

## Open Development enabled through innovative uses of ICT



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June 28, 2011



## Goal: Increasing Accountability in Public Services & Aid



### New paradigms

- Transparency
- Participation
- Collaboration
- Economic Empowerment



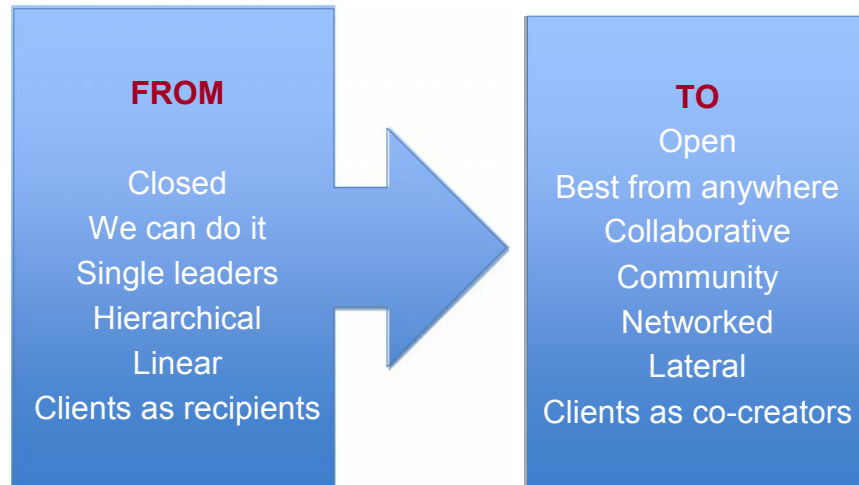
## World Bank's Vision



"Imagine this: A health care worker or parent in a village, with a laptop or mobile device, can access development knowledge in real time through **geo coding** and **geo mapping**. She can see which schools have feeding programs and which go without, and what is happening to local health. She can access 20 years of data on infant mortality for her country and its neighbors. She can dig deeply and compare her village with others. She can **upload her own data**, throw light on the likely effect of new interventions, and mobilize the community to demand better or more targeted health programs."

"Our aim is for *Open Data, Open Knowledge, and Open Solutions.*" RBZ, Sept 28, 2010

## Open Data, Open Knowledge, Open Solutions Requires a Way of Doing Business



## Focus: Game Changing Opportunities



- Geo-coding
- Mobiles
- Social Media

## Open Development Vision



### Open Data

- Share tools and essential information on the global economy and Bank operations

### Open Knowledge

- Enable researchers, students, civil society, and local communities to collect data, measure results, increase knowledge

### Open Solutions

- Work together to find solutions to development problems

## Open Data Initiative



- Easy and free access to a wealth of indicators, aid flows and project outcomes

- Partner with others, such as Google and Microsoft, to expand data reach

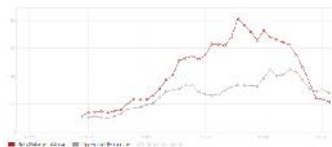
- Apps for Development Challenge – encourage innovation

## Open Data

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Country Name	1990	1995	2000	2005	2010
Barbados	100	100	100	100	100
Cape Verde Rep. of	20	20	20	20	20
United Kingdom	20	20	20	20	20
Kenya	20	20	20	20	20
Malawi	20	20	20	20	20
Tanzania	20	20	20	20	20



## What they are doing with Open Data...



Google search results for "external debt tanzania". The search bar shows "external debt tanzania" and the search button is labeled "Search". Below the search bar, it says "About 100,000 results (1.25 seconds)".

On the left side, there are links for "Everything", "More", "All results", "Timeline", and "More search tools".

The first search result is titled "External debt stock, Tanzania" and shows a line graph of the debt stock from 1970 to 2008. The y-axis is labeled "10B" and "5B". The graph shows a general upward trend in the debt stock over time. Below the graph, it says "www.google.com/publicdata".

The second search result is titled "THE UNITED REPUBLIC OF TANZANIA" and includes a snippet of text: "Oct 1, 2002 ... An index for a weighted average exchange rate on Tanzania's external debt is needed for continuously tracking the impact of currency ...". Below the snippet, it says "www.tanzania.go.tz/qpdic/02.htm" and "Cached Similar".

The third search result is titled "External Debt Statistics Compilation in Tanzania" and includes a snippet of text: "File Format: Microsoft Powerpoint - View as HTML. The government designated the Bank as the central institution responsible for recording and managing Tanzania's external debt database for both the ...". Below the snippet, it says "www.afdb.org/fileadmin/uploads/afdb/.../External-Debt.../tanzania.ppt" and "Similar".



