

RWI – Leibniz Institute for Economic Research

FDZ Data Description: The Senegal Migration Panel (SMP) User Guide 4 – Urban (2023)

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The Senegal Migration Project (SMP)
User Guide 4 - Urban (2023)

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1. Introduction

This **User Guide** provides a description of the **SMP-Urban 2023 survey**, including information on the sampling and procedures for this survey, and how to use the data.

The SMP-Urban 2023 survey was funded by the *Leibniz Cooperative Excellence* program, with additional contributions from the Kiel Institute for the World Economy (IfW Kiel) and Kiel University.

A general introduction to the **Senegal Migration Panel (SMP)** can be found in Ebert et al. (2026), which provides an overview of all SMP surveys and waves.¹

2. Description of survey

Table 1 presents an overview of the respondents, sample size and timing for the survey. In total, **1,009 in-person interviews** were conducted in 29 primary sampling units (*communes* in Dakar, *quartiers* elsewhere) across **four cities: Dakar, Kaolack, Saint-Louis, and Ziguinchor**. All interview subjects were **men aged 18 to 40 years** at the time of the survey.

The urban survey includes information on socioeconomic characteristics of the individual and his household, migration attitudes and behavior, skills, climate change perceptions, wellbeing and risk preferences among other things.

Table 1: Sample size and dates for SMP

	Respondent	N consented	Dates
Urban (in-person)	Male 18 to 40 years	1,009	Nov. 26, 2023 - Dec. 6, 2023

Source: Urban survey conducted in 2023.

3. Data Access

3.1 Data Access

The datasets are available free of charge for scientific purposes as a Scientific Use File (SUF) Off-site at <https://doi.org/10.7807/SMP:2023:URBAN:V1>.

3.2 Recommended citation

The recommended citation for the dataset is:

Beber, B., Heidland, T., Tchokni, Y., Niklas Murken, Leopold, S., SYLL, M. M. A., Ruhose, J., & Ebert, C. (2026). *The Senegal Migration Panel - Urban (2023) - SUF Off-site (Version 1)* [Dataset]. RWI – Leibniz Institute for Economic Research. <https://doi.org/10.7807/SMP:2023:URBAN:V1>

3.3 Anonymization

Identifying information such as names, phone numbers, GPS data and village names were removed from the dataset.

¹ 2022 SMP materials, including the general survey introduction, can be accessed here: <https://doi.org/10.7807/SMP:2022:V1>.

3.4 Variables subject to embargo

Embargo restrictions exist for this survey. Table 2 lists the variables that are currently subject to a release embargo. In the present version of the dataset, their values have been replaced with the placeholder “EMBARGO”. The embargo is expected to be lifted in 2028, after which the variables will be released in full as part of an updated version of the dataset under the same DOI.

Table 2: Variables in the *Urban* survey that are currently under embargo

hh_relative_wealth	language_audiodigit	reading_group
writing_group	grit_5	grit_7
grit_8	skill_read	skill_read_correctly
skill_assessment_note_3	skill_use_2	skill_use_5
skill_corn	skill_computer	skill_transport
skill_machinery	skill_physically	skill_manual
skill_electric	skill_paddle	skill_success
skill_success_other	skill_electric_correct	skill_paddle_correct
skill_num_correct	digits_1a	digits_1b
digits_1c	digits_2a	digits_2b
digits_2c	digits_3a	digits_3b
digits_3c	digits_4a	digits_4b
digits_4c	digits_5a	digits_5b
digits_5c	digits_6a	digits_6b
digits_6c	digits_7a	digits_7b
digits_7c	digits_8a	digits_8b
digits_8c	digits_pair1	digits_pair2
digits_pair3	digits_pair4	digits_pair5
digits_pair6	digits_pair7	digits_pair8
digitspan_pairs_correct	digitspan_levels_completed	digitspan_trials_correct
numeracy_1	numeracy_1_correct	numeracy_2
numeracy_2_correct	numeracy_5	numeracy_5_correct
numeracy_9	numeracy_9_correct	numeracy_11
numeracy_11_correct		

Source: Own data.

4. Sampling

The SMP-*Urban* survey was conducted in **four cities** that are among Senegal’s largest and that are national and regional centers of migration: **Dakar**, Senegal’s economic and political capital and most populous urban area; **Kaolack**, a key regional hub in the centrally located groundnut

basin; and **Saint-Louis** and **Ziguinchor**, the largest cities in northern and southern Senegal, respectively. All interviewees are **men from 18 to 40 years of age**, because individuals of this type are particularly likely to be migrants in the Senegalese context.

