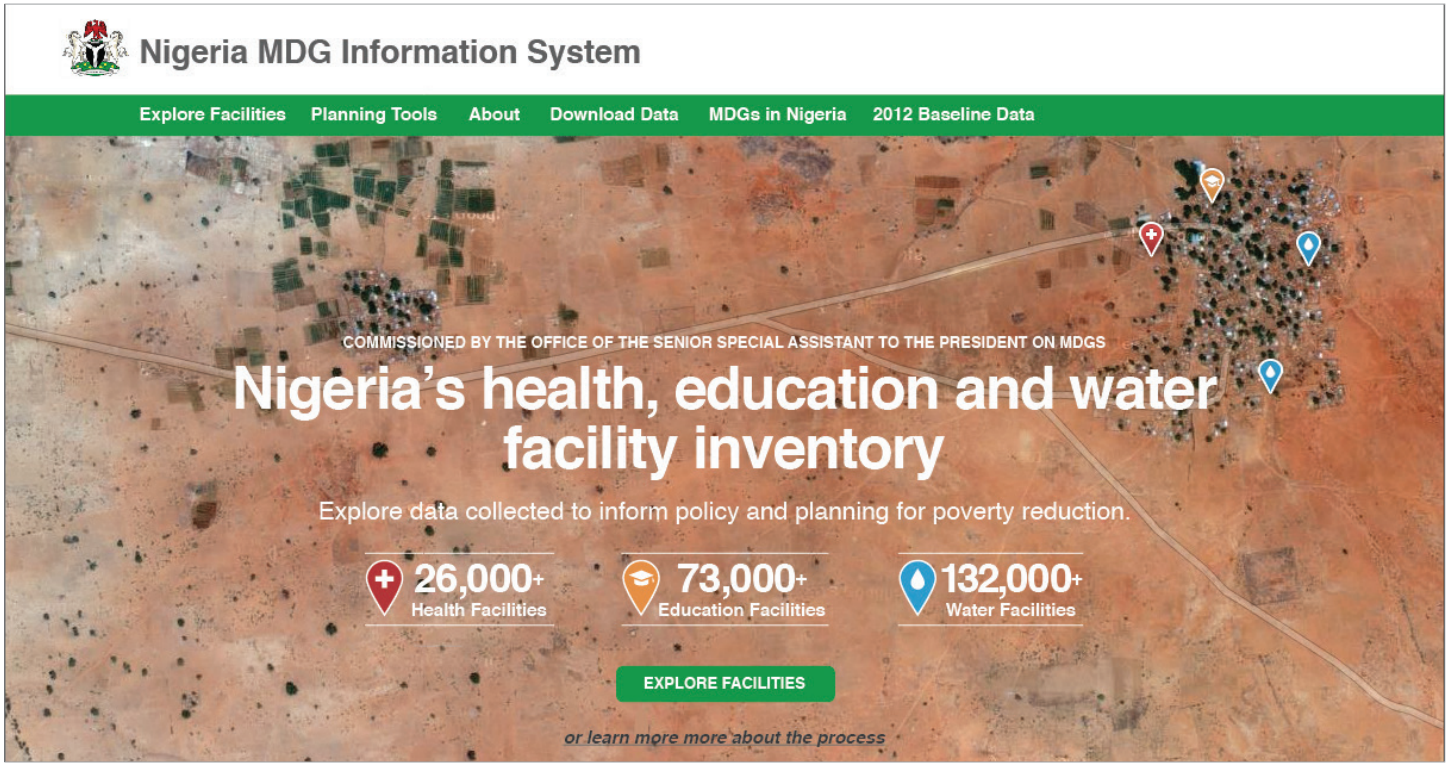
SUSTAINABLE ENGINEERING LAB.

sel.columbia.edu

THE NIGERIA MDG INFORMATION SYSTEM ALLOWS YOU TO SEE THE BIGGER PICTURE.



The Nigerian Government has committed $1.2 billion USD to achieve the Millennium Development Goals. In an effort to regulate and most effectively use this funding, the Office of the Senior Special Assistant to the President on the Millennium Development Goals (OSSAP-MDGs) created the Conditional Grants Scheme (CGS). Through this scheme, matching grants are given to Local Government Areas (LGAs) to be used towards reducing poverty and improving education and public health.

