



Humanitarian OpenStreetMap Team, Washington D.C., 2025

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Contact us

Address: 1100 13th Street NW Suite 800 Washington, D.C. 20005, United States

info@hotosm.org www.hotosm.org

Edited by: Atiya Anis

Designed by: Raiza Pilatowsky Gruner, Claudio de los Reyes

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A PERSONAL WELCOME FROM THE EXECUTIVE DIRECTOR

According to the Global Humanitarian Overview, nearly 305 million people around the world will need humanitarian assistance and protection in 2025 due to conflicts, climate emergencies, and other drivers. Despite these daunting challenges, our open mapping communities and partners continue to rise to the occasion, navigating complexities and seizing opportunities to create tangible, measurable impact for those we serve. The pages of this Impact Report bear testimony to their dedication, resilience, and innovation.



While the report showcases many high-impact projects, our work in climate and Artificial Intelligence (AI) stand out as beacons of progress. Through our flagship Mapping for Climate-Ready Cities program, we are addressing the critical climate data gap and ensuring that communities are represented in the global climate agenda. This initiative is improving climate resilience in high-risk cities around the world as well as in small islands and the Amazonia. Our goal is simple yet profound: to create accurate local maps that can be used in decisions and planning for climate adaptation, saving resources and time while preventing displacement, disease, and livelihood losses. On the other hand, the rapid evolution of AI is redefining innovation and unlocking new possibilities. HOT's AI-assisted mapping initiative, fAIr, is leading the AI mapping landscape by enabling communities to train AI models tailored to their environment and needs. This groundbreaking approach shifts power to communities, resulting in more efficient data collection, increased accuracy and greater local representation in the map.

As I reflect on HOT's journey over the past year and a half I am struck by the profound impact our work has made around the world:

We supported 46 disaster responses, and reached a milestone in mapping an area home to over 933M people through HOT's Tasking Manager, bringing us close to our Audacious goal of mapping an area home to one billion people by 2026.

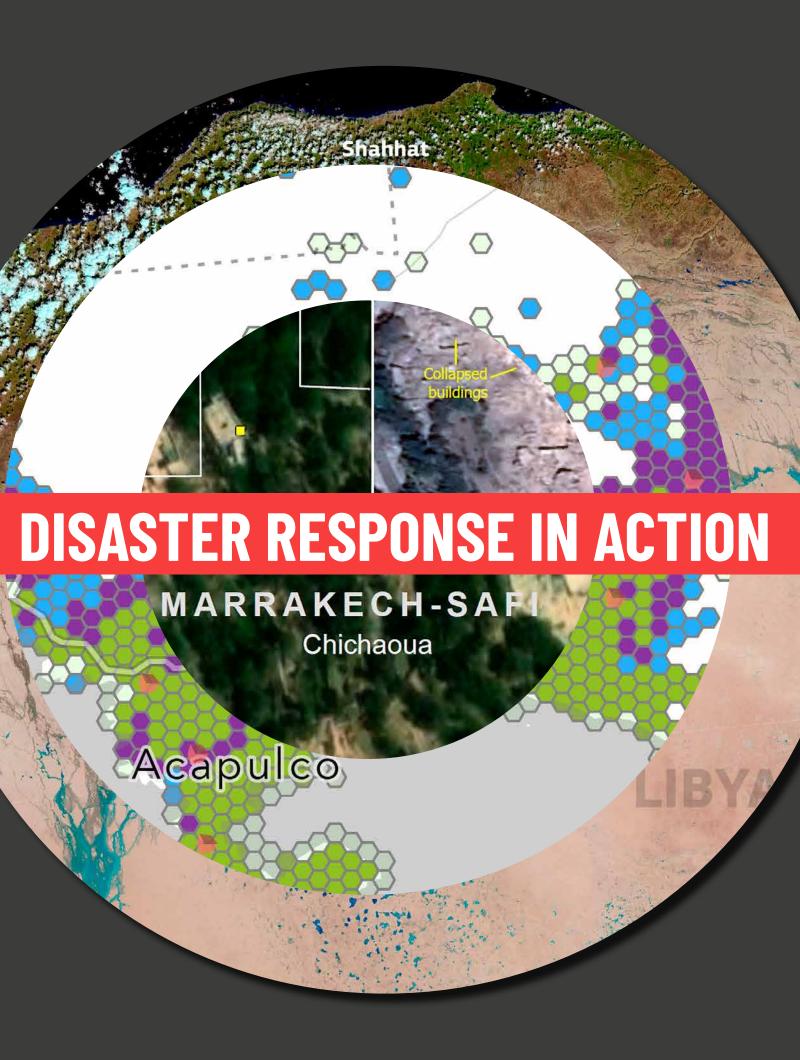
As we celebrate these achievements, I want to thank HOT's staff, community, and partners, all united by our shared values and purpose. Your unwavering dedication and commitment make this work possible. I am also profoundly grateful to our donors for their continued trust and support.

