

Understanding safe drinking water behaviors and effective means to improve these in Terai Region of Nepal

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WATER
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Achieving SDG6 in a Changing Climate



#WaWF23

Presentation outline

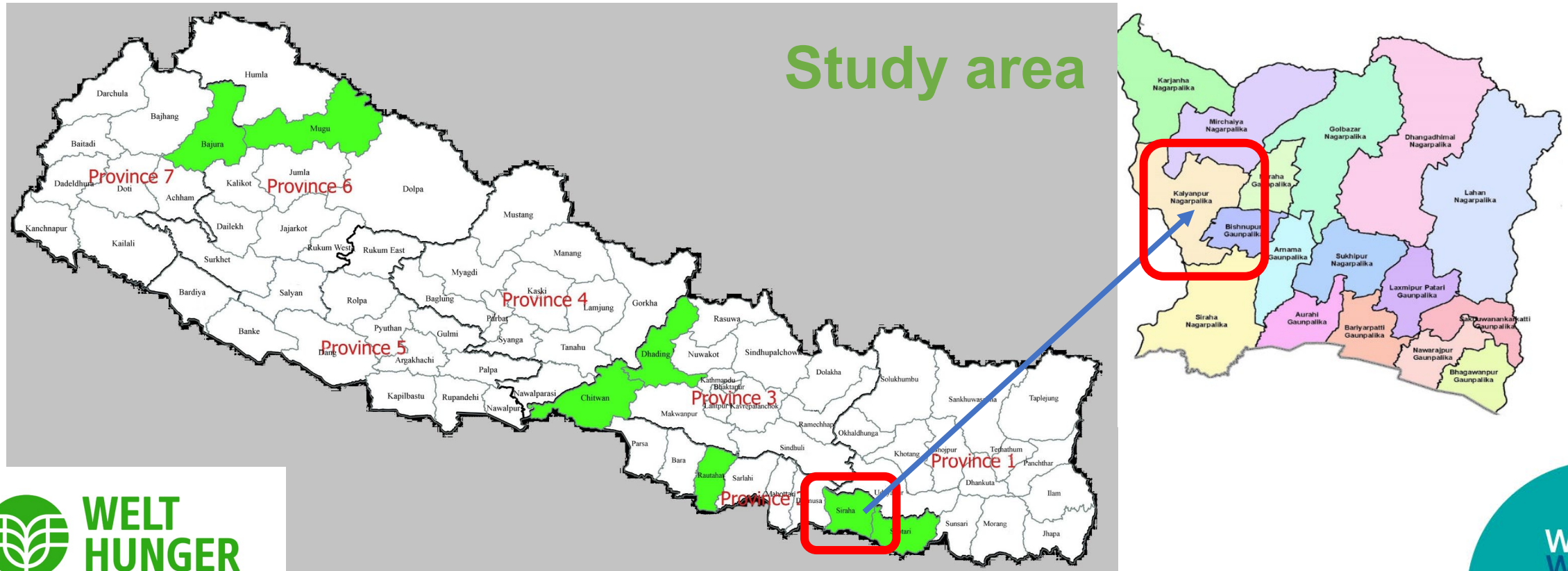
1. Context
2. Objectives and study area
3. Methods
4. Key findings
5. Drivers and agents for safe water behaviour promotion
6. Reorganizing the intervention
7. Way forward

Context

- Nepal constitution explicitly recognizes the 'right to water and sanitation' Article 35(4).
- Despite of having remarkable momentum in WASH sector, safely managed drinking water decreased from 27% (JMP 2019) to 19 % (JMP 2021).
- People in Terai region of Nepal mainly depend on shallow Tubewells which are high risk to contamination due to poor drainage, O&M etc.
- A water quality assessment conducted showed 27% of water sample (N=270) from handpumps contaminated with E. coli (WHH, 2020).
- Despite of people having access to city supplied water majority do not use for drinking purpose, where as some people are reluctant to connect tap.

