SOCIAL, POLITICAL AND GEOGRAPHICAL CHALLENGES IN INTERNATIONAL DEVELOPMENT INTERVENTIONS

New data and methodologies for development geography, AAG 2015

Jeroen Verplanke, Yola Georgiadou

Faculty of Geo-information Science and Earth Observation – ITC
University of Twente, the Netherlands

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DEVELOPMENT INTERVENTIONS SUCK

why do development interventions
designed to improve
the human condition in poor countries
fail so often?

FAILURE ACCORDING TO SCOTT

Because they replace "thick, complex, quasi-autonomous social and natural orders with thin, simplified, mechanical orders that function badly, even for the limited purposes for which they are designed." (Scott, 1999)

(Scott, 1999, 'Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed', p. 273).

NEW AID (OECD 2005)

Increased country self-determination and better coordination of aid:

- recipients identify development goals and national development strategies *autonomously*.
- Systematic, broad-based stakeholder participation, would guarantee strategy *ownership within a nation*.
- Development Partners and recipients are *mutually accountable* for development results.

ROTTENBURG'SAPORIA

The internal contradiction in international development cooperation of the accountable, predictable and therefore obviously conditional transfer of resources,
versus the facilitation of sustainable and self-determined development of target countries.

Rottenburg, R. (2009) Far-fetched facts: a parable of development aid

THE IRREVOCABLE CONTRADICTION

- The relationship between 'adherence to administrative procedures in the North' and the logic of 'getting things done in the South', *"does not represent a relationship of mutual dependence but an 'irrevocable contradiction'"* (Kühl 2005, p. 22-23).

OUTLINE

- The technical game
- Water point mapping system in "Ruritania"
- Problems - Thick versus mechanical order
- A question of functionality
- Consequences for water sector interventions

THE TECHNICAL GAME

- Playing field is the intermediate space in the organisation of foreign aid where ineluctable technical games between donors and recipients are unfolding.

- A seemingly impossible feat is attempted: the transfer of a 'thing (system, practice, framework, idea) from one context to the next in such a way that the 'thing' remains identical while it is transformed to accomplish the desired impact in the destination context.

RULES OF THE GAME

- One way the clash is handled is by switching between an official and an unofficial script

- According to the official script, the 'giver' must adhere to procedures in the North and monitor the performance of the 'receiver' while the informality and cultural differences of the 'receiver' must be suppressed, else the cooperation cannot materialize. At the same time, the autonomy and self-determination of the 'receiver' must be safeguarded.

RULES OF THE GAME

To resolve the dilemma the 'consultant' comes to rescue.

Officially, the consultant implements and reports to the 'receiver'.

Unofficially, the consultant receives instructions from the 'giver'.

The switch between scripts allows the 'giver' to keep his image as infallible professional institution intact, and the 'receiver' to appear autonomous and self-determined,

The three key characters have no choice but to play a 'technical game', which brackets their cultural and social heterogeneity.

The consultant can be blamed for failure by both sides

CREATING THE TECHNICAL GAME

The usual game has been to circumvent the aporia by proclaiming the means and ends are universal and can be objectively assessed creating a "technical game" that is independent of social and cultural frames of reference.

The actual value, functioning or sustainability of the intervention is no longer subject to accountability.

PLAYING THE TECHNICAL GAME

- nobody can be held answerable for **unpredicted consequences** of interventions
- Development experts can only be held accountable for **predictable consequences** of the intervention
- Only through appropriate execution of adequate procedures to deliver a product there is (procedural) accountability

REFORMULATE A WICKED PROBLEM

Raise the percentage of
the population in rural areas
with sustainable and
equitable access to safe water
to 74% by 2015.

INTO A STRUCTURED PROBLEM

Monitor the percentage of
the population in rural areas
with sustainable and
equitable access to safe water
by mapping all functional WP
in 2014

OFFICIAL TECHNICALSOLUTION

Consultancy to create a national mapping system to show actual functionality of water supply facilities in rural Tanzania

WATER POINTMAPPING SYSTEM

Construction cost: US$ 4,000,000

Period of construction: 2010 – 2014

Total Number of Water Points: ± 77,000

OUR AIM

- Can the technical game be improved or avoided?
- Instead of demonizing it, speculate whether the technical game may not be the only game in town anymore in the digital age.

