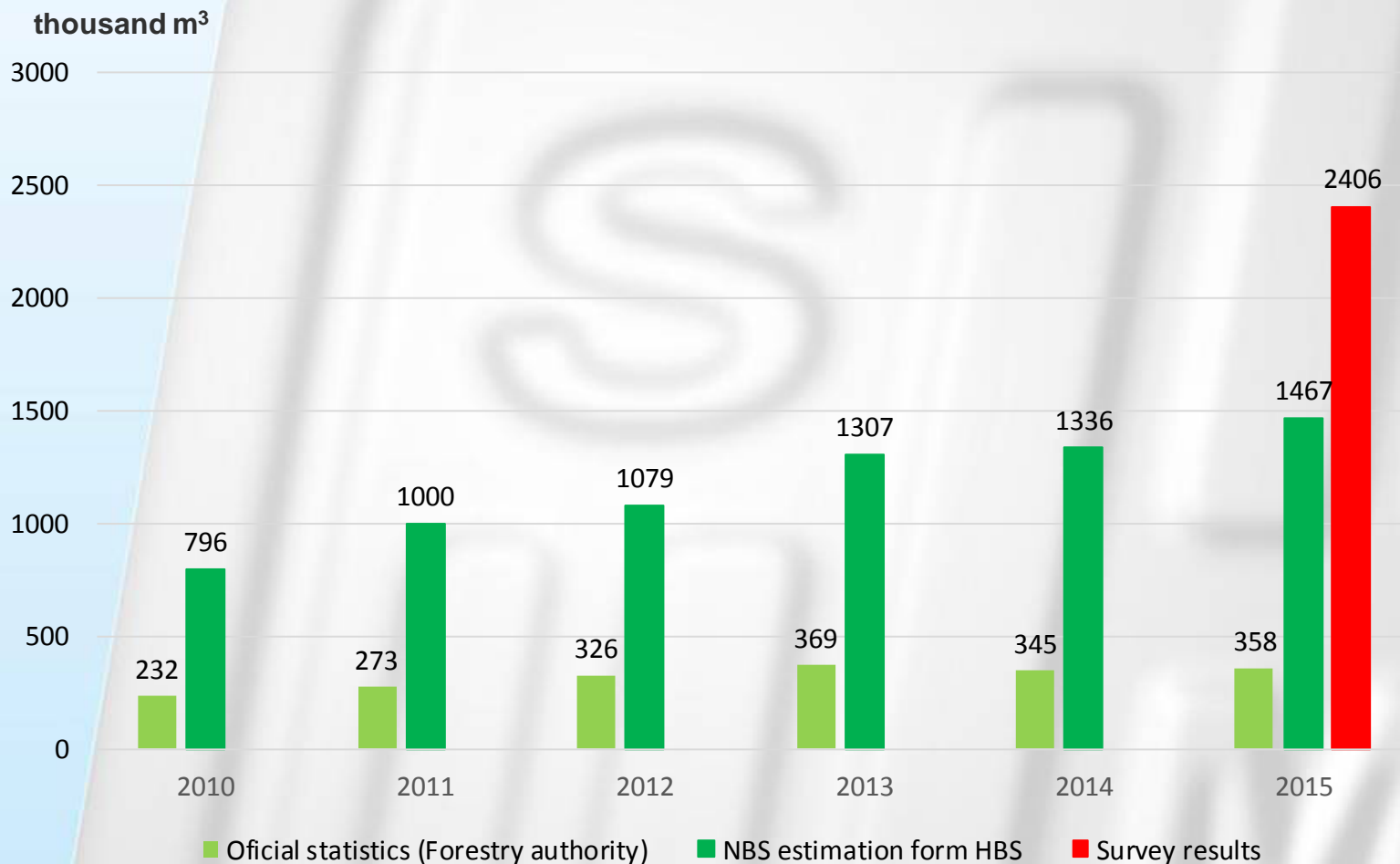


Selected survey results (8)



Selected survey results (9)

Total fuel wood consumption in households



- The results of the survey were presented in an event organized by the National Bureau of Statistics on 16th of November 2016 at which the principal stakeholders were invited.
- The publication can be viewed and downloaded accessing the following address

<http://www.statistica.md/pageview.php?l=en&id=5413&idc=350>



Next steps

- Retrospective estimation of the biomass consumption using the structure of the dwellings from the 2014 Population and Housing Census;
- Estimation of the biomass consumption for the 2016 year;
- The incorporation of survey estimated data into the energy balance of the Republic of Moldova;
- Need of additional expert assistance for modeling process in order to estimate the energy efficiency indicators.

Thank you for your attention!

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