DATA COLLECTION IN CONFLICT-RIDDEN CONTEXTS: THE CASE OF SOMALIA.

Abstract

Data is critically essential for Somalia to understand who is left behind as well as the progress made in the National Development Plans, Sustainable Development Goals (SDGs), and Agenda 2063 for Africa. Somalia has conducted only two Population Censuses, in 1975 and 1985-86, but the latter remained unpublished due to concerns about their accuracy. To fill the gap and collect data for monitoring development initiatives and measuring poverty, some surveys were conducted such as the Population Estimation Survey (PESS) 2014, the Labor Force 2019, the Somali Health and Demographic Survey (SHDS) 2020, and the Household Budget Survey 2022.

The quality of data is determined by factors such as accuracy, reliability, and relevance. This paper aims to assess the impact of recurrent conflicts in Somalia on data collection plans, addressing challenges such as accessibility, land disputes, clan clashes, climate change (including droughts and floods), and the enumeration of nomads. It also discusses the content of questionnaires and their impact on the safety of respondents and interviewers. While data collection tools are critical, they can also pose risks, especially in partially accessible areas.

The paper will highlight the challenges faced by field teams and compare response rates and data quality, providing valuable insights on improving data collection processes in Somalia.

Keywords: Surveys, security, conflicts, climate change, nomads.

Author:
Abdulrazak Karie,
Demographer,
karieyare@gmail.com
Somalia National Bureau of Statistics.

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1 BACKGROUND:

Somalia is in the Horn of Africa, with an estimated surface area of 637,657 km2 and a terrain consisting mainly of plateaus, plains, and highlands. Somalia boasts Africa's longest coastline, extending over 3,333 kilometers along the Gulf of Aden to the north and the Indian Ocean to the east and south. It shares borders with Djibouti to the northwest, Ethiopia to the west, and Kenya to the southwest. The country's climate is tropical and hot, with minimal seasonal variations and daily temperatures ranging from 30°C to 40°C. The country experiences low annual rainfall, with distinct rainy seasons known as Gu' and Deyr, and dry seasons called Haga and Jilal. Somalia has faced challenges due to civil war, terror groups, and unpredictable climate patterns, leading to recurrent floods and droughts that affect regions nationwide.

Since gaining independence in 1960, Somalia has only conducted two Population Censuses. The initial census took place in 1975, yet the findings were not released; only an analytical report emerged in 1984. Similarly, the second census carried out in 1985-86, remained unpublished mainly due to concerns about accuracy. Thirty years ago, the civil war erupted in the country, making the statistics department within the Ministry of Planning, responsible for the nation's information suffer significant losses, destroying much of its national records. This led to a lack of data about the country, making it necessary to estimate critical socio-demographic health indicators using ad hoc and anecdotal methods.

Since 2012, Somalia ~~began to~~ experience relative stability, creating an opportunity to re-establish government institutions, including the Directorate of National Statistics (DNS) under the Ministry of Planning. This entity subsequently evolved into the Somalia National Bureau of Statistics (SNBS), an independent organization for gathering, organizing, coordinating, analyzing, evaluating, and disseminating national statistical information.

The SNBS mainly uses two sources to produce information about the population: surveys and administrative records. Surveys are frequently undertaken and used as a critical source of socio-economic data for monitoring and informing development initiatives. The nationwide surveys in Somalia encompass various efforts, including the Population Estimation Survey (PES~~S~~) designed to estimate the population size and collect data on the geographic distribution, and social, and economic characteristics of the Somali people. It serves as a critical initial step towards implementing a comprehensive population and housing census. The survey covers urban, rural, and nomadic areas, as well as camps for internally displaced persons (IDPs) across the 18 pre-war regions. (1)

Subsequently, the Somali Health and Demographic Survey (SHDS) is conducted to offer insights into the health and demographic profiles of the Somali population. This data serves as a crucial foundation for developing programs and crafting policies that are effective and relevant. Moreover, this information aids in monitoring and evaluating national, sub-national, and sector-

specific development plans, including progress toward the Sustainable Development Goals (SDGs), by both the government and development partners (2).

