How crowdsourced mapping is helping prevent Female Genital Mutilation in Tanzania

Introduction

Female Genital Mutilation or FGM is a traditional cultural practice involving the cutting or removal of the external female genitals. It results in pain, emotional and health problems and even bleeding to death. Although illegal in Tanzania it is still practiced by many tribes, particularly in the remote villages in Serengeti district. Outreach and campaigning work in this area is hampered by the lack of maps showing village locations.

A survivor's story – Rhobi's Safe House

Rhobi grew up in a small village in Serengeti. As members of the Kurya tribe, her family wanted her to undergo FGM as the traditional preparation for marriage. As a 13 year old she knew well the dangers of such cutting, as one of her friends had died from the practice the previous year. She pleaded in vain with her parents not to cut her. However, having nowhere to turn she had no choice but to submit, which almost cost her her life as she bled so much she fell unconscious. Twenty years later she finally achieved her dream and set up the Mugumu Safe House - a sanctuary where girls refusing FGM can turn during the annual "cutting season". To ensure girls know they have a safe place to go, Rhobi visits the remote villages where they are most at risk to tell the girls there about their rights, and to persuade these communities to use alternative, safer, rites of passage.

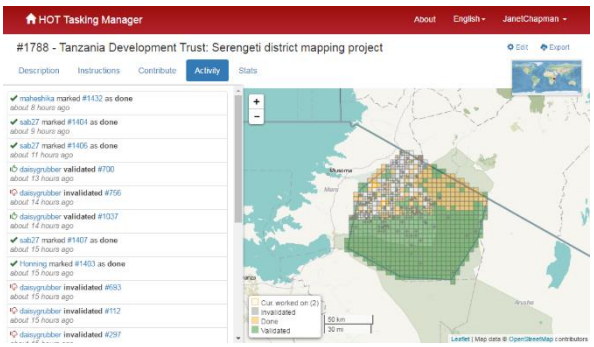
Reaching the villages

Rhobi's work in reaching the villages is difficult because before this project there were no maps available. This meant it was impossible to ensure all girls are reached. Villages like Sogoti were forgotten by the outside world. Rhobi had to cut down trees to reach it the first time she visited. Rhobi and other workers in this area were concerned that many girls were being missed.

Enabling rural communities to map

Living in London I am used to having good maps to help get me wherever I want to go. When I first started visiting rural Tanzania as a project officer with Tanzania Development Trust in 2014, I was frustrated at the blank maps of the rural areas where we work. After I learnt about Openstreetmap I was determined to enable the rural communities we work with to start mapping their villages to allow better navigation and planning of services.

Using HOT Tasking Manager and Satellite Images



With fellow mapping enthusiast Egle from HCI we set up the project Crowd2Map Tanzania and launched with a triple mapping party at UCL in London, with Ramani Huria in Dar es Salaam and the Technarium in Vilnius, where Egle is based. Over 200 people took part, and also in side parties in Nairobi and at the Safe House itself, tracing roads, villages and buildings of the area around the Mugumu from satellite images within the HOT Tasking Manager.

Adding open data
Adding the names of the villages we were marking is more of a challenge. We used the Tanzania Open Government data showing the name and location of schools and clinics. We recruited over 300 volunteers from UN Online Volunteers and set up a google sheet whereby they could paste the latitude and longitude of each school into openstreetmap, find the relevant building on the satellite image, draw a box around it and label it appropriately. In many cases the name of the primary and secondary schools and clinic all share the same name, which means it is likely to also be the name of that village.

Mobile mapping competitions
When we first started we were also using a smartphone app called Epicollect, and as I travelled around rural Tanzania visiting projects by bus, daladala (minibus) and pikipiki (motorbike) I labelled everywhere I could, but more importantly showed everyone I met with a smartphone how to do the same. In order to encourage people to get mapping, which necessitates some expenditure of effort and purchase of mobile data, we started monthly competitions. The person who added the most relevant points won a small cash prize. We promoted this via personal contacts, What's App groups, a Facebook group where we also answered questions on getting started. When Maps.Me launched its new version which allowed people to add points directly into openstreetmap we started using that instead.

What next?
We are desperately finishing the map around Mugumu before the FGM cutting season starts at the beginning of December. We will then move on to the area around Shinyanga where girls are particularly at risk of child marriage. I will be visiting both areas in December and as well as running mapping workshops hope to also take out paper maps of each area.

Maps.Me is brilliant for mapping and navigation, but some of the categories it includes are difficult, particularly for people for whom English is their 3rd language. We are working with them to develop a Swahili version with more relevant categories for rural Africa.

How you can help.
This is an entirely volunteer run project. We have no budget. Money for the monthly competitions comes from donations or our own pockets. Access to mobile phones is a huge limiting factor in the areas where we work, so any donated second hand phones are put to very good use. We are not mappers, so any technical help, particularly around importing data and validating would be fantastic.

But **ANYONE WITH AN INTERNET CONNECTION** and a few minutes to spare can map a road connecting to safety here – so please help!

And please help us get the word out – on Facebook, Twitter and our blog..