Can Sudan Overcome Its Statistical Tragedy? What have we learned?

Author Details:

Abstract:
It is a tragedy that Sudan that needs data the most is least likely to have it. Population censuses are out of date, and poverty estimates are infrequent and incomparable over time and, hence, of limited use. We cannot be sure of what happened to poverty between 2009 and 2014; a period characterized by meager or even negative economic growth. Timely, accurate, granular, and accessible data provides the foundation for evidence base policymaking, particularly in Sudan’s context characterized by conflict, stagnant economic growth, high poverty, and low social indicators. Inadequate funding, weak capacity, and a lack of coordination of statistical activities are argued to be behind Sudan’s statistical tragedy. But the underlying cause is political; low level of funding and statistical capacity are the consequences of a lack of political support for quality statistics. Statistics unsuitable to political leaders’ goals are altered, delayed, or that choices are made between conflicting estimates on political grounds, limiting the demand for quality data. In turn the lack of demand for data lead to fewer resources available for data production. As part of the ongoing transition process and as a key input to sensitive electoral, peace and resource sharing negotiations, the conduct of a census/survey is a politically sensitive exercise, particularly in a setting such as Sudan. However, promoting greater openness and transparency of data as a pathway to mitigate political economy constraints and raising the public profile for statistics may help Sudan overcome its statistical tragedy.

JEL Codes: C81, O47, O55

Keywords: Sudan, population census, household survey, poverty, statistics, tragedy, evidence base

I. Introduction

1. It is a tragedy that the African countries that need data the most, including Sudan are the least likely to have it. The poor state of statistics on the continent is increasingly discussed and documented (Devarajan, 2013; Jerven, 2014; World Bank, 2018, Hogeveen and Nguyen, 2019). For example, Hogeveen and Nguyen (2019) noted of the 48 African national statistical offices (NSOs), including Sudan, on which they collected data, seven do not have functional websites. 1 These offices implemented 173 household consumption surveys between 1990 and 2012, of which 99 surveys are not comparable, limiting their use. Among the 48 NSOs, 16 use the 1968 system of national accounts, while 20 calculate gross domestic product (GDP) using a supply-use table that is at least 15 years old, rebased in 2000 or earlier. Sudan, Benin, and Madagascar utilize supply-use tables that were last rebased more than 30 years ago. Only 28 of the 48 NSOs publish a statistical abstract online; 12 of these are recent. 2 Such statistics are of limited value to decision makers, researchers, civil society, or the private sector. In fact, Africa’s statistical offices are caught in a vicious cycle wherein underinvestment constrains activities and results in data of poor quality and users unwilling to use them. This lack of demand for the data leads to fewer resources available for data production.

2. This poor state of statistics highlights the importance of overcoming what Devarajan deems as “Africa’s statistical tragedy” and strengthening Africa’s statistical systems for evidence base policymaking. Timely, accurate, and accessible data is an important foundation for policymaking, efficient

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1 The seven countries are Central African Republic, the Comoros, Côte d’Ivoire, the Democratic Republic of Congo, Eritrea, Somalia, and South Sudan.

resource allocation and effective service delivery. Data is crucial to knowing where a country stands in terms of socio-economic and human development and can help explain which policies work and which do not work in promoting economic growth and reducing poverty and other social deprivations.

3. **Timely, accurate, and accessible data is particularly important in Sudan’s context—that is characterized by conflict, stagnant growth, high poverty and low social indicators—to ensure that limited resources are allocated to their most productive use.** This includes ensuring that policies and programs are supporting economic growth, job creation and poverty-responsive, that service delivery is equalizing opportunities especially for people in conflict-affected and less developed states. Yet, Sudan’s statistical system faces several challenges such as insufficient institutional capacity to manage data, inadequate and unreliable financing, limited use of statistical evidence by decision makers, and limited public access to data.

4. **The statistical system is expected to sustainably support a core set of demographics, economic, and social statistics notably through regular population censuses and household surveys.** Data from censuses and household surveys can be used to obtain statistics on: (i) physical and financial assets; (ii) employment status/labor markets outcomes; (iii) poverty and living conditions; and (iv) selected human capital indicators, in line with the country’s development strategy. In addition to informing the design of policies, these statistics are required for regularly monitoring and evaluation of public policies and programs that address poverty and inequality, improve human capital outcomes, promote jobs and economic transformation as well monitor progress toward the Sustainable Development Goals (SDGs). Finally, the availability of data on vulnerable groups (including internally displaced, refugees and nomads) provides greater opportunities for enhanced efforts to identify the main service gaps and barriers to access services and markets that individuals face with the view to improve targeted interventions.

