

Sudan - High Frequency Phone Survey COVID-19, 2020-2022

The World Bank

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Identification

SURVEY ID NUMBER

SDN_2020-2022_HFPS_v01_M

TITLE

High Frequency Phone Survey COVID-19, 2020-2022

COUNTRY/ECONOMY

Name	Country code
Sudan	SDN

STUDY TYPE

Other Household Survey [hh/oth]

SERIES INFORMATION

Round 1 of data collection was conducted during June 16–July 5, 2020, about three months after the declaration of the outbreak in Sudan and lockdown. The dates of implementation run from August and September 2020 for Round 2, November 2020 and January 2021 for Round 3, February to April 2021 for Round 4, May to June 2021 for Round 5, July/August 2021 for Round 6 and June/August 2022 for Round 7.

ABSTRACT

Like the rest of the world, Sudan has been experiencing the unprecedented social and economic impact of the COVID-19 pandemic. From restrictions on movement to school closures and lockdowns, the economic situation worsened, and commodity prices soared across the country. Results from the first six rounds of the High-Frequency Phone survey indicated that household welfare was negatively affected. The situation led to the loss of employment and income, decreased access to essential commodities and services, and food insecurity, particularly among the poor and vulnerable Sudanese. Moreover, the inability to access food and medicine degraded in July/August 2021 despite a slight amelioration in February/April 2021.

After COVID-19 in 2020, Sudan experienced situations that are more likely to compromise the recovery process. Political instability, unrest, and protests occurred before and after the military takeover in October 2021. Meanwhile, Sudan Central Bank devalued the currency, which may increase the already high commodities price. Besides, Sudan encountered historic flooding since the onset of the rainy season between May and June 2022. To monitor and assess the dynamics of the impacts of the country's economic and political situation (high inflation, social unrest, food shortages, asset loss, displacement, etc.) on households' welfare, another round of the Sudan High-Frequency Phone survey took place in June to August 2022.

Similar to the six previous rounds, the survey was conducted using mobile phones and covered all 18 states of Sudan. Round 7 sample is composed of 2816 Households from both urban and rural areas of Sudan. This sample allows us to draw statistical inferences about the Sudanese population at the national and rural/urban levels. The risk of nonresponse was a concern, so efforts were made to minimize this risk, including follow-up with respondents who failed to respond and keep the interviews short (15–20 minutes) to reduce respondent fatigue.

The questions are similar to the previous six rounds of the High-Frequency Phone survey but with added context. Households are asked about the key channels through which individuals and households are expected to be affected by the exchange rate distortions, country political instability, or flooding that occurred in May/June 2022, as well as how they have recovered from the COVID-19 pandemic impacts. Furthermore, questions cover a range of topics/themes including, but not limited to, health conditions, access to health facilities, access to other social services, availability of common food and non-food items (including medicines), nutrition and food security, employment/labor, income, assets, coping strategies, remittances, subjective welfare, climate/weather events, and the safety nets assistance.

UNIT OF ANALYSIS

- Households
- Individuals

Version

VERSION DESCRIPTION

Version 1: Anonymized dataset for public distribution

VERSION DATE

2022-04-07

VERSION NOTES

This version includes datasets from Round 7 survey.

Scope

NOTES

Sudan High Frequency Survey on COVID-19 covered the following topics:

- Household Basic Information (Rounds 1, 2, 3,7)
- Knowledge Regarding the Spread of COVID-19 (Round 1,2)
- Satisfaction with government policies (Round 1,2)
- Behavior and Social Distancing (Round 1,2,3,4)
- Covid-19 vaccination (Round 4)
- Climate (Round 7)
- Access to Basic Goods and Services (Rounds 1, 2, 3, 4, 6,7)
- Water, Housing, Internet, Energy (Round 2)
- Water, Housing (Round 7)
- Fuel (Rounds 4)
- Education (Rounds 5)
- Electricity (Round 7)
- Mental Health (Rounds 5)
- Employment (Rounds 1, 2, 3, 4, 7)
- Income Loss (Round 1, 2, 3, 4, 7)
- Food Insecurity Experience Scale (Round 1, 2, 3, 4, 7)
- Welfare (Rounds 1, 2, 4, 7)
- Coping/Shocks (Rounds 1, 2, 3, 4, 7)
- Social Safety Nets (Rounds 1, 2, 3, 4, 7)
- Youth Basic Information (Round 6)
- Youth Employment and Job search (Round 6)
- Youth Aspirations and Expectations (Round 6)
- Youth Skills and Mental Health (Round 6)

