OVERTURE MAPS FOUNDATION

MEMBER SUMMIT

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Humanitarian OpenStreetMap Team

Closing the data gap: Human-contributed data in Overture in the age of AI

Humanitarian OpenStreetMap Team

Open Mapping Hub ASIA-PACIFIC

Stock footage provided by Videvo

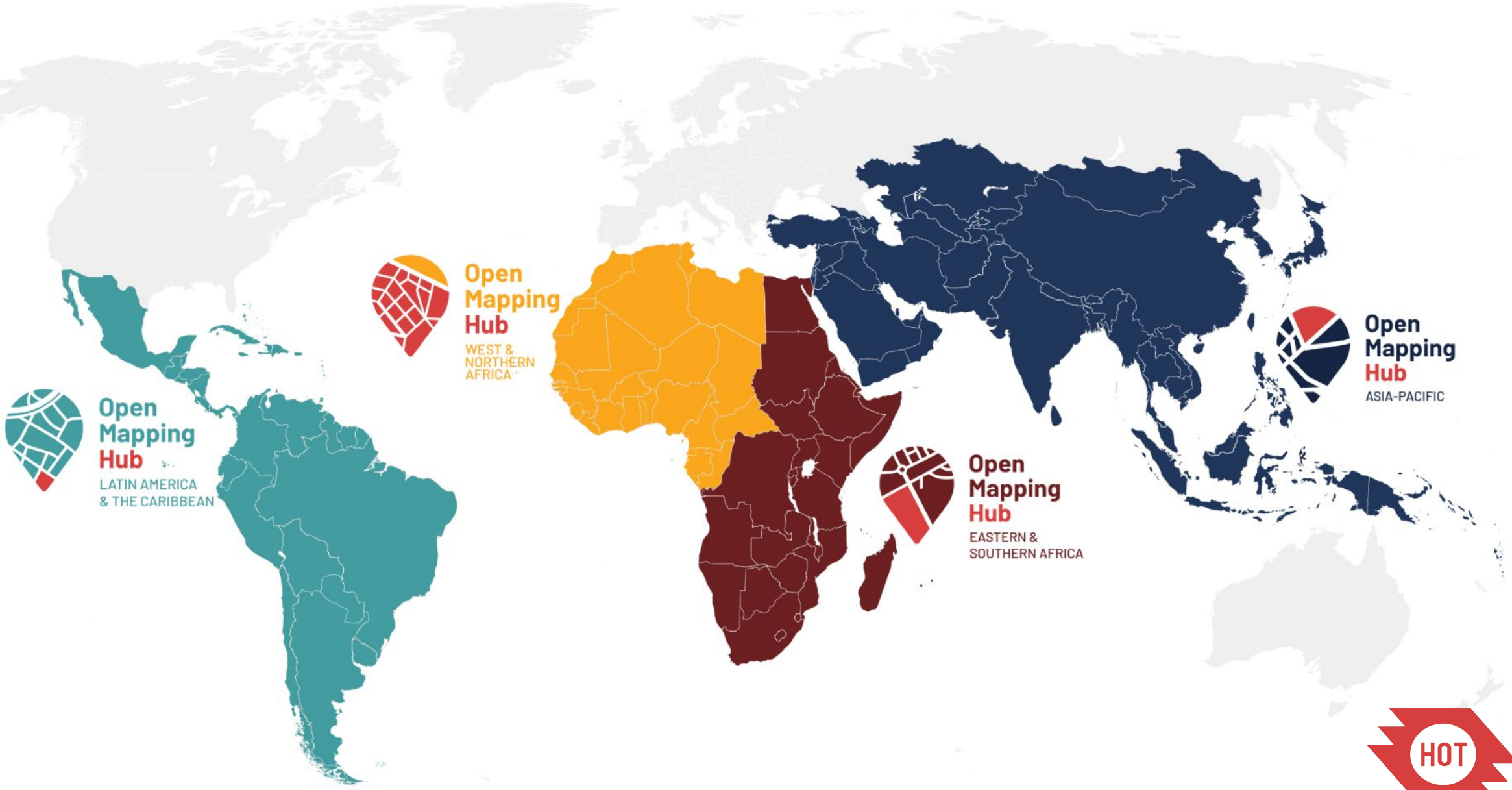
HOT is works towards a world where…

…community needs are addressed through mapping.

