

SENIOR GIS OFFICER – PUBLIC HEALTH UNIT NIGERIA

(Reference: 21/NGA/SGISO01)

BACKGROUND ON IMPACT AND REACH

IMPACT Initiatives is a humanitarian NGO, based in Geneva, Switzerland. The organisation manages several initiatives, including the REACH Initiative. The IMPACT team comprises specialists in data collection, management and analysis and GIS. IMPACT was launched at the initiative of ACTED, an international NGO whose headquarter is based in Paris and is present in thirty countries. The two organizations have a strong complementarity formalized in a global partnership, enabling IMPACT to benefit from ACTED's operational support on its fields of intervention.

REACH was born in 2010 as a joint initiative of two International NGOs ([IMPACT Initiatives](#) and [ACTED](#)) and the United Nations Operational Satellite Applications Programme ([UNOSAT](#)). REACH's **purpose** is to promote and facilitate the development of information products that enhance the humanitarian community's decision making and planning capacity for emergency, reconstruction, and development contexts. REACH facilitates information management for aid actors through three complementary services: (a) need and situation assessments facilitated by REACH teams; (b) situation analysis using satellite imagery; (c) provision of related database and (web)-mapping facilities and expertise.

We are currently looking for a SENIOR GIS OFFICER to support and oversee our Public Health Unit in Nigeria.

Department: REACH
Position: Senior GIS Officer
Duration: 12 months
Location: Abuja/Maiduguri, Nigeria
Starting Date: ASAP

FUNCTIONS

Under the functional supervision of the head of the REACH data / GIS unit Nigeria, as well as the IMPACT Country Focal Point and ACTED Country Director, the REACH Remote Sensing and GIS Officer is responsible for application of geographic information systems and remote sensing in Nigeria including relevant aspects of research design, support in designing data collection tools, ensuring (spatial) data quality, geo-spatial and remote sensing analysis, drafting of maps, and production of web maps and information management systems.

CONTEXT / COUNTRY

Since May 2013, the Boko Haram insurgency in Northern Nigeria has destroyed infrastructure, provoked dramatic livelihoods erosion and triggered the displacement of over 2 million people, out of which 1.4 million people are in Borno State. The humanitarian situation of internally displaced persons (IDPs) is critical. Following years of conflict, the majority of the state's rural areas are empty. Much of the population has fled to the relative safety of Maiduguri, capital of Borno State, or other Local Government Area (LGA) capitals. In the IDP camps of Maiduguri and other enclaved LGA capitals, large

portions of the population are extremely vulnerable and in need of immediate humanitarian support. While some areas have recently experienced returns in proximity of main roads, the population from many LGAs is likely to remain displaced for the medium term, lacking security, shelter and livelihoods in their villages of origin. When returns are made possible, it will be essential to support returnees in rebuilding their homes, which are in many cases completely destroyed, and resuming their productive lives and livelihoods. Since April 2017, IMPACT's REACH Initiative has been deployed to Nigeria to help meeting the information needs of humanitarian actors operating in the State and build a better understanding of the needs of conflict affected populations.

POSITION OBJECTIVES AND FUNCTIONS:

1. Research Planning

- In coordination with relevant assessment officer(s), support assessment planning in line with project and program objectives and with IMPACT's research cycle and other relevant guidelines;
- Contribute to draft assessment ToRs with a specific focus on the analysis plan, and related mapping, as well as data management plan;
- Develop geo-spatial analysis of assessment areas to be used in developing daily assessment plans, field movement plans and accompanying operational maps for field teams;
- In coordination with relevant assessment officer(s), support construction of quantitative sample.