## Mobiles in 2010

**“The mobile phone is the most powerful technology for ending poverty in the world today”.**

Jeffrey Sachs



### The New Compass

✓ **5 Billion** subscriptions Worldwide  
➢ **100%** penetration in developed world  
➢ **58%** in Developing countries and rising fast

✓ **560 million** GPS enabled handsets by 2012

✓ **42%** of Mobile Apps are Geospatial

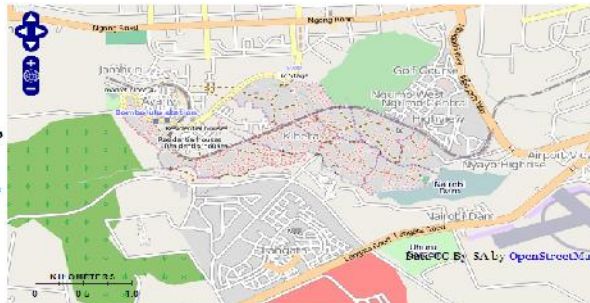


## Community Participation

### MAP KIBERA

**Kibera's first complete free and open map**  
November 2009

Kibera in Nairobi, Kenya, widely known as Africa's largest slum, remains a blank spot on the map. Without basic knowledge of the geography and resources of Kibera it is impossible to have an informed discussion on how to improve the lives of residents. This November, young Kiberans create the first public digital map of their own community.



Themes

**Health**

get involved

**Security**

**Education**

**Water/Sanitation**

**Wiki**

all our plans

**Discuss**

on the Google Group and Facebook

**Voice of Kibera**

community media

**Download**

get data

**Contact**

great to hear from you

[mapkibera blog](#)

2010 World Disasters Report: Focus on urban risk

The The International

A meeting of the minds – mappers, videographers, editorial board & SMS reporters

Kibera's Census: Population, Politics, Precision

The 2009 Kibera Census Data

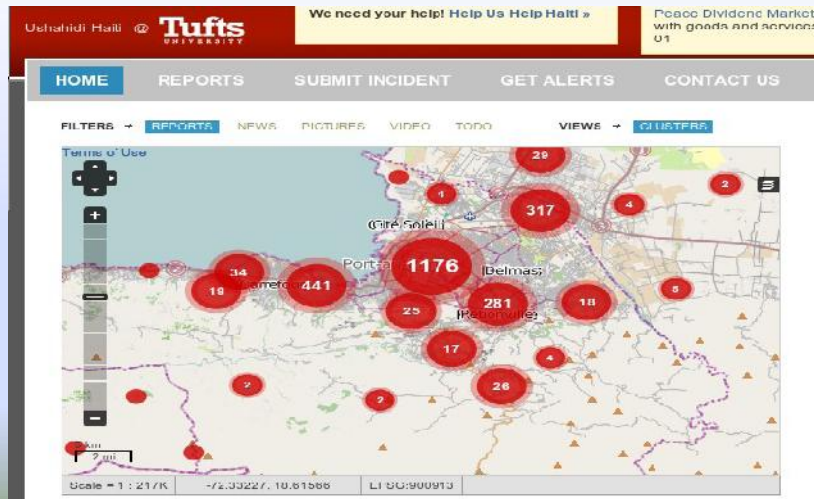
Twitter Weekly Updates for 2010-09-05

New Video by KNN: Are Kibera Residents Visiting VCT?