…everyone can access and contribute to the map.

…open map data is available and used for impact.

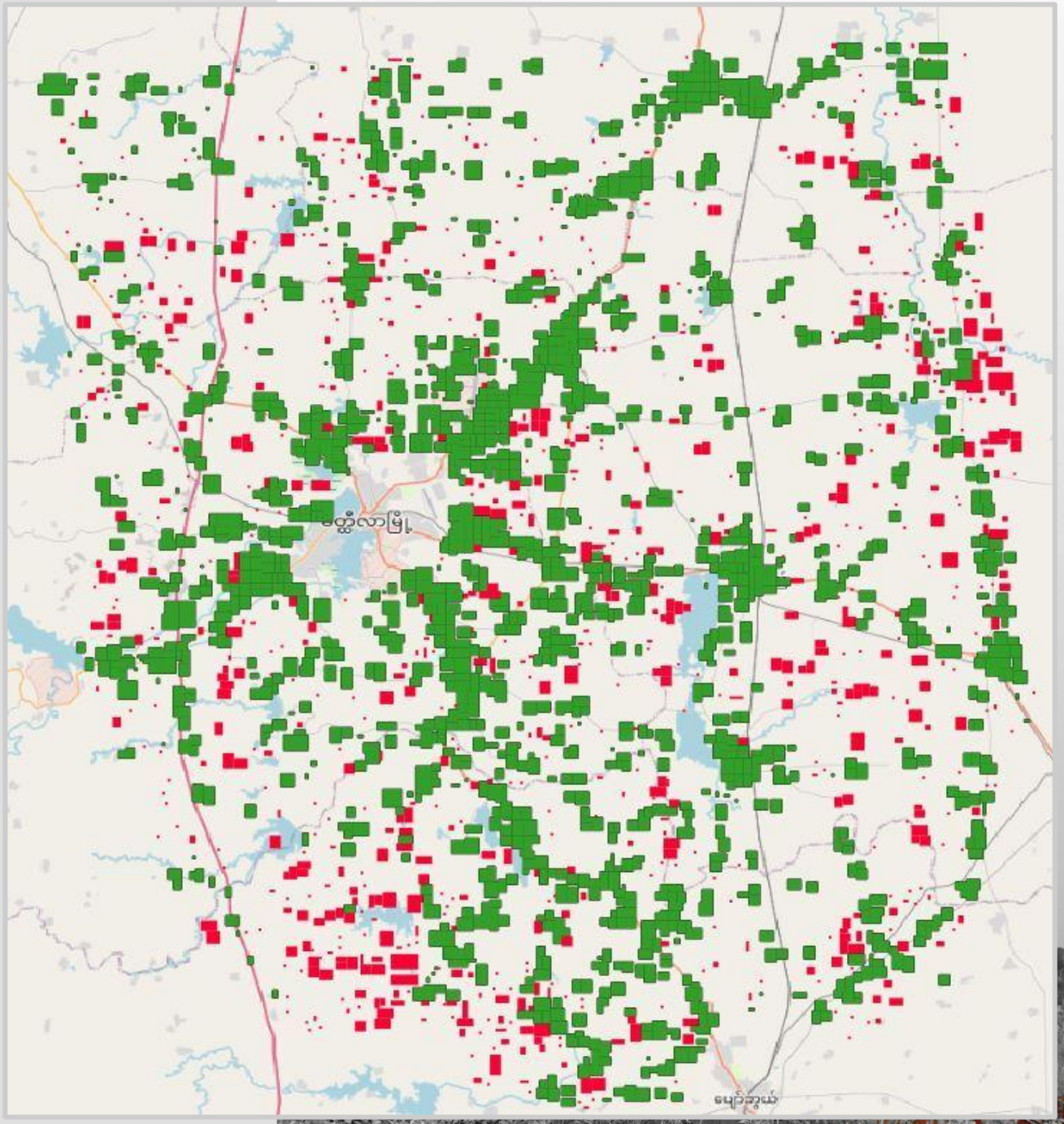
COMMUNITY: HOT works through 4 Regional Hubs



Why do we all need better data?