THERE ARE NEW RULES TO THE GAME

- National and international targets
- Donor demands
- Global forums
- Open data
- Open communication
- Black boxes become grey
- Exposure of incompetence and accountability

SEMA AND CITIZENS IN RURAL WATER SUPPLY

- Sensors, Accountability and Empowerment in Tanzania (NWO-Wotro, 2012-2016) (SEMA)
- Focus on (rural) water supply: can the voice of citizens and the accountability of service providers and relevant authorities be assisted by a mobile platform of information exchange?
- Research into the open water point mapping database of the Ministry of Water

Water Point Mapping Tanzania

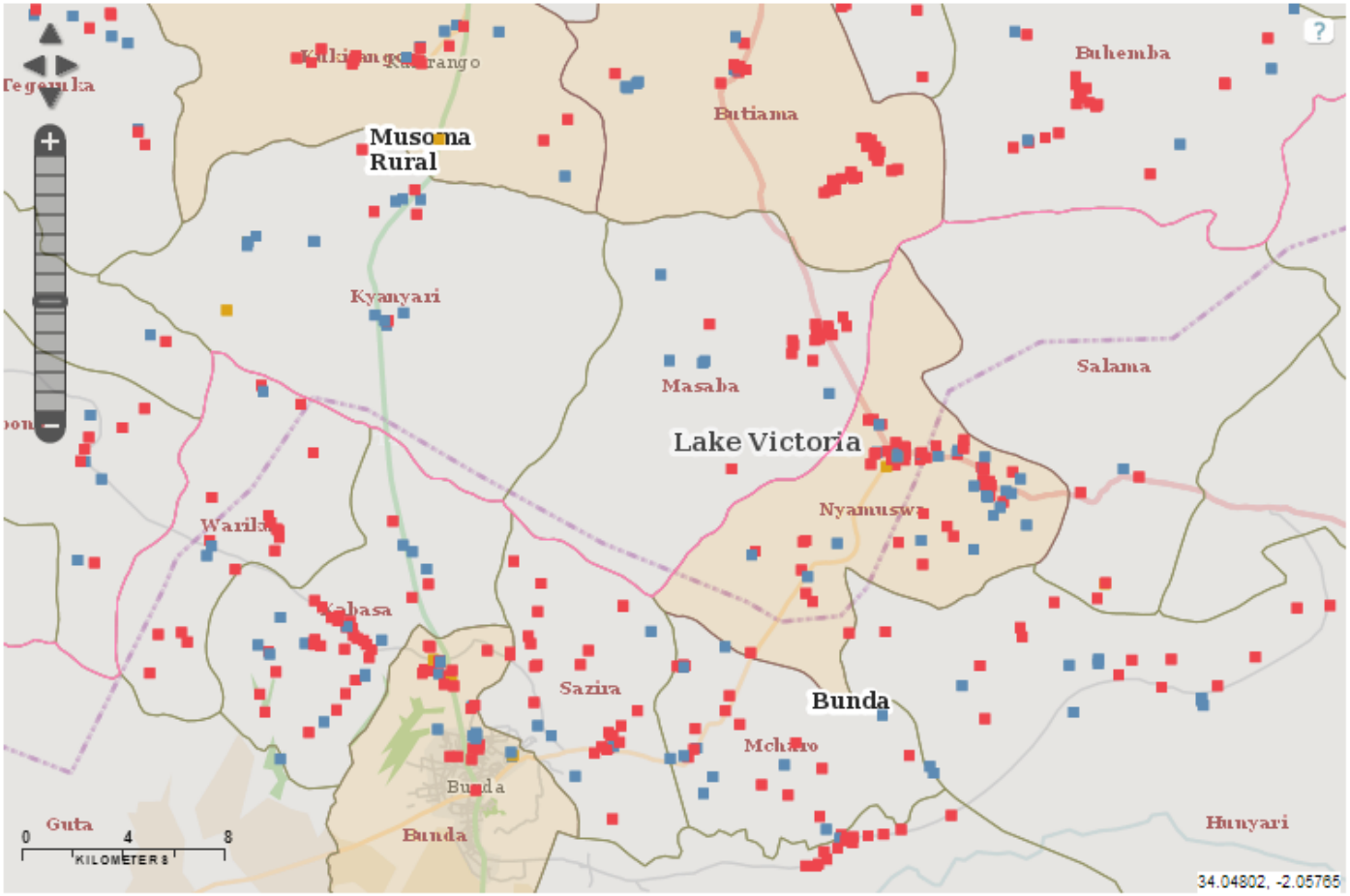
Home | Map | Simple Querying | Links | ?