In order to support the CGS, and as part of their goal to promote the use of data in the local planning process, OSSAP-MDGs in partner with the Sustainable Engineering Lab, undertook a rigorous, geo-referenced baseline facility inventory across Nigeria spanning from 2009 to 2011 with an additional survey effort to increase coverage in 2014. The data collected informs local, state, and federal interventions aimed at closing gaps and achieving the MDGs. The end result is the Nigeria MDG Information System (NMIS), a comprehensive and detailed facilities inventory that houses all of the data collected.

nmis.mdgs.gov.ng

Technical Assistants using their Android phones during the practical on-the-ground data collection exercise at Dobi Primary School, Gwagwalada LGA, and Federal Capital Territory, Nigeria. (Photo Courtesy of Angelique Mahal)

Data gathering

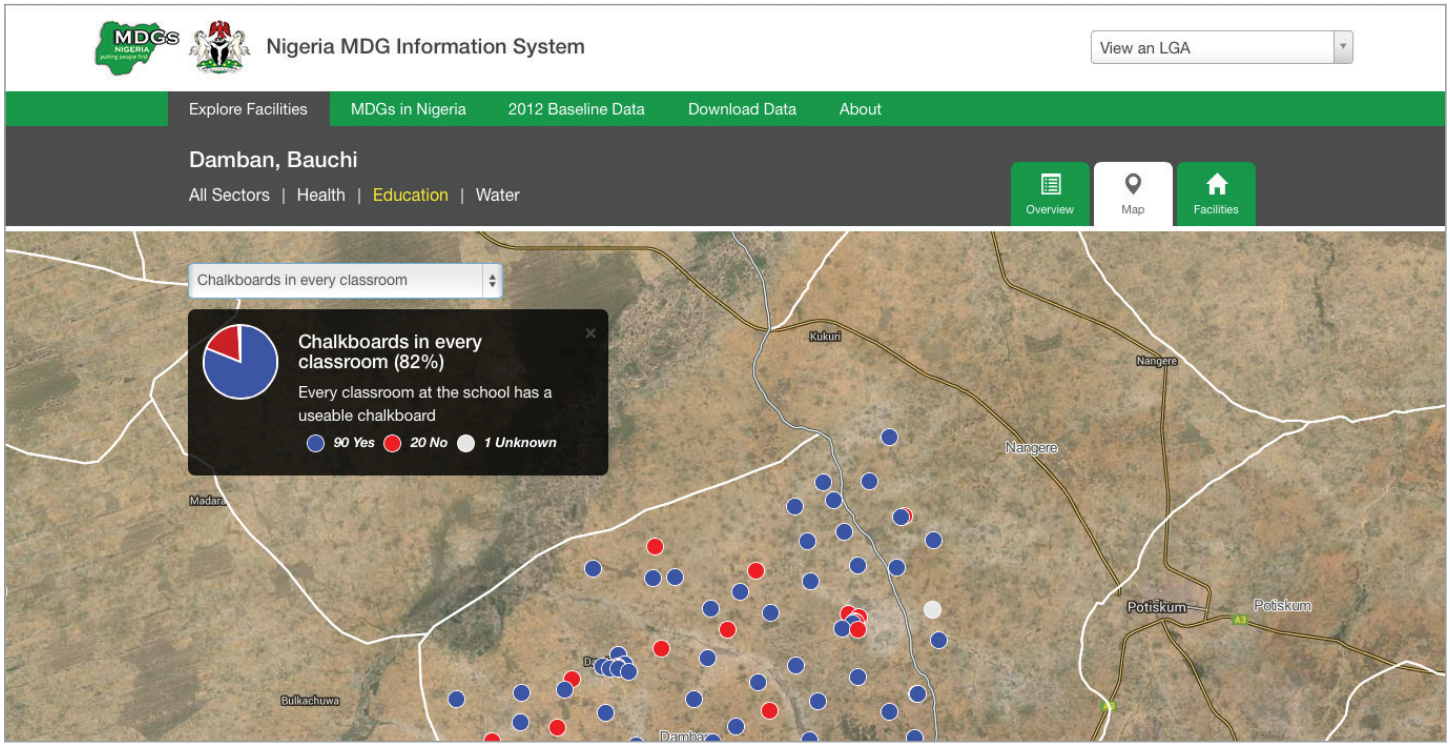
Gathering data for NMIS was an iterative process, involving 3 separate surveys and collections. Enumerators were trained to collect data on Android-based smartphones using *formhub*, a tool specifically developed by SEL to provide fast, flexible and reliable mobile data collection, even while offline.

