

METHODOLOGICAL NOTE

GENERAL POPULATION SURVEY UKRAINE

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INTRODUCTION AND OBJECTIVES

Starting on 24 February 2022, the Russian Federation (RF) launched a large-scale invasion of Ukraine, triggering an unprecedented humanitarian crisis across Ukraine. Since 9 March 2022, the IOM's Data and Analytics Unit began systematically conducting a highly representative assessment of the general population in Ukraine to gather information on displacement, mobility flows, intentions, and conditions to inform targeted assistance to the war-affected population.

Over the course of March 2022 to January 2023, the IOM's Data and Analytics successfully carried out 12 rounds of the General Population Survey. Initially conducted bi-monthly and later transitioning to a monthly frequency, the results were extrapolated at both national and macro-regional levels. As of May 2023, the survey methodology underwent adaptation to generate quarterly representative data at the oblast level, thus facilitating localized analysis.

The General Population Survey is a highly representative assessment with 20,000 random respondents interviewed, providing population data and enabling an assessment of the geographic distribution of the war-affected populations across the country.

This phase is supplemented with around 6,000 follow-up interviews with IDPs, returnees, and residents (non-displaced), offering insights into displacement, returns, mobility intentions, and needs.

The survey objectives are as follows:

- To assess population stocks for current location and produce population estimates at different levels of administrative and territorial divisions within the country.
- To analyse intentions and measure mobility flows and trajectories among population groups and locations.
- To identify humanitarian and recovery needs, including initial insights into durable solutions and vulnerabilities related to displacement among population groups and locations, as well as elements of social cohesion.

This methodological note outlines the comprehensive assessment methodology and sampling design.

DATA COLLECTION AND SAMPLING

The General Population Survey is a cross-sectional study wherein a similar set of question is asked to an independent sample of respondents in each survey round. In the first cycle of the study lasting 12 rounds, the sample was constructed using the random digit dial approach, with 2,000 unique and anonymous respondents aged 18 and over. It had an overall sample error of 2.00% [Confidence Level/CL 95%] with the extrapolation of the results to the national and macro-regional levels.

Starting from the 13th round, the sampling approach has been revised to enhance precision in estimating the population figures for internally displaced persons (IDPs), returnees and non-displaced at the oblast level. The survey in Round 13 covered the entire territory of Ukraine, excluding areas under the temporary military control of the Russian Federation where phone coverage by Ukrainian operators was not available (Autonomous Republic of Crimea, Donetska, Luhanska, Khersonska, and Zaporizka Oblasts). Interviews were conducted anonymously, with respondents giving their consent prior to the interview. Structured questionnaires were utilized, and computer-assisted telephone interview (CATI) techniques were employed to directly enter the results into a data entry program. The modified sampling design involved a two-stage approach. The first stage aimed to produce the population figures and assess the geographic distribution of IDPs and returnees.

It facilitated the sample frame formation and stratified the second stage sampling by groups of interest at the oblast level. In the first stage, a random digit dial (RDD) method was applied to construct a sample of 20,000 unique and anonymous respondents aged 18 and over. The sample frame was developed by combining three-digit mobile phone prefixes with randomly generated seven-digit phone numbers, proportional to the national market share of the six phone networks covered in the study. The RDD approach generated new phone numbers every millisecond.

The second stage focused on collecting in-depth information and profiling the displaced population regarding their situation, needs, and household composition, allowing for comparative analysis with a control group of the non-displaced population. The data obtained from the first stage was used to establish sample requirements in each of the 24 oblasts and Kyiv city. During the second stage, the sample was stratified across IDPs, returnees, and residents (strata) distributed by oblasts. RDD was applied again in the second stage to construct a sample, relying on the contacts and consents to recontact gathered within the first survey stage.

For comprehensive information regarding the sample breakdown and sample error at both the oblast and macro-region level, kindly consult $Table\ 1$ and $Table\ 2$ located on page 3.