5. **The objectives and the structure of this paper is as follows.** The paper presents an overview of the state of core statistics in Sudan (Section II); analyses the main causes of the problem with core statistics and lessons learned (Section III); and concludes, making some policy recommendations (Section IV).

II. **The State of Core Statistics in Sudan**

6. **Population censuses are out of date.** It is now 12 years since the last population census of 2008. Likewise, there was a 15-year gap between the 2008 and the 1993 population census. However, earlier data collection gap was shorter, 10 years between 1983 census and 1973 census, whereas the first census was conducted at independence in 1956 (Table 1). Since 1993, there has been some discouraging trend in census periodicity as the standard for population census periodicity is 10 years and, in a few countries, censuses are conducted once in five years. This problem is not only confined to Sudan. Lessons from other African countries suggest similar periodicity problems. Devarajan (2013) noted only 32 African countries representing 65 percent of the total population have had a census during the last 20 years. For instance, in Angola the most recent census was in 1975, while Ethiopia, Africa’s third most populous nation had its first census covering the whole country only in 2007 (Devarajan 2013, page 12).

7. **Household budget surveys and poverty estimates are infrequent and incomparable over time and, hence, of limited use.** In the absence of regular and comparable household surveys, it is not possible to determine poverty trends in Sudan. The most recent poverty estimates are based on the 2014/15 National Household Budget and Poverty Survey (NHBPS), following the 2009 National Baseline Household Survey (NBHS) that provided the base for a first comprehensive assessment of living conditions in Sudan in over 30 years. That is, prior to the 2009 survey, a household budget survey was conducted in 1978, whereas the standard for household budget survey periodicity is 5 years (Table 1).

8.
9. **Given the transition, there is an urgent need for updated data on demographic and socio-economic aspects, and this can be provided by a population census and a household-based survey.** The transition government is facing one of the most challenging political, economic and social environments in the world. Addressing the roots of the Sudanese conflict, displacement and marginalization, vulnerable and war affected groups are formidable challenges. In addition, the country faces macroeconomic instability, rampant inflation, massive currency devaluation, debt overhang, and ostracism from dollar-based international financial system as the country remains on the US List of State Sponsors of Terrorism. Currently, the floods and covid-19 are posing a significant health emergency and an additional shock on the economy. These factors have adverse impacts on poverty and socio-economic conditions and require policies and programs to address them. In turn timely and accurate data can inform the design of these policies and programs.

10. **The planned 6th population census is expected to provide baseline and benchmark data for social, economic and political development planning in the post-2018 revolution period. and a necessary precursor to the elections.** The updating of the 2008 demographic and socioeconomic indicators given in Table 2, including disaggregation at the sub-national/state level would provide needed data for evidence base policymaking. The transition government has emphasized the need for a new population census and at the request of the government, the UN Integrated Transitional Mission for Sudan (UNITMAS) plans to support the implementation of a new population census. The census is expected to provide the basis for the upcoming elections and subsequent power sharing, wealth sharing and a more equitable allocation of resources. That is, identifying the root causes of under development, poverty and regional disparities and addressing these causes through evidence base decision making. The 6th census will also offer an opportunity to assess the housing situation, following the damage of over 100 thousand houses during the recent floods. The census will provide new basis for sampling frame for the implementation of much-needed household budget survey, labor force survey and annual monitoring survey of key indicators related to poverty, service delivery and Sustainable Development Goals (SDGs).

<table>
<thead>
<tr>
<th>Table 1: Frequency of core data collection since independence</th>
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<tr>
<td>Date of Population Census</td>
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<tr>
<td>1st 1956</td>
</tr>
<tr>
<td>2nd 1973</td>
</tr>
<tr>
<td>3rd 1983</td>
</tr>
<tr>
<td>4th 1993</td>
</tr>
<tr>
<td>5th 2008</td>
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**Source:** Author’s compilation.

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<table>
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<tr>
<th>Table 2: Demographic and socioeconomic indicators, according to the 2008 population Census</th>
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<tr>
<td>Indicator</td>
</tr>
<tr>
<td>Sex Ratio</td>
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<tr>
<td>Average Household size</td>
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<tr>
<td>Dependency Ratio</td>
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<tr>
<td>Life Expectancy at birth (both sexes)</td>
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<tr>
<td>Unemployment rate (10+years+)</td>
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<tr>
<td>Infant Mortality Rate</td>
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<td>Under 5 mortality Rate</td>
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<tr>
<td>Maternal mortality Rate</td>
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<tr>
<td>Total fertility Rate</td>
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Source: Central Bureau of Statistics
Following the recent deterioration in economic conditions, there is an urgent need for a new household budget survey to inform government plans to address the situation. The three-digit inflation (166% in August 2020), negative GDP growth (estimated at -8% for 2020), shortages of fuel, electricity bread, and other food items as well as the floods and covid-19 have adverse impacts, particularly the poor and vulnerable groups. The new survey is expected to avail timely and accurate statistics on living conditions, facilitating government plans to improve the standards of living. The new household survey is expected to provide an updated poverty data base to inform the targeting of the newly introduced family support program. The previous cash transfer program of 2012-2019 was poorly targeted across Sudan’s 18 states and 189 localities, according to a recent World Bank Study (World Bank 2020b). The World Bank study recommends improving the targeting mechanisms of the cash transfer program delivery, utilizing an updated poverty data base and a monitoring system. Finally, the new household survey is expected to inform the implementation of the Government’s poverty reduction strategy paper (PRSP).