The SNBS also conducted a labor force survey in 2019 to gather statistically significant measurements of key indicators in the labor market disaggregated for a selected sample in accessible areas, comprising rural and urban regions. Nomadic areas were excluded from the survey coverage in Somalia due to the methodology aspect. The key indicators encompass the labor force participation rate, employment-to-population ratio, and measures of underemployment and labor underutilization. (3)

In 2022, the Somali National Bureau of Statistics (SNBS) released the Somali Integrated Household Budget Survey (SIHBS). This survey was designed to gather comprehensive data on household expenditures and consumption patterns related to goods and services. The aim is to monitor household welfare more effectively and provide a sustainable method for measuring poverty. Apart from welfare-related data, the SIHBS also collects other socioeconomic information crucial for monitoring the living conditions of Somali households. This includes data on access to basic assets, facilities, and services. (4)

In contrast, government institutions such as the Ministries of Education, Health, and Security collect administrative records and share the data with the SNBS upon request. The SNBS and MDAs-FGS in Somalia face challenges including data gaps, limited administrative data, poor data quality, high costs for improving data, lack of historical sector data, methodological limitations, delayed data release, inadequate ICT infrastructure, coordination issues, security concerns, and limited statistical advocacy. (5)

2 DATA COLLECTION RESILIENCE: THE SOMALI HEALTH AND DEMOGRAPHIC SURVEY EXPERIENCE AMID UNCERTAINTY.

2.1 Reason for the implementation of SHDS.

The gaps in health and demographic indicators were identified, prompting the Somali Health and Demographic Survey (SHDS) to fill these gaps. The SHDS aims to address SDG indicators like zero hunger, good health, inclusive education, gender equality, water and sanitation management, and economic growth.

2.2 Consultation meetings.

Consultation meetings were convened with key stakeholders to ensure broad engagement and collaboration, including the National Statistics Office, Ministries of Health, Education, Women, Water, Energy, civil society organizations, and Women's Association. These meetings focused on the implementation of surveys and addressing challenges specific to Somalia. The discussions resulted in collaborative efforts to overcome obstacles, recognizing the critical importance of these surveys for the country's development.

2.3 Technical aspect

2.3.1 Sample frame and sample design.

The sample for the Somali Health and Demographic Survey (SHDS) was designed to provide estimates of key indicators for the entire country, urban, rural, and nomadic areas. Each region, except Banadir, was stratified into these three areas, resulting in 55 sampling strata. Due to security concerns, all strata of Lower Shabelle and Middle Juba have been excluded. While the rural and nomadic strata of Bay became inaccessible. This resulted in a total of 47 sampling strata. Dwelling structures in urban and rural areas were digitized using satellite imagery and ground staff knowledge from the ministries of planning.

2.3.2 Questionnaires.

Four types of questionnaires were used in the SHDS 2020: the Maternal Mortality Questionnaire, the household questionnaire, ever married questionnaire, and the Never Married Woman's Questionnaire.

2.3.3 Training.

Training for the SHDS was two-phased: for the Listing/Maternal Mortality Ratio data collectors and the Main Survey data collectors (those administering the household, ever-married woman, and never-married woman questionnaires).

2.3.4 Main Survey Data Collection

Trained interviewers and supervisors were deployed to collect data from 30 selected households in each of the 10 sampled enumeration areas (EAs) in each region stratum. Selected households were chosen from a complete list of households in each EA. Data collectors were supported by a listing team proficient in map reading and identifying EA boundaries and selected households. Each interviewer collected data from about two households per day.

For nomadic households, a complete listing was done a day before enumeration in each Temporary Nomadic Site (TNS) to obtain an up-to-date list of households. During listing, the coordinates of all nomadic household structures and the names of household heads were recorded. A sample of 30 households was selected by the listing team and provided to the enumerating team's supervisors on the first day of enumeration. The supervisors then allocated households to enumerators. The Maternal Mortality Ratio (MMR) questionnaire was administered by both listing and enumerating teams in nomadic areas. The enumerating team collected data from the 30 sampled households, while the listing team collected data on maternal deaths from the remaining unsampled households in the TNS.

