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# National Nutrition Information Systems | Nigeria Case Study

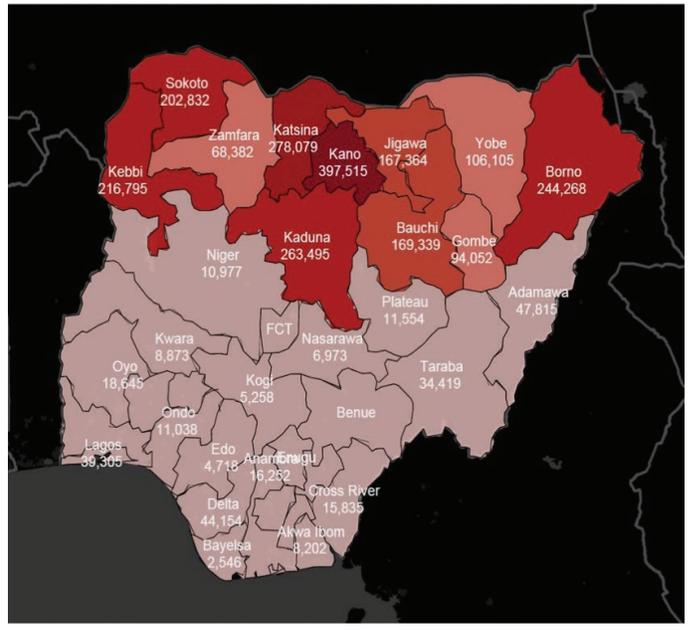
## INTRODUCTION

As one of the most populous nations in the world, Nigeria faces challenges in monitoring progress toward national nutrition goals. Until recently, the health system suffered from a dearth of reliable and timely information. This was particularly true when it came to data that was sufficiently disaggregated to provide management information at State level.<sup>i</sup>

Nigeria's National Strategic Plan of Action for Nutrition (NSPAN) 2014-2019, highlights the need to strengthen the Nutrition Information System (NIS) in the country, including conducting surveys on a more regular basis. Although the National Bureau of Statistics (NBS) and National Population Commission (NPopC) conduct national demographic and health surveys every 4 to 5 years, their frequency does not help to monitor progress on an annual basis.<sup>ii</sup>

Nigeria's experience in conducting Nutrition and Health Surveys using Standardized Monitoring and Assessment of Relief and Transition (SMART) methods on an annual basis demonstrates the potential to establish a data collection system that captures changes over time. The system focuses on reducing the cost of data collection, improving data quality, and ensuring timeliness of the survey results for improved decision making.<sup>iii</sup> Three main elements can be highlighted from this case:

i) Timeliness and quality of data are critical - the survey methodology addresses data quality assurance factors and using smartphone technology for field



**Figure A:** Burden of Severe Acute Malnutrition Among Children 6-59 months by State, 2016

data entry enables both real-time supervision and cost-effective data management.

ii) Strategic selection of key indicators - In contrast to comprehensive household surveys, SMART survey questionnaires are intentionally limited to assessing a small set of key indicators.

iii) Institutionalization - while supported by development partners, the operational side of the Nutrition and Health survey is fully housed within a government institution, the National Bureau of Statistics, ensuring institutionalization of the approach and longer term sustainability.

## USE OF DATA AND INFORMATION

### For timely assessment of critical child malnutrition levels

Nigeria has one of the highest prevalence of acute malnutrition in the world. Nutrition and Health surveys using SMART methodology were initiated as part of the response to the Sahel crisis in 2010 and covered 8 states of northern Nigeria with the objective of monitoring the situation and address challenges in a timely manner. The survey was conducted twice a year during the hunger gap and post-harvest season to measure the nutritional status of children under five years of age and women of reproductive age and estimate crude and under-five mortality rates. Since 2010, eight surveys were conducted in the same geographical area, providing information on trends in severe acute malnutrition.<sup>iii</sup>

### For advocacy for adequate funding

UNICEF uses the data showing the high prevalence of acute malnutrition in the northern states for state level advocacy initiatives to increase government funding for expanding nutrition programme coverage. Using each survey's results, they calculate the estimated burden for each state and then calculate the number of lives that could be saved if the government invests a certain amount of money. UNICEF also uses this information to calculate the annual caseload – e.g. in 2016 there were 2.5 million children with severe acute malnutrition – to raise funds for programming in the region to reach as many of these cases as possible.

### For verifying quality of administrative data

Some stakeholders were surprised by low coverage results reported by the Nutrition and Health surveys and did not initially trust the results found by the SMART survey methodology. However, triangulation of results showed similar trends. Ultimately, this data has really helped to address program issues and address the key question of whether health workers are reporting what is actually happening on the ground.