III. Causes of the problem with core statistics

Causes of the problem with core statistics have to do with inadequate funding, weak capacity, and a lack of coordination of statistical activities as well as political considerations. Similar to other Sub-Saharan African countries, Sudan faces inadequate funding to collect data; weak capacity to manage and disseminate data; and diffuse responsibilities. As one example, if the implementation of a census/survey depends on irregular financing by development partners, it becomes extremely difficult to plan in advance for multiple years of census/survey efforts with any degree of certainty, which in turn has negative repercussions for the collection of regular data.

Inadequate funding

Populations censuses and household surveys are costly and efforts to increase the frequency of surveys/censuses are faced with inadequate funding. The cost of the 2008 population census was US$102.9 million, a substantial increase of US$29 million from the original estimate of US$73.7 million (Table 3). The census was implemented in two phases and with two sets of project documents as the costs and time requirements turn out to be higher and longer than originally expected. The second round of documents was prepared because the first set under-estimated the total amount of costs for the overall exercise, necessitating a re-estimation of costs. Initially, the cost of the census was estimated at US$73.7 million in February 2006. Of this total, 2/3rds would be for the census in the North, and 1/3rd for the South. This estimate was increased through a Phase II reappraisal in June 2007, and the new estimated total costs (of US$102.9 million) took account of substantial increases in the costs of planning, census cartography, enumeration, advocacy, vehicles and boats, and data processing equipment. The Government of National Unity contributed US$68.5 million (an increase of US$ 27.8 million from the US$40.7 million in the original proposal. The Multi Donor Trust Fund for the North Sudan (MDTF-N) contributed US$20.0 million (the same as in the original proposal), and the Multi Donor Trust Fund for South Sudan (MDTF-S) provided US$14.4 million (i.e. an increase in of US$ 1.4 million from the original project proposal).

What would be the cost of the new population census? Following the secession of South Sudan in 2011, this paper estimated the cost of the new population census at US$70 million, which is lower than the 2008 census cost of nearly US$103 million throughout Sudan. That is the estimated cost of the planned census is two thirds of the total cost of 2008 population census. This estimate is based on loss of one third of the population living in South Sudan following the secession.

Would the adoption of new technologies reduce the population census cost? The new population census is expected to increasingly take advantage of new technologies to collect, manage and analyze information, including computer assisted technologies rather than the traditional methods of paper and pencil.
However, the reduction of cost due to the introduction of new technologies may not fully offset the cost of enumerating more people as the Sudan’s population growth rate is high (about 2.4 percent) and the 2020 population is projected at 41 million, an increase of 10 million people over the 2008 estimate. In addition, Sudan is a vast country with 18 states, and 189 localities, each with several administrative units and several different languages in use, all of which are likely to add to the cost of enumeration. In particular, the additional states and localities created after the 2008 population census may require redrawing of all enumeration areas maps, a labor and travel intensive effort.

Table 3: Actual and estimated costs of the 2008 Population and Housing Census (million US$)

<table>
<thead>
<tr>
<th>Financier</th>
<th>Initial cost (US$ million)</th>
<th>Actual cost (US$ million)</th>
<th>Cost increase (US$ million)</th>
</tr>
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<tbody>
<tr>
<td>Government contribution</td>
<td>40.7</td>
<td>68.5</td>
<td>27.8</td>
</tr>
<tr>
<td>MDTF contribution</td>
<td>33</td>
<td>34.4</td>
<td>1.4</td>
</tr>
<tr>
<td>MDTF- North Sudan</td>
<td>20</td>
<td>20.0</td>
<td>0.0</td>
</tr>
<tr>
<td>MDTF- South Sudan</td>
<td>13</td>
<td>14.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Total</td>
<td>73.7</td>
<td>102.9</td>
<td>29.2</td>
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16. The household surveys of 2009 and 2014 were mainly financed by the African Development Bank. The AfDB approved two projects, supporting the 2009 and 2014 household surveys and amounting to US$ 3 million for each survey. The government provided counterpart funding including staff, salaries, and overheads. In fact, government funding for surveys revives a lower priority and becomes an easy target for budget-cutting as evident in the few household-based surveys conducted.

