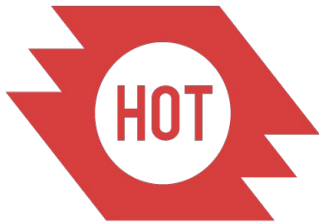


Uganda Open GIS Community Mapping 'Hyper-Local' Refugee Data



Humanitarian
OpenStreetMap
Team



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*Gift of the United States Government -
Bureau of Population, Refugees, and
Migration - US Department of State*

Open Mapping and Sustainable Community Capacity



HOT's objective is split between capacity building and map creation.

Two main engagements:

- Collaborative inter-agency data-sharing. **Embedded Trainings** in partner organisations, GIS tooling and data sharing through OSM.

And:

- HOT engages and trains participants from both **Refugee and Host Communities** as community surveyors under HOT/UNHCR's established standard Data Indicators.

Result:

Comprehensive, community-verified maps for operational precision, monitoring, and accountability.



Humanitarian OpenStreetMap Team

Step 1

Remote volunteers trace
satellite imagery into
OpenStreetMap



Step 2

Community mapping
to add local data



Step 3

Mapped information used
to plan risk reduction and
disaster response activities



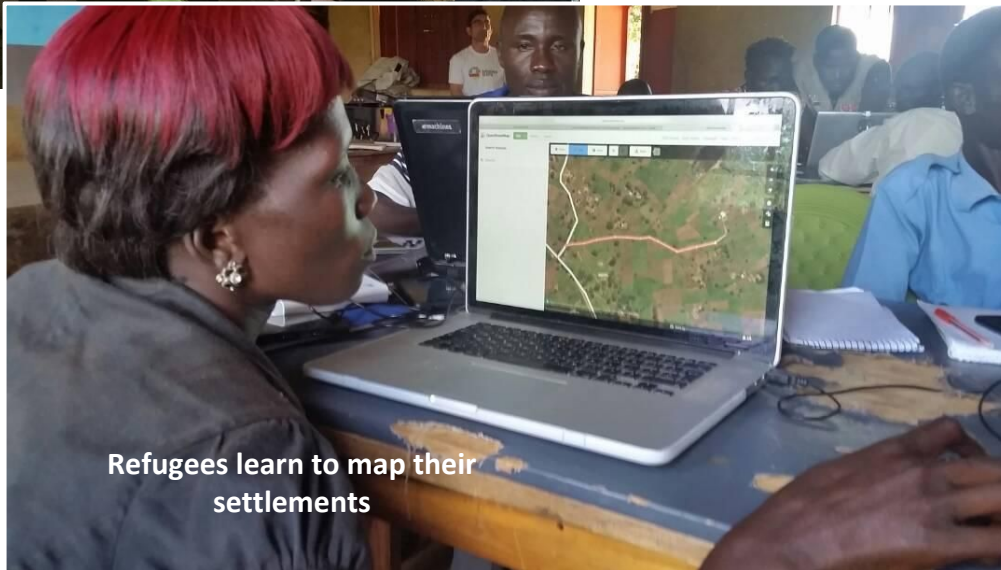
Remote Mapping



Refugees and Partners learn to map Settlements

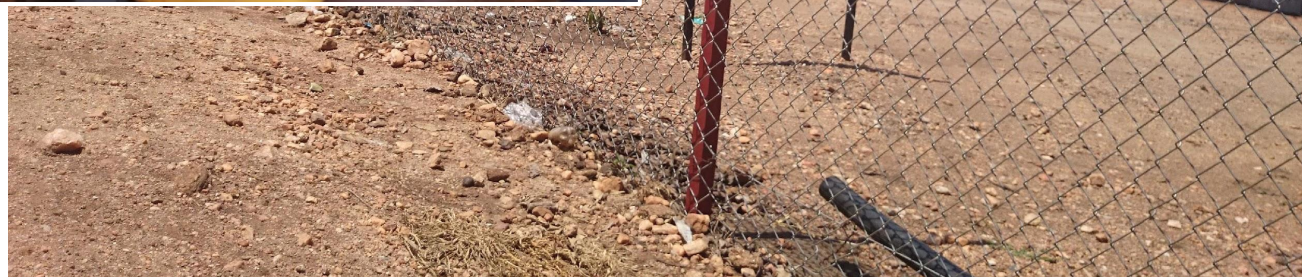


- **OSM** as the standard.
- Sharing as the Standard.
- Sensitive/Confidential data split at source.
- **Geographical Data Only on OSM.**



