

LABOUR ECONOMICS AND WELFARE

Maes, F. & Defloor, B.

PUBLIC TAPS: A DROP IN THE BUCKET?

EXPERIMENTAL EVIDENCE FROM UGANDA

Public taps in town

Rationale

Do public taps improve drinking water quality at home and reduce diarrhea incidence in children?

- Some say yes (Kremer et al., 2011; Majuru et al., 2011; Wapenaar & Kollamparambil, 2019), others say no (Gasana et al., 2002; Jensen et al., 2003; Opryszko et al., 2010).
- Let's unravel the behavioural mechanisms of success or failure!

The experiment

Intervention

- Where? Rural Western Uganda.
- What? Nine public taps, 100 UGX/jerrycan.

Sample & data

- Who? 360 households, 1800 children.
- What? Surveys and water samples at point of use.
- When? Right before (October 2021) and 4 months after (April 2022) the intervention.



Determinants:
- Traditional water source
- Distance to the tap

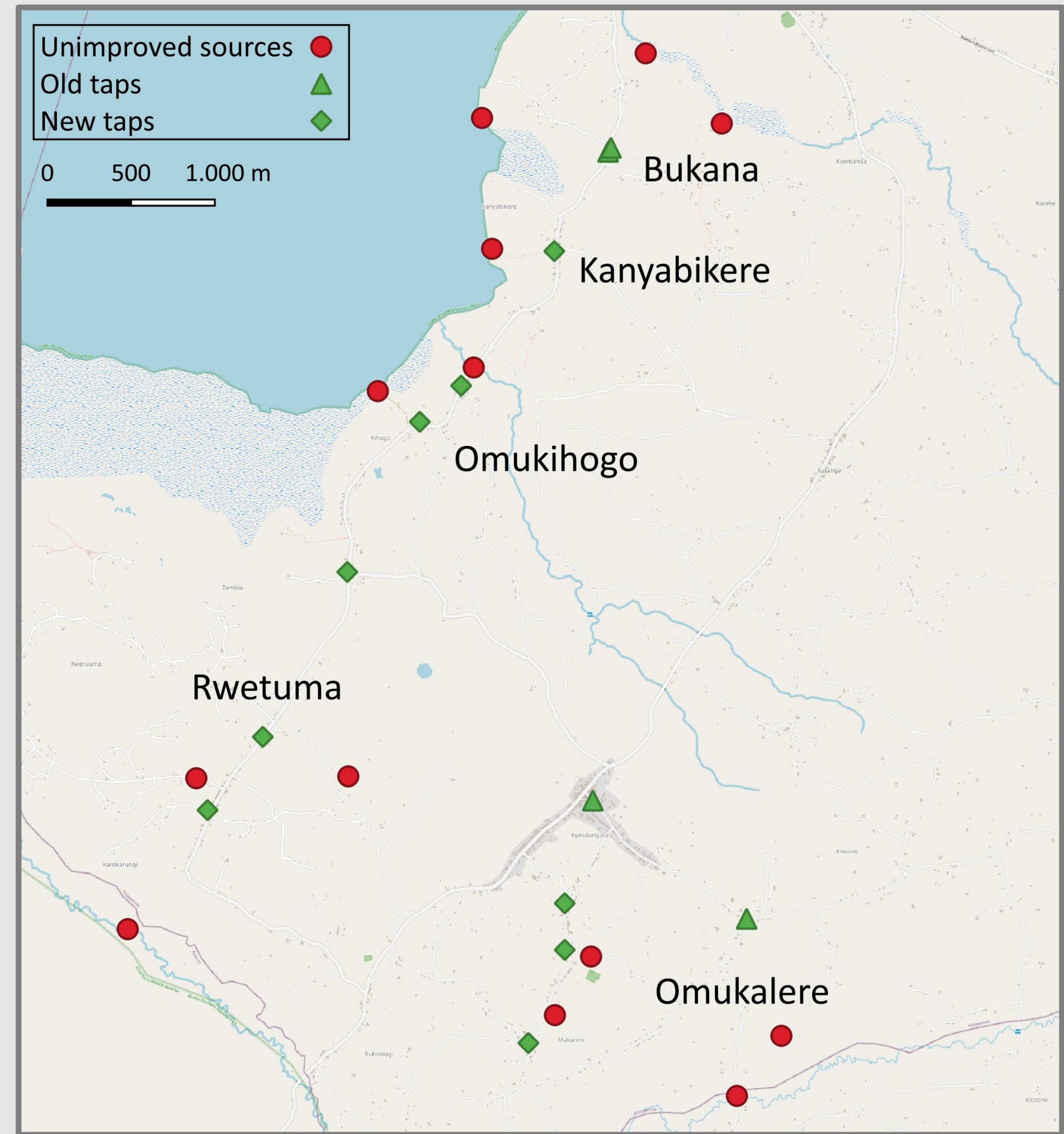
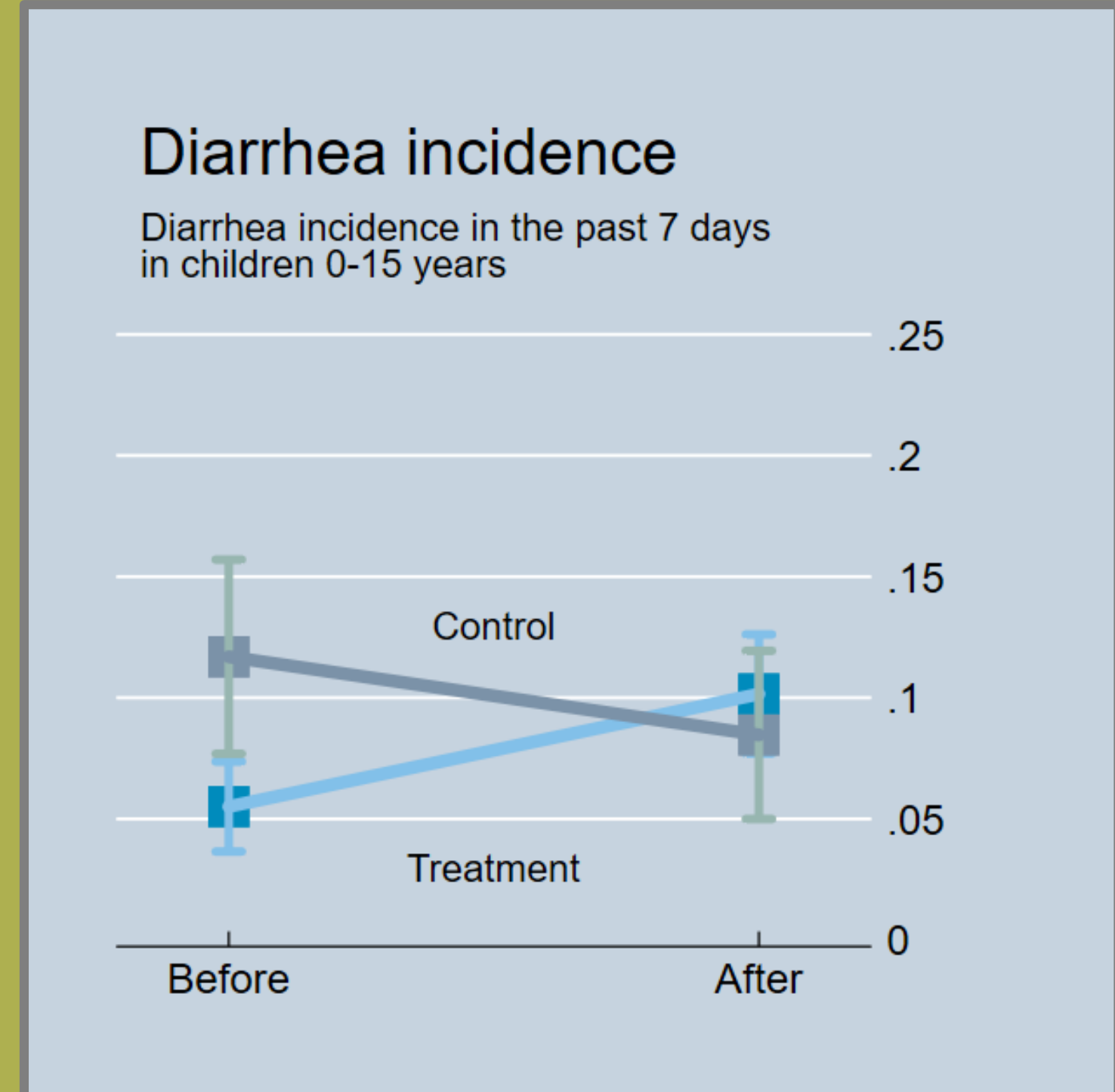
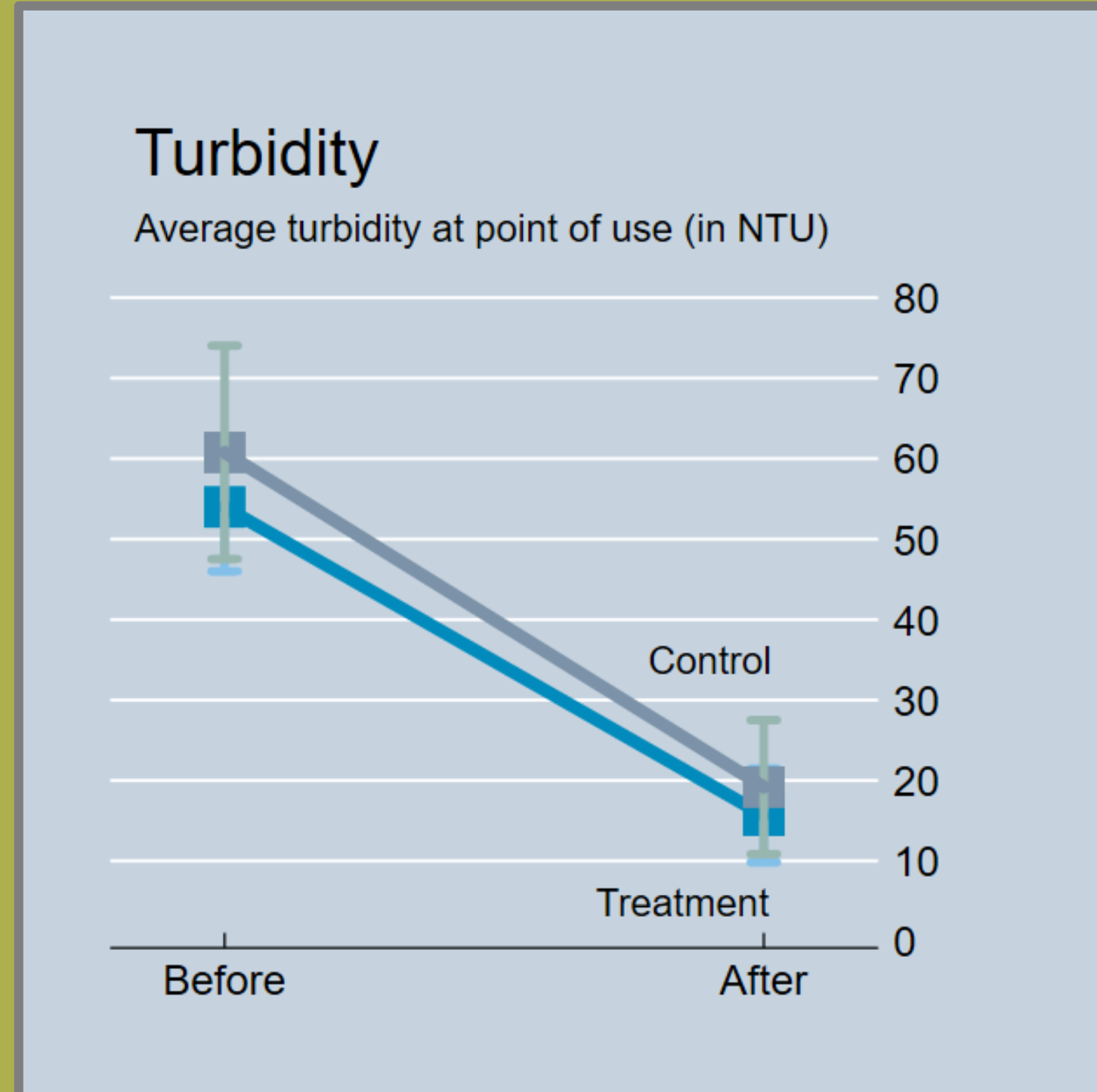
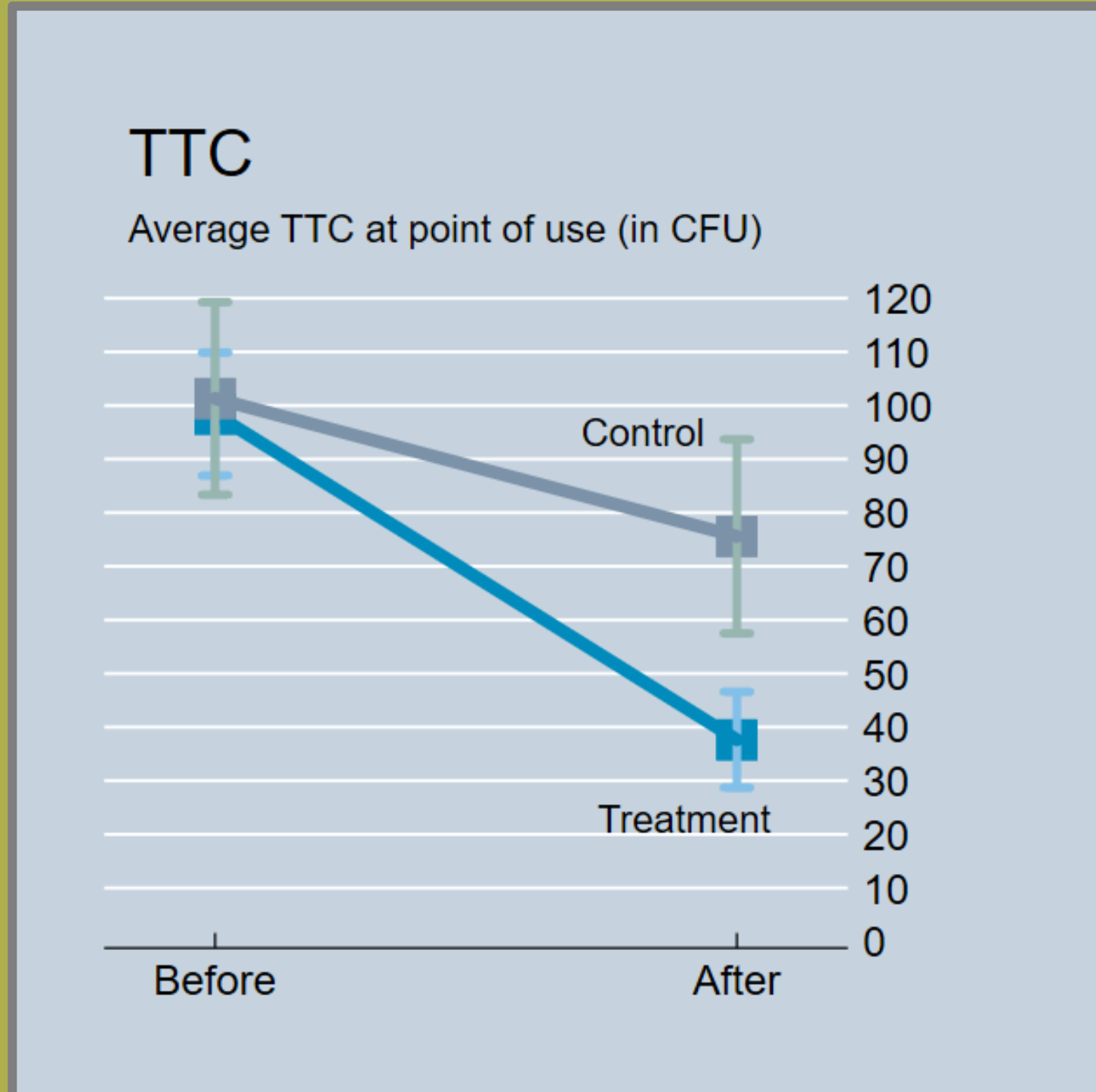
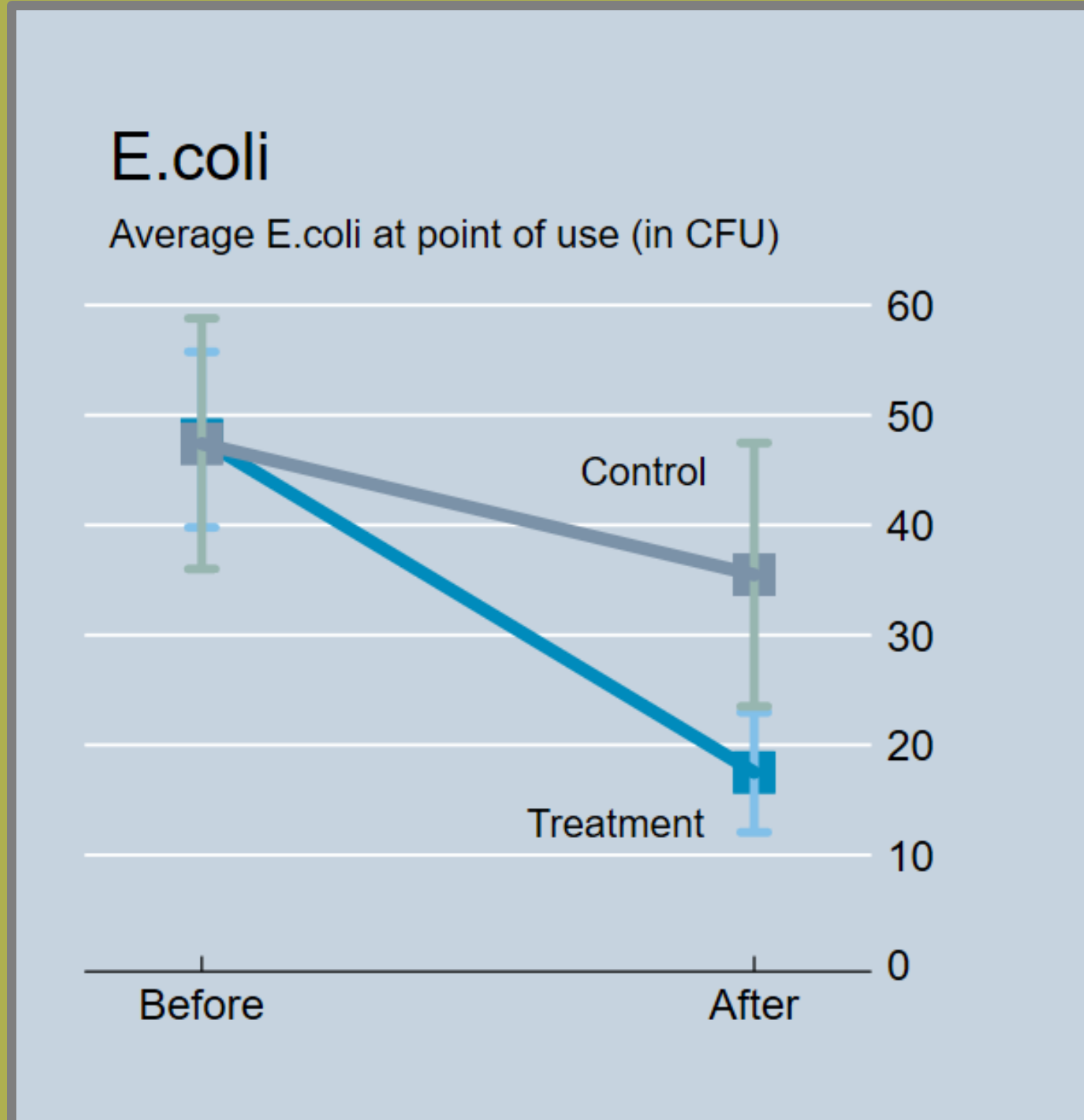