Our work is far from finished. In the coming year, we will intensify our focus on local mapping, enabling communities to represent themselves not just on the map, but in the discussions and decisions that will shape their futures.

I invite you to join us as we continue to map a better future for all.







SEPTEMBER 2023, MOROCCO AND LIBYA

On the night of September 8-9, 2023, a 6.8 magnitude earthquake hit Morocco, followed by a 4.9 aftershock, marking the deadliest and strongest recorded quake in the country's history with 2,960 fatalities. Just a day later, Storm Daniel caused catastrophic flooding in northeastern Libya, killing over 4,300 people.

In response, OSM communities in Morocco and Libya, along with global volunteers, mapped critical areas, contributing with over 220,000 buildings and 5,000 km of roads.

The map data is available directly from OpenStreetMap, and also in curated packages for Morocco and Libya, via OCHA's Humanitarian Data Exchange (HDX).

Hurricane Otis struck the Mexican state of Guerrero on October 25, 2023, becoming the most powerful cyclone ever recorded on the Mexican Pacific coast. This catastrophic event caused widespread devastation, displacing thousands, and claiming lives.

Even before the hurricane hit land, HOT's Open Mapping Hub in Latin America and the Caribbean and local community institutions launched an initiative to provide the essential mapping and information needed by local authorities for recovery.

This project combined cutting-edge open mapping tools, and engaged with local and national student networks like Youthmappers

chapters, and the National Network of Geography Students, RENEG, to cross-reference data sources to estimate the affected population. As a result of this partnership, a permanent network of stakeholders dedicated to Acapulco's long-term reconstruction and disaster preparedness was established.

52,000 buildings and 639 km of roads were mapped, and 5,439 damaged structures were identified.

This work was instrumental in guiding targeted interventions and recovery planning.

NOVEMBER 2023, MEXICO



OPEN MAPPING HUB'S IMPACT ACROSS THE WORLD





Established in early 2021, the Asia-Pacific (AP) Hub advances the open mapping movement across the Asia Pacific region. The Hub engages local organizations and communities, facilitating idea exchange and providing financial and technical support to significantly scale local OpenStreetMap (OSM)contributions.

IMPACT AT A GLANCE

*Since Hubs' creation

32 Countries Reached

12 Projects

107Partnerships

3,035People Trained

139 KMapping Volunteers

290.2 M

People Living in an Area Mapped via HOT's Tasking Manager

OPEN MAPPING GURU



49 K
Roads
Mapped and
Validated
(km)





The Open Mapping Guru Project is a vibrant, community-driven initiative designed to recruit, connect, motivate, and upskill experienced mappers across the region. This project fosters powerful collaborations with HOT, the AP Hub, and various partners, driving meaningful impact. The AP Hub has built a dynamic network of experts, placing them in 17 organizations across countries such as Bangladesh, India, and Timor-Leste. By June, the 50 Open Mapping Gurus had trained over 1,700 individuals. The project also launched the Climate Change Challenge, where more than

DHAKA THRIVE







areas at risk.





50 Guru-led teams participated in a month-long campaign to map priority

Dhaka, Bangladesh, one of the world's fastest-growing megacities, is threatened by increasingly frequent and intense climate-related disasters. With a growing population, these risks are magnified, making it crucial for NGOs and the government to access open geodata on Dhaka's most vulnerable urban settlements. This data is vital for evidence-based urban planning and effective disaster management. Dhaka Thrive is a collaboration of the AP Hub with World Vision Bangladesh, Open Mapping Gurus, OSM Bangladesh. It has completed the critical mapping of 41 slum areas in the wider Mirpur Region in Dhaka. This comprehensive base map data empowers NGOs and the government to implement climate resilience interventions, from disease and waste management to flood risk and fire hazard risk reduction, helping Dhaka to not just survive, but thrive.