## Disaster Relief Has Changed

Crisis mapping brings online tool to Haitian disaster relief effort



## The Power of combining Mobile, Social Media and Inter-active Mapping

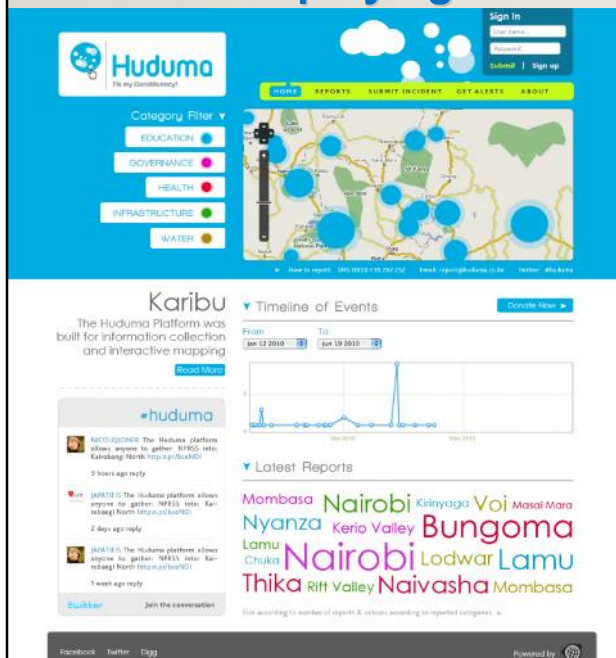


## To Engage Citizens & Improve Outcomes


- **Afghanistan:** GPS cameras track progress on irrigation infrastructure in remote areas
- **India:** pilot project tracks maternal and child health visits via cell phones
- **Bolivia:** Verifying installation of solar panels in infrastructure project
- **Cambodia:** Track rehabilitation of national highway network



## Huduma: Amplifying Citizen Voices Via ICTs



- **Geo-Reference** with categories (Health, Water etc having different dots);
- **Timeline** indicating response times;
- **Bubble** with location names getting bigger depending on veracity of problems reported;
- **Flagging**: of actions with delayed response (red) & (green) for efficiency.
- **Budget Layer**: tagging project, concerns with budget information


**Huduma**  
 For your Convenience

Welcome  
 Hon. Sam Ong'el  
 Log Out

[HOME](#)
[REPORTS](#)
[SUBMIT INCIDENT](#)
[GET ALERTS](#)
[ABOUT](#)

Search reports

Incident Details  
 Incident Category  
 Report Date  
 All Reports  
 My Account

July 2010 @ Office

Reports  
 Responses

### The Dashboard

Download the Full tutorial and follow the instructions to get you started

[Dashboard Tutorial](#)

### View reports on

Selection

A cluster reports gathered the number of Police and July 2010

### Latest Reports on Education

#### Teachers on STRIKE over pay in TAITA

GIRL arrested for STUDYING too much in Laikipia

#### SCHOOL with out TEXT books in Leibet district

Mboya High school CLOSED due to students STRIKE in MACHAKOS district

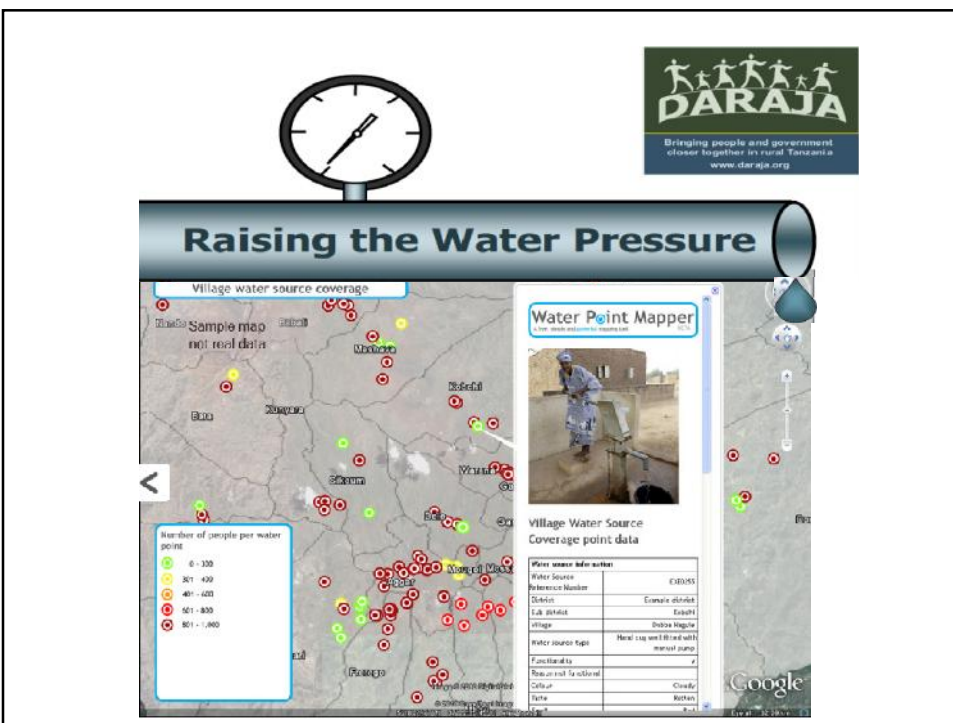
### More Reports on Education

<b>HAMILTON, IOWA</b> Best school's faculty walk out on first school day for the first time for the first time 1500 teachers are on strike in grade...	View Full Report 	Reported to Response 
<b>CHENNAI, INDIA</b> Students locked out of schools, 50000 more in the streets of Chennai without a vaccination from the 10th...	View Full Report 	Reported to Response 
<b>MISSISSAUGA, ONTARIO</b> School without TEXT books in 117th street for years, and now has conditions for learning about of the school's...	View Full Report 	Reported to Response 