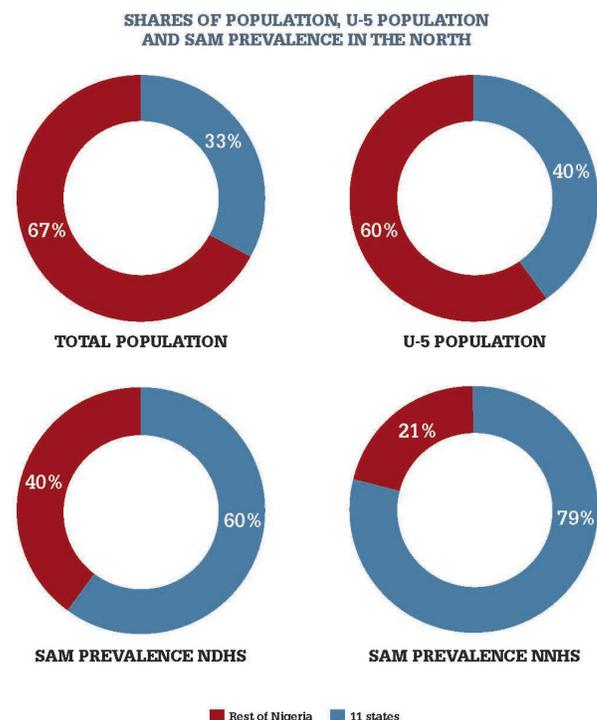
### For tracking performance of the health system

Annual national-level Nutrition and Health surveys also meet a vital need of the Saving One Million Lives Program for Results for an independent and reliable

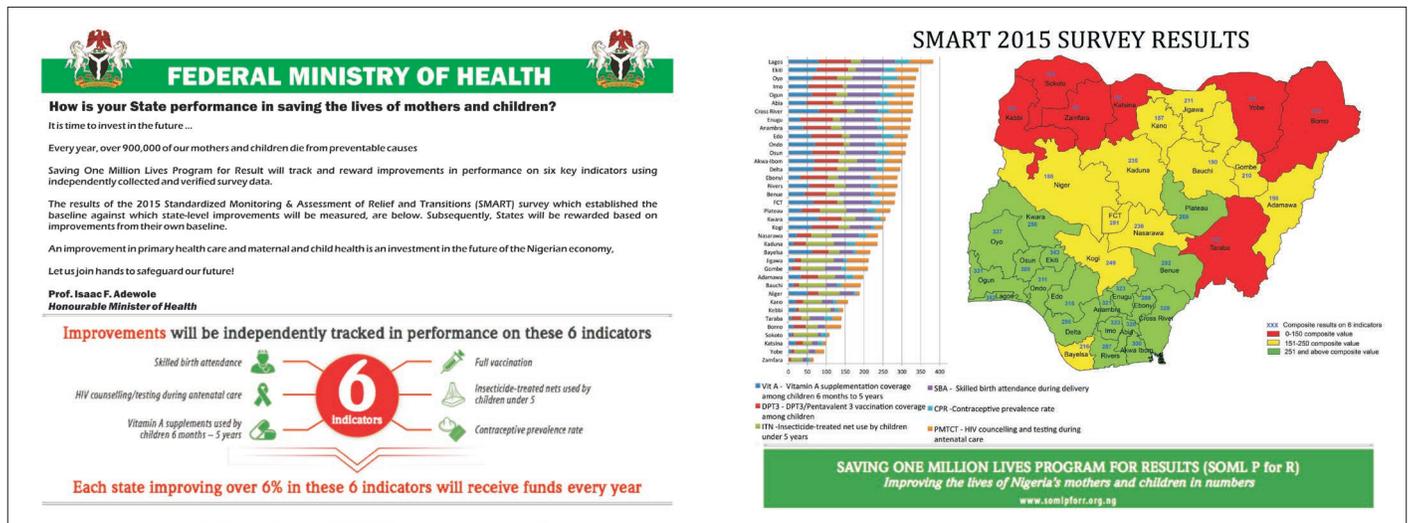
data collection system to monitor the performance of the health system. Launched in 2012, the Saving One Million Lives (SOML) initiative seeks to increase the utilization of high impact reproductive health, child health, and nutrition interventions in the country. The World Bank-funded Program for Results will disburse funds to states based on annual results achieved, using six performance indicators<sup>iv</sup> identified as key to strengthening the health system in the country. The 2015 Nutrition and Health survey results were used to establish the baseline against which state-level improvements will be measured.<sup>ii</sup> The 2015 state-level estimates for key health and nutrition indicators were used to populate Child Survival Scorecards that will be used by states to monitor their Saving One Million Lives progress.