“In rural areas of Myanmar there are a whole series of settlements that are completely missing from Overture buildings - only spotted this by comparing results of first completed MapSwipe project.

Only 66% of the polygons identified by humans in MapSwipe contain Overture buildings. MapSwipe polygons that do not contain Overture buildings are highlighted red in the image below. Green are areas where MapSwipe built up areas intersected with Overture data. This effectively means that the Overture dataset for this rural area is completely omitting **roughly a third** of the villages / towns in Myanmar. “



Meiktila, Mandalay, Myanmar (as of April 2025)

Overlap between MapSwipe & Overture

Missing from Overture

The Marketplace concept

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Purpose

Create an ecosystem where **local communities supply the data needed** for decisions in domains such as climate adaptation, urban planning, health, and disaster response. **Enable growth in paid work for local mapping communities,** which increases the volume and quality of local data.

How It Works

1. **Accreditation and Training:** HOT trains and certifies local mappers and organizations as community vendors, ensuring quality and compliance
2. **Marketplace Platform:** the marketplace makes it easy for clients to find, contract, and pay local vendors for geospatial services
3. **Quality and Oversight**: HOT provides the technology, quality assurance, and responsible data frameworks to guarantee reliability
4. **Revenue Model**: Community vendors earn livelihoods through paid work

JOURNEY OF A COMMUNITY-BASED VENDOR

This is the story of Tommy Charles, from Freetown, Sierra Leone.
Hundreds of our community mappers have followed similar paths.

2016

Learns to map with the Sierra Leone Red Cross.

2017-2018

Volunteers with YouthMappers, a HOT partner.

2020-2022

Receives **training** and a **microgrant** from HOT.

2024

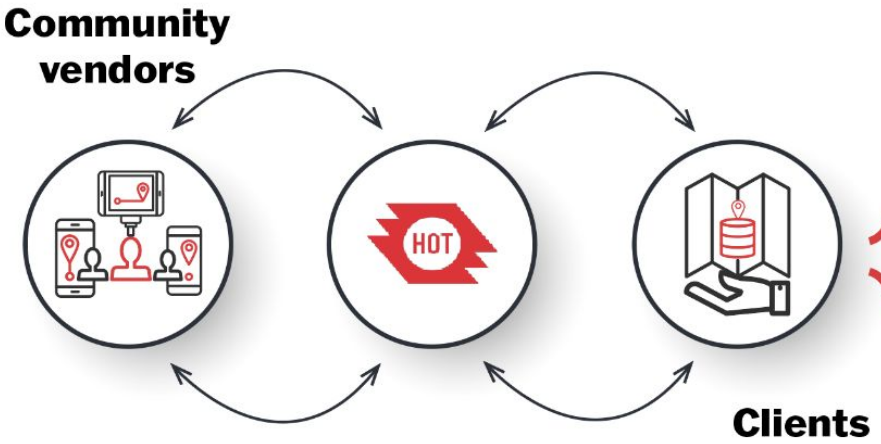
Subcontracts for HOT in Sierra Leone and trains as a drone pilot.

2025-2026

Set to lead mapping activities on **$750K** of HOT contracts in Freetown.