Refugees learn to map their settlements

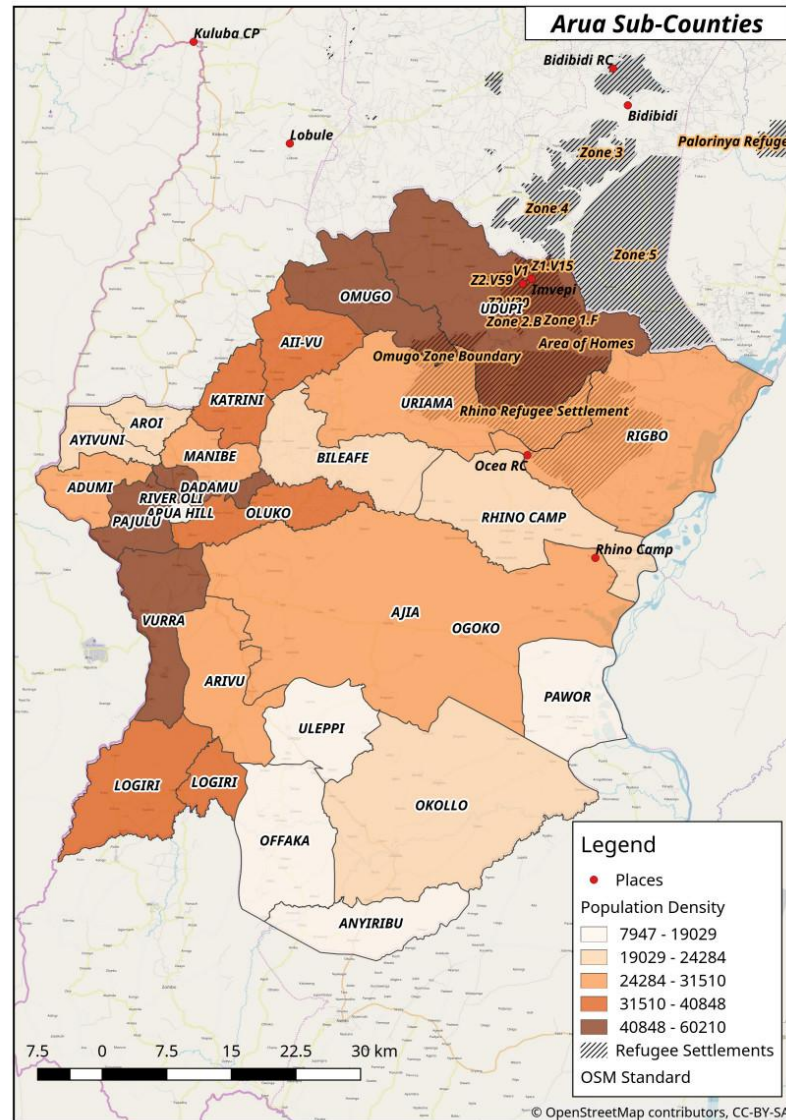
Sustaining Partner AND community Capacity by: Collaborative Base-Map Updating, through Public Engagement



Mapping all Hosting Sub-counties in Arua District.