Objective of this study

To understand the safe drinking water behavior practices, preferences, willingness to pay and effective communication measures for the sustained practices of household water treatment.



Methods

- Empirical data was collected through document review, semi structured interviews
- **Key informant interviews (KII)-6**, (WASH focal person, Ward Chair, HCF in-charge, WSUC members)
- **In-depth interview (IDI)-12**, (NGO representatives, schoolteachers, Political leaders, FCHVs, water operator)
- **Focus group discussions (13)**- Piped water users (7), people without pipe water connection (5), WSUC members (1)
- **Water quality monitoring demonstration** (presence/absence of E.coli)
- Household observations for water handling behavior



Findings- practices

- **Water handling behavior** was poor, and majority people drink water directly from tap/Tubewell.

“I will not die drinking water drawn by my hand. It’s written in the lifeline. I will die on the day when I am supposed to die.”—P10,

- People shifted their storage practices in clay pots or gaito (with small opening), to a plastic bucket.

“People don’t know about the possibility of water getting dirty when water is fetched or kept in a bucket with wide opening.”—IDI, Headteacher

- Most of the **people believe pipe water is safer** than water from shallow tube well, yet they are not ready to install taps; In contrast, they are getting **water free of cost** at their premises from handpumps.

Findings- preferences

- Despite of access to piped water at home, they do not use it for drinking purpose due to **bad smelling (chlorination) & hot (during summer), taking time to maintain leakage**

“I use tubewell water because the pipe water is not good. I used piped water for other purposes.”—Water User Committee member,

- People belonging to poor quintile **cannot afford for deep handpump installation** and are habituated with water from shallow Tubewells despite of knowing it is not safe to drink (without access to pipe water)
- Water operator (WSUCs) do not have **adequate knowledge and understanding of safe drinking water-** hence they can not communicate to the users

Key findings-willingness

- People are **not ready to install taps** mainly because they are not sure **about the cost and quality of chlorinated piped water** (people access to tap water).
- Majority of the people are **ready to connect** (including low quintile people) water tap if **cost is minimal and water quality is guaranteed** (with/out access to tap water).
- Water Users Committee (Operator) found passive because of **no incentive, low coverage, and people are not willing to pay tariff.**

“Though it is in existence, the water supply management committee does not functional fully and properly. If any organization supports them then they work—otherwise they won’t. They are careless.”—IDI, headteacher, Kalyanpur

- Household level water treatment option: **if treatment options are easily available and low cost, also maintain the water temperature!!!**