Weak capacity to collect, manage and disseminate data

17. The experience of the 2008 population census indicated that the national statistical system did not have the capacity to manage the census. The initial proposal arranged for the Central Bureau of Statistics (CBS) in Northern Sudan and the Southern Sudan Center for Census, Statistics and Evaluation (SSCCSE) to lead implementation, with support from the United Nations Office for Project Services (UNOPS) which was subcontracted for procurement of equipment and vehicles. However, following early delays in implementation and an institutional and fiduciary assessment that concluded that neither CBS nor SSCCSE had the capacity necessary to administer the census. Thus, it was decided with the agreement of the Government of National Unity (GONU and the Government of Southern Sudan (GOSS), that the United Nations Fund for Population Activities (UNFPA) would directly manage the activities in both northern and southern Sudan. Because of delays in the startup period, dates for the actual conduct of the Fifth Population Census slipped from November 2007 to May 2008. Furthermore, activities to disseminate and promote further analysis of the basic population results were significantly delayed (Annex Table 1).

18. The capacity to disseminate and promote data use could also be strengthened. The experience of the 2009 and 2014 household surveys showed the survey results were also not timely disseminated. The results of the 214 survey were released in late 2017; a three-year delay, limiting their use. A similar delay was experienced in releasing the results of the 2009 survey. International experience indicates promoting data use are as important as producing data. Support activities that make data more central in policymaking through targeted dissemination and communication efforts help inform the public on the results of a census or survey.

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4 Consequently the World Bank poverty assessment of the 2009 survey was concluded in 2014 (World Bank 2014 and the assessment the 2014 survey was conducted in 2019 (Poverty and Inequality in Sudan 2009-2014).
5 For example, providing the public with information on service delivery components that are essential for quality services in health and education may generate attention in local media.
and promote greater access and transparency of data as a pathway to mitigate political economy constraints and raise the public profile for statistics. The 2018 World Bank report on Data for Development concludes that the World Bank has been more effective at fostering client countries’ data production capacity, and less effective in promoting data use. Thus strengthening core data collection and dissemination is key for evidenced-based policymaking. However, the limited funding for long-term investments in training statistical staff adversely affected their capacity to promote dissemination and data use.

19. Sudan ranks 33 out of 48 Sub-Saharan African countries in terms of the World Bank’s statistical capacity indicator (SCI). Progress in improving the statistical capacity is monitored through a specially developed indicator, the SCI indicator, which is published annually by the World Bank. The SCI is a composite score assessing the capacity of a country’s statistical system. It is based on a diagnostic framework assessing the following areas: methodology; data sources; and periodicity and timeliness. Countries are scored against 25 criteria in these areas, using publicly available information and/or country input. The overall Statistical Capacity score is then being calculated as simple average of all three area scores on a scale of 0-100.

Table 4: Statistical Capacity in Sub-Saharan African Countries and Aggregate Country Groups

<table>
<thead>
<tr>
<th>Country/country group</th>
<th>Statistical Capacity Indicator Level (scale of 0-100)</th>
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<tbody>
<tr>
<td>Somalia, Equatorial Guinea, Eritrea, Gabon</td>
<td>20-40</td>
</tr>
<tr>
<td>Uganda, South Africa, Burkina Faso, Malawi, Nigeria, Mozambique, Rwanda, Mauritius</td>
<td>70-84</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>59</td>
</tr>
<tr>
<td>Low income</td>
<td>62</td>
</tr>
<tr>
<td>Middle income</td>
<td>75</td>
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20. Sudan scores low in many of the 25 criteria of the SCI reflecting methodology; data sources; and periodicity/timeliness. For instance, SCI asks: “Does the national statistical office have a calendar indicating the release dates of statistics on its website?”; “Is the annual statistical yearbook or statistical abstract available online?”; “Is the survey report published on the website?”; “Can census data be downloaded”. Relative to good statistical practice, Sudan scored low. The Central Bureau of Statistics does not regularly announce the release of data. The latest statistical yearbook was published in 2018 but covering data pertaining to 2016. As noted, the 2009 and 2014 household survey results were significantly delayed.