The Federal Government will also be rewarded for their performance related to improving monitoring and evaluation systems and data utilization. Key performance indicators include conducting annual SMART and health facility surveys in all 36 states and publicly disseminating these results, publishing them on the internet in a nationwide newspaper.<sup>v</sup>

**Figure B:** NNHS survey results showing the disproportionate burden of severe acute malnutrition in the northern states (Source: NNHS 2013)



**Figure C:** Publication of SMART 2015 survey results in national newspaper



## THE PROCESS

The Health and Nutrition Survey was first launched in 2010 by the NBS and NPopC with the support of UNICEF. The survey was intended to assess the nutrition and health situation at the state level, complementing MICS and DHS data and providing data to populate state scorecards for advocacy. From the beginning, the SMART survey was carefully positioned to distinguish it from the other big surveys, with an emphasis on high quality nutrition data collection and results produced in a short period of time, creating a unique value proposition to donors and government stakeholders.

The survey method is a cross-sectional household survey using two-stage cluster sampling to provide results representative at the state level. The questionnaire is flexible, allowing for addition and removal of health and nutrition indicators depending on the population needs and focus of the survey. A SMART Survey Committee was created from the outset as part of the institutionalization process and is responsible for deciding each round which indicators will be included.

The first surveys initially covered eight states of northern Nigeria and were conducted once during the hunger gap and once during the post-harvest season in order to track seasonal variations in levels of child malnutrition.<sup>iii</sup> Since 2013, only one SMART survey per year is conducted. In 2014, the Federal Ministry of Health requested that the survey be expanded to all 36 states plus the Federal Capital

Territory (FCT), as they needed this information for the scorecard. The utility of the survey has increased significantly over the years and now the data is being used to guide six programmes funded by the USAID, the World Bank and in the Saving One Million Lives Initiative.<sup>iii</sup> As a result, the government is now committed to continue implementing the survey annually.

Since 2014, field data collection has been carried out using Smartphones which helps to improve data quality, enhance real-time supervision of data collection teams and obtain results in a timely manner. Data analysis is conducted within two weeks following completion of data collection and a preliminary report on the findings is produced at that time. The summary of results is available for public within four weeks period and the detailed final report is released eight weeks following completion of data collection.<sup>iii</sup>

Detailed data quality reports are included in the annex of each survey report in order to identify and avoid mistakes in the future and to consistently improve the quality of nutrition surveys. Data quality scores have improved with each survey due to a combination of technological innovations (use of smartphones, real-time monitoring of enumerators using GPS, real-time uploading of data collected) and daily standardization of anthropometric tools.<sup>iii</sup>

The experience with smartphones for the National Nutrition and Health surveys also convinced stakeholders to try using similar technology for real-time external monitoring of Maternal, Newborn and



PHOTO: UNICEF NIGERIA, 2015

Child Health (MNCH) Weeks in June 2015.<sup>vi</sup> Monitors were sent out with “smart tablets” to 2,253 randomly selected health facilities to administer standardized checklists on planning, supply management, health worker capacity and the timing of release of funds for social mobilization. Data were uploaded in real time to an online database, monitored daily by key stakeholders at the national level and the information used to take corrective actions, as necessary. The information was also used to develop state-specific score cards that were then used as an advocacy tool for engaging with Governors, State leaders and civil society.

## RECOMMENDATIONS FOR OTHER COUNTRIES

1) Work with a partner who will allow you to institutionalize the process - working right from the beginning with a government institute already involved in survey implementation was strategic for ensuring high quality surveys that were produced on time and building capacity for longer term sustainability.

2) The institutionalization of these annual surveys is also due to the demand for and the use of the information they provide by a variety of stakeholders.

- 3) The presence of a champion who is behind the process and committed to making it work has been an important factor for institutionalization.
- 4) The use of smartphones for data collection was a key factor in improving the supervision of enumerators, enhancing data quality and enabling more timely analysis and reporting of survey results.
- 5) Nigeria’s experience with SMART surveys has shown that limiting the number of indicators assessed can be helpful in making more frequent data collection cost-effective and ensuring high quality data. Think carefully about how the data will actually be used before including a long list of indicators in your survey.

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### References and Notes

- <sup>i</sup> World Bank (2015). Nigeria Program-For-Results to Support the Saving One Million Lives Initiative: Technical Assessment Report, March 31, 2015
- <sup>ii</sup> Nigeria National Bureau of Statistics & UNICEF Nigeria (2015). National Nutrition and Health Survey (NNHS) 2015: report on the nutrition and health situation of Nigeria. <http://somlpforr.org.ng/pdfs/SMARTResults%202015.pdf>
- <sup>iii</sup> UNICEF Nigeria (2015). Support the Nutrition and Health Surveys using SMART Methodology: 1st Progress and Utilization Report to the USAID, 1 January 2014 – 3 March 2015.
- <sup>iv</sup> The indicators include DPT3/Penta3 coverage, Vitamin A coverage, HIV testing during ANC, skilled birth attendant, modern contraceptive prevalence rate and use of mosquito nets.
- <sup>v</sup> Saving One Million Lives Program for Results (SOML PforR) Brochure
- <sup>vi</sup> Imohe, Annette (2016) Improving the performance of Maternal, New-born and Child Health Weeks in Nigeria through a real-time monitoring tool. Oral presentation at MN Forum, Cancun, Mexico.