Image 1: overview map of the intervention area. Previously, households solely relied on unimproved sources and four old taps. The intervention encompassed the installation of nine public taps providing clean drinking water from a gravity scheme.

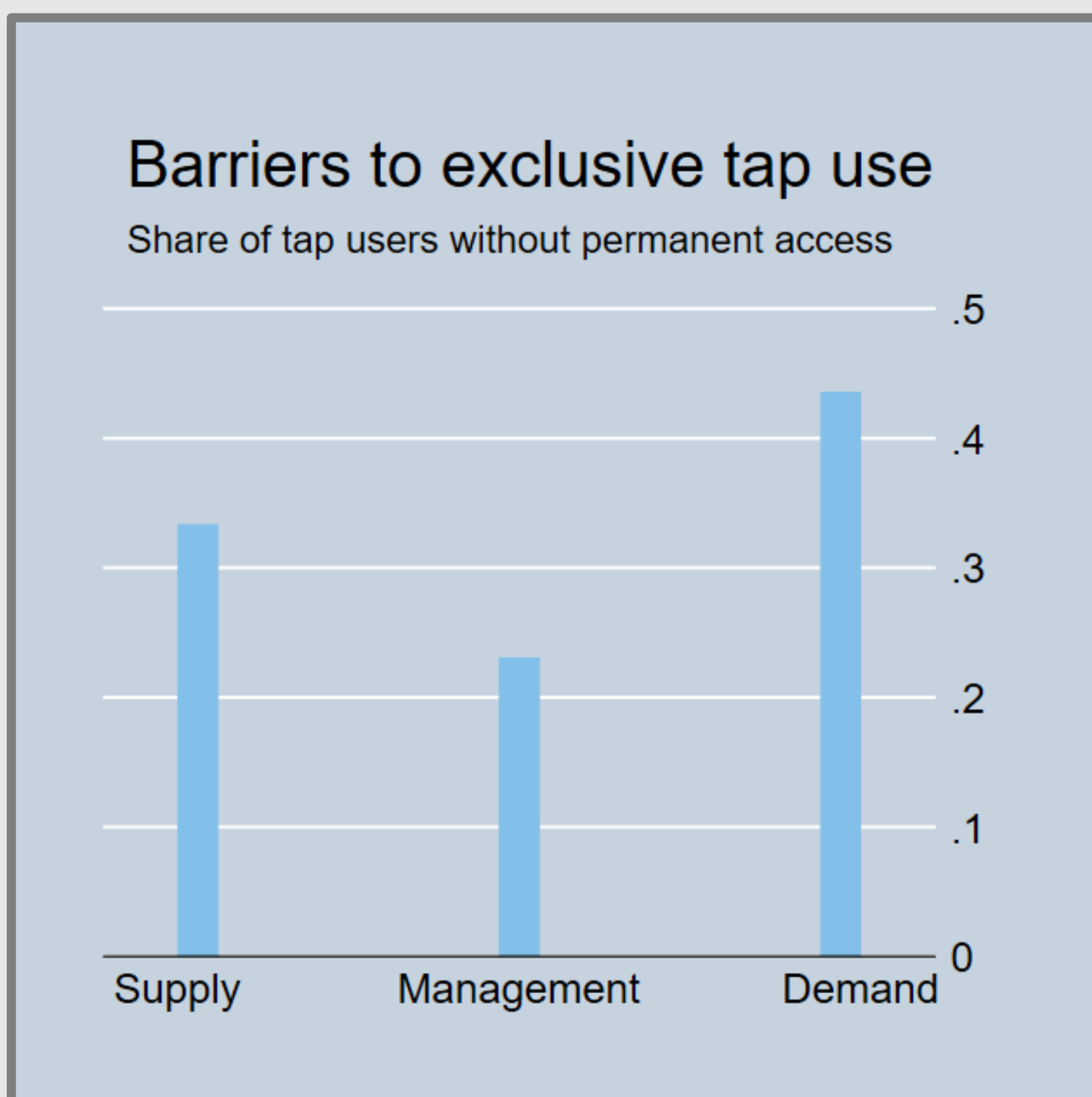
Results: tap users vs. non-tap users

- 28% reduction of E.coli
- 32% reduction of Total Thermotolerant Coliforms
- No effect on turbidity
- 10 times higher diarrhea incidence



BUT limited benefits in water quality and detrimental effects on diarrhea incidence...

Discussion & Conclusion: a drop in the bucket?