2025

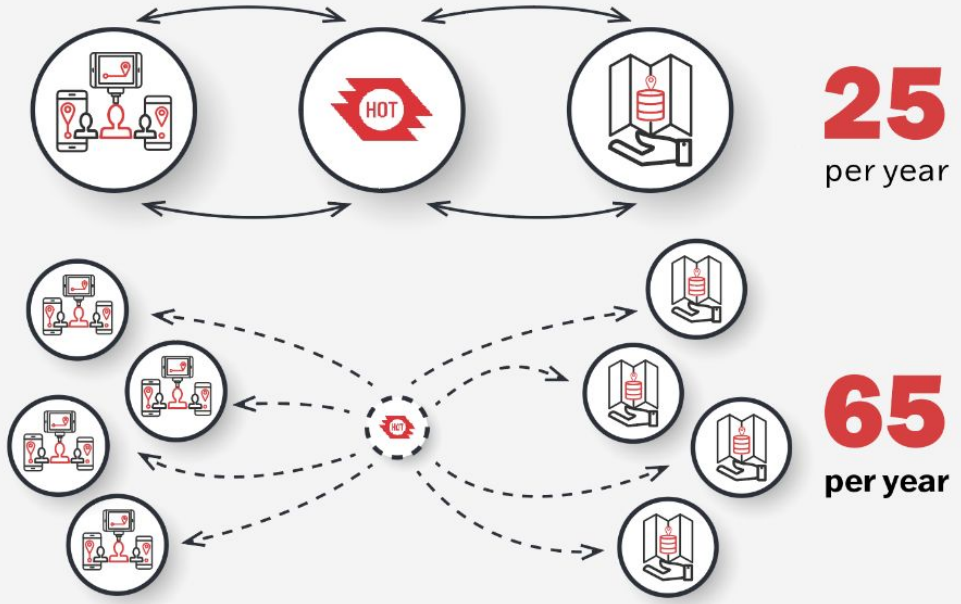
In our current model, HOT leads mapping projects with clients and subcontracts local vendors to support data collection and training



Currently at **20** per year

2030

HOT-led projects will continue while the Open Mapping Marketplace will enable clients to contract services directly from community vendors at a lower price



25 per year

65 per year

The Open Mapping Marketplace: On-Demand, Ethical, Local Intelligence and Ground Truthing

Scaling Ground-Truthing: engage with a global network of mapping professionals to enhance the accuracy and trustworthiness of Overture datasets.

Access accredited mapping vendors

Access high-quality, ground-truthed geospatial data sourced directly by vetted, local experts.

Ethical & Sustainable Quality

Drive investment directly into the communities that map their own enviroments, ensuring long-term sustainability.

Imagery & beyond

- Drone imagery acquisition
- AI model ground-truthing and customized training datasets
- Complex, locally-nuanced field data collection.

