Rethinking Greywater: Building a research and governance agenda for Community-led water reuse in rural India

Alokananda Bisoyi, International Innovation Corps ; Sabir Kumar Barik, Xavier University

BACKGROUND

- Greywater = wastewater from
  - bathing, washing, laundry
  - (excluding toilets)
- Forms 50–80% of household wastewater
- JalJeevan Mission (JJM)
  - higher water use
  - more greywater
- Unmanaged discharge leads to
  - stagnation,
  - vector breeding,
  - health risks
- Yet, greywater is a local, renewable resource whose safe reuse can support irrigation,
  - nutrition, nutrition,
  - resilience

POLICY AND KNOWLEDGE GAP

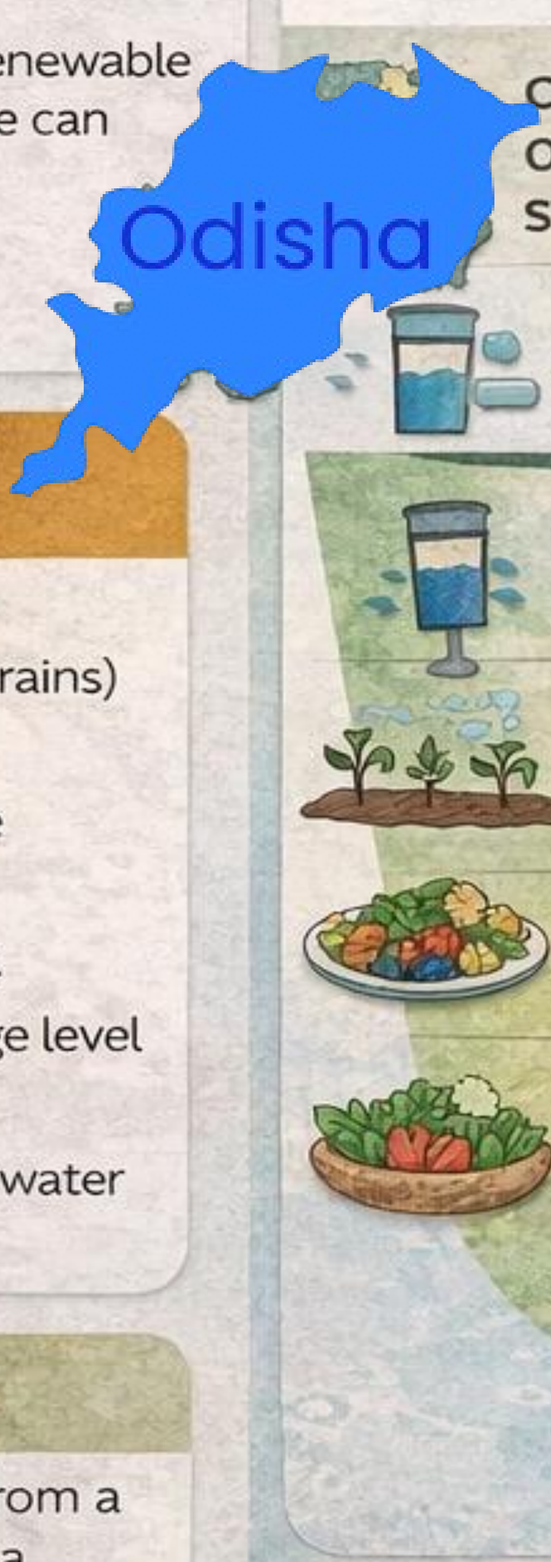
- Policies focus on infrastructure (soak pits, drains)
- Limited data on
  - quantity, quality, reuse
- No national database for greywater monitoring.
- Governance gaps at village level
  - VWSC capacity, roles)
- Behaviour change on greywater largely absent in WASH

STUDY AIM

- To reposition greywater from a negiected by product to a governable, reusable community resource, and to propose a research driven governance agenda for rural india.

METHODOLOGY

- Review of national policies, programme guidelines, and scientific literature
- Qualitative field research:
  - Semi-structured interviews
  - Focus group discussions
- Stakeholders:
  - Community members
  - VWSCs
  - Frontline workers



KEY FINDINGS

- Greywater systems function poorly when focus remains only on construction
- Limited O&M
- No VWSC involvement
- Greywater management is highly context-specific
- Less community acceptance without engagement
- Evidence from community-led pilots shows
  - greywater reuse is feasible at household level
  - when training and support exist

Five-Point Research and Governance Agenda

CONCLUSION & POLICY RELEVANCE

- Greywater governance sits at the intersection of water security, public, health, agriculture, and climate resilience.
- Without ovidence-based, community-led-governance, unmanaged greywater risks reversing the gains achieved through large scale rural water supply investments. A research driven agenda is essential to cransform greywater into a sustainable local resource.