

REACH DATA SPECIALIST

(Reference: 21/HQ/WSCDS)

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 organization 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 Data Specialist to support the WASH Severity Classification Team.

Department: REACH
Position: Data Specialist
Contract duration: 6 months
Location: Geneva
Starting Date: ASAP

Under the supervision of the WSC Manager and as part of the WSC Development Team, the Data Specialist will support the development of a standardized global analysis system for classifying the severity of water, sanitation, and hygiene (WASH) conditions – the WASH Severity Classification (WSC).

The WSC is a set of tools and protocols designed to classify the severity and drivers of WASH needs and vulnerabilities based on recognized standards. The WSC uses a five-phase approach to quantify the number of people in need by severity level, while assessing likely situational changes and monitoring key risk factors. The WSC combines an array of data from different sources coupled with contextual expertise of practitioners on the ground to guide and validate the process. Through this approach, it allows for the classification of geographic areas, estimates the population in each severity phase and provides a comparison of findings over time and across countries.

RESPONSIBILITIES

The Data Specialist will play a lead role in developing the WSC data ecosystem: Responsibilities include:

- Manage and streamline the WSC data pipeline to ensure WSC analyses include most recent and relevant input data
- Developing, maintaining, and documenting WSC R scripts and packages
- Testing and calibrating core WSC quantitative model for optimal application across humanitarian and development contexts
- Increase automation of WSC data pre-processing, including compilation and aggregation of complex and varied data sources, transformation and manipulation of data for inclusion in analysis, visualisation of time series of spatial trends, and output into WSC analysis worksheet or other format
- Apply innovative data science techniques to overcome specific data problems for WSC implementations, including analysis of areas with limited data availability and for severity forecasting

REQUIREMENTS

- Advanced quantitative degree in data science, statistics, physics, mathematics, economics, computer science, engineering or related subjected
- Minimum 3 years of relevant working experience
- Proficient with R, particularly the tidyverse (dplyr, tidyr, rlang)
- R package development experience
- Strong experience in data collection/compilation, cleaning, processing, and applied analysis
- Proven track record of working with and compiling data of varying quality, type, and structure from multiple different sources
- Experience in working with complex surveys and other categorical data
- Knowledge of ArcGIS and spatial analysis an advantage
- Commitment to humanitarian principles required, but no previous experience in the humanitarian or development sector necessary
- Fluency in English required, competency in French an asset