Data and tech examples

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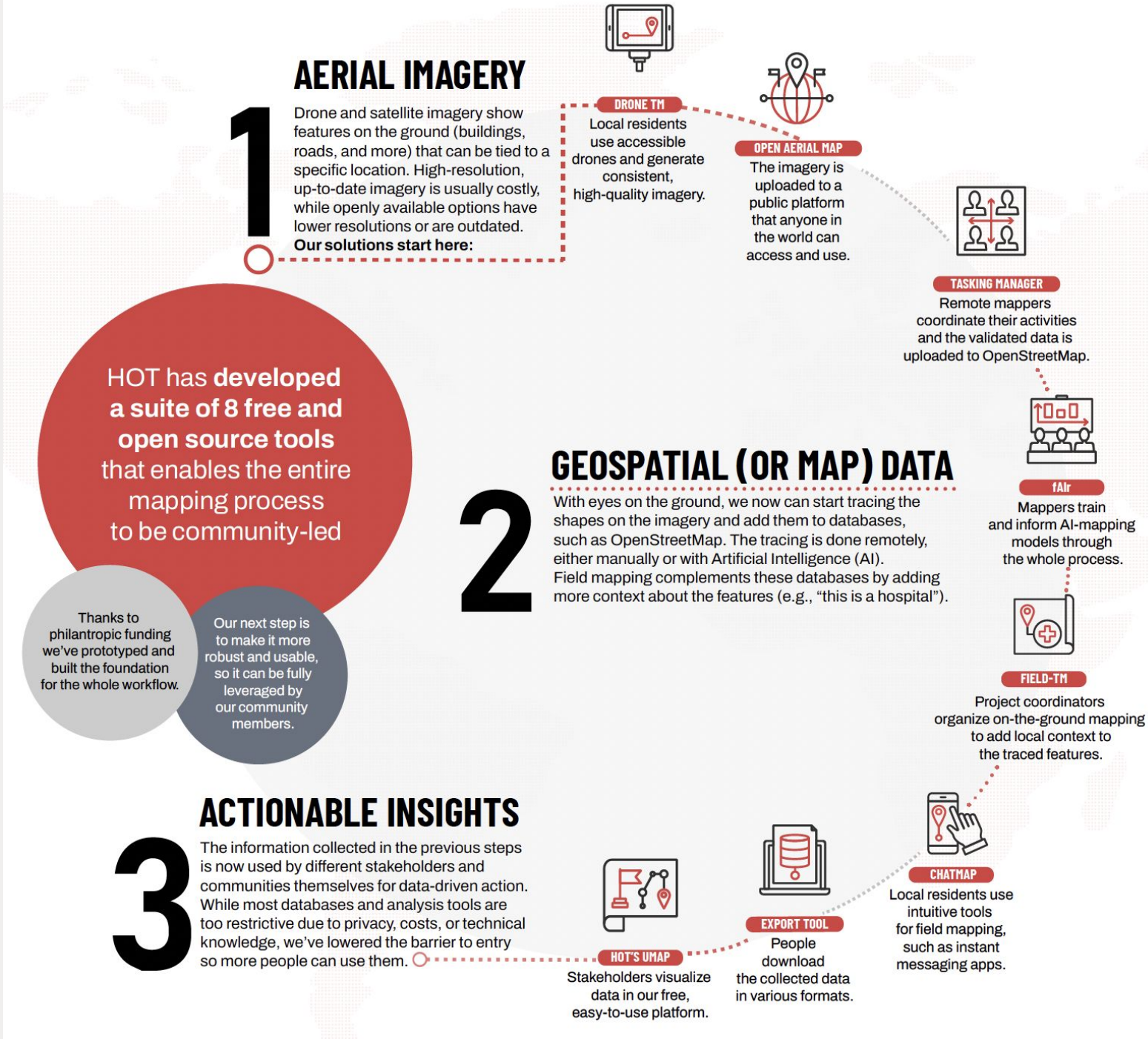
