



How digital technologies can help reduce inequalities in water security

Annika Kramer, Senior Project Manager, adelphi

What inequalities exist in water security?

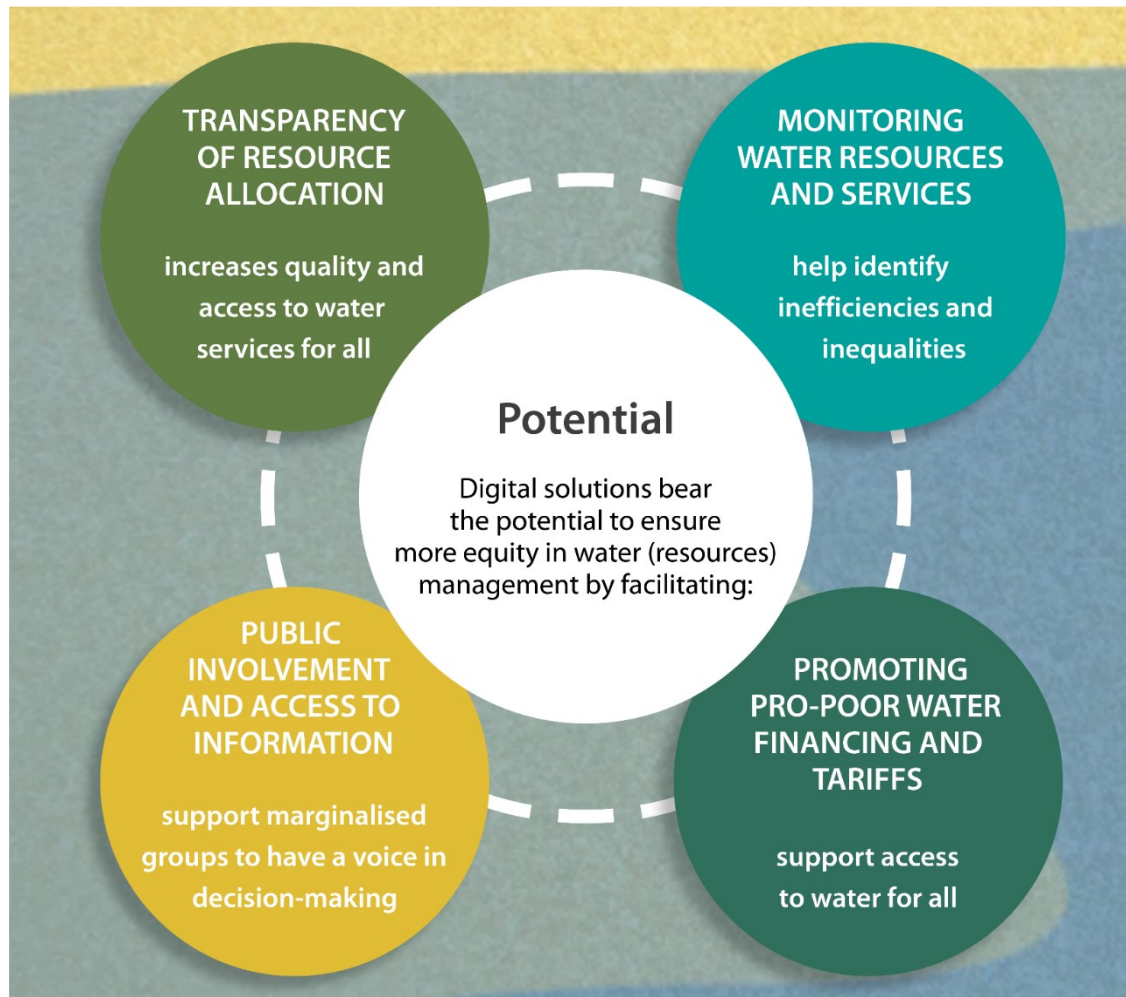
Water security includes aspects of:

- Access to water resources in sufficient quantity and quality,
- Access to safe water supply and sanitation services, and
- Protection from water-related disasters.

Significant **inequalities** remain, for example:

- Access to basic drinking water services: 60% of urban population worldwide, but only 20% of rural population
- The poor are much more affected by water-related disasters
- Women, ethnic and other minorities do not get fair shares of water allocation.

How can digital technologies help?