Map for all users

Search by: Region Basin

Mara | Bunda | Please select a ward | Go

Search a water point:



Legend

- Water Point
  - Functional
  - Needs Repair
  - Not Functional
- Village Center
  - Village Center
- Region
  - Land
  - Lakes
- LGA
  - Land
  - Lakes
- Basin
  - Basin
- Ward
  - Rural
  - Mixed

Data CC-By-SA by OpenStreetMap

ELABORATE CRITERIA

- 19 attributes describe Water Point location
- 3 attributes describe Water Point type
- 6 attributes describe Water Point functionality
- 4 attributes describe Water Point management
- 1 attribute for comments

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Water Point Mapping - Data Entry Form

January 2010

Date of record _____ Recording organisation _____

Region _____ Village Longitude _____ Dec °
District _____ Village Latitude _____ Dec °
Ward _____ Village registration no _____
Village _____ Village phtoto ID _____
Sub village _____

WP name _____ GPS waypoint no _____
Scheme name _____ WP Longitude _____ Dec °
Funder _____ WP Latitude _____ Dec °
Installer _____ Elevation _____
Year const'd _____ WP photo ID _____

Source type
- O Shallow well
- O Hand-drilled tube well
- O Machine-drilled borehole
- O Dam
- O River/Lake
- O Spring
- O Rainwater harvesting
- O Other...

Extraction system
- O None
- O Mono
- O Cemo
- O Climax
- O KSB
- O Submersible
- O Gravity
- O Afridev
- O Nira/Tanira
- O SWN 80
- O India mark II
- O Walimi
- O Windmill
- O Other...

Water point type
- O Hand pump
- O Communal standpipe
- O Communal standpipe multiple
- O Cattle trough
- O Dam
- O Improved spring
- O Windmill
- O Other...

Status
- O Functional
- O Not functional

Main hardware problem
- O None
- O Source damaged
- O Pump broken
- O Pump stolen
- O Engine broken
- O Engine stolen
- O Tank out of use
- O Pipe broken
- O Tap poorly sited
- O Tap broken
- O Under construction

Water quantity
- O Enough
- O Insufficient
- O Seasonal
- O Dry

Water quality
- O Soft
- O Milky
- O Coloured
- O Salty
- O Salty abandoned
- O Fluoride
- O Fluoride abandoned
- O Abandoned other ...

Breakdown year _____

Other reason WP not functional ... _____

Scheme Ownership
- O VWC
- O WUG
- O WUA
- O Company
- O Trust
- O Water Board
- O Parastatal
- O Private individual
- O Other...

WP Management
- O VWC
- O WUG
- O WUA
- O Company
- O Trust
- O Water Board
- O Parastatal
- O Private operator
- O Other...

Water payment
- O Pay per bucket
- O Pay monthly
- O Pay annualy
- O Pay when scheme fails
- O Never pay
- O Other...