SURVEYS:

- Community
- WASH
- Health
- Education
- CBI
- Social/Other

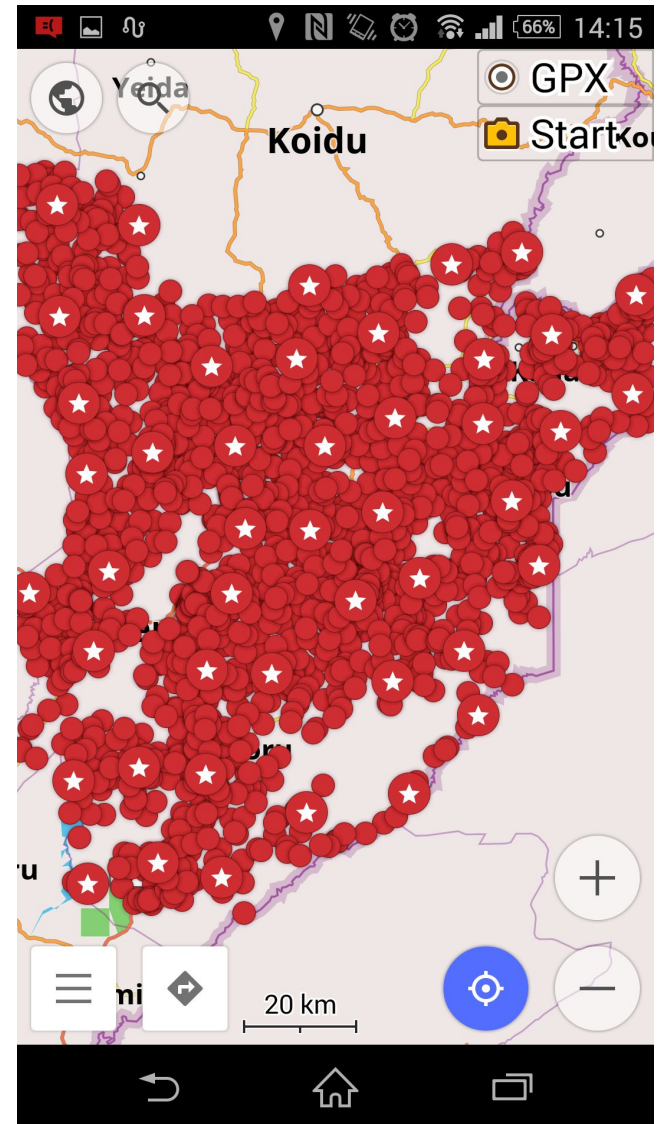
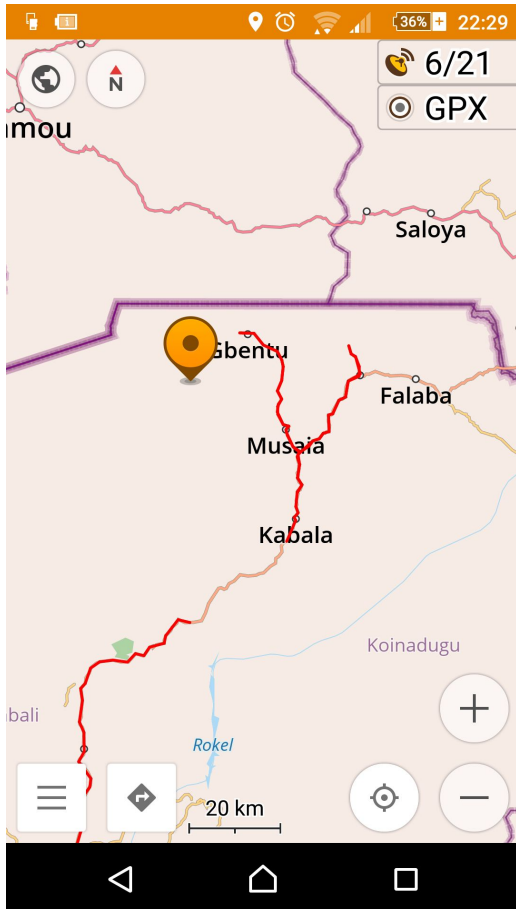


Field-Strategising for Arua - OSM basemap print-out.