Dashboard    Profile    Help

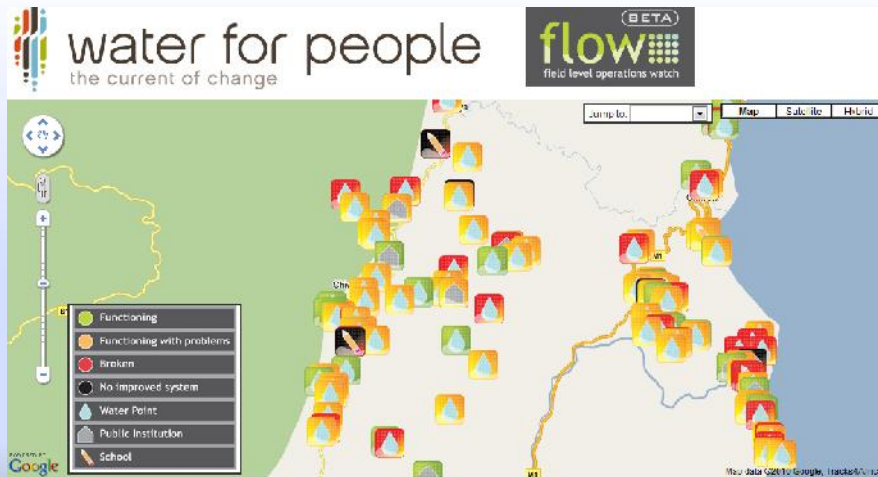
Emergency

- **Service provider** with **ID** and **login**;
- Incorporates **visualization tools** (graphs, red flags, green flags etc)
- **Provider** able to **pick a problem** and **act**;
- Provider able to **add comment** after **fixing a problem**

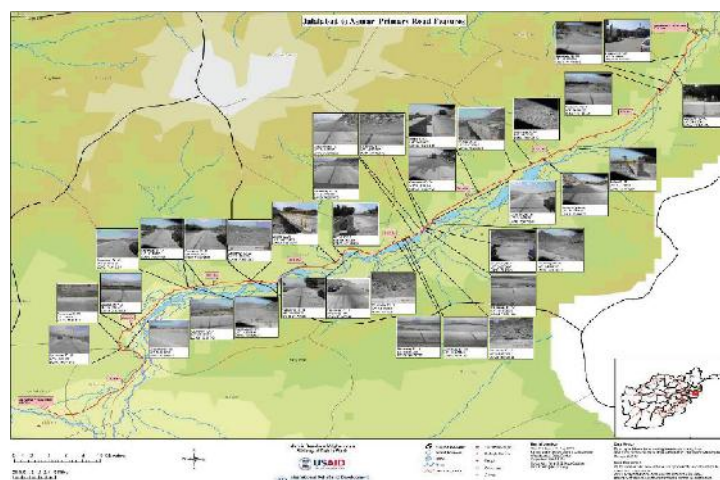




## Twaweza: Water Point Mapping in Tanzania



## Asset verification: Afghanistan roads



Images from International Relief and Development, Inc. Human Resources and Logistics Support Program (IRD-HRLS), September 2010

## ***Asset verification: EQUIP***



<http://www.advocacy.net.org/resource/251>



[http://www.boston.com/news/world/blog/2009/07/post\\_9.html](http://www.boston.com/news/world/blog/2009/07/post_9.html)



## **Blood Bank Reporting in Western Ken**



“The local district hospital in Kilifi never had enough blood for transfusions,” Eagle said. “So I built a system for the nurses to send short, daily text messages from mobile phones to the centralized blood bank to avoid shortages.”