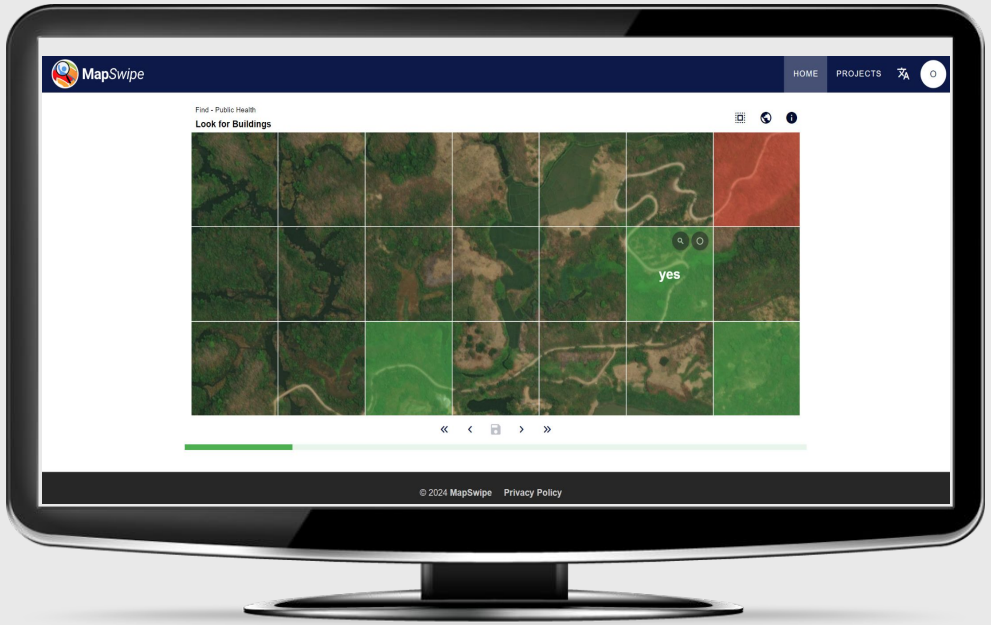
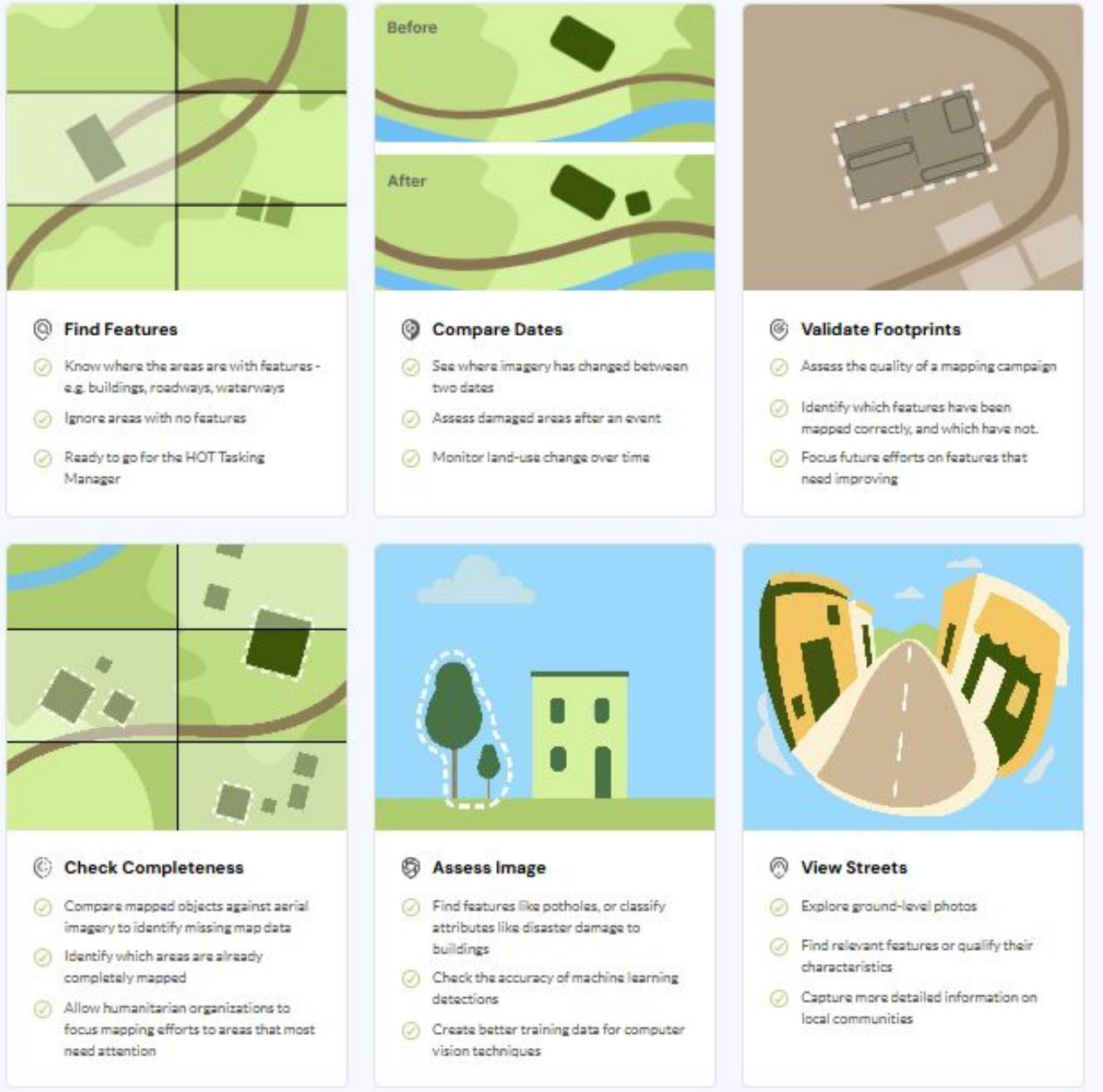
An open source, community-led mapping workflow