My Guru Fellowship Journey: **Sushma Ghimire**

Sushma started as an OSM mapper in 2017, while she was attending college. This year, she went through a 5-month journey as a Trainer Fellow with the AP Hub, which has proved to be a transformative experience for her.

The in-person training, "Map and Chat: Open Mapping Hands-on Workshop for DRR 2024", designed for bachelor students with diverse backgrounds in Kathmandu. Nepal, in collaboration with Sendai Stakeholders Children and Youth Group, UN Major Group for Children and Youth (UNMGCY) and ALIN Foundation Nepal, aimed to equip them with handson open mapping tools and knowledge for disaster risk reduction (DRR).

For Sushama, the highlight of the workshop was seeing the participants present their ideas As a result of this progam, after the group discussions. It was a testament to their

newfound skills and how they could be applied in their respective disciplines.

Following the training, a group of participants engaged in a week-long mapathon focused on DRR. They mapped areas affected by floods and landslides, and contributed to various global projects remotely.

The collective effort resulted in mapping over 4000 buildings and 250 km of roads – a testament to the power of this initiative and the impact extended beyond the mere workshop.

Sushma organized and led the training –facilitating a pathway for participants to create a tangible impact (mapping over 4000 buildings and 250 km roads). She also developed an interdisciplinary training module that's adaptable and replicable, making it easier to train interdisciplinary participants in the future.

Sushma has lead over 30 trainings and reached more than 1,500 people.

"A big thank you to [...] everyone involved in making this possible. I am now even more excited to continue promoting open mapping and empowering others to contribute."





The Eastern and Southern Africa (ESA) Hub, which was launched in early 2021, and works with a network of community based volunteers and organizations, empowers communities across 23 ESA countries to create and share high-quality open map data.

IMPACT AT A GLANCE

*Since Hubs' creation

22 Countries Reached

> 52 Projects

19 Partnerships

8,033 People Trained

126.1 K Mapping Volunteers

244.9 MPeople Living in an
Area Mapped via HOT's
Tasking Manager



MAP DATA FOR EARLY WARNING SYSTEMS

1.075 M Buildings Mapped

5,757 Roads



Roads Land-use Mapped (km) Features Mapped

As part of preparation efforts for El Niño, FAO SWALIM requested geospatial data to inform the development of an early warning flood system to protect lives and livelihoods in Somalia. To effectively incentivize the ESA Hub's network of volunteers, they disbursed funds to community partners and designed training activities to encourage mappers to map quickly and with high quality. After projecting the value of the work, the FAO requested to expand the activity to Kenya and Ethiopia. Over 300 volunteers participated in five virtual marathons. The resulting data sets supported the development of the FAO's mitigation, preparedness and response plan.

MAPS FOR PUBLIC HEALTH PROGRAMS

Yendanafe is an innovative household registration tool developed by Medic Mobile, designed to optimize care delivery and empower community health workers to provide effective healthcare services directly at the household level. However, incomplete and inaccurate geospatial data have posed significant challenges to Yendanafe's deployment, limiting Medic's understanding of community locations and accessibility. The ESA Hub is playing a crucial role in overcoming these challenges by enhancing the completeness and accuracy of geospatial data. Through the dedicated efforts of staff and volunteers, enough OSM data has been collected to be offer invaluable insights into local realities, from household distribution to proximity to key services, paving the way for more efficient and impactful healthcare delivery.





