

## GIS/DATA SPECIALIST FOR BANGLADESH

(Reference: 21/BGD/GISDS)

### BACKGROUND ON IMPACT AND REACH

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.

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

**We are currently looking for a GIS/Data Specialist to support our team in Bangladesh.**

**Department:** REACH  
**Position:** GIS/Data Specialist  
**Contract duration:** 6-12 months  
**Location:** Cox's Bazar, Bangladesh  
**Starting Date:** ASAP

### COUNTRY PROFILE

In successive waves over four decades, stateless Rohingya refugees have been fleeing to Bangladesh from Rakhine State, Myanmar, where they have suffered systematic, ongoing persecution. Since August 2017, an estimated 745,000 refugees have arrived in Cox's Bazar, Bangladesh, bringing the total number to more than 900,000. The displacement marks the latest stage in one of the world's most complex ongoing human rights crises. While they have found safe haven from persecution in Bangladesh, the Rohingya have faced new constraints on building self-reliant and dignified lives. Refugees are currently confined to 34 crowded spontaneous settlements, with limited freedom of movement, heavily restricted access to livelihoods and cash, and no provision of formal education.

As a consequence, they remain in a highly precarious situation, dependent on humanitarian assistance to cover their basic needs, and vulnerable to natural disasters, and the activities of criminal groups. At the same time, Cox's Bazar District is among the most deprived areas of Bangladesh. The local community have expressed concerns that the refugee influx may have exacerbated the existing burden of unemployment and difficulties accessing essential services in the region. In areas where refugees and host communities live side by side, many are now accessing the same services and depend on the same labour markets, creating potential sources of tension as well as common vulnerabilities to hazards and shocks.

Cox's Bazar district is exposed to storm surges, high winds, and heavy rainfall that often cause flash flooding and trigger landslides. The location, living conditions, and status of the Rohingya make them highly exposed and vulnerable to such hazards. As such, disaster risk management is vital to manage the risk of an emergency within the emergency. REACH contributes to the response through the development of natural hazards related hazard analysis products and information management coordination support.

Since September 2017, IMPACT's REACH Initiative has been deployed to Bangladesh to help meet the information needs of humanitarian actors operating in Cox's Bazar District and build a better understanding of the needs of displaced and host populations, supported by assistance from ECHO, UNICEF, and UNHCR.

## FUNCTIONS

Under the line management of the IMPACT Country Coordinator in Bangladesh, the GIS/Data Specialist is responsible for the oversight and coordination of the GIS/Data Team and undertakes technical GIS/data analysis related tasks.

This includes the application of GIS in Bangladesh, including relevant aspects of research design, support in designing data collection tools, ensuring (spatial) data quality, geo-spatial analysis, drafting of maps, and production of web maps and information management systems.

Furthermore, the Specialist will act as the technical lead on data analysis for REACH assessments and related data analysis tasks. This includes maintaining and developing workflows and analysis procedures in R.

The GIS/Data Specialist will lead investigations and analyses relating to natural hazards in Bangladesh, focussing on the District of Cox's Bazar. Typical analyses have focus on (but should not be limited to) flooding, landslides, and cyclone preparedness. The role will also include engaging with other organisations to ensure a coordinated, systematic and knowledge sharing approach to mitigating hazards in the camps and the host community. In coordination with other actors and the IMPACT Bangladesh team, the Specialist will, within reason, have the freedom to develop, explore, and implement different hazard analyses and resources.

The GIS/Data Specialist will provide technical inputs in all stages of the research cycle. Throughout each research cycle, the GIS/Data Specialist, in close liaison with the assessment teams, engages with partners to promote their participation and maximise their impact. The GIS/Data Specialist also ensures an efficient and transparent use of resources required for project implementation. This can include the direct supervision of GIS teams. The Specialist will also be responsible for developing and implementing a continuous capacity building program for national and international team members, and (when relevant) for providing trainings to partners.

## RESPONSIBILITIES

The GIS/Data Specialist responsibilities include the following:

### 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.
- Map and analyse secondary data in coordination with the assessment officer(s).
- Contribute to draft assessment Terms of Reference (ToRs) with a specific focus on the analysis plan, and related mapping, as well as data management plan.
- Support the development of qualitative and quantitative data collection tools, ensuring GIS requirements of research cycle/assessment are met.
- In coordination with relevant assessment officer(s), support construction of quantitative samples.