Diffuse responsibilities and fragmentation

21. One reason for the inadequate spending is that it is often not clear who is accountable for statistics in Sudan. Officially, the Central Bureau of Statistics is part of the Ministry of Cabinet Affairs organization structure. But it is one of several activities for which the minister of the Ministry of Cabinet Affairs is responsible. With the transition, the minister is facing daunting challenges pertaining to key government priorities including achieving sustainable peace, ensuring a smooth transition to democracy, and maintaining systematic and regular monitoring of government performance to ensure responsible ministers maintain a continual focus on the priorities. As the census or survey is financed by a donor, it is often assumed that the donor agency is responsible, further diluting the accountability of the statistics staff to the domestic

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policymaker. Furthermore, surveys and data gathering exercises, especially when they are donor-funded, are not especially well coordinated. Sometimes you have two surveys on similar topics such as the Multiple Indicators Cluster Surveys supported by DFID and UNICEF and the 2009 and 2014 household budget surveys funded by AfDB. Different initiatives use different methods, making comparability across time or even between states difficult.

Statistics are fundamentally political

22. The underlying cause is political considerations/ political sensitivity of these statistics. For example, the 2014 household budget survey took place during an election year and a politically unstable period, and there was a tendency to keep the results under wraps. Worse still, there is a tendency to drag feet in completing the survey. The survey started in November 2014; however, the results of the survey were revealed in late November 2017. More importantly the raw data of the household survey are almost never publicly available (so there is little chance of being able to replicate them). While poverty estimates assess whether people are better off today than they were five years ago, the 2014 poverty estimates utilized a poverty line based on a reduced 2100 kilocalories of food per person per day instead of the 2,400 kilocalories used in 2009 (Central Bureau of Statistics). Based on the 2009 National Baseline Household Survey (NBHS) the poverty incidence was estimated at 46.5 percent, while the poverty incidence was estimated at 36.1 according to the 2014/15 National Household Budget and Poverty Survey (NHBPS), i.e. a ten-percentage point decline in poverty rate. However, these poverty estimates are not comparable over time and the Central Bureau of Statistics noted in its 2017 report, “The poverty estimates from the NHBPS 201/15 survey are therefore not comparable with those from the 2009 NBHS.” page 57.

23. It is a tragedy that we cannot be sure of what happened to poverty between 2009 and 2014; a period characterized by meager or even negative economic growth. Following South Sudan secession, the average economic growth dropped significantly from 5.1 percent in 2001-2010 to -1.3 percent in 2011-2019 with negative growth rates in 2011 and 2012, where GDP Growth was -0.3 and -2.2, respectively. The different survey methods rendered comparability across time of whether people were better off in 2014 than were in 2009 difficult. This highlights the need to review in depth the basic data and methodology underlying the country’s poverty estimates.

24. Given the incomparability, the World Bank produces its own poverty estimates for 2009 and 2014 for Sudan that are higher than the government’s. When poverty was measured against the World Bank’s international poverty line for lower middle-income countries (US$3.2 per capita per day), 46.1 percent was deemed poor, rising from 21.4 percent in 2009. Also, between 2009 and 2004 extreme poverty (based on the international poverty line of US$1.9 per person per day) also increased in urban areas. Poverty estimates vary markedly across Sudan’s localities, ranging between a head account of 77 percent in Mukjar Locality, Central Darfur State and 5 percent in Dalgo Locality, Northern State (World Bank 2020).

25. These poverty estimates differences are significant and have been at the center of much debate both within the country and among development partners, highlighting the importance of comparable surveys/ statistics with harmonized methods and standards in line with international experiences. While some variation in the estimates is to be expected as a result of differences in methodology and sampling,
reaching an understanding of what drives these differences has been difficult. The lesson learned points to the importance of comparable surveys/statistics with harmonized methods and standards, and increased cooperation among institutions in line with international standards. This approach is consistent with international demand such as from the African Union’s Strategy for Harmonization of Statistics in Africa (SHaSA). The strategy exploits economies of scale of sub-regional approaches including peer-to-peer learning, software licenses and training.

26. **The World Bank has also developed a strategy to promote the harmonization of statistics by introducing international standards and to facilitate the introduction and scaling of innovations in data collection, storage, measurement and analysis in low income countries.** The strategy is implemented through a regional approach that started in 2015 with a regional project to strengthen the capacity of the national statistical offices of Ghana, Liberia and Sierra Leone. The core social and economic statistics to be generated include: a set of poverty and a core of basic socioeconomic indicators using Living Standard Household Surveys produced every three years; micro-data from Living Standard Household Surveys made publicly available; basic labor statistics produced every six months; interim national accounts released in six months; and a national Consumer Price Index (CPI) with national coverage compiled monthly and released to the public (World Bank 2019).

27. **The situation is not much better in other African countries, highlighting the importance of overcoming Africa’s statistical tragedy.** Over half the African countries have poverty estimates that are not comparable over time. For only 33 percent of the countries are the data comparable. The remaining 16 percent only have one estimate. For example, due to conflict and other difficulties, Guinea-Bissau had only one household survey and hence only one estimate of poverty due to conflict and other difficulties (Devarajan 2013, page 14). Whereas the developing world has an average of 3.9 estimates of poverty since 2001, Africa has, on average 1.7. This highlights the necessity of strengthening Africa’s statistical systems.