Public meeting about income & expenditure ?
- O Yes
- O No
- O Don't know

Comments _____

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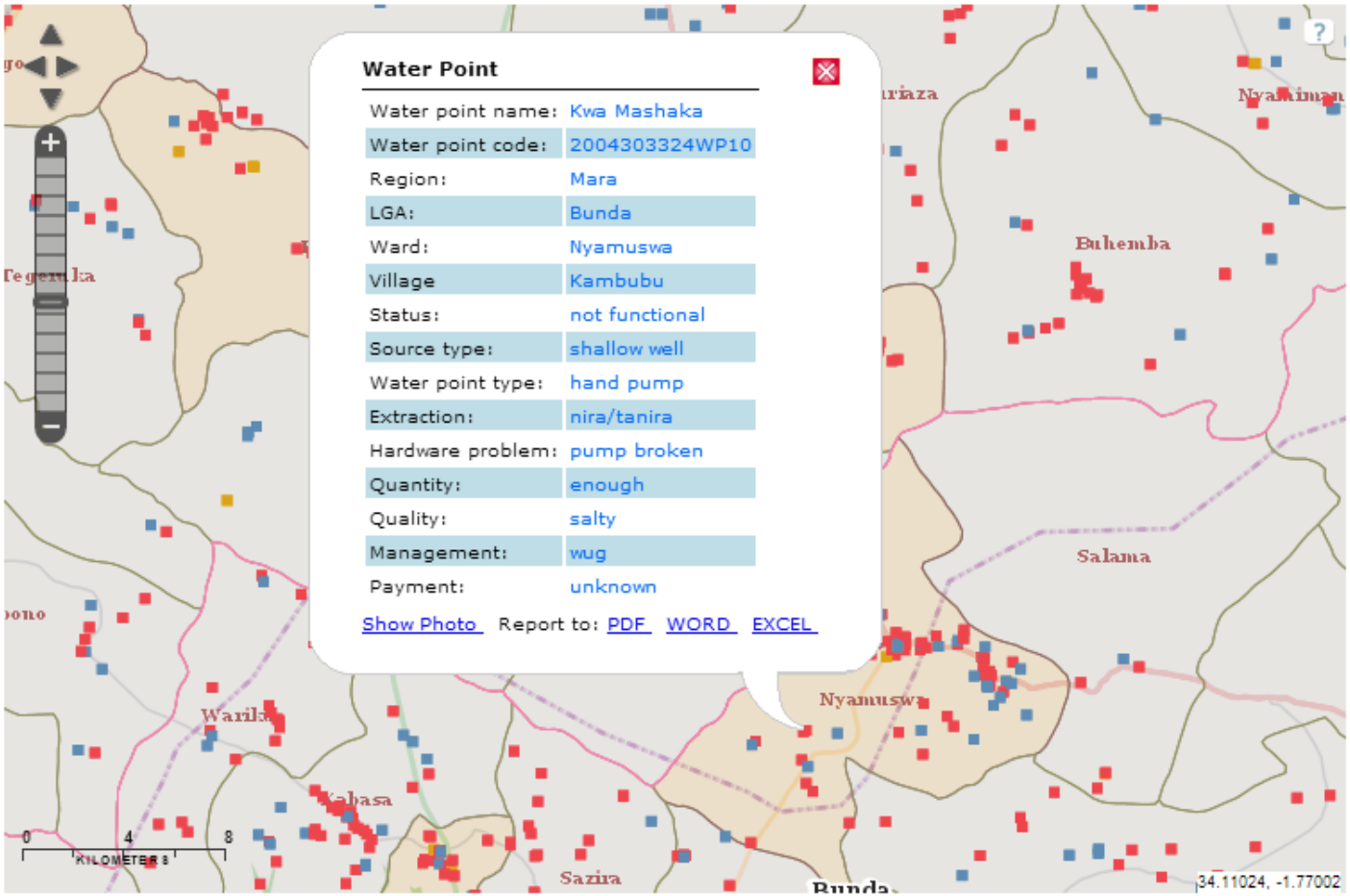

