



Better Data | Better Decisions | **Better Outcomes**

## **CAPABILITIES STATEMENT**

### **REMOTE DATA COLLECTION**

iMMAP is an international not-for-profit organization that provides information management services to humanitarian and development organizations, enabling partners to make informed decisions that ultimately provide high-quality targeted assistance to the world's most vulnerable populations.

Our mission is to harness the power of information to facilitate evidence-based decisions to improve people's lives.

Through our expertise in collecting, verifying, analyzing, and visualizing and disseminating data during crises and in places that are hard to reach, iMMAP creates knowledge for decision-makers operating in development contexts, situations of violence, post-disaster, and conflict recovery.

#### **DATA COLLECTION**



Drawing on decades of field experience and expertise from software engineers, web developers, data scientists, statisticians, field enumerators, and researchers, iMMAP has developed an integrated workflow that ensures timely, accurate, and reliable data.

iMMAP provides a survey and assessment design, training, and execution with data collection activities supported by remote sensing capabilities, Global Positioning Systems (GPS) technology, crowdsourcing, participatory mapping, and mobile data capture tools.

#### **FIELD LEVEL DATA COLLECTION AND TRAINING**



iMMAP has implemented population monitoring projects in Syria through remote data gathering techniques by using primary data collection, secondary (phone based and Key Informants Interviews) and open source collection.

iMMAP's Middle East and North Africa (MENA) Data Systems team designs, develops and maintains software solutions tailored to assist business needs, in support of remote management, knowledge hubs, monitoring and reporting processes, and feedback and complaints mechanisms.



The Field Operations Unit in the MENA office, with expertise in remote and on the ground support, is primarily responsible for collecting data and managing field teams to ensure data collection requirements of our partners are achieved.

This model allows for replication in multiple contexts by taking into consideration the geographical scope and disparity in local partners' competencies and capacity to collect data. iMMAP provides tailored data collection training to harmonize partners' understanding of methodologies and use of tools, and conducts participatory mapping workshops to develop community maps that detail information regarding district layout, infrastructure, and other relevant features.

## OUR INNOVATIVE APPROACH TO REMOTE DATA COLLECTION



As part of iMMAP's innovative and collaborative approach, we seek synergies through new partnerships with key technology companies, including satellite imagery providers, high-tech startups, and other organizations specialized in different remote data collection capacities, which allows us to prepare tailored remote data collection processes when it is needed.

Examples of these capacities include mass Internet surveys, mobile application data collection, and satellite imagery analysis. All these data collection processes can be complemented by modeling that allows for data samples to be turned into high quality indicators to support data-led decision-making.

### **Analysis Ready Data Cube (ARDC)**



iMMAP's Analysis Ready Data Cube (ARDC) is designed to assist the humanitarian and development sectors in addressing crucial economic, environmental, and social challenges by harnessing earth observation data from satellites as well as climate models.

Employing the technology infrastructure behind the Open Data Cube initiative, the iMMAP MENA office ARDC is the first Open Data Cube with a focus on the needs of the humanitarian sector. iMMAP's ARDC will increase the impact of Earth Observation data aimed at supporting different clusters with On-Demand Analysis Ready Data and Information.

With the advances in machine learning, data mining, and computing infrastructures, the iMMAP ARDC will be capable of managing big data queries and rapidly yield time-series analysis of large satellite data archives such as Sentinel 2 and Landsat spanning as far back as 30 years.

### **Tracking Venezuelan Migrants in Colombia through Facebook API**



iMMAP tracks the movement of Venezuelan refugees and migrants around Latin America on a biweekly basis by analyzing Facebook's Marketing API, based on the monthly behavior of users. The data are estimates of the potential reach of a Facebook ad based on the segmentation of the audience on its platform.

### **Piloting Machine Learning and Satellite Imagery to Support Emergency Response**



Satellite imagery allows for a rapid detection of migrant settlements that multiply along the Colombian-Venezuelan border and cannot be located by field teams.

This innovative approach aims to produce an accurate model that develops quarterly maps of possible informal settlements across urban centers and areas along the border, to help support organizations consolidate a common baseline between responders that reduces duplication and improves the quality of humanitarian assistance in the emergency.

### **Remote WASH Infrastructure Assessment**



In a continuous search for innovative approaches to data collection in challenging contexts, iMMAP turns observational data, such as GPS and time-tagged photos collected in locations by mobile users, into actionable proxies to be used by humanitarian responders in decision-making.

### **Unravelling Data through Analytical Products**

Drawing on iMMAP's humanitarian experience, we work to interpret the results of the internet surveys designed by our partners by developing high-quality analytical products that are tailored to the needs of any organization.



#### **Better Data**

Improve data quality, collection and timeliness to stimulate sharing and coordination



#### **Better Decisions**

Analyze and visualize data to support evidence-based decision-making



#### **Better Outcomes**

Maximize program outcomes and make a measurable difference