Non-exclusive tap use

66% of all tap users face barriers to access tap water and have to mix tap water with unimproved sources.

Supply:

- Interruptions in water supply

Management:

- Unavailable during opening hours
- Waiting queue

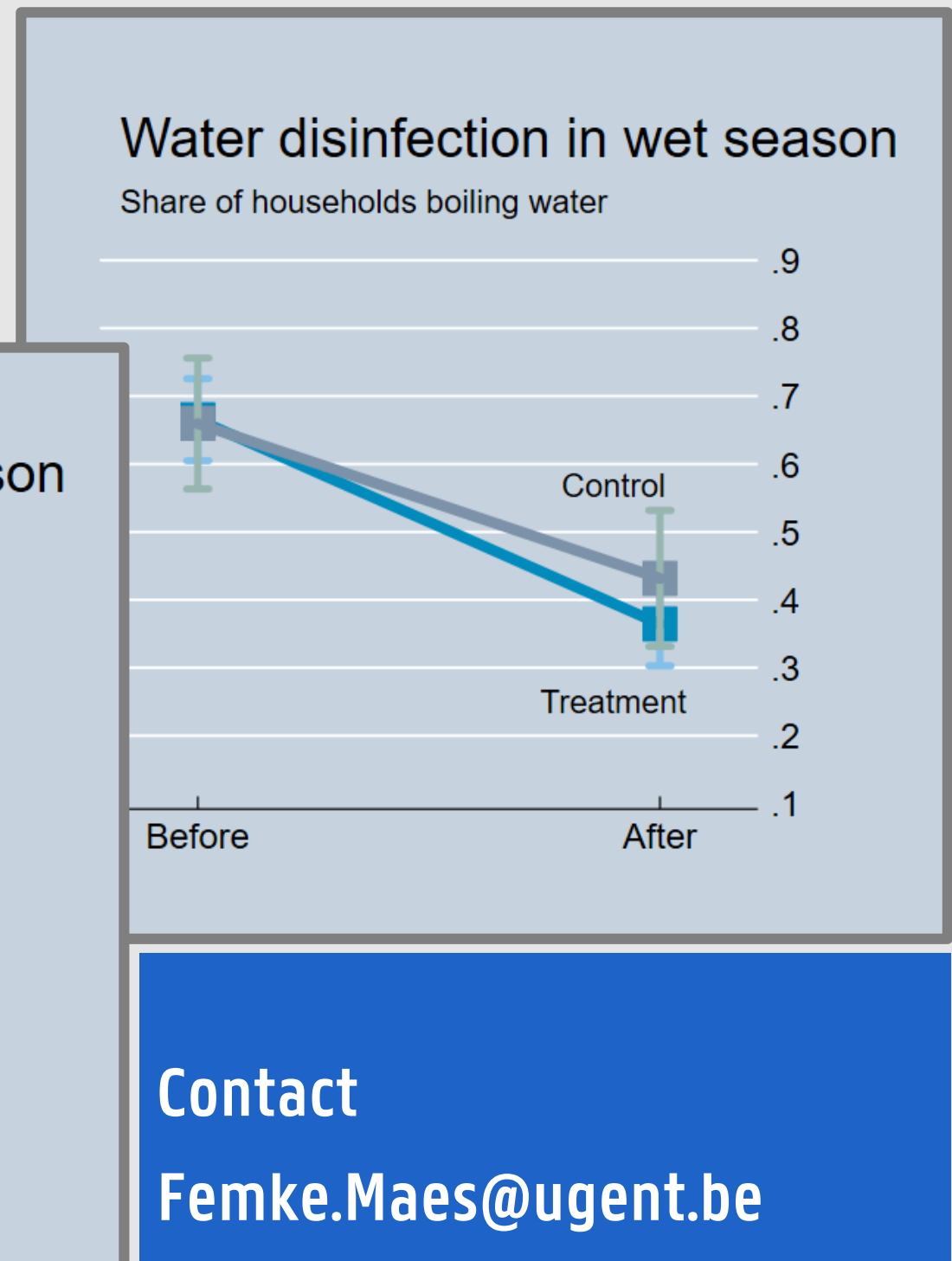
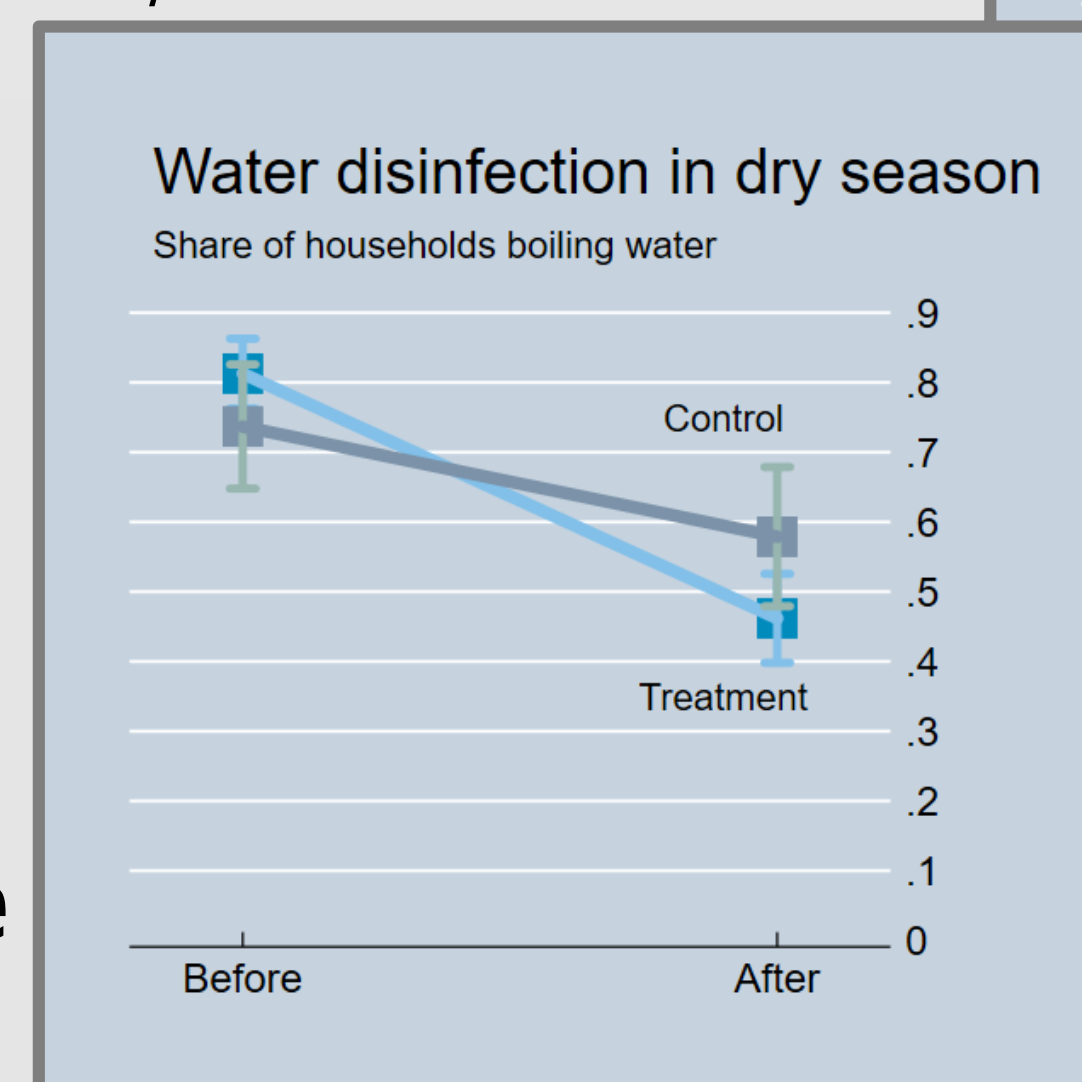
Demand:

- Budget constraints
- Walking distance

Substitution of disinfection

Tap users are 14% less likely to disinfect drinking water at home than non-tap users.

- Boiling at home is substituted by clean water sources.
- Mainly in the dry season.



Overcome access barriers and educate households to disinfect at home to avoid public taps to be just "a drop in the bucket".

Contact
Femke.Maes@ugent.be