

## REMOTE SENSING/GIS OFFICER

(Reference: 22/SYR/GISO01)

### 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 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.

**We are currently looking for a Remote Sensing/GIS Officer to support our team in Amman, Jordan.**

**Department:** REACH  
**Position:** Remote Sensing/GIS Officer  
**Contract duration:** 6 months  
**Location:** Amman, Jordan  
**Starting Date:** ASAP

### COUNTRY PROFILE

After more than a decade of conflict, conditions in Syria remain volatile and marked by violence and socioeconomic deterioration. The scale, complexity, and severity of humanitarian needs in Syria extends the necessity for up to date, timely, and accurate information. Evidence-based planning and programming remains paramount to ensure that the response adequately meets the needs of the most vulnerable people and is tailored to different realities across communities and over time. REACH has been conducting assessments on the humanitarian situation in Syria since 2013 and has since grown significantly as an actor in the response.

Broadly speaking, REACH Syria facilitates a humanitarian evidence base via four key research streams:

- Monitoring of the humanitarian situation in Syria, including joint market monitoring to track prices of goods as per the survival minimum expenditure basket (SMEB);
- Displacement tracking, through tracking the movement of IDPs and returnees;

- Remote sensing activities, including market functionality, flood hazard assessments, etc;
- Technical support to clusters, including thematic assessments and capacity building.

Examples of REACH Syria information products, include:

[NES Market Network Analysis – March 2022](#)

[Briefing Notes: Humanitarian Impact of Water Shortages – April 2022](#)

## POSITION PROFILE

IMPACT is seeking a candidate with a strong technical background, who has previous experience of working in the sphere of Remote Sensing (RS) and GIS/Cartography. More specifically, the candidate should have experience of working on at least one of: analysis of satellite imagery with different spatial and spectral resolution for the purposes of climate, agricultural and water resource monitoring; collection and processing of socio-economic data. The candidate should understand concepts of cartographic design and be experienced in presentation of the results of spatial analysis using static and interactive mapping products.

## FUNCTIONS

Under the line management of the Senior RS Officer, the RS/GIS Officer is responsible for the application of geographic information systems and remote sensing, including relevant aspects of research design, support in designing data collection tools, ensuring (spatial) data quality, geo-spatial analysis, drafting of maps, and (as relevant) production of web maps and information management systems. In coordination with the relevant Research Managers, Specialists and Senior RS/GIS Officers, the RS/GIS Officer is required to support assessment planning in line with project and program objectives and with IMPACT's research cycle and other relevant guidelines.

In their mission, the RS/GIS Officer will be hosted by IMPACT's global partner ACTED and will fall under the direct responsibility and management of ACTED's Country Director and their delegates for all administrative, security, and relevant logistics and finance issues.

## RESPONSIBILITIES

The RS/GIS Officer 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;
- Contribute to draft assessment ToRs with a specific focus on the analysis plan, and related remote sensing and geospatial analysis, as well as data management plan;
- Perform geo-spatial analysis of assessment areas to be used in developing assessment plans, when required;
- In coordination with relevant assessment officer(s), support construction of quantitative sample, when relevant;

### REMOTE SENSING RESEARCH IMPLEMENTATION

- Plan, develop and implement satellite-based modelling techniques which highlight hazards and risks for the country, e.g., change detection, Machine Learning-based classification, and time series

analysis. Such activities will be based on a variety of different sensors including multispectral optical sensors, SAR sensors and very high resolution optical sensors;

- Understand, maintain and improve models already present and running, in order to use them upon request;
- Evaluate opportunities for additional remote sensing analysis within existing research cycles;
- Ensure proper documentation of methodologies and tool development.

#### RS/GIS RESEARCH IMPLEMENTATION

- Perform spatial/geostatistical analysis to understand patterns that are beyond conventional levels of aggregations such as administrative levels, i.e., patterns that are within livelihood zones, environmental features, etc.;
- Contribute to products related to hazard/environmental monitoring (e.g., flood, drought) and analyse how these interrelate with other analytical layers;
- Automation of workflows to integrate analysis processes into cartographic outputs, spatial analyses, etc.

#### DATA MANAGEMENT, CLEANING AND ANALYSIS

- Ensure that all collected data is stored in line with IMPACT's Data Management Guidelines, and with the ToRs (data management plan Annex);
- Ensure that data is revised and cleaned, and that all revisions are recorded;
- Conduct spatial analysis on collected data as per ToRs;
- Ensure that data and its spatial analysis are validated by IMPACT HQ before product drafting stage;
- Ensure that data and its analysis do not contain personal or other sensitive information and are validated by IMPACT HQ before sharing to external parties;
- Ensure the quality and accuracy of technical information provided as well as the confidentiality and protection of collected information.
- Development and maintenance of country-level databases for the consolidation of all assessment-related and RS/GIS data in country.

#### DRAFTING OF PRODUCTS

- Ensure accurate linkages between spatial databases and assessment data;
- Ensure that the RS/GIS products meet the requirements of IMPACT and concerned partners;
- Maintain regular communication with IMPACT HQ on progress and deadlines for RS/GIS products;
- Ensure the drafting of timely and accurate RS/GIS products, which comply with IMPACT's guidelines;

#### EXTERNAL ENGAGEMENT

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

#### CAPACITY BUILDING

- In coordination with the IMPACT CC/CR, Research Managers and RS/GIS Senior Officers, support the development and implementation of capacity training plans for RS/GIS and other team members, particularly on remote sensing capacities;

- Be available to provide regular support and technical backstopping;

## DATA CONFIDENTIALITY AND PROTECTION

The RS/GIS Officer will maintain the strictest confidentiality on all data collected and related processes, ensuring full compliance with IMPACT's data protection policy and SOPs. He/she will actively take measures to prevent the unauthorized sharing of any information and data belonging to IMPACT and its partners or collected during their assignment with IMPACT.

## REQUIREMENTS

- ❖ **Academic:** Excellent academic qualifications, preferably including a Master degree related to GIS, Remote Sensing, Data Science, Geography or related discipline;
- ❖ **Theoretical knowledge:** Sound foundational knowledge of remote sensing, including theory, principles, practice and application. Expands and maintains knowledge in the field through literature;
- ❖ **Research skills:** Advanced experience with remote sensing analysis, spatial analysis, and geo-spatial information management. Advanced knowledge of climate, agriculture, and hydrology is an asset;
- ❖ **Software skills:** Advanced knowledge of Google Earth Engine; advanced knowledge of GIS software (ArcPro, ArcGIS Online, QGIS); knowledge of remote sensing software (e.g., ESA SNAP, ERDAS IMAGINE); advanced knowledge of Microsoft Office including Excel; good knowledge of Python and/or JavaScript; knowledge of R, STATA, or equivalent statistical software an advantage; knowledge of Adobe Suite, particularly InDesign and Illustrator an asset;
- ❖ **Years of work experience:** At least 1 years of relevant working experience. Experience in humanitarian settings desirable;
- ❖ **Communication/reporting skills** Excellent communication and drafting skills for effective reporting;
- ❖ **Multi-tasking skills** Ability to multitask with tight deadlines, on numerous research cycles;
- ❖ **Level of independence** Proven ability to work independently;
- ❖ **Cross-cultural work environment** Ability to operate in a cross-cultural environment requiring flexibility;
- ❖ **Experience in geographical region** Past experience in the region is desirable;
- ❖ **Language skills** Fluency in English required, competency in Arabic an asset;
- ❖ **Security environment:** Ability to operate in a complex and challenging 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