DATA WEIGHING

The survey data is weighted using three types of weights (national, macro-regional, and oblast-level) based on the first phase with 20,000 responses to address coverage and non-response biases. Initial weights are calculated for each survey participant based on their selection probability at the oblast, macro-regional, or national level, considering their displacement status (IDPs, returnees, or general population). Subsequently, adjustments are made to the weights to account for non-response among survey participants.

By comparing the expected and actual number of respondents within each region and group, necessary adjustments are made to ensure representative results while accounting for non-response biases. The final weights are derived by incorporating the initial weights and adjustments made to address non-response. When analysing the data, respective weights are applied to aggregated survey results for reliable population estimates.

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THE OUESTIONNAIRE

The General Population Survey questionnaire consist of a series of structured questions covering a wide range of topics relevant to various population groups in Ukraine. The survey collects information on respondents' sociodemographic characteristics, displacement status, mobility intentions and behaviours, living conditions, access to basic services, health and well-being, livelihoods, and received assistance.

Additionally, the survey gathers unique data on displaced individuals' preferences regarding settlement options (integration, resettlement within the country, return), informing planning for durable solutions.

To support effective programming for displaced populations' pathways towards durable solutions, a new set of questions was introduced based on the Inter-Agency Standing Committee (IASC) Framework for Durable Solutions for IDPs, considering the protracted nature of displacement and return.

Lastly, regular survey implementation allows for comparative analysis over time, including data disaggregation by sex, age, individual and family vulnerabilities, and more.

POPULATION GROUPS ESTIMATION

The stock estimates for IDPs and returnees are determined based on their proportions within the surveyed population, utilizing the United Nations Population Fund (UNFPA)'s Common Operational Datasets on Population Statistics (COD-PS) as the total population baseline for Ukraine, which stands at 43 million. However, data for the Autonomous Republic of Crimea and the city of Sevastopol, comprising a total of 2.3 million people, are excluded from the analysis.

To estimate the number of internally displaced, the IDP share among respondents is multiplied by the total population figure from UNFPA (41 million). Minors are assumed to travel with their parents/guardians, which ensures that the estimates are extrapolated using the total population figure rather than considering only adults.

To estimate the number of returnees, the share of returnees among respondents reporting to be in their habitual place of residence is multiplied by the total population figure (31 million) excluding the total number of IDPs and people staying abroad (as per UNHCR's data). The number of residents is calculated by subtracting the sum of IDPs and returnees from the total population baseline.

Once the total number of each group is estimated at the national level, macro-regional and oblast breakdowns are assessed by multiplying the national estimates by the proportion of respondents within each group residing in each macro-region or oblast.

POPULATION GROUPS IDENTIFICATION

The estimation of population groups by displacement status relies on theoretical concepts for analysis purposes.

1. The IOM Glossary on Migration defines Internally Displaced Persons (IDPs) as persons or groups of persons who have been forced or obliged to flee, or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border. Operationally, in this exercise, IDPs are defined as the individuals who have been forced to flee or to leave their homes or who are staying outside their habitual residence due to the full-scale invasion in February 2022 (including all the de-facto IDPs), regardless of whether they hold registered IDP status.

2. The IOM glossary defines return as "the act or process of going back or being taken back to the point of departure". Return can occur within a country's territorial borders, or between a country of destination or transit and a country of origin.

For the purposes of this study, the terms "return" and "returnee" are used without prejudice to status and refer to all people who have returned to their habitual residence after a significant period of displacement (minimum of two weeks since February 2022), whether from abroad or from internal displacement within Ukraine.. This definition excludes those who have come back to Ukraine from abroad but who have not returned to their places of habitual residence in the country.

3. The resident (non-displaced) population includes people residing in their habitual residence who have not left it due to the ongoing war for a period of two weeks or more, as well as people who are temporarily outside their place of habitual residence for reasons not in connection with the ongoing full-scale war.

The identification of population groups uses a composite variable from reported data to determine their shares within the surveyed general population. For more comprehensive information about how the population groups are identified empirically, refer to Figure 1 on page 3.