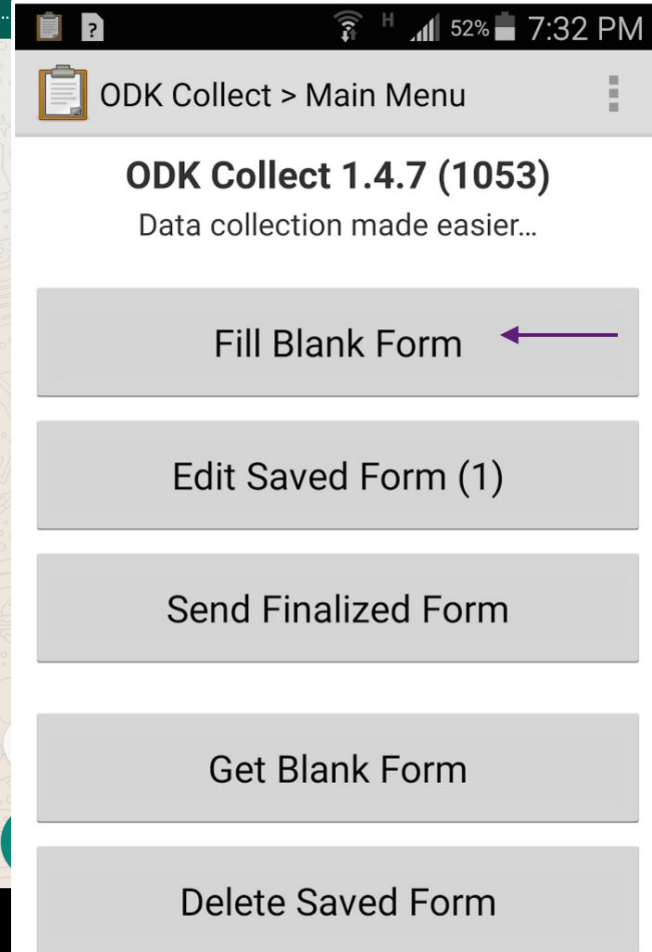
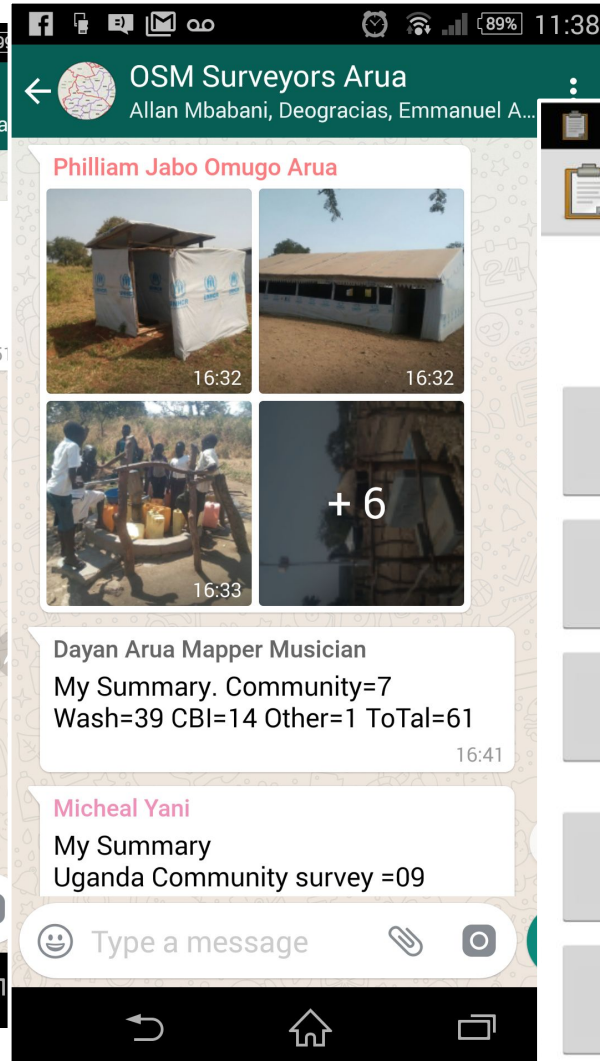
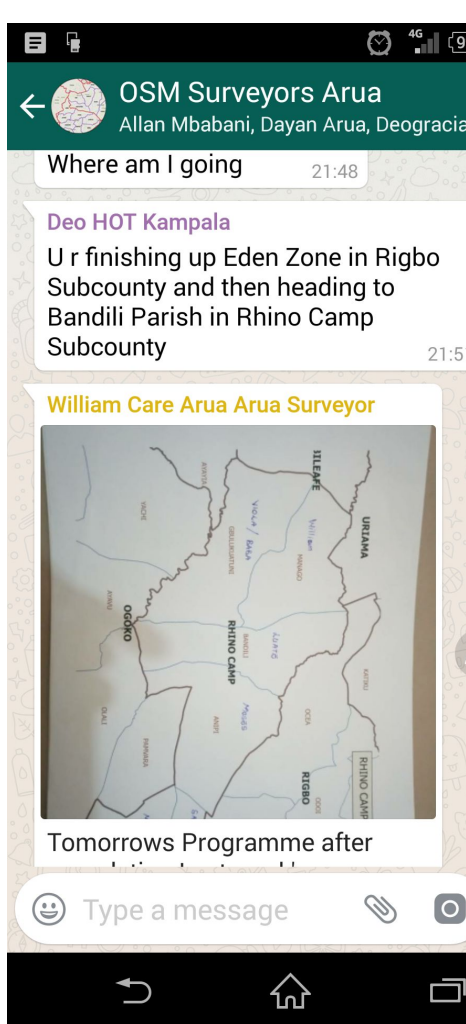