28. **The periodic fifth census of 2003 was postponed to 2008 for political reasons.** Following multiple years of peace negotiations between the government of Sudan and Sudan’s People Liberation Movement/Army (SPLM/A) the two parties signed on the 9th of January 2005 the Comprehensive Peace Agreement (CPA); ending Africa’s longest civil war that lasted for more than 50 years. Sudan accepted giving South Sudan the right of self-determination, and a referendum was scheduled to be held, following the 5th population census. After significant delays, the census was conducted in 2008 in a highly politicized environment, received high momentum by the international community (the UN and donors). A technical backstop was provided by UNFPA, by establishing two census support units at the two statistical offices in the north and south, included high level international and national technical expertise. GIS technology was applied to exactly determine the boundaries and fix the enumeration areas.

29. **The 2008 population census met key provisions of the 2005 Compressive Peace Agreement and complied with the constitution.** According to article 215(1) of the 2005 Constitution: “A population census throughout the Sudan should be conducted and completed by the end of the second year of the interim period (2005-2010)” The implementation of a population census—a prerequisite to holding a referendum on unity between Northern Sudan and Southern Sudan—was an important immediate objective. By achieving its immediate objective of producing reliable demographic data, the census results provided the data base to go ahead with 2011 referendum on unity. In a highly politicized referendum environment, the census focused on residency/nationality aspects, raising seven questions (out of the total of 54 questions) on
nationality, regional groups, region of origin, place of birth, usual residence, years lived in usual residency and so on in preparation of the referendum.  

30. **Similarly, the second population census was delayed for seven years and conducted in 1973, following the 1972 Addis Ababa peace agreement between the government and the Southern Sudan Armed Movement. The role of politics in the 1973 population census rendered its results as not trustworthy.** President Nimeiri did not wait for the population census results to be released by the Central Bureau of Statistic, following the peace agreement between the Government of Sudan and Southern Sudan leaders in Addis Ababa, Ethiopia, that gave South Sudan self-autonomy. The President announced that the size of the Sudanese population census was 22 million, while initial estimates by the Central Bureau of statics amounted to 14 million. These conflicting estimates, poor as they may be, are more than just numbers – they have real-life consequences in terms of costs and benefits to various political players, and as a result, it is unlikely to be the case that these statistics are finalized without at least some degree of negotiation.  

31. **The political influence of leaders over the production of statistics is evident in other African countries.** For example, two years ago the Tanzanian government wrote a law (since amended) under which people could be locked up for three years for disputing official statistics. The government has arrested an opposition member of the parliament for questioning GDP numbers and closed a newspaper for publishing accurate exchange rates. Jerven (2014) examined the impact of politics on agricultural statistics and input subsides in Nigeria, Malawi. and India.  

32. **Because accurate numbers matter so much, donors spend almost $700m a year helping poor countries collect them.** The low-quality statistics and low capacity to generate statistics prompted a wide range of interventions, ranging from the development of national statistical strategies, statistics advocacy organizations, development of the United Nations’ Data Revolution Initiatives, celebrations of “Statistics Day”, international declarations, and actions plans to raise funding for statistical capacity building through many vehicles such as Trust Fund for Statistical Capacity Building grants or STATCAP credits and grants managed by the World Bank. For example, the objective of the current World Bank STATCAP credit for Sudan (US$4.9 million) is to strengthen the capacity of CBS to monitor social indicators.  

33. **Sudan developed its National Statistical Development Strategy that is ambitious and highly dependent on development partners’ assistance.** The international community urged African countries to develop their own National Statistical Development Strategies (NSDS), and that all statistical activities should be consistent with the NSDS. With UNDP support, Sudan developed its NSDS covering the period 2012-2016. Sudan’s NSDS is very ambitious with 10 strategic goals, 64 indicators and 60 actions. The budget was estimated at SDG 88,090,621 (the equivalent of US$40 million). The government would mainly cover recurrent expenditures including salaries, overheads and allowances plus the capital expenditure to cover part of the strategy cost. Development partners would cover the bulk of the capital cost. Other costs to development partners would be in the form of technical support. However, the low level and inconsistency of government budgetary contributions to statistics as well as erratic and short-term donor support, directly results in inconsistencies in data collection activities that has significant implications for data quality.  

34. **There is an urgent need to further raise the public profile for statistics.** The National Statistical Development Strategy (2012-2016) has not been reviewed and progress toward achieving its objectives has not
been fully assessed before updating the strategy. Further efforts need to be undertaken that make data more central in policymaking through targeted dissemination and communication efforts to help inform the public on the strategy and its results and promote greater access and transparency of data. By making data open and accessible, the public will see their value—and the value of timely and up-to-date data—which could put pressure on policymakers to properly fund and carry out data collection.