### DATA MANAGEMENT, CLEANING, AND ANALYSIS

- Serve as focal point for statistical analysis and quantitative reporting on assessments.
- Lead on directly implementing advanced GIS analysis processes/products.
- Conduct advanced spatial analysis and modelling (e.g. to better understand natural hazard risk, or coverage and catchment area of existing and planned services).
- Overseeing the life cycle of geographic information products, the conception and production of maps in the Bangladesh mission.
- Maintain, update and expand R systems from automated data management and analysis to map production for factsheets.
- Coordinate with members of the GIS/Data Unit, Assessment Unit and external partners to determine strategic direction on how to best apply GIS, visualisation, and other related approaches, and oversee the deployment of new approaches.
- Ensure that data and its spatial analysis are validated by IMPACT HQ before product drafting stage.
- Development and maintenance of country-level databases for the consolidation of all assessment-related and GIS data in country.

### DRAFTING OF PRODUCTS

- Ensure that the GIS products meet the requirements of IMPACT and relevant partners.
- Maintain regular communication with IMPACT HQ on progress and deadlines for GIS products.
- Ensure the drafting of timely and accurate GIS products, which comply with IMPACT's guidelines.
- Ensure that all GIS products are validated by IMPACT HQ before external release.
- When relevant, in close coordination with IMPACT HQ, support the regular maintenance and update of web GIS products.
- In coordination with the Country Coordinator, liaise with IMPACT HQ on the procurement of UNOSAT services and satellite imagery.
- Prepare platforms for data sharing, dissemination and visualisation (e.g. ArcMap Online platforms and R Shiny Apps).

## EXTERNAL ENGAGEMENT

- In support of the assessment team, link with relevant partners to consult and involve them in the GIS components of a research cycle.
- Co-chair of the Natural Hazard Technical Working Group, which involves coordinating with partners, organising and leading meetings, and determining with the group what information would be useful to the humanitarian response.
- Represent the organisation at external technical forums as required including (but not limited to) the Information Management and Assessment Working Group and the Emergency Preparedness Working Group.
- Represent the GIS/Data Unit directly in relevant discussions with external partners regarding ongoing or upcoming work cycles.
- Promote active use of REACH datasets, GIS products, and research findings by partners and the broader humanitarian community for their decision making.
- After validation by line manager, support the presentation of research findings through GIS inputs to relevant third parties in order to enhance their use and impact.
- Ensure that all partner engagement and all external relations are clearly documented and communicated with the line manager and relevant colleagues.
- More generally, contribute to the creation of a positive image and overall credibility of the organisation, notably through the application of IMPACT's mandate, ethics, values, and stand-point with regard to other actors.

## INTERNAL COORDINATION

- Actively participate in regular team meetings, including Senior Management Meetings.
- Ensure regular coordination and exchange with colleagues across the different Units.
- Engage in the development and implementation of IMPACT's strategy in-country.
- The GIS/Data Specialist will liaise with IMPACT in Geneva to guarantee a quality product that suits the needs of the field office. S/he will respond to information requests from IMPACT Initiatives and keep Geneva informed of the data activities in the field.
- Manage logistics, financial, administration, and HR processes related to the GIS/Data Department, and liaise accordingly with relevant support departments.
- Coordinate work across different cells within the GIS/Data Unit through weekly meetings.

## KNOWLEDGE SHARING AND LEARNING PROCESSES

- Identify and anticipate knowledge gaps prior the execution of the Research Cycle.
- Provide content and contributes to lessons learned exercises.

## PROJECT CYCLE MANAGEMENT

- Before a project starts, participate and help organise a kick-off meeting, and the availability of key project management documentation, to plan the efficient use of assets and human resources.
- In close coordination with line management, finance, and grants colleagues, monitor and regularly update the use of GIS-related assets, financial, and human resources, in full compliance with IMPACT's guidelines.
- Ensure that GIS-related project deliverables and requirements are tracked, met and complied to.
- When relevant, support oversight of data collection, in line with agreed TORs (including their Annexes), including spatial verification and validation as part of daily assessment checks.