Digital technologies facilitate monitoring



**MONITORING
WATER RESOURCES
AND SERVICES**

help identify
inefficiencies and
inequalities

- Approaches range from citizen data collection to high-tech solutions such as remote sensing
 - Helpful in areas that are difficult to access, such as remote areas and densely populated informal settlements
- More efficient water management, especially in less attended areas

TREND OBSERVATORY ON WATER

Example: Smart-phone app to monitor rural sanitation in India

MONITORING
WATER RESOURCES
AND SERVICES

help identify
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Digital technologies facilitate communication and participation



**PUBLIC
INVOLVEMENT
AND ACCESS TO
INFORMATION**

support marginalised
groups to have a voice in
decision-making

- Low-cost and efficient means for raising awareness, educating and informing people
 - Facilitate public participation in water planning and decision-making
 - Reaching out to and involving groups who are difficult to contact, for example in remote areas or staying at home
- Empowering marginalized groups

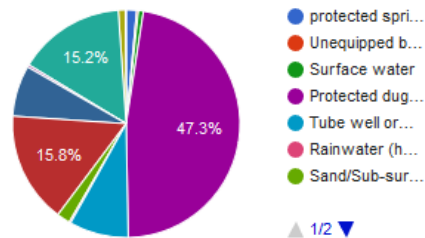
TREND OBSERVATORY ON WATER

Example: Open data portal on water points in West Africa

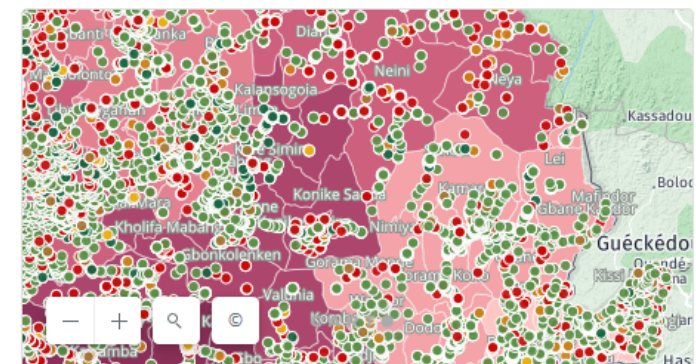
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Questionnaires completed by district



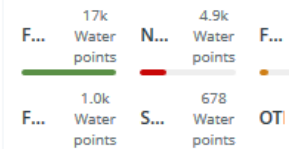
Latest map: Water point functionality



point count
25,885

functionality

ALL SELECTED



Source:

<https://bit.ly/370dwLs>

<https://akvo.org>

Digital technologies provide opportunities for innovative funding

**PROMOTING
PRO-POOR WATER
FINANCING AND
TARIFFS**

**support access
to water for all**

- Approaches range from crowdfunding to smart metering combined with mobile payments
 - Increased collection of water payments and alternative funding sources for water services
- Increased revenue and funding for water services in rural and poor urban areas.

TREND OBSERVATORY ON WATER

Community-operated water stations in Ghana

PROMOTING
PRO-POOR WATER
FINANCING AND
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support access
to water for all



Source: www.safewaternetwork.org/ongoing-innovation/improving-access-through-automated-services

Digital technologies can increase transparency

**TRANSPARENCY
OF RESOURCE
ALLOCATION**

**increases quality and
access to water
services for all**

- Visualisation and tracing of water distribution and service performance
 - Holding decision-makers accountable and detecting corruption
- Reducing inequalities related to water availability, accessibility and allocation.

TREND OBSERVATORY ON WATER

Example: “Phones against corruption” Papua New Guinea

TRANSPARENCY
OF RESOURCE
ALLOCATION

increases quality and
access to water
services for all

Source:

<https://bit.ly/30ps30C>

<https://www.asia-pacific.undp.org>

Phones Against Corruption

Free of charge, anonymous corruption-reporting tool

Results

SINCE JULY 2014

2

ARRESTS



TWO public officials arrested for fund mismanagement of more than 2 million US dollars

5

waiting for
court decision



FIVE cases have been uncovered and waiting for court decisions

250

under
investigation



250 more cases are being investigated

PARTICIPATION



6000
text messages
received



more than
1500 USERS



38 message a
day

**TREND
OBSERVATORY
ON WATER**

RésEAU Shareweb
K&G ERM Water



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC

Thank you!

Annika Kramer, Senior Project Manager, adelphi
kramer@adelphi.de