2. Remote Sensing Research Implementation

- Harmonisation of available data through Secondary Desk Review (SDR) in the form of static maps, interactive dashboards or Web Maps;
- Develop and lead GIS and Remote Sensing strategy for the mission to identify new workflows, secondary data uses, and analysis to support across REACH teams.
- Plan and develop satellite-based modeling techniques (e.g. natural hazard susceptibility and early warning) which highlight hazards and risks for the country. Understand, maintain and improve models already present and running, in order to use them upon request;
- Suggest and conduct satellite-based analyses, such as rapid damage assessments, change detections, natural disaster mapping, and time series. Such activities will be based on a variety of different sensors including multispectral optical sensors, SAR sensors and very high resolution optical sensors;
- Work with IMPACT Global GIS Specialist on new Remote Sensing research viable for the context of Nigeria.
- Liaise with IMPACT HQ on the procurement of UNOSAT services and satellite imagery.

3. GIS Research Implementation

- Ensure that collected data is properly geo-referenced, enabling the production of maps and related products;
- In coordination with relevant assessment officer(s), document all changes in data collection that lead to a modification in the agreed TORs, ensuring that the IMPACT CC and IMPACT HQ are informed and agree on the modifications.

4. Drafting of Products (Maps and Factsheets)

- Ensure accurate linkages between spatial databases and assessment data;
- Ensure the drafting of timely and accurate GIS products, which comply with IMPACT's guidelines on data visualization.
- Support in reviewing other GIS Officer's products to support in improving the mission's GIS standards and quality;
- Maintain regular communication with IMPACT HQ on progress and deadlines for GIS products.

5. External Engagement

- Link with relevant partners to consult and involve them in the GIS components of a research cycle;
- Represent IMPACT in relevant meetings/working groups and support the presentation of research findings through GIS inputs to relevant third parties in order to enhance their use and impact;
- Follow up on issues identified by partners or during meetings/working groups;
- Promote an active use of datasets, GIS products and research findings by partners and the broader humanitarian community for their decision making.

6. Capacity Building

- In coordination with the Research Manager and GIS Specialist, support the development and implementation of capacity training plans for GIS and other team members, particularly on remote sensing capacities;
- Be available to provide regular support and technical backstopping.

7. Water Sanitation and Hygiene (WASH) Infrastructure Mapping assessment support

- Support in research design and implementation of WASH infrastructure mapping assessments in Nigeria;
- Draft tools, cleaning scripts, analysis scripts, and reporting templates for assessment
- Ensure data quality through support on data tasks, such as data cleaning and analysis to uphold standards.
- Support in WASH Severity Classification (WSC) workshop and analysis.
- Liaise with WASH Sector in Northeast Nigeria, and provide technical support for the sector as well as local government agencies

QUALIFICATIONS AND EXPERIENCE

- Master's degree in Geography/GIS or a related discipline **required**;
- 3+ years of experience in GIS / Database management, preferably in humanitarian context
- Demonstrated expertise in manipulation and analysis of remotely sensed data, spatial analysis, zonal statistics, and other complex geoprocessing tasks **required**
- Demonstrated expertise in automation of cartographic and spatial analytical process **required**
- Experience writing and editing scripts and analysing complex data with R **required**; knowledge of other statistical programming languages and packages a plus;
- Knowledge in dashboard development and maintenance **required** (Shiny, Tableau, PowerBI or other)

- Thorough understanding of humanitarian data landscape an extreme asset
- Demonstrated expertise in the use of collaborative online workspaces and data storage applications
- Demonstrated experience designing and maintaining web-based GIS solutions an asset
- Experience with mobile data collection (ODK, ONA, KOBO);
- Knowledge of the Adobe Suite, particularly Illustrator and InDesign required; demonstrated ability to integrate workflow processes between ArcGIS and Adobe Suite a must
- Excellent teamwork skills required
- Demonstrated ability to build capacity in team members
- Ability to operate in a cross-cultural environment requiring flexibility a must
- Demonstrated familiarity with the aid system, and understanding of donor and governmental requirements required
- Fluency in English required
- High level of competency with Microsoft Word, Excel and Project Management Software; High level of autonomy and willingness to spend time in deep field locations away from support staff