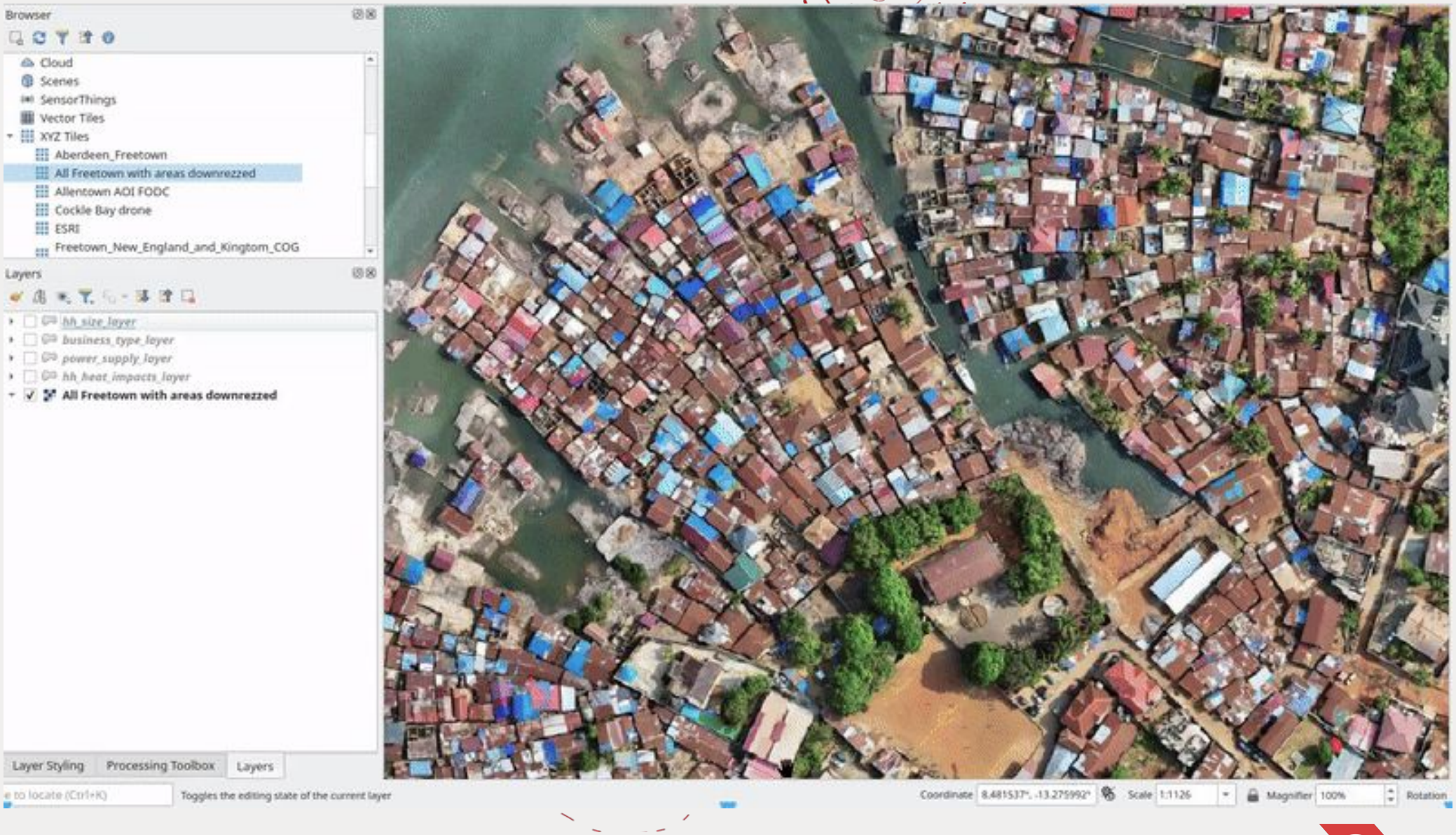
If you're on a laptop..