2.3.5 Data Processing

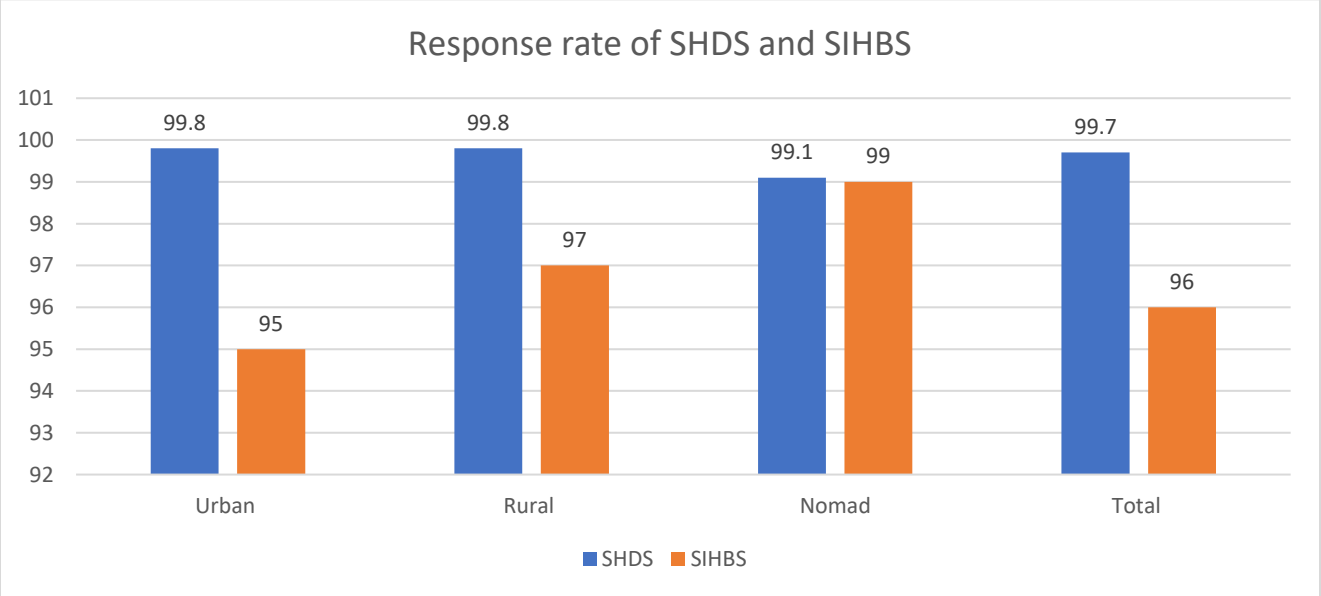
Data from the Somali Health and Demographic Survey (SHDS) underwent several processing steps. It was first transferred to a secure cloud CSWeb server. The files were then downloaded as CSDB files and analyzed using SPSS and Stata software. Three CSPro data administrators oversaw the data, ensuring it was correctly downloaded and merged. A larger team then processed the data into six standard DHS files, which were later distributed to other processing teams. Additionally, three GIS specialists edited the spatial data, while data tabulation and recoding teams developed a plan and manual according to DHS standards but customized for the SHDS. Finally, two team members calculated sampling and survey weights.

2.3.6 Dissemination

The SHDS report was disseminated following the international best practice.

3 RESPONSE RATES: SOMALI HEALTH VS. HOUSEHOLD BUDGET SURVEYS

The data depicted in the figure indicates that the response rates for the conducted surveys exceed 95 percent. This high response rate suggests a strong level of engagement and cooperation from the surveyed population, indicating a robust data collection process. The results of the two surveys indicate that the Nomadic household's participation is consistent at 99 percent.



