



# New data sources, innovation trends and challenges on information retrieval in UNICEF

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# UNICEF is Big

Global & local

135 countries

15,000+ staff

88% of the in the field

\$4.5 billion a year budget

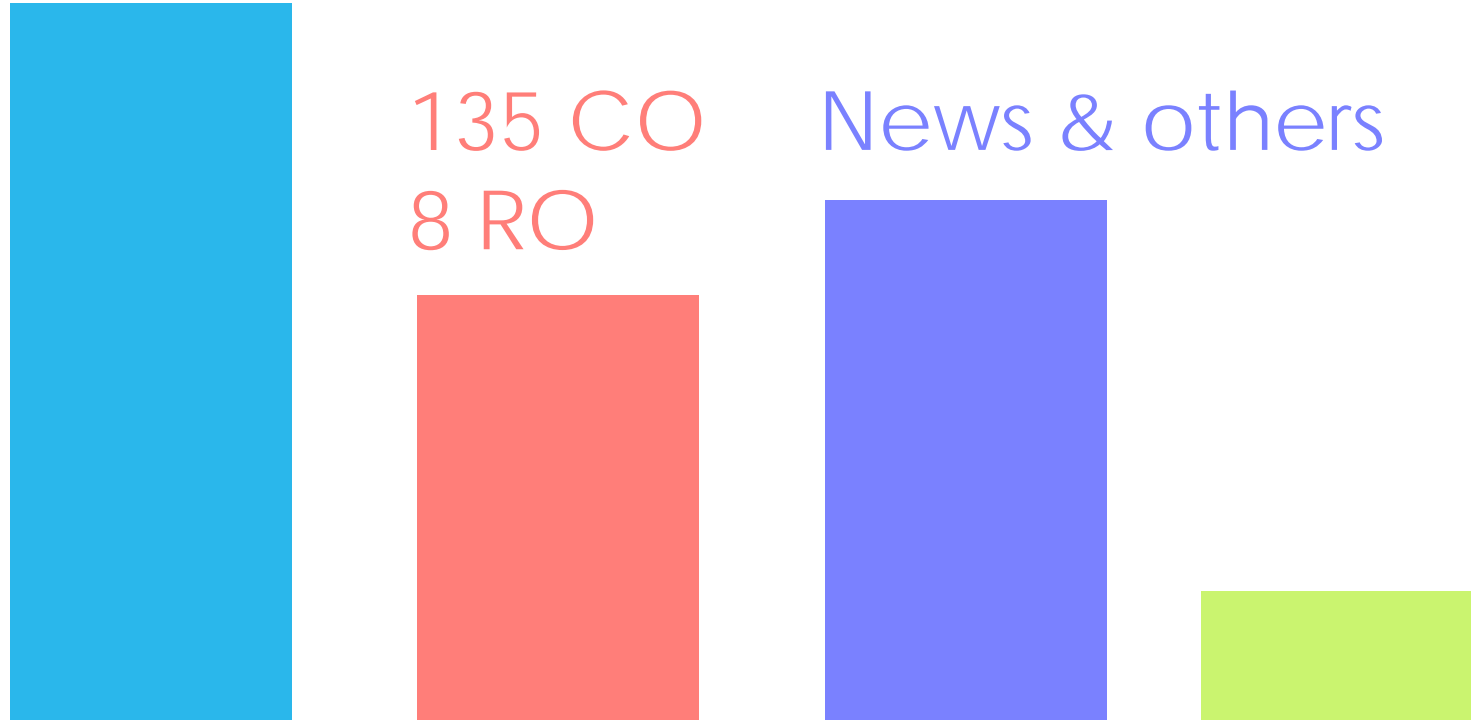
# Data nightmare

Big, decentralized & incomplete

2-3 year surveys

12,000 HH

100 countries



**14 Aug 2014**

**Army rescues hostages, mostly women and children, held by LRA**

Ugandan troops have rescued 45 women and children held by fugitive Lord's Resistance Army (LRA) rebels after battles with the rebels, the army said. Army officials said they were freed in two separate batches earlier this month in Digba, in the remote forests of northeastern DR Congo. "We rescued from the LRA 45 people, the latest (batch) being 32 women and children," Ugandan army spokesperson reported on 13 August. He said another batch of 13 women and children had also been freed.

Al Jazeera - <http://www.aljazeera.com/news/africa/2014/08/ugandan-army-rescues-hostages-held-lra-2014813165551905773.html>

**31 March 2014**

**Ugandan president dismisses aid cuts at rally against gays**

President Yoweri Museveni told a rally of religious leaders, politicians and thousands of supporters on Monday that Uganda could live without aid that Western donors suspended or diverted in protest at an anti-gay bill that became law in February. Western donors have halted or re-directed about \$118 million in aid since Museveni signed the law, which toughened existing rules against gays and prescribed life in jail for what it called "aggravated homosexuality", such as sex with a minor. "When you hear these Europeans saying they are going to cut aid ... we don't need aid in the first place," Museveni said. "A country like Uganda is one of the richest on earth."