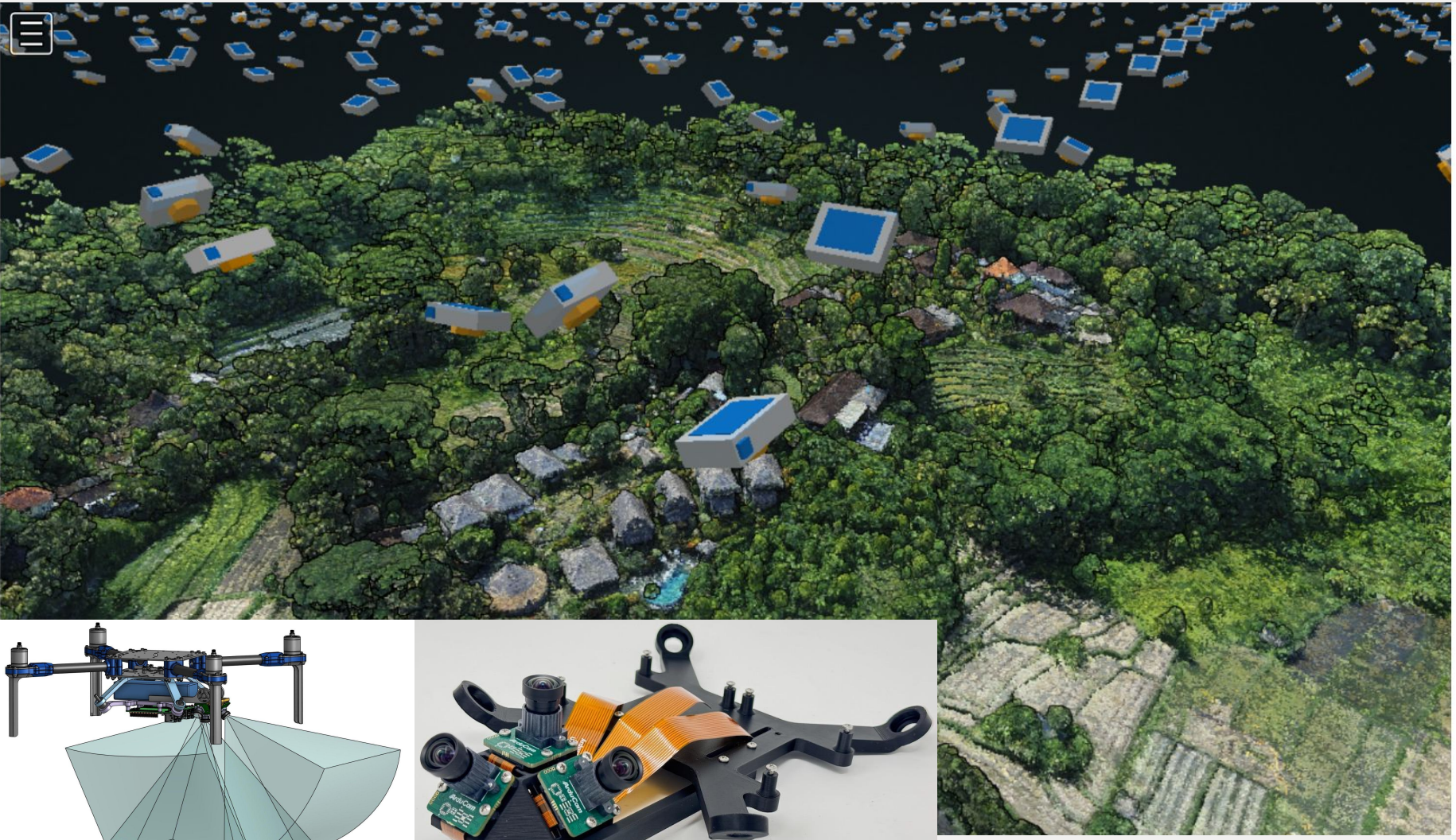
*https://**web.mapswipe.org***

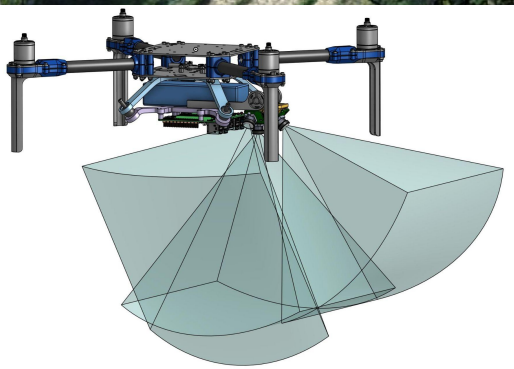


Comprehensive household surveys for climate adaptation and resilience planning.



Low-Cost Drones for Community Mapping





Commercial drones are too expensive and complex for non-experts. HOT is developing a multi-angle camera array that can be attached to a low-cost micro drone so that **community entrepreneurs are able to capture high quality imagery** that can be processed into 3D products, including technical maps and digital twins.

The multiple camera angles shown here create 3D data nearly as good as expensive and more complicated Lidar equipment at a fraction of the price.

Thank you

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Missing Maps

MapSwipe