

# Fraym for Communicable Diseases

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 vaccinations, comorbidities, and other health related indicators at the 1km<sup>2</sup> level, and health facility locations to inform project design and adaptation. **Disease Risk Maps:** To locate and quantify at-risk population's vulnerability to HIV, TB, Malaria, NTDs, and Zoonotic outbreaks due to exposure, comorbidities, and access to health facilities.

**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 Facility Demand Assessments:** For different health services and products to inform resource allocation, mobile clinics, CHW training, or demand-driven subgrants.

**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.





**Development Partners** 











**Program Design** 

and Reporting

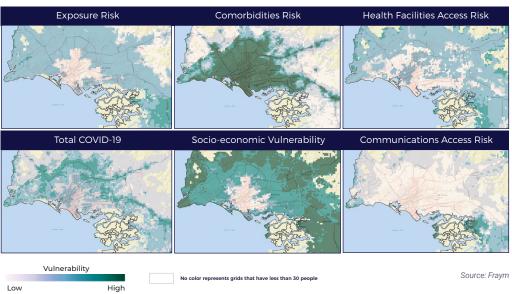
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## **Use Case: Data into Action**

In response to the global COVID-19 pandemic, Fraym produced a number of actionable *risk indices* in **Ethiopia**, **India**, **Kenya**, **Nigeria**, **and Pakistan** for integration into stakeholder dashboards to inform pandemic preparedness and response. Funded by the **Bill and Melinda Gates Foundation**, these *Disease Risk Indices* assessed population and community characteristics to determine vulnerabilities, then identified and quantified those most in need. *Disease Risk Indices* can be produced for **any communicable disease** in any region, target specific populations (i.e. **AGYW**, **OVC**), and include environmental factors including **climate change** that may impact **mosquito populations** or **zoonotic transmission**.



#### **Risk Profile Maps For Greater Karachi Area, Pakistan**

## **Relevant Experience**



Key Populations

Fraym worked with a global health organization to understand where **HIV+ atrisk men** are in Uganda and how best to reach them– building a profile of men and mapping them down to the community level. Fraym overlayed health and infrastructure information, such as health facilities, illustrating opportunities to reach these men.



For a Global Health Organization, Fraym assessed how vaccination rates changed across specific communities in the Sahel—looking at the impact of factors such as armed conflicts, population change, grid connectivity, and infrastructure, among others. Fraym highlighted communities that have been 'left out' of vaccination efforts.



Fraym analyzed female access to health facilities and compared the **profiles of women who did and did not visit clinics** in the past year to underscore the complexities behind seeking health services. This information was overlayed with facility locations and highlight that proximity to facility is not the only factor in deciding to seek services.



Fraym mapped the percent and total number of households without **insecticide treated nets** (ITNs) at the national and square kilometer level **across Tanzania**. Using this analysis, Fraym examined in detail areas with significant gaps in supply to better inform targeted, costeffective efforts to prevent malaria in the country.