Reuters - <http://af.reuters.com/article/commoditiesNews/idAFI5N0MS3RF20140331>

**26 March 2014**

**Authorities probe alleged atrocities in LRA rebel war**

Ugandan President Yoweri Museveni has ordered investigations into alleged atrocities committed by the army during 20 years of war against Lords Resistance Army rebels, officials said on Wednesday. "Information has been coming up that some officers may have committed crimes, but these cases were never reported to the government," presidential spokesperson Tamale Mirundi said. "But now that they are being reported he [President Museveni] has directed an inquiry." Ugandan military spokesman Paddy Ankunda said the probe was welcome and that the army would co-operate.

AFP - <http://www.news24.com/Africa/News/Uganda-probes-alleged-atrocities-in-LRA-rebel-war-20140326>

# Challenge 1

Aggregate and make data "computer readable"



# The hardest to reach

How do we generate data about the invisible?



40% Phone <sup>\*Uganda (2013)</sup>

10% Internet

2% Facebook



# Communication

Fast & digital



Child registration  
Family reunification  
HIV education  
Health monitoring  
...

Rapid **SMS**  
RAPID **FTR**

# Crowdsourcing

Polling and survey Individuals & Communities



200,000+ U-reporters  
90% under age 30

2xweek poll  
20-30% response rate

## Challenge 2

Extract new knowledge from existing sources

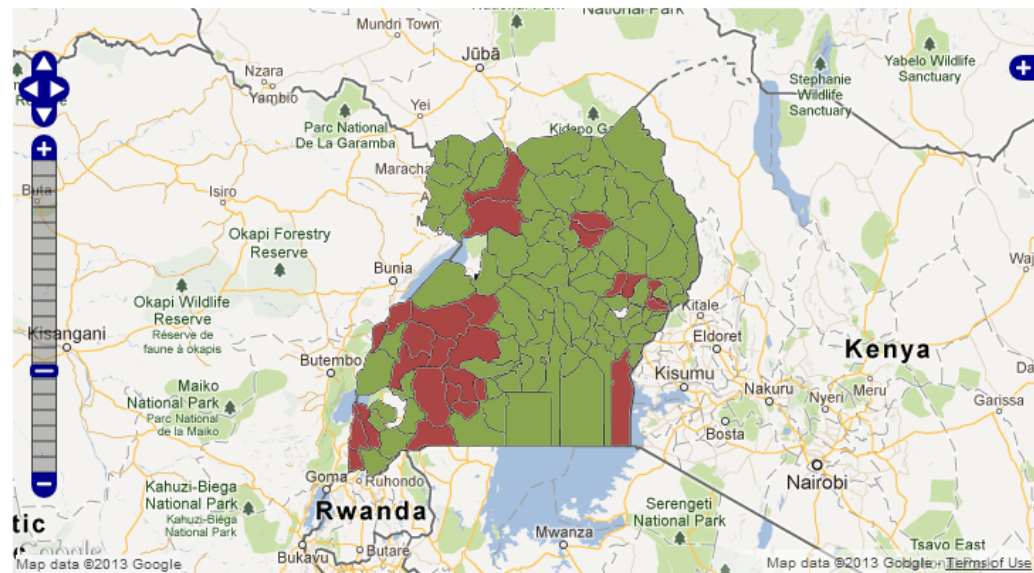
automatic analysis/clustering? other knowledge? 8



CURRENT POLL - 04/Mar/2013 :

If you get water from a well, borehole or community tap, is it working today? YES or NO and include village name.

28,391 Responses out of 182,517 Participants (15%)





# Tower data

Digital exhaust

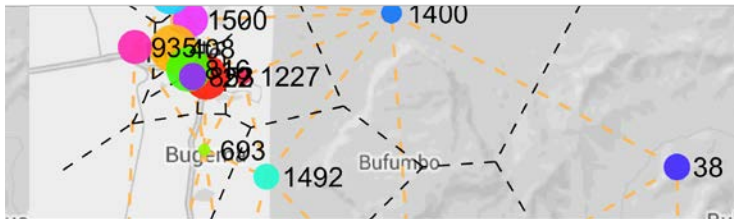


# Challenge 3

Extract fast knowledge from new sources



Demographics



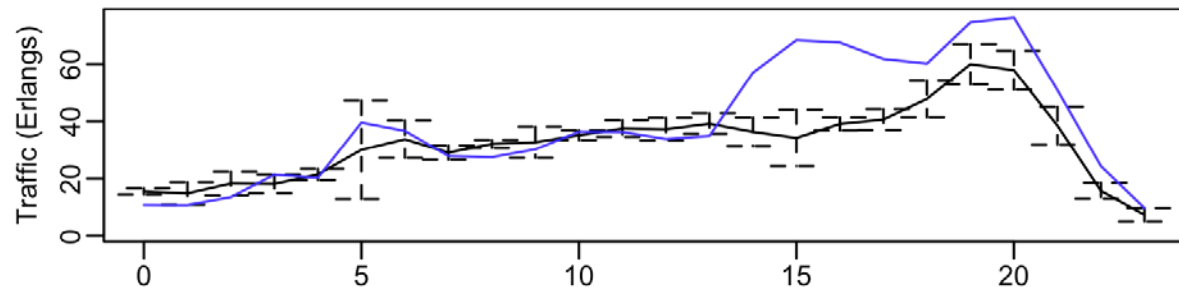
Mobility

Social structure



Economic resilience

Emergencies detection



2012-06-25 - cell: 38





Thank you

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