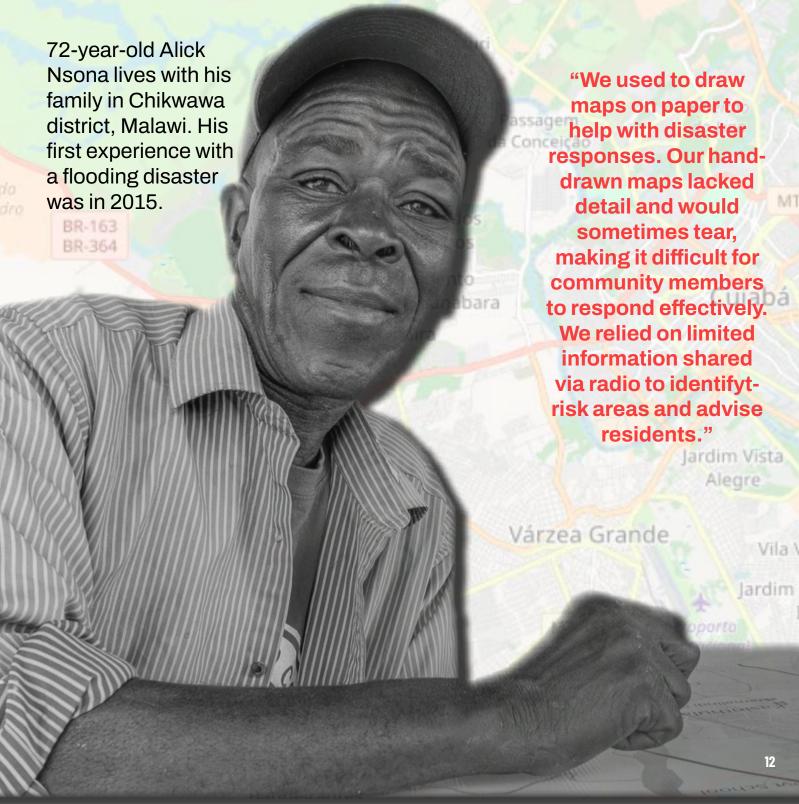
82,944 M

Buildings

Mapped

COMMUNITY AT THE HEART OF MAPPING

In 2022, the ESA Hub supported the Malawi Red Cross Society with a grant through the Open Mapping Grant program. The goal was to provide geospatial insights into the aftermath of Tropical Storm Ana by analyzing critical infrastructure affected in the districts of Chikwawa and Nsanje. The data sets were used in decision-making processes crucial for the early recovery of affected communities.





The Latin American and Caribbean (LAC) Hub was established in 2023 with the goal of advancing social impact mapping practices across diverse groups. The LAC Hub believes that social impact mapping can serve as a catalyst for social and economic change in the region. It emphasizes active community involvement in collaborative mapping efforts, ensuring that everyone has the opportunity to access and contribute to the map.

IMPACT AT A GLANCE

*Since Hubs' creation

19
Countries

90
Projects

112
Partnerships

6,624
People Trained

People Living in an Area Mapped

via HOT's Tasking Manager

AMAZONIA PROGRAM

21,327 10

Roads
Mapped (km)
Municipalities
Mapped
Communities
with grants

135,425

Buildings

Mapped

453 People Trained

50 MapSwipe Projects

The Amazonia Program is a multifaceted initiative addressing cartographic gaps and promoting social impact mapping in the region, with key projects in Colombia, Ecuador, Brazil, and Peru to strengthen prevention, emergency management, sustainable forest management, and community resilience. An example of this work is the project "Anticipatory Mapping of Risk Areas in the Amazon". In coordination with the risk management authorities in Ecuador, Colombia, and Brazil, the LAC Hub identified the most vulnerable areas in early 2024 and launched mapping projects on the HOT's Tasking Manager. The LAC Hub will prioritize mapping of these areas over the next two years, progressively advancing to complete a comprehensive map of the region. This map will be a powerful tool for all communities and decision-makers, providing detailed information that will enable better planning and response to risk situations.

WOMEN-CENTERED INITIATIVES IN SMALL ISLAND DEVELOPING STATES (SIDS)



The project focuses on enhancing the ability of women and girls in SIDS to address disaster risk and resilience through open mapping. The LAC Hub, in collaboration with the Caribbean School of Data (CSOD), distributed grants for six projects in the Caribbean. In Trinidad and Tobago, Saint Lucia, Guyana, Jamaica, Montserrat and Haiti, female high-school students were trained in GIS concepts, open mapping tools, drone awareness, risk management, and gender-based disaster resilience. Subsequently, they applied their skills by mapping public infrastructure and flood-prone areas in their communities as part of their capstone projects. The girls became local open mapping champions, by becoming part of local YouthMappers Chapters and the OSM Caribbean community and enhancing capacity in flood management and inclusive emergency preparedness



32.3

FEATURE: Paula dos Santos Silva

Paula dos Santos Silva is a 35-year-old woman born in the riverside community of São Luis do Macari, and a dedicated mother to a 13-year-old girl. She immersed herself fully in her passion for geography and in the mission to understand and map out the dynamics of riverside communities in the Amazon region.

Graduated and specialized by the Amazonas State University (UEA), Paula is currently involved in research for the Mamirauá Sustainable Development Institute (Mamirauá) on the impacts of the "Tierras Caídas" phenomenon, a process of erosion that has affected riverside communities.