- Ensure that any issue in relation to project implementation is reported to the line manager, finance, and grants colleagues, and HQ.
- Contribute to the organisation and documentation of a project completion meeting for all relevant projects.
- Support the line manager, finance, and grants colleagues in drafting of relevant project narrative and financial reports.
- Other tasks as requested by supervisors and colleagues.

## TEAM MANAGEMENT AND CAPACITY BUILDING

- Conduct regular meetings with staff members to assess progress in relevant research cycles and to review work plans.
- In coordination with the Country Coordinator and the Research Manager conduct induction for new staff members, including training in basic technical GIS competencies.
- Be available to provide regular support and technical backstopping.
- When relevant, support/ lead staff appraisals and recruitment process's in collaboration with the Country Coordinator, Research Manager, and IMPACT HQ.
- The GIS/Data Specialist is responsible for the development and implementation of capacity training plans for GIS and other team members. S/he is responsible for setting clear and personalised development goals, and designing training and mentorship plans to assist team members in professional development.
- Provide direct line reports with mentoring, support, and guidance in managing their teams.
- Where relevant, implement a common training framework to the units to allow for a clear understanding of work flows between the units (e.g. training GIS & database cell R to feed into data analysis flow).

## DATA CONFIDENTIALITY, PROTECTION AND LOGISTICS

The GIS/Data Specialist will maintain the strictest confidentiality on all data collected and related processes, ensuring full compliance with IMPACT's data protection policy and SOPs. S/he will actively take measures to prevent the unauthorised sharing of any information and data belonging to IMPACT and its partners, or collected during his/her assignment with IMPACT. This includes ensuring that data and its analysis do not contain personal or other sensitive information and are validated by IMPACT HQ before sharing to external parties.

In his/her mission, the GIS/Data Specialist will be hosted by IMPACT's global partner ACTED and will fall under the direct responsibility and management of ACTED's Country Director and his/her delegates for all Administrative, Security, and relevant Logistics and Finance issues. S/he will therefore fully abide to ACTED's Security, Administration, and relevant HR, Logistics and Finance rules and regulations.

## REQUIREMENTS

### GIS/Data Specialist

- ❖ **Academic:** Strong academic qualifications, preferably including a Master degree in relevant discipline (e.g. GIS, Mathematics, physical and environmental sciences, computer science).
- ❖ **Research skills:** Demonstrable experience with geo-spatial information management and analysis. Excellent spatial analysis skills. Knowledge of statistics for data analysis.

- ❖ **Software skills:** Advanced experiences of GIS software, such as ArcGIS and QGIS. Advanced experience analysing complex data with R and or Python. Advanced understanding of database management. Previous experience with Tableau or Power BI is an asset. Previous experience with mobile data collection (ODK, ONA, KOBO); Strong abilities in operating Microsoft Word, Excel and Project Management Software are required.
- ❖ **Years of work experience:** At least 1 year of relevant working experience. Experience in humanitarian settings highly desirable.
- ❖ **Experience:** Experience with remote sensing techniques is an asset. Prior knowledge of the region is an asset.
- ❖ **Management skills** Team management experience and skills highly desirable. Ability to manage a team and with well with others is required. Ability to provide ongoing feedback to team members to facilitate capacity building.
- ❖ **Communication/reporting skills** Excellent communication and drafting skills for effective reporting are important. Attention to detail is important when creating high quality outputs.
- ❖ **Multi-tasking skills** Ability to multitask with tight deadlines, on numerous research cycles.
- ❖ **Level of independence** A high level of autonomy and proven ability to work independently to short deadlines and high research standards. Willingness to spend time in field locations.
- ❖ **Cross-cultural work environment** Ability to operate in a cross-cultural environment requiring flexibility is required.
- ❖ **Experience in geographical region** Past experience in the [relevant] region is desirable.
- ❖ **Language skills** Fluency in English required.
- ❖ **Security environment**

## CONDITIONS

- ❖ Salary defined by the IMPACT salary grid; educational level, expertise, hardship, security, and performance are considered for pay bonus
- ❖ Additional monthly living allowance provided in country by IMPACT's partner ACTED
- ❖ Food and lodging provided at the organisation's guesthouse/or housing allowance (depending on contract length and country of assignment)
- ❖ Transportation costs covered, including additional return ticket + luggage allowance
- ❖ Provision of medical, life, and repatriation insurance + retirement package