Coverage

GEOGRAPHIC COVERAGE

National

Producers and sponsors

PRIMARY INVESTIGATORS

Name
The World Bank

PRODUCERS

Name	Role
Stat-Solutions	Collaborated in the implementation of the survey
Central Bureau of Statistics	Collaborator

Sampling

SAMPLING PROCEDURE

The sampling methodology adopted for the implementation of this survey is probabilistic. Each of the units in the targeted population of the study must have a nonzero and known probability of selection. The sample was stratified by rural/urban for all 18 states. The distribution of the sub-sample between states and rural/urban is proportional to the size of the individuals owning mobile phones, i.e., not equal allocation. The selection of the individual phones (the households) is random, i.e., with equal probability, using a systematic sample procedure in the list (frame) of phones. This allows for extrapolating the results of the sample to the target population and estimating the precision of the results obtained. However, the implementation of this approach requires the availability of an adequate sampling frame containing all the units of the population without omissions or duplications.

In this survey, the sampling frame is provided by the phone lists. Considerable efforts were made to compile the frame using multiple lists of phone numbers collected during the implementation of various projects/surveys during the last few years at the household level across the country. This reduces the chances of having more than one phone number per household. Moreover, the interviewers double-checked during data collection that only one number was called for each selected surveyed household. Therefore, selecting individual phone numbers is the same as selecting households. It is worth noting that for West Kordofan and Central Darfur, the proportionality of rural/urban cannot be done according to the size of phones since there are no details for rural/urban. So, the size of the rural and urban populations (projection 2020) was used instead.

In Sudan, under the present federal system, the state is considered a semiautonomous entity mandated to take care of the affairs of the citizen, provide governance, and be responsible for planning, policy formulation, and implementation of the annual program. Consequently, the sample needed to cover all 18 states of the country. The sample is conceived to provide reliable estimates for the country (urban and rural) and to give statistically meaningful results at the national level.

RESPONSE RATE

BASELINE (ROUND 1): A total of 4,032 households were successfully interviewed during the first round of data collection (conducted during June 16–July 5, 2020). Selected households from each state include both rural and urban households, with the representation of each state in the final sample being proportional to the state's population relative to the overall population. Households who refused to tell their location (mode of living and state) were dropped to minimize bias. The final sample size accounts 4,027 households.

ROUND 2: Interviewers attempted to contact and interview all 4,032 households that were successfully interviewed in the baseline of the Sudan HFS on COVID-19. 2,989 households were successfully interviewed in the second round. However, households who refused to tell their location (mode of living and state) were dropped to minimize bias. The final sample size accounts 2,987 households.

ROUND 3: Interviewers attempted to contact and interview all 4,032 households that were successfully interviewed in the Baseline of the Sudan HFS on COVID-19. 2,990 households were successfully interviewed in the third round. Households who refused to tell their location (mode of living and state) were dropped to minimize bias. The final sample size accounts 2,987 households.

ROUND 4: Interviewers attempted to contact and interview all 4,032 households that were successfully interviewed in the Baseline of the Sudan HFS on COVID-19 in an effort to maintain the sample size. 2,662 households were successfully interviewed in the fourth round, but 2,659 households constitute the final sample size after dropping those who refused to tell their location (mode of living and state)

ROUND 5: Interviewers attempted to contact and interview all 4,032 households that were successfully interviewed in the Baseline of the Sudan HFS on COVID-19 in an effort to maintain the sample size. 2,783 households were successfully interviewed in the fifth round.

One new feature of the fifth round was more extensive individual-level data collection on how the school closures affected the children in the (6-14 years). All eligible members were included. Information was successfully collected for 2,519 children from 1,258 households.

ROUND 6: Interviewers attempted to contact and interview all 4,032 households that were successfully interviewed in the Baseline of the Sudan HFS on COVID-19 in an effort to maintain the sample size. 2,182 households were successfully interviewed in the sixth round. The final sample size accounts 2,179 household once those who refused to tell their location (mode of living and state) were dropped.

One new feature of the sixth round was more extensive individual-level data collection on youth jobs/employment, aspirations and expectations, skills and mental health. Information on household members 15-24 years was targeted. One youth members per household were included. Information was successfully collected for 1,626 households. 555 households were partially completed or no youth available.