Read more: [Txeagle takes outsourcing to cell phones | New Mexico Business Weekly](#)

## Mapping for Results ...

Information available,  
but not easy to  
visualize



Project ID	Project Name	Project Location	Project Type	Project Status	Project Start Date	Project End Date	Project Budget	Project Description
1	Project A	Location A	Type A	Status A	Start A	End A	Budget A	Description A
2	Project B	Location B	Type B	Status B	Start B	End B	Budget B	Description B
3	Project C	Location C	Type C	Status C	Start C	End C	Budget C	Description C
4	Project D	Location D	Type D	Status D	Start D	End D	Budget D	Description D
5	Project E	Location E	Type E	Status E	Start E	End E	Budget E	Description E

Geo-coding: makes  
project data more  
accessible



Visualize project  
locations and MDGs at  
country level



[www.maps.worldbank.org](http://www.maps.worldbank.org)

## Key Principles of Mapping for Results

Results

- Visualize location of projects

Openness

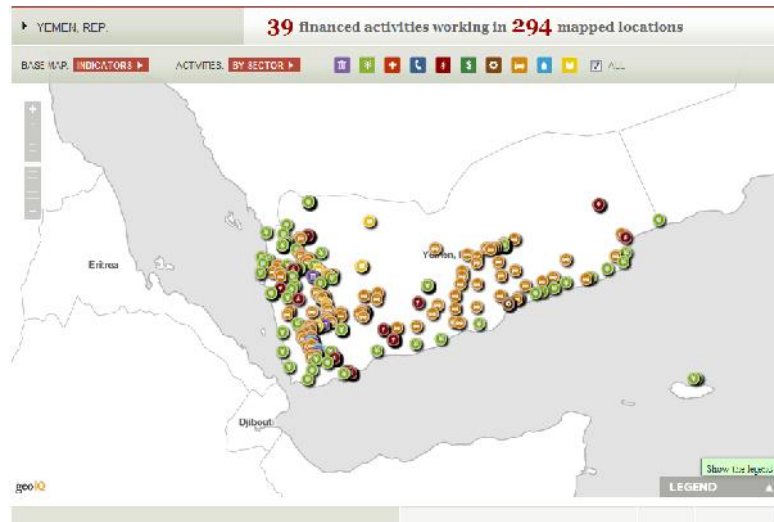
- Location data for 1,200 projects and 16,000 project activities available by April

Accountability

- Directly engaging beneficiaries through ICT to provide feedback and improve results

# Greater Transparency in WBG Projects

## Mapping for Results

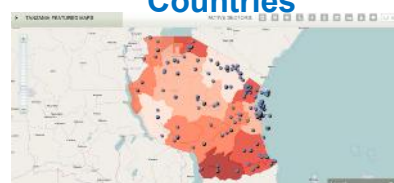


## Mapping at Various Levels...

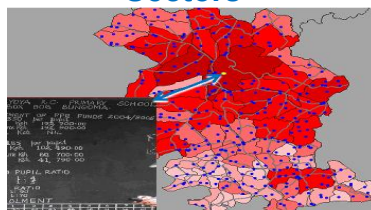
### Regions



### Countries



### Sectors



### Projects



[www.maps.worldbank.org](http://www.maps.worldbank.org)

## WBI in Action → Mapping for Results + Beneficiary Feedback

**Bolivia:** Poverty concentration & geo-mapping aid projects

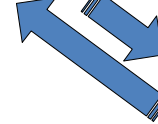


**Haiti:** Beneficiary feedback on geo-mapped reconstruction projects



School Being Built

New Teacher Arriving



## 1. Improve Project Planning

Better targeting of schools based on needs



## 2. Oversee Project Implementation

Philippines: [checkmyschool.org](http://checkmyschool.org)

Updates, as of today



**20**

community  
volunteers

**100**

new feedback  
reports

**75%**

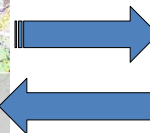
said textbooks  
are enough

**8,000**

schools have  
GPS

## 3. Listen to Beneficiary Feedback...

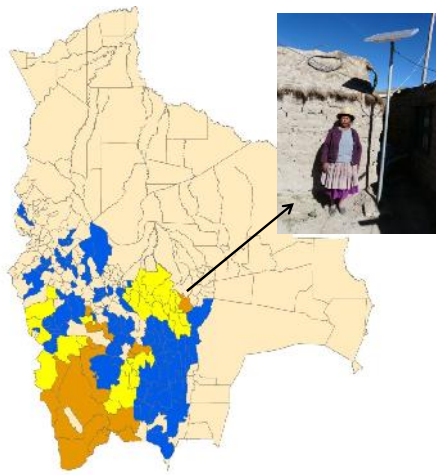
Haiti: Community-based reporting



Shelter  
being  
built

## 4. Enhance Tracking of Results

### Bolivia: Decentralized Infrastructure for Rural Transformation Project



#### Benefits

- Target activities to regions with most need
- Promote synergies between components (Electrification and Telecomms)
- Verify that services were provided
- Monitor project results and impact
- Transparency and social accountability

## 5. Enhance Aid Effectiveness Coordination