LIMITATIONS AND CONSTRAINTS

The exact proportion of excluded populations is unknown, and certain considerations must be made when interpreting the results. Those currently residing outside Ukraine were not interviewed due to active exclusion. Moreover, when estimating population figures, it is assumed that minors (under 18) are accompanied by their parents or guardians. The sample frame used for the survey was limited to adults with mobile phones, which could potentially introduce biases in the data. During the survey period, the functionality of phone networks across Ukraine might have varied, leading to some numbers having a higher likelihood of receiving calls than others. Furthermore, residents in areas with high infrastructure damage may be underrepresented in the sample, potentially leading to an underestimation of their needs.

Additionally, residents in the Autonomous Republic of Crimea and areas under temporary military control by the Russian Federation (Donetska, Luhanska, Khersonska, and Zaporizka Oblasts) were not included in the interviews due to lack of Ukrainian operator phone coverage.

Lastly, estimates of displaced population stocks are solely based on respondents' self-assessments regarding their characteristics, location, and displacement situation. These estimates reflect the maximum calculated value based on available population data in the country at the time of the survey implementation.

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TABLE 1: SAMPLE ALLOCATION AND NUMBER OF INTERVIEWS PER OBLAST AND MACROREGIONS - ROUND 13

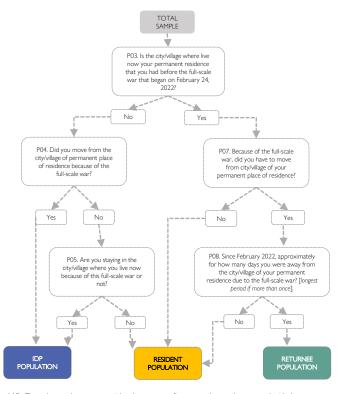
| Macro-region* | Oblast | First stage | | | | Second stage | | | |
|---------------|----------------------------|-------------------------------|---------------------------------|------------------|------------------|-------------------------------|---------------------------------|---------------------|-----------------------|
| | | Total interviews (Male) | Total interviews (Female) | Total interviews | Interviews share | Total interviews (Male) | Total interviews (Female) | Total interviews | Interviews share % |
| EAST | Dnipropetrovska | 837 | 1,262 | 2,099 | 10% | 198 | 336 | 534 | 10% |
| | Donetska | 146 | 210 | 356 | 2% | 44 | 65 | 109 | 2% |
| | Zaporizka | 233 | 387 | 620 | 3% | 74 | 128 | 202 | 4% |
| | Luhanska | 1 | - | 1 | 0% | - | - | - | -! |
| | Kharkivska | 590 | 871 | 1,461 | 7% | 206 | 337 | 543 | 10% |
| SOUTH | Mykolaivska | 236 | 416 | 652 | 3% | 63 | 127 | 190 | 4% |
| | Odeska | 478 | 799 | 1,277 | 6% | 113 | 206 | 319 | 6% |
| | Khersonska | 78 | 133 | 211 | 1% | 19 | 41 | 60 | 1% |
| WEST | Ivano-Frankivska | 260 | 380 | 640 | 3% | 54 | 82 | 136 | 3% |
| | Volynska | 223 | 323 | 546 | 3% | 41 | 59 | 100 | 2% |
| | Zakarpatska | 183 | 258 | 441 | 2% | 32 | 58 | 90 | 2% |
| | Lvivska | 584 | 729 | 1,313 | 7% | 114 | 170 | 284 | 5% |
| | Rivnenska | 197 | 340 | 537 | 3% | 38 | 63 | 101 | 2% |
| | Ternopilska | 186 | 253 | 439 | 2% | 36 | 51 | 87 | 2% |
| | Chernivetska | 153 | 265 | 418 | 2% | 33 | 61 | 94 | 2% |
| | Khmelnytska | 262 | 359 | 621 | 3% | 46 | 85 | 131 | 2% |
| NORTH | Zhytomyrska | 258 | 410 | 668 | 3% | 51 | 119 | 170 | 3% |
| | Kyivska | 704 | 897 | 1,601 | 8% | 210 | 319 | 529 | 10% |
| | Sumska | 223 | 332 | 555 | 3% | 45 | 78 | 123 | 2% |
| | Chernihivska | 226 | 363 | 589 | 3% | 59 | 98 | 157 | 3% |
| | Vinnytska | 343 | 549 | 892 | 4% | 61 | 124 | 185 | 3% |
| | Kirovohradska | 208 | 359 | 567 | 3% | 48 | 85 | 133 | 3% |
| | Poltavska | 333 | 503 | 836 | 4% | 66 | 141 | 207 | 4% |
| | Cherkaska | 273 | 381 | 654 | 3% | 51 | 86 | 137 | 3% |
| Kyiv | Kyiv | 813 | 1,095 | 1,908 | 10% | 279 | 390 | 669 | 13% |
| | Residence location unknown | 41 | 57 | 98 | 0% | 1 | 6 | 7 | 0% |
| Total sample | | 8,069 | 11,931 | 20,000 | 100% | 1,982 | 3,315 | 5,297 | 100% |