ROUND 7: Interviewers attempted to contact and interview all 4,032 households that were successfully interviewed in the Baseline of the Sudan HFS on COVID-19 in an effort to maintain the sample size. 2,816 households were successfully interviewed in the seventh round.

WEIGHTING

When creating weights, a number of cases each respondent should represent are identified. Weights cannot correct all types of survey errors (questionnaire design, data collection, sampling, nonresponse, etc.). HFS-HH mainly used scale weights for all seven rounds.

For some purposes, population totals were estimated based on the sample results. Counts of the sample and the population were used. To expand the scale of the result from sample to population scale, weights of the general form are used as follows:

$$W=N/n$$

Where the sample results are multiplied by the reciprocal of the sampling fraction n/N , the general rule is that the “inverse of the probability” of selection for each participant is the “individual weight.”

In a simple random sample with only one sampling fraction throughout, scale weighting is achieved by multiplying everything by the overall or uniform scale factor N/n . Scale weights will make the number of respondents equal to the number of populations.

Before applying the weights, each respondent HH is counted as one HH. After weights are used, each respondent will count as equal to the value of the weight.

For Round 7, there are some variations in the distribution of the sample in the urban and rural and in total between regions. The sample size increased in both urban and rural areas. Accordingly, there is a slight reduction in the Scale Weights of the rural compared to Round 6. Also, there are slight changes in Scale weights compared to Round 6 in some states e.g., Northern, Central, and East Darfur. These slight changes are due to the change in sample size in Round 7.

Round 7: The household weights can be found in the household-level data file. It is state scale weight. The stratification is done by both Urban / Rural and by States; hence weights are calculated accordingly. The variable name is weight.

Data Collection

DATES OF DATA COLLECTION

Start	End	Cycle
2020-06-16	2020-07-05	Baseline (Round 1)
2020-08-01	2020-09-31	Round 2
2020-11-01	2021-01-01	Round 3
2021-02-01	2021-04-31	Round 4
2021-05-19	2021-06-17	Round 5
2021-06-25	2021-08-14	Round 6
2022-06-14	2022-08-03	Round 7

DATA COLLECTION MODE

Computer Assisted Telephone Interview [cati]

DATA COLLECTION NOTES

ORGANIZATION OF FIELDWORK:

Data were collected by trained Stat Solution interviewers who individually made phone calls from the call centers of Stat-Solutions. The first round of the survey was fielded towards the end of the lockdown period. The interviews for the selected household respondents were done by telephone, and data collection for the survey was done using tablets and the Kobo application. Kobo is a software mainly used for collecting reliable information during a humanitarian crisis, especially following a natural disaster such as a large earthquake or typhoon in any area around the world. Understanding the population's needs is often neglected for lack of quick means to collect and analyze this crucial information. Kobo Toolbox, developed by the Harvard Humanitarian Initiative, is an open-source suite of tools for data collection and analysis in

humanitarian emergencies and other challenging environments built to address this gap.

Kobo Toolbox is a suite of tools for field data collection for use in challenging environments. It is free and open-source software. Most of its users work in humanitarian crises or aid professionals and researchers in developing countries.

TRAINING

Interviewers and supervisors were trained virtually for the first four rounds, then face-to-face for the rest of the rounds to participate in the survey. The training focused on providing participants with a detailed understanding of the survey and CAPI, elucidated essential concepts and questions in the questionnaire, mock interview, and evaluation. A pilot was conducted with households. Brief follow-up training was carried out after the pilot.

LANGUAGE

The baseline questionnaire is in English and Arabic. Interviewers are assigned to states or regions where they speak, read, and understand the local language/dialect. Interviewers are instructed to ensure that the way the question is read in Arabic preserves the sense of the English question rather than a word-by-word translation.

RESPONDENT

There is ONE RESPONDENT per household. The respondent should be 18 years or older. If the respondent is younger than 18, the interviewer should ask to speak to the head of a knowledgeable adult household member. The respondent must be a member of the household. Unlike many other household surveys, interviewers are not expected to seek out other household members to interview them on their data. The respondent may still consult with other household members to answer the questions.

Interviewers were instructed to make every effort to reach the same respondent in subsequent rounds of the survey to maintain the consistency of the information collected. However, in cases where the previous respondent was not available, interviewers would identify another knowledgeable adult household member to interview.

