

Our mission: to create space for local data collaboration and innovation connected to humanitarian decision making and a global data network

The Humanitarian Data Exchange (HDX) is an open platform for sharing and finding data, created by the UN Office for the Coordination of Humanitarian Affairs. To further engage the humanitarian community, HDX opened a Data Lab in Nairobi in November 2014. The Lab has been working to surface data from partners across sectors and provides services like data cleaning, analytics, and training to collaborating organisations.

Since the Lab's inception, over 700 datasets (both privately and publicly) from the East African region have been shared--roughly 10% of the total datasets currently on HDX. Kenya is one of the top locations for HDX use. This is the result of collaboration with about 56 partners to explore how the HDX platform may address a number of information management challenges that they have been facing. Close to half of the organisations collaborating with the Lab are NGOs. This demonstrates a very real need for data sharing and information management tools in the humanitarian sector.

Our Impact

Sub-national Data Surfacing: A primary purpose of the Lab is finding humanitarian data for the region. One of our first projects was supporting secondary data collection for the development of a regional risk model for the Intergovernmental Authority on Development (IGAD). The aim was to improve IGAD's ability to analyse, visualise and disseminate information to support the response to humanitarian crises. For this project, we conducted outreach with potential data partners and extracted data manually from static maps, GIS files, PDF documents and spreadsheets. A regional interactive risk map, the first of its kind, has since been developed.

Key learnings from this work included: i) Uncovering the disparities between national and sub-national level indicators; and ii) Developing a data deficit heatmap to illustrate the importance of new data sources in policy analysis.

Visualisations for Improved Analytics: The Lab has developed interactive visualisations to increase the speed to insight for decision-makers in organisations. Our partners have expressed that the visuals have helped with simplified and more engaging reporting, and evidence-based advocacy (See Twaweza case study).

Data Collaboration and Innovation: The Lab aims to support innovations around the use of data in the humanitarian community. We have sought to host exciting research projects that can support humanitarian decision-making.

For example, the Lab facilitated a research project between The Global Urban Observatory (GUO) team at UN HABITAT and the Probono Analytics group of the Institute for Operations Research and the Management Sciences. Probono Analytics proposed the inclusion of a Human Vulnerability Index in cities, data that the GUO team was previously lacking in their models for the City Prosperity Index presented in the State of the World Cities report.

Questions

Ability in English

Ability in Mathematics

Ability in Swahili

House Wall Material

Household Education Level

Meals Per Day

Number of Children in Household

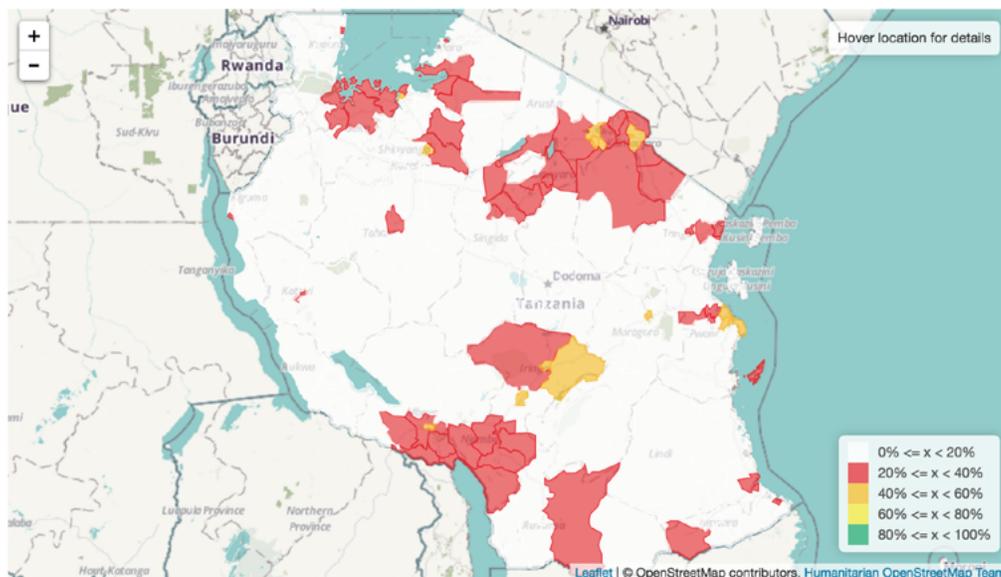
Number of Females in Household

Ability in English

(Survey totals are multiplied by weights)

Map Bar chart Bar chart (percent)

Answer: Competent 2344146 respondents



[Twaweza data visualisation on HDX](#)

Case Study: Visualising Education Data

Twaweza’s Uwezo initiative is Africa’s largest annual citizen assessment of children’s learning levels across hundreds of thousands of households. Their goal is to communicate these results to ‘a discerning and curious public’ to prompt collective action towards educational reform, turning the the data into a useful public good that can enable decisions to be made faster.

We worked with Twaweza to visualise their survey data to show comprehension levels in mathematics, English and Swahili at the sub-national level in Kenya, Uganda and Tanzania. Following an iterative design process, our data teams worked together on data preparation and cleaning, while HDX completed the data visualisation programming and design work.

The Uwezo data visualisation is valuable to us in a number of ways:

1. The data visualisation exercise with HDX motivated us to look at and understand the wealth of data we collect. We realised how much value we were holding in the data. Their questions were instrumental to our deeper understanding of what we have and how best to share it with non-specialist, but informed/curious audiences.
2. The ‘product’ has helped us to open a potentially fruitful dialogue with Tanzania’s government publications.
3. We hugely appreciated HDX’s approach to working with us. I note the patient encouragement and guidance that was a hallmark of their interaction with our data team.

The end result is a very competent first iteration of a public facing data product. I look forward to expanding the visualisation to include more data/variables, and to making it even more accessible to non-specialists.

--Aidan Eyakuze, Executive Director, Twaweza East Africa