Subjects were **randomly recruited in two ways**. First, in Dakar, Saint-Louis, and Ziguinchor, we **re-contacted respondents from a previous survey** that had been conducted in these cities by the IfW Kiel in 2022 (Becker et al., 2024). This prior survey randomly sampled subjects from complete household listings in randomly selected enumeration areas corresponding to neighborhoods. We consented 311 of these subjects across 12 primary sampling units for the *SMP-Urban* survey (172 in Dakar, 54 in Saint-Louis, and 85 in Ziguinchor). We refer to these subjects as target subjects or preloaded sample. Households can contain more than one target subject. Second, we used a **random walk** and household selection procedure to recruit a **new sample** of 698 men across 29 primary sampling units (169 in Dakar, 223 in Kaolack, 169 in Saint-Louis, and 137 in Ziguinchor). Enumerators randomly sampled a household within each building reached via random walk, and then randomly sampled one person per household to be interviewed.

The region and metro variables included in the data match those of the Senegalese ANSD census.

5. Survey procedures

All subjects were interviewed in person for the *SMP-Urban* survey. In cases in which a target subject of the preloaded sample could not be accessed or the target subject was not immediately available, enumerators carried out multiple recruitment attempts. The number of refusals we observe (6 subjects) is small.

Recruitment outcomes and survey responses were recorded in a single entry form, using tablets and computer-assisted personal interviewing (CAPI) software (SurveyCTO Collect), and all available data from the *SMP-Urban* survey is contained in one dataset.

6. Using the data

6.1 Data and materials

Sampling and recruitment aspects, and survey responses are all contained in one *SMP-Urban* dataset.

Documentation:

- *SMP - User guide - 4 Urban (2023) – 20260708.pdf*: User guide of the 2023 *SMP-Urban* survey (this file).

Urban survey:

- *smp_2023_urban__8_Jul_2026.dta*: Dataset (format: wide).
- *smp_2023_urban_questionnaire.xlsx*: Questionnaire.

Codebook:

- *smp_2023_urban_codebook__8_Jul_2026.dta*: Codebook.

6.2 Unique Identifiers

Observations are uniquely identified by the variable ***subject_id***.

6.3 Linking information

As of now, the 2023 SMP-*Urban* survey is a one-time survey and cannot be linked to any other SMP survey.

6.4 Standardized response codes

The following codes have the same meaning across this and all other SMP datasets:

- -66 = Other
- -88 = Don't know
- -99 = Refuse to answer

6.5 Variable labels

Variable labels include the following prefixes to improve data usability:

- *VGEN*: Variables that are generated or adjusted and are not part of the questionnaire.
- *RGEN*: Variables that are generated because the origin variable allowed for multiple responses. *RGEN*-variables are dummies indicating if a response category was selected.
- *Calc*: Variables of type "calculate", calculated within the survey form in SurveyCTO.
- (*Phone*): Variables that are only asked in the phone mop-up of the *Core-individual* and *Core-household* surveys, either because the wording differed from comparable items in the in-person survey, because they were repeated (e.g. enumerator codes) or because these were exclusively phone survey items. These variables also have the variable name suffix *_phone*.
- Variables without a prefix are as they appear in the questionnaire.

7. Recoding of data

7.1 Multiple interviewees per household

Household-level checks were conducted to identify cases where multiple interviewees come from the same household. This is only the case for target subjects of the preloaded sample. The variable *hh_count* was created, which records the number of interviewees linked to the same household indicated by the variable *hh_prefix*.

7.2 Use of preloaded respondent information

The variables age and gender were skipped during the interview when preloaded information was already available. Missing values of age were therefore filled using the preloaded target age. Blank values of gender were set to "male". For respondents who did not provide consent, both age and gender were removed from the final data.

7.3 Construction of derived variables and scores

A consolidated variable on desired number of children, *children_choose*, was created by combining the two survey branches *children_choose_yes* and *children_choose_no*.

For the numeracy section, binary variables were created to indicate whether each numeracy question was answered correctly. These indicators were then combined into the total score *numeracy_num_correct*. Similarly, correctness indicators were created for skills questions, including *skill_electric_correct* and *skill_paddle_correct*, and combined into the total score *skill_num_correct*.

For the digit span scoring two additional variables were created: *digitspan_levels_completed*, which records the highest digit-span level completed, and *digitspan_trials_correct*, which counts the total number of correctly answered digit-span trials, ranging from 0 to 16.

References

Becker, Malte, Finja Krüger, Tobias Heidland (2024), What Drives Attitudes toward Immigrants in Sub-Saharan Africa? Evidence from Uganda and Senegal, IZA Discussion Papers, No. 16734, Institute of Labor Economics (IZA), Bonn.

Ebert, Cara, Bernd Beber, Niklas Murken, Nils Haveresch, Zara Riaz, Tobias Heidland & Maximiliane Sievert (2026), FDZ Data Description: The Senegal Migration Panel (SMP) User Guide 1 – Overview (2022), RWI Projektberichte, Essen.