For Paula, mapping goes beyond the four walls of the classroom. She highlighs the importance of the community's vision in understanding her work.

"MAPPING KNOWLEDGE WOULD BE OF GREAT IMPORTANCE FOR RIVERSIDE INHABITANTS AS IT WOULD ALLOW THEM TO MAP THEIR OWN TERRITORIES, COMBINING EMPIRICAL KNOWLEDGE WITH THE SCIENCES."



Launched in March 2022, the West and Northern Africa (WNA) Hub stimulates and strengthens the leadership of communities in West and Northern Africa to protect their livelihoods, improve their resilience and preserve their way of life by promoting social justice in accessing open data and free technology for their own purposes.

STRENGTHENING GENDER RESILIENCE AGAINST DISASTER (SGRAD)

The Saloum islands in Senegal are particularly vulnerable to natural hazards due to their small size. remoteness, low production capacity and lack of infrastructure. The SGRAD project worked with a local women's association to map the islands' natural areas and man-made infrastructure. The women were also trained to use HOT's mapping tools to monitor oyster populations, a key livelihood for the island, and use that information to better market their products.

\$8

Islands



Trainees





Amenities Added



ECO-SMART CITIES

The Eco-Smart Cities project focuses on under-mapped, secondary cities, aiming to generate and activate updated, reliable datasets and map products that support urban planning, public health, and service delivery. The project's primary goal is to develop innovative tools and promote eco-smart practices, addressing the pressing challenges of urbanization and urban planning in the region.

IMPACT AT A GLANCE

*Since Hubs' creation

Countries

Projects

Partnerships

4,485

People Trained

64.8K **Mapping Volunteers**

People Living in an Area Mapped via HOT's Tasking Manager



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Buildings Mapped



Roads Mapped (km)



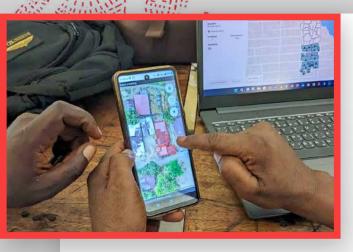
TECH CORNER

DroneTM

Lack of up to date, high resolution imagery is a bottleneck for generating open map data. HOT, along with our Nepal based partner NAXA, started the development of the Drone Tasking Manager (DroneTM), a solution enabling anyone with access to a drone, even an inexpensive consumer or DIY drone, to contribute easily and effectively to a global free and open aerial imagery repository. By coordinating flight plans, the Drone Tasking Manager enables capturing high resolution imagery over a larger area in a community- led manner.



During the pilot phase of development in 2023/2024 the HOT team conducted tests in various locations, including Rwanda, Cameroon, Nepal, Liberia, Indonesia, Dominica, Ghana, Tanzania, and Sierra Leone. In 2024, we have successfully kicked off the software development work and built the foundations for community centred drone data collection and coordination.