N.B: A macro-region is a territorial unit comprised of multiple oblasts (regions), as defined by the Law of Ukraine "On the Principles of State Regional Policy" (Article 1, item 2).

TABLE 2: SAMPLE ERROR AT OBLAST AND MACRO-REGION LEVELS BY SURVEY STAGES R13

| Macro- | First | Second | | | | |
|---------|--------|--------|---------------|-------------|------------------------|--|
| region | stage | stage | Oblast | First stage | Second stage CL 95% | |
| region | CL 95% | CL 95% | | CL 95% | | |
| | | 2.6% | Dnipropetrovs | | | |
| | | | ka | 2.1% | 4.2% | |
| FAST | 1.5% | | Donetska | 5.2% | 9.4% | |
| L/(31 | 1.576 | | Zaporizka | 3.9% | 6.9% | |
| | | | Luhanska | N/A | N/A | |
| | | | Kharkivska | 2.6% | 4.2% | |
| | 2.1% | 4.1% | Mykolaivska | 3.8% | 7.1% | |
| SOUTH | | | Odeska | 2.7% | 5.5% | |
| | | | Khersonska | 6.8% | 12.7% | |
| | 1.4% | 3.1% | Ivano- | | | |
| | | | Frankivska | 3.9% | 8.4% | |
| | | | Volynska | 4.2% | 9.8% | |
| | | | Zakarpatska | 4.7% | 10.4% | |
| WEST | | | Lvivska | 2.7% | 5.8% | |
| | | | Rivnenska | 4.2% | 9.8% | |
| | | | Ternopilska | 4.7% | 10.5% | |
| | | | Chernivetska | 4.8% | 10.1% | |
| | | | Khmelnytska | 3.9% | 8.6% | |
| | 1.7% | 3.1% | Zhytomyrska | 3.8% | 7.5% | |
| NORTH | | | Kyivska | 2.5% | 4.3% | |
| NORTH | | | Sumska | 4.2% | 8.8% | |
| | | | Chernihivska | 4.0% | 7.8% | |
| | 1.8% | 3.8% | Vinnytska | 3.3% | 7.2% | |
| CENTER | | | Kirovohradska | 4.1% | 8.5% | |
| CENTRE | | | Poltavska | 3.4% | 6.8% | |
| | | | Cherkaska | 3.8% | 8.3% | |
| Kyiv | 2.2% | 3.8% | Kyiv | 2.2% | 3.8% | |
| UKRAINE | 0.7% | 1.4% | ÚKRAINE | 1.4% | 0.7% | |

FIGURE 1: POPULATION GROUPS IDENTIFICATION METHODOLOGY



N.B: The scheme does not consider the answers for respondents who are undecided on the answer (hard to answer and refusals).