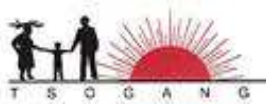


# Operationalizing Community-driven Multiple-use water services (MUS)

Barbara van Koppen (IWMI)

4<sup>th</sup> WRC Symposium 'Innovation in every drop'  
Sandton, 12 September 2019

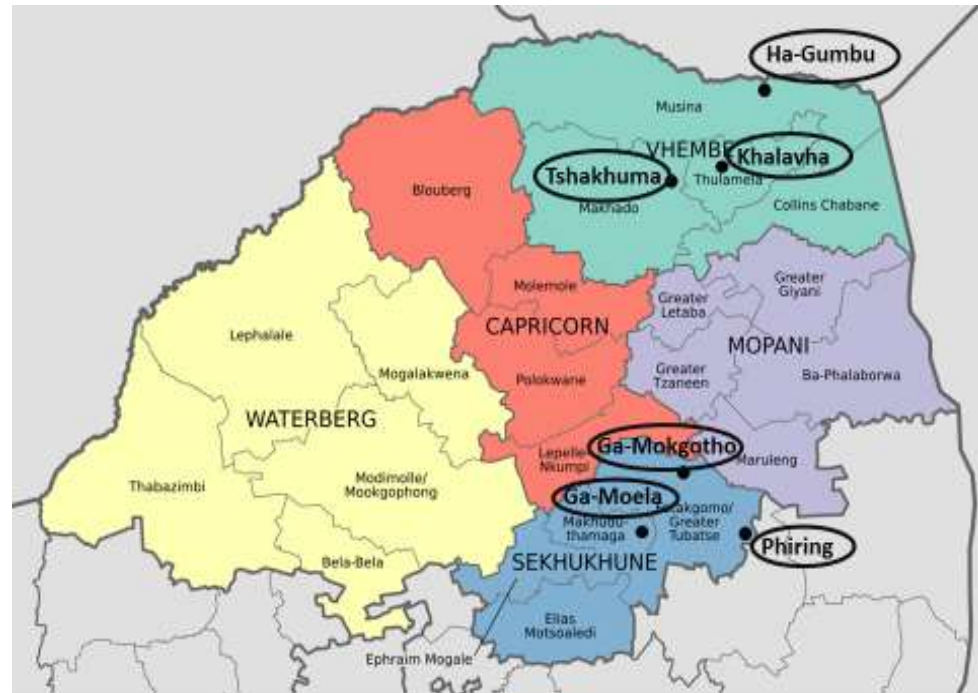
**Operationalizing Community-Driven Multiple-Use Water Services in South Africa**



# Project goal and methodology

1. To **demonstrate community-driven MUS** in 6 diverse villages (Tsogang)
2. To strengthen the **knowledge base, video, tools** (IWMI)
3. To **upscale MUS** into downstream investments (all)

**Today** – lessons from India and Ethiopia



Map of the six demonstration communities of the project  
'Operationalizing community-driven Multiple-use water services in South Africa'

## Operationalizing Community-Driven Multiple-Use Water Services in South Africa

# Problem analysis in water infrastructure services (domestic uses, irrigation, ..)

- Design/construction: often delayed, unfinished or not implemented
- Use: underused, vandalized, neglected, or abandoned



Conventional planning cycle:

- High-level provides funds to district-level; pre-/feasibility studies (often outsourced); elected political councillors/mayors select; winning contractors procure and construct



**Where are the end-users?**

Operationalizing Community-Driven Multiple-Use Water Services in South Africa

# Proposed solution: strengthen accountability downwards

“Multiple use water services” (MUS) : >> A holistic, participatory approach to planning and providing water services that considers people’s self-supply and their multiple water needs, as identified by communities; and coordinates across government departments as needed <<

Downstream investors at scale: Municipalities, Departments of Agriculture, Rural Development, Public works/employment programs, NGOs, Climate Change Adaptation, Disaster Management, corporate social responsibility, etc

## Operationalizing Community-Driven Multiple-Use Water Services in South Africa





# Participation in six steps



**1. Introducing MUS** to community, municipality and other stakeholders (IDPs)



**2. Diagnosis** Situational assessment, problem analysis

**3. Solutions:** Visioning, developing capacity, technical and other options

**4. Plan:** Prioritization, fitting the financial framework, other support, and approval final plan

**5. Implementation:** Procurement, construction and capacity development

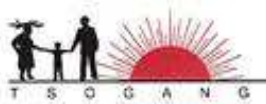
**6. Support for sustainability** capacity development, monitoring and evaluation



# Hypothesis to test: advantages

- Meeting multiple water needs for **more livelihood benefits**
- **Saving costs** by
  - leveraging self-supply
  - multi-purpose infrastructure

## Operationalizing Community-Driven Multiple-Use Water Services in South Africa



# Findings step 2 diagnosis: multiple-use infrastructure and self-supply are widespread

- Most water infrastructure is **multiple use**
- Multiple **sites of use**
  - **homesteads** (25-59% of hhs irrigate e.g. Ha-Gumbu)
  - **distant fields** (can be single use)
  - **other sites of use** e.g. streams, dams (livestock, laundry, back up for drought)
- **71-100% of** hhs uses **multiple sources**
- **Self-supply is most important source at homesteads**



Operationalizing Community-Driven Multiple-Use Water Services



# Self-supply

Tshakhuma: 11 communal self-supply schemes for 2360 hhs (72% of population)





# Hypothesis to test: advantages

- Meeting multiple water needs for **more livelihood benefits**
- **Saving costs** by
  - leveraging self-supply
  - multi-purpose infrastructure
  - local procurement (**finding**: central public tendering costs up to 39% more than on- the-shelves)
  - local construction/job creation (**finding**: 3392 person days for 199 persons in 5 villages)
- **More sustainable**: ownership, own incremental priorities, capacities developed (still to be tested).

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# Hypothesis to test: BUT required skills/costs

## Which external support is really required and who can provide?

- **Facilitating** participatory stepped design & implementation process
- **Capacity development** (institutional, projects, **technical** supervision design and construction)
- **Due diligence** in local procurement of materials and contracting

## Operationalizing Community-Driven Multiple-Use Water Services in South Africa



# Impressions of the steps from participatory videos Ga-Moela and Tshakhuma

Ga-Moela

low self-supply service level



Tshakhuma

high self-supply service level



Full videos: IWMI Voicing Water Visions by Michelle Ng  
at <http://stories.iwmi.org/voicing-water-visions/mus-south-africa/>

**Operationalizing Community-Driven Multiple-Use Water Services in South Africa**



Thank you

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