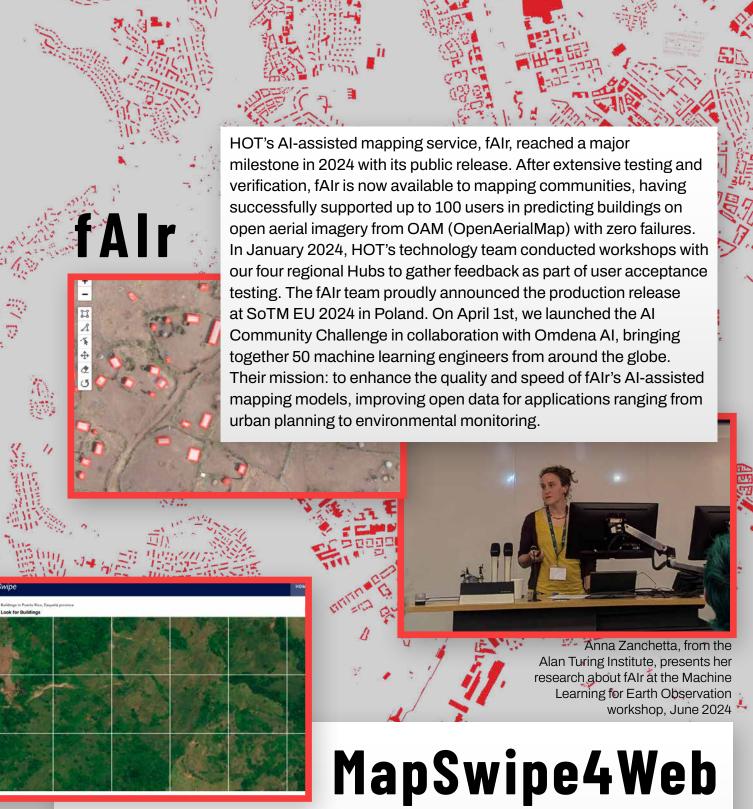


FIELD MAPPING TASKING MANAGER

《声歌歌唱篇

FMTM is a product that supports teams aiming to add local knowledge (information that cannot be captured from sensors) to map features through improved coordination in the field. FMTM is a standalone open source mobile and web application that works using OpenDataKit (ODK), and enables people to input geospatial data in the field in a coordinated manner.

In 2023/2024 the HOT team performed multiple tests with local communities incorporating the feedback for FMTM from the field. OpenStreetMap Rwanda was the first community to test FMTM in July 2023, followed by field work activities in more than 8 locations, a public beta release in March 2024 and a community webinar in July 2024.



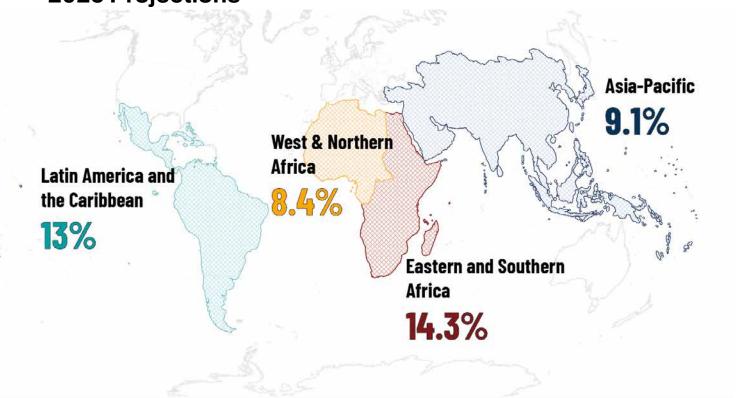
In 2024, HOT supported the creation of the web based version of MapSwipe. A larger screen not only makes it easier for users to view detailed satellite images but also improves the overall usability, especially for those who may have visual impairments or prefer desktop interfaces. By lowering the barrier to entry, we aim to engage a broader audience, from professionals in the humanitarian sector to casual volunteers eager to contribute to meaningful causes, and by providing a versatile platform, we hope to mobilize a larger community of volunteers dedicated to making a tangible impact on global humanitarian challenges.

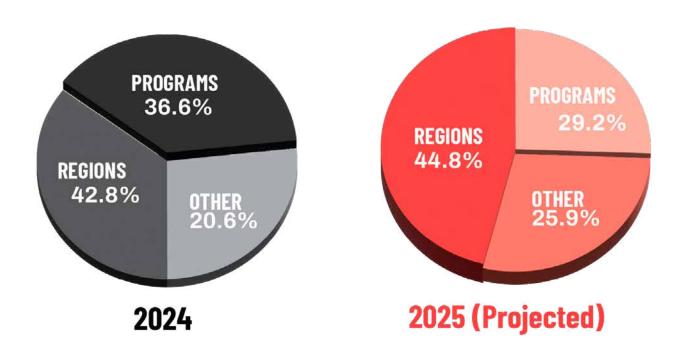
Financial Report

	2024	2025
Asia Pacific Region	\$797,606	\$700,000
Eastern & Southern Africa Region	\$971,508	\$1,100,000
West ୫ Northern Africa Region	\$673,490	\$650,000
Latin America & Caribbean Region	\$1,147,133	\$1,000,000
Technology & Data Innovation	\$2,017,151	\$1,700,000
Global Programs	\$498,169	\$300,000
Community and Partnerships	\$556,531	\$250,000
External Relations & Philanthropy	\$422,926	\$600,000
Management & Operations	\$1,302,508	\$1,400,000
TOTAL	\$8,387,022	\$7,700,000 *Projection
		*Projection

Budget by Region

2025 Projections





OUR DEEPEST GRATITUDE TO

OUR MISSION CRITICAL IMPACT PARTNERS*



















Members of



Including









Networks







*Based on the size of data contributions, collaboration, and/or funding support.