4 NAVIGATING CHALLENGES IN DATA COLLECTION: THE SOMALI HEALTH AND DEMOGRAPHIC SURVEY EXPERIENCE AMIDST CONFLICT.

The following items need special consideration when Collecting data in Somalia:

3.1 limited resources:

Data collection in Somalia faces unique challenges due to the country's economic weakness and low revenue, which limit the government's capacity to fund comprehensive data-gathering efforts. As a result, Somalia relies heavily on the support of international partners and organizations to conduct surveys and collect data crucial for monitoring development initiatives and measuring poverty.

The economic challenges in Somalia stem from decades of conflict, which have disrupted the country's infrastructure and institutions. The lack of a functioning central government for much of this period has further hindered economic development and the ability to collect reliable data. Additionally, the country's revenue generation is constrained by factors such as limited tax collection and a largely informal economy.

However, sustaining these efforts and ensuring the availability of reliable data remain ongoing challenges that require continued collaboration and support from the international community.

3.2 Security:

Somali Health and Demographic Survey (SHDS) 2020 data were collected from 16 out of 18 regions of the country, including urban, rural, and nomadic areas. The threats, disorders, and violence posed by terror groups in some regions, including Lower Shabelle and Middle Juba make it difficult to collect data during the Somali Health and Demography. Some other regions were found to be partially accessible. For example, only urban areas were covered in the Bay region and no data was collected from rural and nomadic areas for security reasons.

On the other hand, the Somali Integrated Household Budget Survey 2022 did not cover Middle Juba for insecurity, but SIHBS included the Bay region which is believed to be safer than years before.

Disputes between the clans are also another security challenge. Additionally, border disputes between the federal member states add another layer to the problems. For example, the Somaliland and Puntland border argument causes difficulties in the data collection process. Both administrations claimed responsibility for Lasanod city, in the Sool region. Another problem is the Galkayo city of Mudug region, whereby both Puntland and Galmudug states control the city.

Advocacy and sensitization activities, including billboards, bumper stickers, T-shirts, and caps, are often postponed due to security concerns during the surveys.

3.3 Climate change:

Climate change is a critical issue and poses significant challenges in Somalia putting the country from drought to floods and vice versa. This has negatively impacted the agriculture and food security of the country. Heavy rains cause rivers to flood and destroy the infrastructure leading thousands of people to flee from their homes hampering families' efforts to rebuild their drought-affected livelihoods, making it challenging for data collection personnel to reach selected households for interviews due to their accessibility.

Drought has an impact on the data collection, particularly the nomads. Households in nomadic areas depend on the water and pasture and move to another place where it rains during the Droughts.

3.4 Nomads' enumeration.

Nomadic communities, characterized by their mobile lifestyle, often migrate in search of water and pasture, which poses challenges for data collection methodologies. This constant movement disrupts the ability to track and survey populations effectively. The dispersed nature of nomadic households, often separated by long distances, places a significant burden on enumerators, who must traverse difficult terrain on foot due to the lack of vehicle-accessible roads. This not only leads to physical exhaustion but also increases the risk of injury from thorns and other hazards. Furthermore, accessing communication networks in these remote nomadic settings presents additional challenges, limiting the ability to collect and transmit data efficiently.

3.5 Ethics and type of data collection tools:

Questionnaires are based on international standards while leaving no one behind. However, religious and culturally sensitive questions need to be customized and consider the country's context. Inappropriate questions are dangerous situations for the enumerator and facilitators.
Global Positioning System (GPS) collection using mobile phones during the interview creates problems among the partially safe districts.

3.6 Sampling frame for surveys

Population censuses constitute the principal source of records for the construction of a
the sampling frame for surveys during the intercensal years on many topics, such as the labor force, fertility, and migration histories. An essential ingredient of probability sample design is the existence of a complete, accurate, and up-to-date sampling frame. A sampling frame is a list of all (or most) of the N units in the universe. A sampling frame may be a list of small areas. It may also be a list of structures, households, or persons. The census can be used to construct either type of frame or both; indeed, most countries do use their census for such purposes. The census frame is often the departure point for the design of a household sample survey. (6)
Somalia has been without a population census for the last almost 5 decades which means a complete list of all sampling units that entirely cover the target population is not available.