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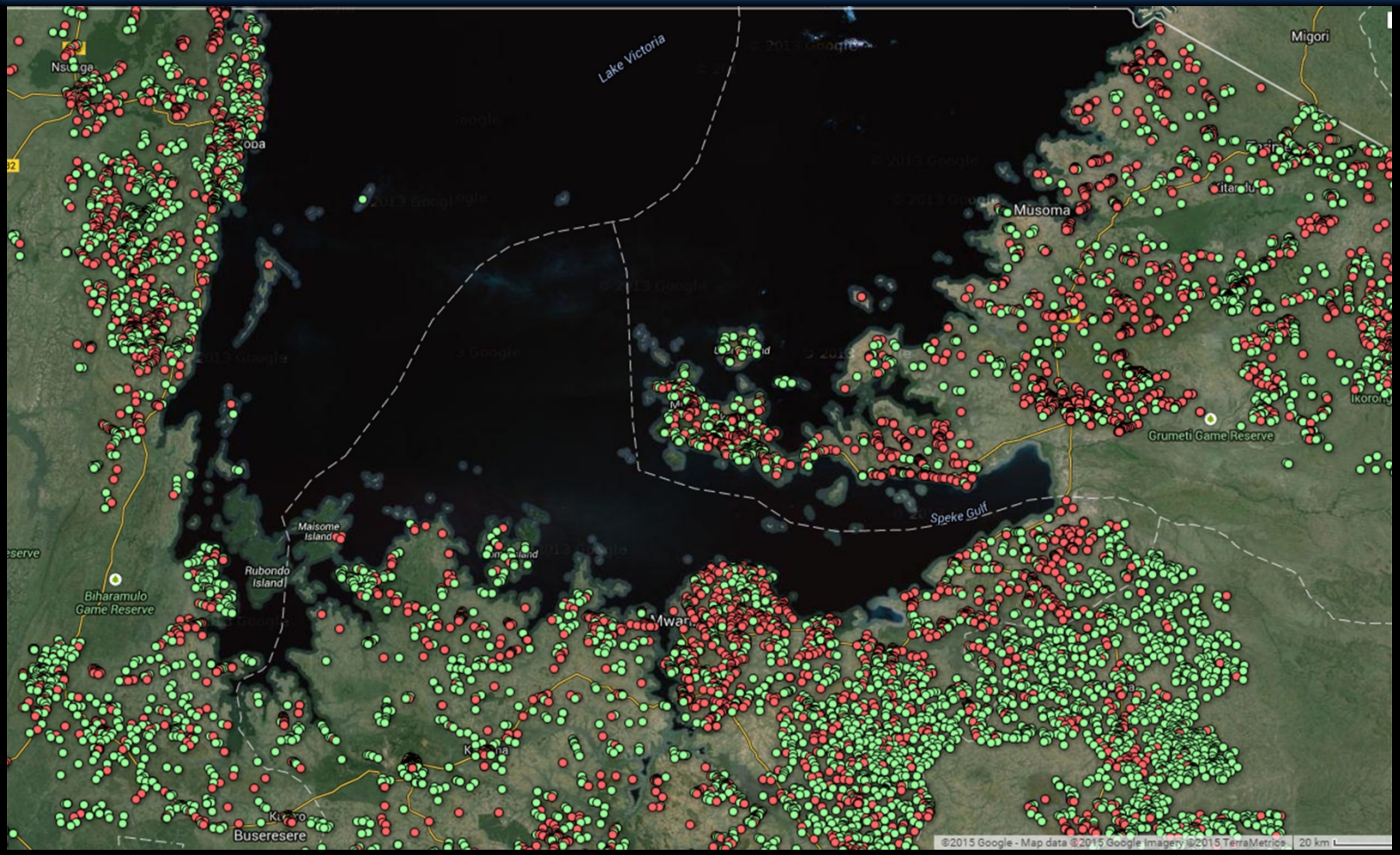
OPEN DATA ACCESS



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REFRAMING INTO A NEW GAME

- The Open Government initiative has allowed public scrutiny of previously undisputed data
  - no longer authoritative for MDG input
  - "arbitrary" recalibration of baseline
- Data analysts have taken the WPMS apart and raised suspicion about integrity of data and capacity of the government
  - Concerns by World Bank, DFID, GIZ, SNV
  - Consultancy to assess capacity for PbR

WPM SCRUTINY

Material errors (procedural)

- filling of the data entry form (19 cases)
- use of GPS, (one case)
- use of water quality testing kits, (one case)
- data processing (3 cases)

Observational errors (human)

- choice of field equipment, (4 cases)
- experience of the Water Point Collector (WPC) (7 cases)
- management of the WPC team (consistency and training) (2 cases)

WPM SCRUTINY

conceptual errors (interpretive)

- rigidity of the data entry form (9 cases)
- changes over time in the WPM approach (3 cases)
- framing of rural water service problems by stakeholders at different levels of the Water Point Mapping System (5 cases)

discursive errors (communicative)