Questionnaires

QUESTIONNAIRES

BASELINE (ROUND 1): One questionnaire, the Household Questionnaire, was administered to all households in the sample. The Household Questionnaire provides information on:

- Demographics
- Knowledge regarding the spread of COVID-19
- Behavior and social distancing
- Access to basic goods and services (medicines, staple food, health, education, financial services)
- Employment
- Income loss
- Food insecurity experience
- Welfare
- Shocks and Coping strategies
- Social safety nets

ROUND 2: One questionnaire, the Household Questionnaire, was administered to all households in the sample. The Household Questionnaire provides information on:

- Demographics
- Knowledge regarding the spread of COVID-19
- Behavior and social distancing
- Access to basic goods and services (medicines, staple food, health, education, financial services, water, transportation, housing, internet, energy)
- Employment
- Income loss
- Food insecurity experience
- Welfare
- Shocks and Coping strategies
- Social safety nets

ROUND 3: One questionnaire, the Household Questionnaire, was administered to all households in the sample. The Household Questionnaire provides information on:

- Demographics
- Behavior and social distancing
- Access to basic goods and services (medicines, staple food, health, education, financial services)

- Employment
- Income loss
- Food insecurity experience
- Welfare
- Shocks and Coping strategies
- Social safety nets

ROUND 4: One questionnaire, the Household Questionnaire, was administered to all households in the sample.

The Household Questionnaire provides information on:

- Demographics
- Youth module screening
- Behavior and social distancing
- Access to basic goods and services (medicines, staple food, health, education, transportation, fuel)
- Employment
- Income loss
- Food insecurity experience
- Welfare
- Shocks and Coping strategies
- Social safety nets

ROUND 5: One questionnaire, the Household Questionnaire, was administered to all households in the sample. Respondent were asked to think about each child in their household for the education question.

The Household Questionnaire provides information on:

- Demographics
- Mental health of the respondent
- Children education.

ROUND 6: One questionnaire, the Household Questionnaire, was administered to all households in the sample. One youth per household is interviewed in the youth section of the questionnaire.

The Questionnaire provides information on:

- Demographics
- Access to basic goods (medicines, staple food)
- Youth employment
- Youth job search
- Youth aspirations and expectations
- Youth skills and mental health.

ROUND 7: One questionnaire, the Household Questionnaire, was administered to all households in the sample.

The Household Questionnaire provides information on:

- Geography
- Access to basic goods and services (medicines, staple food, health, education, water, housing, electricity)
- Employment
- Income loss
- Food insecurity experience
- Welfare
- Experience of Climate/Weather events
- Shocks and Coping strategies

Access policy

CONFIDENTIALITY

CITATION REQUIREMENTS

Use of the dataset must be acknowledged using a citation which would include:

- the Identification of the Primary Investigator
- the title of the survey (including country, acronym and year of implementation)
- the survey reference number
- the source and date of download

Example:

The World Bank. Sudan - High Frequency Phone Survey COVID-19, 2020-2022 (HFPS 2020-2022). Ref: SDN_2020-2022_HFPS_v01_M. Downloaded from [uri] on [date].

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DISCLAIMER

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Metadata production

DDI DOCUMENT ID

DDI_SDN_2020-2022_HFPS_v01_M_WB

PRODUCERS

Name	Abbreviation	Affiliation	Role
Development Data Group	DECDG	World Bank	Documentation of the study

DATE OF METADATA PRODUCTION

2023-02-23

DDI DOCUMENT VERSION

Version 01 (2023-02-23)

Data Dictionary

Data file	Cases	Variables
sdn_2020_hfs_r1_hh_v2 HFPS Round 1 - Household	4027	447
sdn_2020_hfs_r2_hh_v2 HFPS Round 2 - Household	2987	467
sdn_2020_hfs_r3_hh_v2 HFPS Round 3 - Household	2987	383
sdn_2020_hfs_r4_hh_v2 HFPS Round 4 - Household	2659	444
sdn_2020_hfs_r5_education_v2 HFPS Round 5 - Education	2519	49
sdn_2020_hfs_r5_hh_v2 HFPS Round 5 - Household	2783	45
sdn_2020_hfs_r6_hh_v2 HFPS Round 6 - Household	2179	16
sdn_2020_hfs_r6_youth_v2 HFPS Round 6 - Youth	1626	239
sdn_2020_hfs_r7_hh_v1 HFPS Round 7 - Household	2816	743