Before each survey round, experts thoroughly discussed content, wording, and intention for every question, revising any necessary. SEL provided training and support for enumerators before and during the collection process. After each round, a period of data cleaning was followed by substantial analysis, which helped refine survey methodologies for future data collection efforts.

In Spring 2014, the Core Indicator Survey was completed to “mop-up” the facilities not surveyed during the baseline data gathering effort in 2009-2011 (both missed facilities as well as those newly built). This is the most streamlined survey to-date. In it, SEL reduced the total number of questions significantly, refined questions with difficult or unfamiliar wording and removed redundancies. We focused on data points and indicators that have the most impact on planning.

Lessons learned

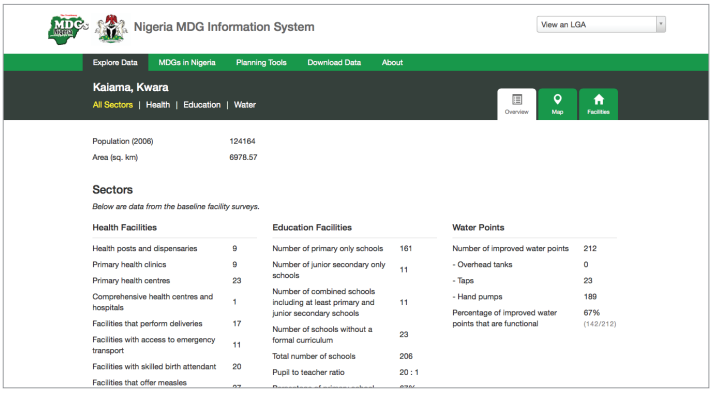
- Smaller, more-focused surveys improve data quality
- Remove unfamiliar and sector specific wording from survey questions
- Use a test-based training of enumerators to create content retention



Education map view displaying number of schools with chalkboards in every classroom in Damban, Bauchi

Data Available on NMIS

The data collected and found on NMIS includes geo-location, type of facility, equipment, services offered, staffing, functionality and many other important parameters. Users can view critical indicators of progress for health, education and water of an entire Local Government Area, filter content by sector, view a map of facility locations or get an in-depth look at each facility. NMIS highlights specific indicators used to inform decisions on how to bridge gaps to achieve goals on a number of levels, local to federal.



Kaiama LGA overview

Hospital in Akwanga LGA in Nasarawa State.

Student Eucharia Ekwealor in the newly renovated Christ the King College classroom block, Umuem, Anambra West LGA (Photo Courtesy of OSSSAP-MDGs)

Vision

NMIS has proven to be an invaluable planning tool for local governments areas. It has already aided interventions throughout the country and will continue to help improve the lives of Nigerians. In Summer 2014, OSSAP will take this initiative further and open the data to the general public. The hope is to encourage and help other organizations better plan future infrastructure and move Nigeria closer to achieving the MDGs. It is designed to be used by planners, researchers and the broader global development community.

Partners

MDGs NIGERIA putting people first

Nigerian Office of the Senior Special Assistant to the President on the Millennium Development Goals (OSSAP-MDGs) and the Earth Institute are partnered to support Nigeria in meeting the 2015 education and health MDGs and to develop the institutional capacity of the Conditional Grants Scheme (CGS) team at OSSAP to distribute and support grants for health and education to Local Government Areas (LGAs) throughout the country.

THE EARTH INSTITUTE
COLUMBIA UNIVERSITY

The Earth Institute and the School of Engineering at Columbia University are the world's leading academic centers focused on addressing the challenges of global sustainable development. In addition to mobilizing the sciences, education and public policy to create sustainable programs abroad, EI also provides multi-sector policy advice to governments, the United Nations and NGOs on issues related to sustainable development and the Millennium Development Goals. The Sustainable Engineering Lab at The Earth Institute brings together a diverse set of talents who work in collaboration to engineer solutions to global development challenges. The team consists of international development experts, faculty, engineers, designers and data analysts.