When a census frame or master sample is unavailable, alternative frames such as lists of electoral zones, high-resolution satellite maps, or lists of administrative units can be used. However, ensuring complete coverage of the target population is a major concern. Assessing the quality of alternative frames is challenging due to a lack of information. Another issue is the size of the primary sampling unit (PSU), which may not be optimal for a DHS survey. Additionally, identifying sampling unit boundaries can be difficult due to a lack of cartographic materials. (7)
Is better to remove the Inaccessible areas from the frame to enhance the response at the very beginning of the survey, before the sample is drawn. However, it is noticed that the accessibility

status keeps changing sometimes making the selected enumeration areas who are previously accessible inaccessible.
Another challenge is that the surveys following the probability techniques select some of the enumerations to represent certain enumeration areas. This annoys some communities in the unselected areas, asking why they were left behind, particularly in nomadic areas. The main reason is that they believe that interviewed households will benefit.

3.7 Internally Displaced Persons (IDP).

Somalia has faced repeated waves of internal displacement over the past several decades, driven by a complex interplay of factors such as conflict, violence, human rights abuses, and natural disasters. This has led to a significant number of people being displaced within the country's borders. Monitoring the situation of displaced populations and evaluating relevant policies and programs relies heavily on internally displaced persons (IDP) data.

Sources of data on internally displaced persons (IDPs) include surveys, censuses, administrative records, and registers. The National Bureau of Statistics includes IDPs as a stratum in national surveys and considers them as places of residence. For instance, the SIHBS covers internally displaced persons (IDPs). However, these surveys are often conducted every 3-5 years, which means that the data may not always be timely. To address this, different surveys might be conducted in different years, allowing the statistics office to consider each survey they implement.

Somalia has not undertaken a census for almost five decades, and civil registration, vital statistics, and population registration are also not in place, although the government's efforts to establish these systems are visible nowadays.
The Camp Coordination and Camp Management (CCCM) cluster plays a role in coordinating humanitarian efforts and collecting operational data, although concerns have been raised by the National Bureau of Statistics about the methodology and results produced by CCCM.

5 CONCLUSION:

Somalia has faced significant challenges in data collection, stemming from historical factors such as the loss of national records and limited censuses. Despite these challenges, the establishment of the Somalia National Bureau of Statistics (SNBS) has provided a foundation for improving data collection efforts. The Office has conducted various surveys, including the Population Estimation Survey (PESS), the Somali Health and Demographic Survey (SHDS), the Labour Force Survey (LFS), and the Somali Integrated Household Budget Survey (SIHBS), to gather crucial socio-economic data. The SNBS has launched the Somali Population and Housing Census to produce a comprehensive report on the size, distribution, and characteristics of the Somali people.

Data collection in Somalia faces challenges, however, the successful surveys implemented indicate security concerns, climate change impacts, and enumerating nomadic people can be addressed. To improve the data collection process, it's important to follow several key steps: Clearly define the purpose and objectives to ensure that the collected data will be relevant and useful. Involve relevant stakeholders from the beginning to gain their buy-in, ensure their needs are considered, and enhance the overall quality of the data collection. Secure adequate funding to support the data collection process, including expenses related to daily allowances, security, training, and technology. Before selecting the sample, conduct a security assessment to identify the accessible areas, and potential risks and develop strategies to mitigate them. Exclude inaccessible areas to ensure the safety of field teams. In partially accessible areas, provide invisible security protection for data collection teams. Use a paper-based questionnaire when mobile data collection is not feasible.

It is key to understanding nomadic movements and their patterns to plan data collection effectively in nomadic settings. Employ nomadic link workers to facilitate data collection among nomadic communities, ensuring cultural sensitivity and better access to data. Customize the questionnaire to the specific context, taking into account cultural nuances and local practices. Undertake a pilot test to ensure the questionnaire is clear and effective. Consider feedback from the field on culturally sensitive questions and make necessary adjustments following international recommendations and best practices.

Investing in the National Strategy for the Development of Statistics (NSDS2) and its operationalization is crucial for enhancing data collection initiatives. This investment adds significant value by ensuring that data is released with all quality dimensions, thereby improving decision-making processes and fostering development.

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