



# Fraym for Community Health

Fraym is a U.S. Certified Small Business that uses machine-learning to generate precise information on communities with data gaps. Governments and organizations around the world use our location-based data to improve planning, enhance evaluations, and to uncover insights that traditional data analysis cannot reveal.

Using advanced algorithms, we produce data about population characteristics, perceptions, and behaviors that cover a wide range of demographic, socioeconomic, communication, and health indicators. Fraym works with health stakeholders to use this insight build more resilient health systems, to increase equitable access to healthcare, to limit the spread and impact of infectious diseases, and to improve demand for and uptake of health products and services. Our advanced geospatial data and analysis is available for 100+ countries at one square kilometer resolution, ensuring we reach the most vulnerable youth, women, and men—even in fragile and remote contexts.

## What We Deliver

### Hyperlocal Population Data

Location-based data on communities including demographic, socioeconomic, and health related indicators at the 1km<sup>2</sup> level, and health facility locations to inform project design and adaptation.

**Nutrition & Food Insecurity Indices:** Understand where communities are experiencing acute malnutrition or may become food insecure due to climate change or supply chain disruptions.

**Social Behavior Change (SBC):** Analyze household access to and consumption of different media channels, and knowledge and attitudes towards diseases and health practices.

**Community Health Mapping:** Analyze maternal, newborn, child, & adolescent health at the facility, community, and neighborhood level to highlight disparities and unique needs.

**Custom Analysis for Health System Stakeholders:** By providing actionable data through existing system integration, visual heatmaps, and tailored reports with key findings.

**Program and Evaluation Design Support:** By providing baseline data, informing data collection and evaluation methodology, and performing geospatial impact assessments.



**Demand Analysis**



**Attitudinal Analysis**



**Catchment Analysis**



**Program Design and Reporting**

## Development Partners



BILL & MELINDA GATES foundation



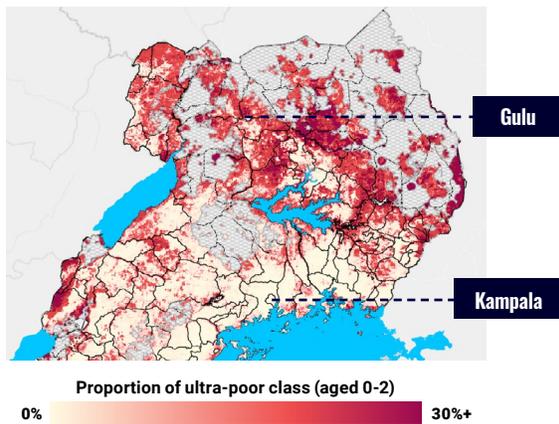
# Fraym for Community Health

## Use Case: Targeted Vaccination Programming

Fraym categorized zero-dose vaccination children into 4-5 mutually exclusive and exhaustive profiles based on common patterns and characteristics across **Ethiopia, Madagascar, Mali, Pakistan, and Uganda** for a large global health organization. Profiles included variables on assets owned, housing conditions, administrative divisions, household composition, and children's height and weight. Fraym then mapped each profile resulting in a data-driven framework for **targeted, community-level vaccination** programming.

### Ultra-Poor Class

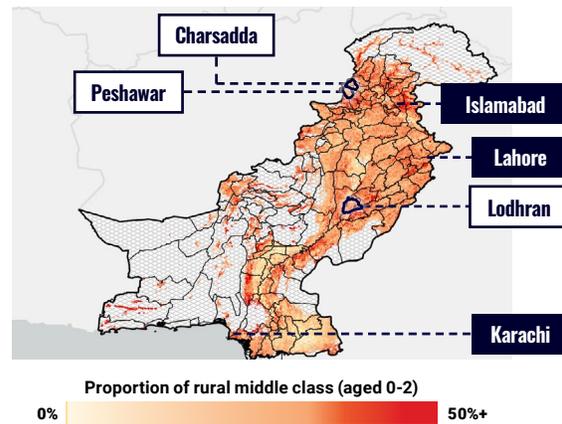
Proportion of zero dose children<sup>1</sup>



1. Given that a child is zero-dose, the map shows the proportion of zero-dose children that belongs to the ultra-poor class.

### Rural Middle Class

Proportion of zero dose children<sup>1</sup>



1. Given that a child is zero-dose, the map shows the proportion of zero-dose children that belongs to the rural middle class.

Areas with total population fewer than 30 people per sq km
 City Large cities
 Water bodies
 Hotspots
 District Hotspot district name

### Mapping Malnutrition and Hunger

Fraym constructed the Localized Food Insecurity Index (LFII) based on the Global Hunger Index (GHI) framework. The LFII is a community-specific targeting tool that maps and quantifies malnutrition, stunting, and wasting. With this information, efforts to address child nutrition and its downstream effects can be designed and implemented at the community level, rather than nationally or regionally.

### Analyzing Health Trends Over Time

For a global health organization, Fraym mapped the hyperlocal change in vaccination rates across the Sahel to to inform a **new targeted resource allocation strategy**. Fraym analyzed explanatory factors such as armed conflicts, population change, grid connectivity, and infrastructure. The result was a roadmap of **high priority areas for investment** in the region to vaccinate all children.

### Private Sector Engagement

For a multinational consumer goods company, Fraym built and mapped profiles of **target consumers for specific health products** to inform and help expand the company's **investment and distribution strategy** in Nigeria. Fraym analyzed household spending on over the counter (OTC) drugs and vitamins as well as remittance reception and media consumption.

### Holistic Community Analysis

For the African Development Bank (AfDB), Fraym developed harmonized, **multi-dimensional poverty and vulnerability indices**, identified the poorest and **most vulnerable communities across 23 fragile and transition** states, and then delivered data and insights through an interactive web-based decision tool that was used for a major AfDB initiative.