GIS/REMOTE SENSING SPECIALIST (MULTI-SECTOR NEEDS ASSESSMENTS)
(Reference: 23/HQ/GIS/RSS01)

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 in its fields of intervention.

We are currently looking for a GIS/Remote Sensing Specialist to support our teams at HQ.

Department: REACH

Position: GIS / Remote Sensing Specialist [Multi-Sector Needs Assessments]

Contract duration: Open ended

Location: Geneva

Starting Date: ASAP

BACKGROUND ON MULTI-SECTOR NEEDS ASSESSMENTS

The global Annual Prioritization Unit at IMPACT HQ in Geneva supports the work of Multi-Sector Needs Assessments (MSNAs) in more than 20 countries. As a result of the World Humanitarian Summit and the Grand Bargain, a commitment was made to "impartial, unbiased, comprehensive, context sensitive, timely and up-to-date" joint needs assessments that can serve as "a sound evidence base for humanitarian response plans." These exercises have been informing consolidated humanitarian appeals since 2016. Since 2016, the number of MSNAs supported by REACH has more than quadrupled; MSNA data continues to influence flagship humanitarian response processes such as Humanitarian Needs Overviews and Humanitarian Response Plans (HNOs/HRPs). This indicates that evidence-based decision making is increasingly becoming a cornerstone of effective humanitarian action. In 2020, MSNA data was used to calculate sectoral PiN for all 12 crises in which the exercise was conducted, and informed inter-sector analysis and severity rankings for eight of these.

POSITION PROFILE

IMPACT is seeking a candidate with a strong technical background, who has previous experience working in GIS and Remote Sensing. More specifically, the candidate should have experience with analysis of satellite imagery with different spatial and spectral resolutions for the purposes of environmental monitoring, particularly the assessment of shocks (flood, drought) and environmental degradation. 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. Ideally the successful candidate will also be familiar with the collection and processing of socio-economic data.

Under the direct supervision of the Annual Prioritization Unit Manager, and functional supervision of the GIS and Remote Sensing Unit at HQ, the GIS/RS Specialist is responsible for providing technical backstopping for MSNA activities. The GIS/RS Specialist will be responsible for the application of geographic information systems and remote sensing in the Annual Prioritization Unit, 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. In coordination with the relevant RMs and Specialists, the GIS/RS Specialist is required to support assessment planning in line with project and program objectives and with IMPACT's research cycle and other relevant guidelines.

The position is based in Geneva

RESPONSIBILITIES

The responsibilities of the GIS/RS SPECIALIST include the following:

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 remote sensing and geospatial analysis, as well as data management plan;
- Produce geo-spatial analysis of assessment areas to be used in developing assessment plans, when required;
- In coordination with relevant colleagues, support construction of quantitative sample.

2) REMOTE SENSING RESEARCH IMPLEMENTATION

- Work with global GIS and remote sensing unit to implement, develop, modify/adapt new RS tools and approaches to specific contexts;
- Ensure proper documentation of methodologies and tool development;
- Share best practices in accessible format to the IMPACT remote sensing community of practice;
- Represent the Annual Prioritization Unit when it comes to planning and procurement of UNOSAT services and satellite imagery.

3) GIS RESEARCH IMPLEMENTATION

- Evaluate opportunities for additional geospatial analysis within existing research cycles;
- Perform spatial analysis to understand if there are patterns beyond conventional levels of aggregation / strata, below aministrative levels or with new strata entirely (i.e livelihood zones, environmental features, etc.)
- Responsible for analysis which contributes to products related to hazard/environmental monitoring (flood, drought, wind, landslide, etc).

4) DATA MANAGEMENT, CLEANING AND ANALYSIS

- Write functions for custom GIS data cleaning/checking;
- 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;

5) DRAFTING OF PRODUCTS

- 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

6) 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.

7) 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.

8) ACCOUNTABILITY TO COMMUNITIES AND BENEFICIARIES

The GIS/RS SPECIALIST is responsible for ensuring that all interactions with affected communities are conducted in a respectful and consultative manner. Due attention must be paid to ensuring that communities are adequately consulted and informed about IMPACT programme objectives, activities, beneficiary selection criteria, and methodologies. This is the responsibility of every IMPACT staff member.

9) CONFIDENTIALITY AND DATA PROTECTION

The GIS/RS SPECIALIST will maintain the strictest confidentiality on all data collected and related processes. 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 his/her assignment with IMPACT.

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1219 Châtelaine, Geneva, Switzerland**

REQUIREMENTS

- ❖ **Academic:** Excellent academic qualifications, preferably including a Master degree related to GIS, Remote Sensing, Data Science, Geography or Environmental disciplines;

- ❖ **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, and excellent spatial analysis skills;

- ❖ **Software skills**: Advanced knowledge of Google Earth Engine; advanced knowledge of GIS software (ArcPro, ArcGIS Online, QGIS); advanced knowledge of Microsoft Office including Excel; knowledge of R, STATA, Python or equivalent statistical software an advantage; knowledge of Adobe Suite, particularly InDesign and Illustrator an asset;

- ❖ **Knowledge of remote sensing tools**: Demonstrated experience using GEE, demonstrated experience with R or python for remote sensing and or geospatial analysis;

- ❖ **Years of work experience:** At least 4 years of relevant working experience;

- ❖ **Familiarity with aid system:** Experience in a complex humanitarian emergency is not required, but is an asset;

- ❖ **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 another language an asset, particularly French or Spanish;

- ❖ **Security environment:** Ability to operate in a complex and challenging security environment.