The shared map evolves, fed by multiple and continued data sources

Data Across Devices, Stored Offline



Mobile Data Collection tools - ODK and Kobo



Server Visualisation Daily Survey Monitoring



Uganda_Community_Survey_v10 | KoboToolbox - Mozilla Firefox

https://kobo.unhcr.org/#/forms/aS3TTXvuCPmFRx6p9mvmY3/data/m...

KoboToolbox Uganda_Community_Survey_v10 267 submissions

FORM DATA SETTINGS

Map

The map displays the Yumbe region in Uganda, with numerous red circles representing survey data points. The circles are concentrated in the central and eastern parts of the region, particularly around the towns of Abiri, Akpokoa, and Acha. The map includes labels for various locations such as Agora, Koboko, Oleba, Ovujo, Abia, Ariwara, Nderi, Vura, Ajiya, Ampa, Anipi, Agonvusus, Abario, Alinga, Achimari, Aliba, Barakala, and Esia. The map is overlaid with a grid and includes standard map controls like zoom in (+), zoom out (-), and a location pin icon. A 'View By' dropdown menu is visible in the top left corner of the map area. A 'back to project' button is located in the top right corner of the map area. The map is powered by Leaflet.

Deployed 9

WASH_Facility_Form_v...

Uganda_Community_S...

Uganda_Community_S...

WASH_Facility_Form_v...

Education_Facility_For...

CBI_Facility_Form_v08

Health_Facility_Forms...

Other_Important_Facili...

OSM_Arua_Mapping_R...