• Drivers/Enablers

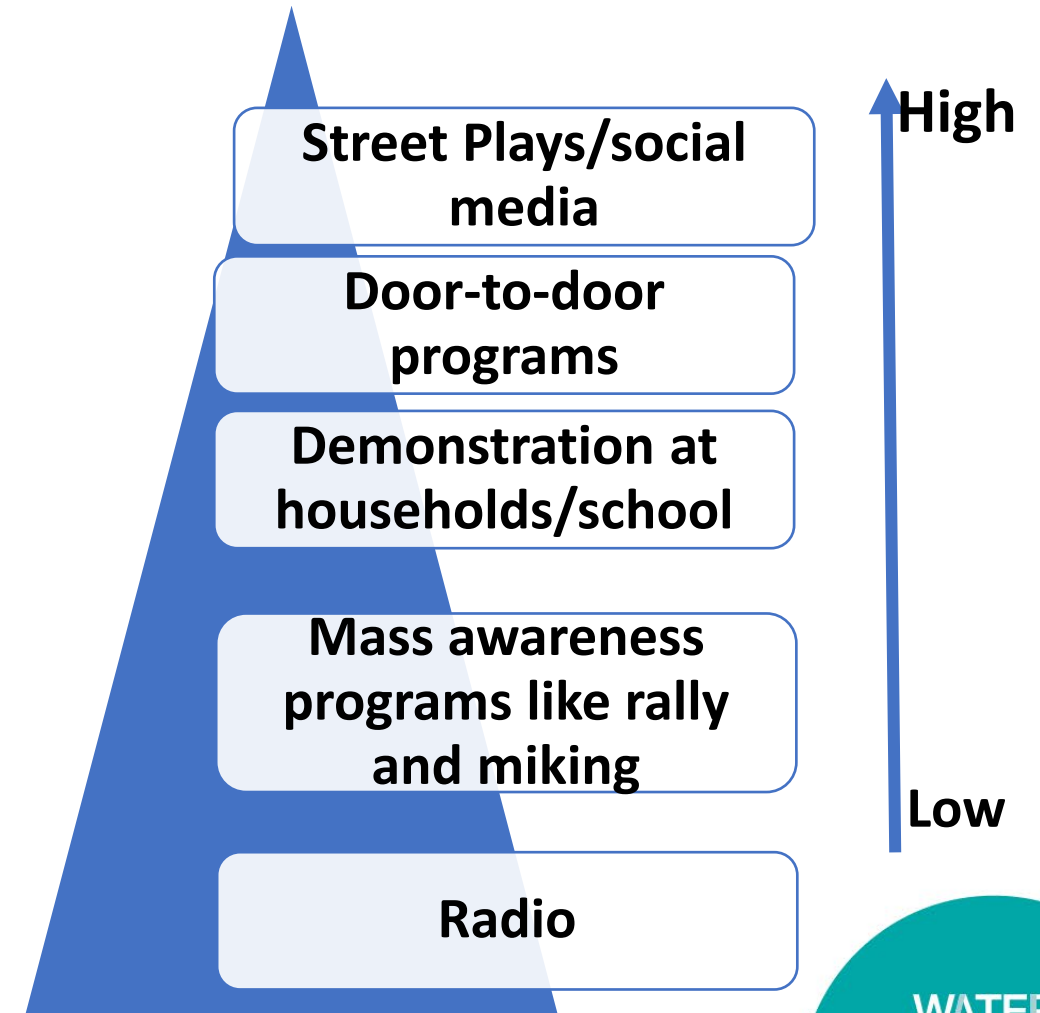
MOST
Effective
Drivers/
Enablers

- Free/subsidized filters, tap installation
- Tap installation and setting of water tariff looking at affordability
- Training on the use of safe drinking water with demonstration (e.g., P/A of E. coli)