OUR CORPORATE AND FOUNDATION PARTNERS

















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WITH SPECIAL THANKS TO OUR AUDACIOUS DONORS



MACKENZIE SCOTT





ROSAMUND ZANDER & HANSJÖRG WYSS







CHANGE THROUGH TRANSFORMATIVE PARTNERSHIPS

Dhaka Thrive is not just a mapping initiative; it is a transformative project designed to tackle the profound challenges of urbanization and climate resilience in Dhaka. By updating and expanding geospatial data accessible to local stakeholders, this project targets critical areas like Mirpur, known for its dense slum populations and significant influx of climate migrants. The potential impact of Dhaka Thrive is substantial. Through the precise mapping of informal settlements, essential services, and environmental hazards, we aim to enhance urban planning, improve disaster response, and foster economic development. Our collaborative efforts with HOT enable us to leverage cutting-edge technology and community-driven data to inform decisions that affect millions of lives.

Dr. Rahul Mathew, Deputy Director, World Vision, Bangladesh



Before the mapping project, we used to have a low turnout of women coming to access reproductive services. With the accessible maps, we saw an increase in the number of women who visit our clinics.

Nurse Siama Zwale

It is important to also have women know about how to read and interpret maps. Because most of the time, you find that it's women who are alone at home when disaster happens, and they need to evacuate with their children.

Eneless Peterson, Community Leader



OUR PROGRAMS IN PROGRESS

Through the Mapping for Climate-Ready Cities program, HOT is closing critical data gaps in climate vulnerable regions. In collaboration with local and global partners—including communities, governments, and NGOs—across 13 countries, we are driving change where it is needed most. The program's key outcomes include updated digital base maps of target cities and the enhanced analytical capacity of local decision-makers. Capacitybuilding training and mapping activities are already well underway in all participating cities, with efforts expected to continue through 2025. By leveraging map data to take pre-emptive measures, this program is a critical piece to mitigate potential crises, thereby saving resources and time and averting displacement, disease, and livelihood losses.

Informations of the second sec Example of increased data quality in **OSM Building** OpenStreetMap building footprints in Gaza Footprint

Understanding the geographic context of conflict affected areas, including where people are, how to access them, and the state of local infrastructure is critical to plan adequate aid to meet basic human needs. Through our Conflict and Displacement program, HOT collaborates with expert partners to link crowdsourced and participatory mapping methodologies to humanitarian data users. For example, our footprint update for Gaza buildings pre-conflict resulted in a total of 59,223 buildings added to the OSM buildings dataset in Gaza, and thousands of existing building geometries (shapes) were improved. The resulting dataset has 18% more buildings than the leading dataset by Microsoft, created by machine learning (as of September 2024). With this improved information, data analysts can track which buildings are functional and which are destroyed, allowing to support rebuilding efforts.



LOOKING TO THE FUTURE



KNOW YOUR CITY

In response to urban climate adaptation challanges, HOT is proud to be teaming up with the Slum Dwellers International network and other partners to relaunch the Know Your City (KYC) project. KYC provides organized grassroots informal settlement communities with the technology, skills and support to leverage geospatial data and community mapping methodologies to identify, design and implement urban climate adaptation and resilience advocacy and action. With innovative collaborations already rolling with local communities, NGOs, and city authorities in Sierra Leone, Liberia, Tanzania and Ghana, the Know Your City project is set to grow in depth and scale over the coming months.

DISASTER RESPONSE

Disaster response is at the core of HOT's DNA, rooted in our origins. In 2025, we anticipate more direct collaboration with responders and local communities in the field. We are thrilled to announce the launch of our Disaster Response Fund. This pooled fund ensures that there is zero delay between our decision to respond to a disaster and the deployment of technology, mappers, data generation, and both on-the-ground and remote support.

COMMUNITY- MAPPING TECHNOLOGY



2023-24 has marked the launch of two exciting new tools: fAIr and the HOT Field Mapping Tasking Manager (FMTM). These innovations put professional-grade open technology in the hands of local community mappers. Both tools have immense potential to grow, and we're equally excited about the Drone Tasking Manager—an accessible application suite that allows anyone with a drone to contribute easily and effectively to a global, free, and open aerial imagery repository, enhancing disaster response and community resilience



Humanitarian OpenStreetMap is an international team dedicated to improving the well-being of people and the health of our planet through growing and sustaining the open mapping movement. In our role as a catalyst, we connect with communities in countries at high risk of disaster, humanitarian crises, or multidimensional poverty, and support them to be added to the map in the way they choose and to be included in decisions that affect their lives.