35. **The development of an updated National Statistical Development Strategy, a credible signal of political support, should be accompanied by reforms that translate in enhanced statistics.** Developing an NSDS through a participatory and consultative processes involving a wide range of stakeholders and adoption by the cabinet may require 12–18 months and is expected to lead to a strategy that “provides a country with a vision of the development of statistics and a detailed, costed action plan over a period of 5 to 10 years that covers the production of all official statistics” (Paris21 2015). The effort to prepare an NSDS should be accompanied by efforts to improve the quality of statistics, enhancing capacity through training and workshops. In addition, efforts to improve capacity through competency-based hiring, competitive salary and performance-related pay should be pursued. 12 Political leaders interested in reforms should send credible signals to show their support. For example, to enhance its independence, the Central Bureau of Statistics can be given sufficient budget to cover the production of all statistics, and the CBS director can be appointed by an independent statistics board composed of members who are not presidential appointees. Another credible signal is making data accessible and avail sample frames to allow researchers, civil society, private sector and other stakeholders to collect representative data and expose CBS to competition.

**Lessons Learned**

36. **As part of the transition process and as a key input to sensitive electoral and resource sharing negotiations, the conduct of a new census is a politically sensitive exercise, highlighting the necessity of reducing leaders’ power over data production and ensuring quality.** The conduct of the Fifth Sudan Population Census of 2008, a prerequisite to holding a referendum on unity between Northern Sudan and Southern Sudan, is one of the key benchmarks of the Comprehensive Peace Agreement and is specifically provided for in the Interim National Constitution as a crucial element in preparing for the elections. The experience of the 1973 population census highlights the importance of limiting the influence of the president over data production. Similarly, the upcoming population census is expected to be a major element of the agreed program of nation-wide peace negotiation activities and upcoming elections and should help the various stakeholders decide upon the division of the proceeds of natural resources, and thus contribute to a lasting peace. However, the conduct of a new population census in this highly politized political environment requires reducing the leaders’ power over the production of data and insisting on quality data.

37. **Costs and time requirement to implement a population census/survey may be higher and longer than originally expected.** As a vast country with its own peculiarity of a diverse ethnicity, poor infrastructure and insecurity in some of its parts renders the implementation of population census a daunting task that requires labor and travel intensive efforts. The experience of implementing the 2008 population census indicated a 40 percent increase in the cost than planned. The additional states and localities created after the 2008 population census resulting in a total of 18 states and 189 localities would imply additional cost. The 2009 and 2014/15 household surveys experienced significant delays.

38. **Promoting data use for evidence base policy making is equally important as producing data.** Though Sudan’s data production capacity needs to be improved, it is relatively better than the capacity to

12 Of the 30 countries that implemented NSDSs in 2013 and 2014, 9 experienced a capacity improvement as measured by the statistical capacity Indicator (SCI), 14 experienced a drop in SCB indicator scores. In 7, the SCB indicator scores did not change ((Hoogeveen and Nguyen (2019). However, a year is too short to expect statistical strategies to yield results.
promote data use. The experience of the 2008 population census and the 2014/15 household survey reflected limited dissemination and communication efforts to make data more central in policymaking.

39. **Comparable surveys/ statistics with harmonized methods and standards, and increased cooperation among institutions in line with international standards would ensure consistent poverty estimates.** Comparable poverty rates can be prepared once a comparable poverty line is generated and a unified, harmonized dataset is prepared.

### IV. Conclusions and Recommendations

40. **Population censuses are out of date, and household budget surveys are infrequent/incomparable and hence of limited use.** The latest population census was conducted in 2008 whereas population censuses are generally conducted once in a decade, and in a few countries, censuses are conducted once in five years. Household budget surveys are also infrequent and incomparable over time. The incomparability of household surveys limited their use.

41. **The tragedy is that the transitional government is undertaking major reforms and preparing/implementing its PRSP without timely and reliable poverty estimates.** The latest poverty estimates based on the 2014 National Household Budget and Poverty Survey indicated a reduction in the poverty level compared to the 2009 estimates derived from the National Baseline Household Survey. The estimated poverty decline between 2009 and 2014, amounting to 10 percentage points, took place during a time of meager economic growth including negative GDP growth in 2011 and 2012. However, we cannot be sure that poverty declined between 2009 and 2014 as poverty estimates and household surveys are not comparable over time.