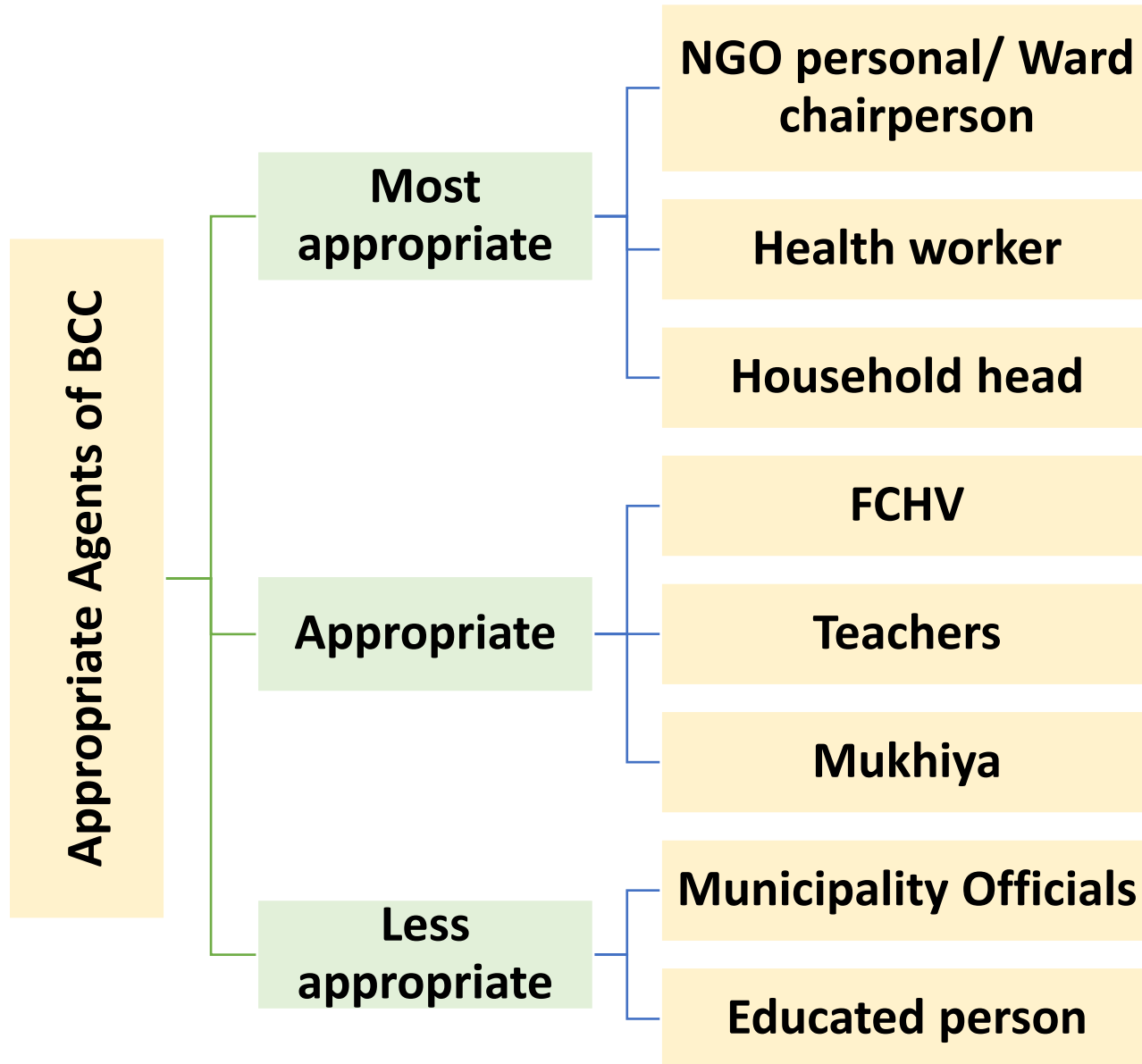
Effective
Drivers/
Enablers

- Periodic water quality testing of water
- Capacity development of water operator on safe drinking water and water quality measurement
- Access to water quality testing laboratory (at least arsenic, Iron, E.coli)

Appropriate communication medium



Appropriate agents of safe water promotion



“It will be the most effective if the *ward chairperson/NGO personal* could also say that *He/She drinks safe water* and urge others to do the same.”—*IDI, Religious Leader, Kalyanpur-11.*

Re-organizing safe water promotion



Latitude: 26.781785
Longitude: 86.156297
Elevation: 12.12m
Accuracy: 6.6m
Time: 06-25-2019 10:28

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Way Forward

- Develop and communicate safe water use behaviors adopting **universal languages approach (ULA) for behavior change** such as drama, water quality monitoring demonstration, sports/games, door to door visit, exhibition of water treatment options
- Capacity building of **water operator (water users committee)/service provider** on safe drinking water and climate resilient Water safety plan that contributes to maintain safe water promotion including continuous supply.
- Local government leadership **to replace shallow Tubewell to deep Tubewell** that has low chance of contamination and later **materialize one house one tap.**
- Social marketing and supply chain of different **household level water treatment options** including spare parts for household tap connection within reasonable price.

"It's high time to understand the barriers and enabelars around safe water drinking behavior of people and intervene to meet the SDG 6.1 effectively"

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