Draft 0

Archived 7

Reports

Table

Gallery

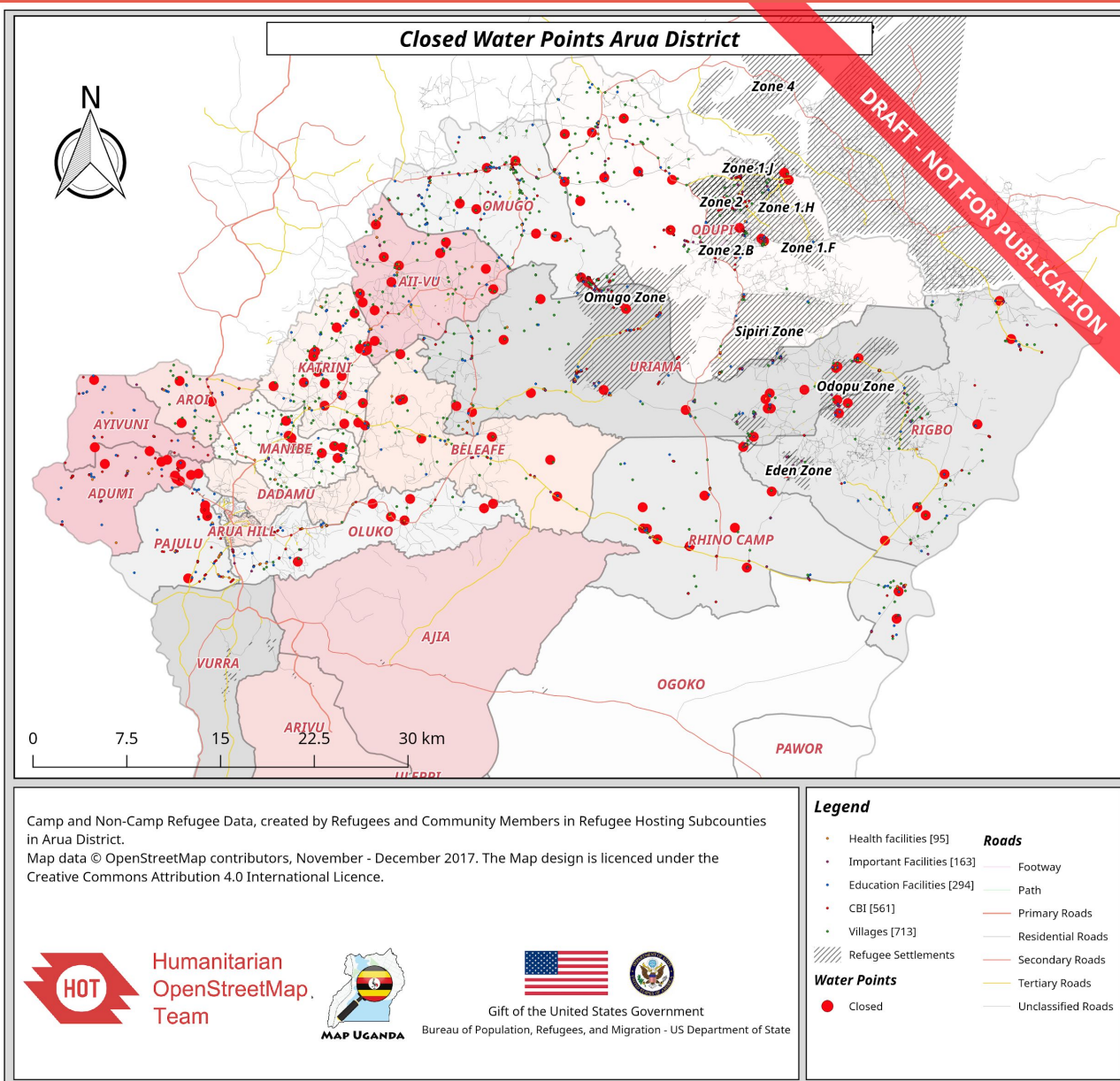
Downloads

HOT is committed to assisting partners to manage data, and commit geo-specific point and line data to OSM.

Government agencies are key stakeholders of spatial data.

Development partners, local NGOs, CBOs, and CSOs, as well as citizens, participate and play a vital role in the process of collecting, using and maintaining data.





Non-Functioning Water Points in Arua

CONTENT VERIFICATION - COORDINATING OPEN CITIES

- Community Mobilisation
- Community-Verified
- Upskilling, Sustained, Inclusive

PARTNERS SKILLING

- Familiar and Inclusive Technology
- Broad Complete dataset accessed by all through ODK, XLS
- GIS skillsets across sectors and Agencies
- Field Feedback, Community Advocacy

Mobile OSM Tools - Fast and Revealing



SURVEY TYPES:

Community

WASH

Health

Education

CBI

Social/Other

Field Mapping Period:

25th Nov 2017-20th Jan 2018

Points uploaded to OSM: 6,537

Interactive Online Maps can be exported for use:

[Arua Closed Water Points and Schools.](#)

Thanks!