42. **The World Bank produces its own poverty estimates for 2009 and 2014 for Sudan, a reflection of its unease with the government’s estimates.** These are overall higher than the government’s and comparable over the period 2009 and 2014. Bank’s estimates are based on international poverty line rather than the national poverty line developed by the Central Bureau of Statistics. The conflicting World Bank-government poverty estimates reflects the poor state of statistics in the country. This calls for reviewing in depth the basic data underlying the country’s poverty estimates. For example, population censuses that provide the basis for sampling frame for the implementation of much-needed household budget surveys are out of date.

43. **The statistical tragedy can be explained in terms of lack of financial resources, weak capacity, a lack of coordination of statistical activities.** Whenever there is an effort to increase the frequency of surveys or a census, funding becomes a binding constraint. The Statistical Capacity Index is lower for Sudan than the average for Sub Saharan and low-income countries. The lack of local capacity in planning, managing, and monitoring such a massive and complex 2008 population census, the major involvement of development partners (e.g. UNOPS, UNFPA and Word Bank) was unavoidable. With hindsight, the development partners should have more carefully considered whether the government could and/or would fund the necessary staff capacity building right from the start; this did become a constraint during the conduct of the 2008 census. Dissemination efforts to stimulate data utilization by government and citizens were limited.

44. **However, the underlying cause is political; low level of funding and statistical capacity are the consequences of a lack of political support for quality statistics.** The lack of political support adversely affects data availability and quality. The results of household surveys are almost never timely available. The 2014 household survey took place during an election year and the survey results were released in late 2017. But the raw data of the survey were almost never publicly available. Similarly, the results of the 2009 household survey were delayed as the survey coincided with an election year. The raw data of the survey are almost never publicly available. Worse still, the 2009 and 2014 surveys are incomparable and therefore of limited use.
Comparable poverty estimates indicate an increase in poverty during 2009 and 2014. Such estimates that are unsuitable to political leaders’ goals are altered/delayed or that choices are made between conflicting estimates on political grounds. This limits the demand for quality data. In turn this lack of demand for data lead to fewer resources available for data production.

45. **Population censuses were also subjected to political considerations and political leaders influence.** Because of their possible implications for resource sharing, elections, and the country’s political future, population censuses were subjected to a complex political negotiation process. The periodic fifth population census was delayed for five years and implemented in 2008 due to peace negotiations between the government and the Sudan People Liberation Movement Army. Similarly, the second population census was delayed for seven years and implemented after the 1972 Addis Ababa Peace Agreement. The influence of the president over the 1973 population census data production highlights the importance of taking politics out of statistics and limiting the influence of political leaders over statistics.

46. **Producing poverty profile on regular basis with the view to improve national poverty monitoring and evaluation systems is crucial.** The country needs to strengthen its capacity in household survey data collection, statistical analysis and research to monitor poverty developments in the country. The demand for better statistical data in Sudan is growing, with the need for monitoring the implementation of the Poverty Reduction Strategy Paper (PRSP). Most of the needed data would have to be produced by the Central Bureau of Statistics (CBS), financed and managed by the government in collaboration with development partners. However, the capacity of the CBS should be further enhanced to meet data and analysis needs. Measures are needed to change this situation with the view to strengthen the capacity of the CBS to improve national poverty monitoring and evaluation systems; an important part in the Sudanese poverty reduction strategy, especially producing poverty profile on regular basis.

47. **In terms of policy recommendations, securing political support for quality statistics is vital for effective implementation of statistical reforms:**

- **Promote greater awareness and transparency and raise the public profile for statistics to mitigate political economy constraints.** Support activities that make data more central in policymaking through targeted dissemination and communication efforts to help inform the public on the result of statistical operation and promote greater access and transparency of data as a pathway to mitigate political economy constraints. By promoting greater openness and transparency of statistics, the public will see their value—and the value of timely and up-to-date data—which could put pressure on policymakers to provide political support for properly fund and carry out data collection identified in the updated Sudan’s National Statistics Development Strategy that is expected to guide statistical products and raise the public profile for statistics.

- **Improve data for evidence base policy making by strengthening institutional capacity to deliver on the production of core data that is of high quality, accessible and timely.** The availability of core data should include disaggregation by state and locality, where appropriate, and with a focus on fragile and conflict settings where robust data is often limited. The need for new core data is critical for effective policymaking based on up-to-date evidence. The UN and development partners should support the implementation of the new population census and household-based survey to update information last collected in 2008 and 2014, respectively. The new census and household -based survey will help to update many indicators across various sectors. The UN and development partners’ support should not be limited to the technical preparations for the new census and survey, but also to supporting actual data collection and contribute to quality enhancement.
References


vii Eljack, Hagir and Awatif E. Musa. (2013). Sudan Experience in Conducting Population Censuses, Faculty of Mathematics and Statistics, University of Alneelain, Sudan-Khartoum


Annex Table 1: Population Censuses conducted in Sudan, 1955/56---2008

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