- intelligence sources for the different WPM attributes (8 cases)
- misunderstanding of WPM concepts by local water users (3 cases)
- misinterpretation of local knowledge by the WPC (7 cases)
- data manipulation (2 cases)

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RESULTING ERRORS IN WPM

- Changes over time, shifting boundaries
- Syntax error, disconnecting features
- Missing data and ambiguous values, 0≠0
- Subjective observations
- Duplicate records

} 10%

- The definition of functional water points

UNOFFICIAL TECHNICAL SOLUTION

Consultancy to create a national ~~mapping~~ monitoring system to show actual functionality of water supply facilities in rural Tanzania

"They asked us to build a Chevrolet, but upon delivery they wanted a Cadillac"

THICK VERSUS MECHANICAL ORDER

Each country is likely to employ their own parameters and if a standard is used it is likely that some form of deviation of this standard is applied to fit the standard to a national context since the institutions responsible for them need to deal with economic and particularly political factors

(Jiménez Fernández de Palencia & Pérez-Foguet, 2012; Reimann & Banks, 2004).

THICK VERSUS MECHANICAL ORDER

As a consequence it becomes challenging to exactly define and identify what should be measured and how to deal with issues such as affordability, quality, reliability and non-discrimination

(Giné-Garriga, Jiménez-Fernández de Palencia, & Pérez-Foguet, 2013)

A QUESTION OF FUNCTIONALITY

For functionality of water points many definitions exist which all have similar characteristics but are inherently different in their benchmarks.

Some definitions are used internationally but others are purely national or even unique for an institution.

We found <u>six definitions</u> from five sources that are relevant to WPM in Tanzania.

FUNCTIONAL SUPPLY

FUNCTIONAL DEMAND

THE DISSONANT FUNCTIONALITY

		Technical	
	Status	**Improved**	**Unimproved**
Social	**Used**	Functional	Functional needing repair
	Unused	*Ex-functional* *Dysfunctional* *inept*	Non-functional

CONSEQUENCES FOR WATER ACCESS INTERVENTION

PROVIDER - SUPPLY:

access to water exists when 250 households can collect water within a distance of not more than 400 meters while spending a maximum of 30 minutes for a round trip for the collection of at least 25 litres per person per day.

= water access in terms of service "coverage" and management.

CONSEQUENCES FOR WATER ACCESS INTERVENTION

USER – DEMAND:

access to water exists when a household has a variety of convenient and reliable water sources available which are suitable for an array of different uses

Goes beyond physical access and service coverage issues

USER PERCEPTI0N

- households are more likely to choose access strategies depending on socio-economic and cultural conditions.
- service reliability, access convenience and social and cultural acceptability, dimensions which were previously less acknowledged, are of high influence to improve access to water.

REMEMBER
THE STRUCTURED PROBLEM

Monitor the percentage of
the population in rural areas
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equitable access to safe water
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TECHNICAL VERSUS REALITY

Availability of water supply facilities does not adequately reflect water service functionality or water use by intended users.

NOT REFLECTING REALITY

Official statistics of water access are only partially valid in reflecting the actual situation on the ground

the process is too much focused on the role of national government and international agencies while neglecting the investments and initiatives that citi2ens and their organi2ations do to improve water access.

TO SUMMARIZE

- The donor objectives were met, but with many shortcomings
- The receiver objectives were not met
- The actual value of what is measured is highly disputed

- Transparency and open government have however allowed for discussion and amendment of the project
- The consultant is still part of the implementation

REFRAMING INTO A NEW GAME

- The Open Government initiative allows public scrutiny of previously undisputed data
- Merits of interventions can be discussed in a wider context
- There is less room for unofficial scripting and the scripting becomes more flexible as insights progress
- Transparency reduces the blame game
- Better motivation to come to a workable solution

DEVELOPMENT INTERVENTIONS NO LONGER HAVE TO SUCK

We therefore work towards an argument that the openness of (big) government data (using the new privileged class of big data analysts as conduits) may create spaces to reframe problems as moderately structured with goal consensus as well as to create opportunities for discursive accountability (explain actions and adjust tactics) for all main actors in the development intervention

ANY QUESTIONS?