



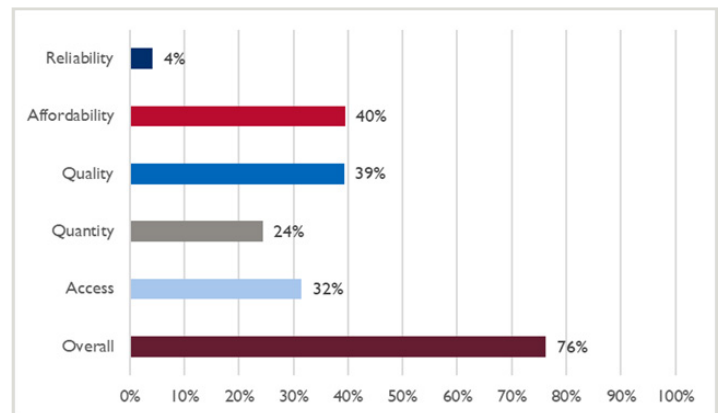
# Independent Study of the USAID IUWASH Tangguh Activity – Baseline Findings

**Question: How has household water security in the targeted areas changed as a result of the interventions?**

### Household Water Security Metrics:

- **Accessibility:** Access to improved source on premises available when needed
- **Reliability:** Days per most recent week where main drinking water source was disrupted
- **Quantity:** Liters per capita per day of water collection
- **Quality:** Absence of *E. coli* at point of consumption
- **Affordability:** Percent of total monthly household expenditure spent on water

*Percent of households that do not meet household water security standards in community intervention areas*



Although household water security is strong in IUWASH Tangguh intervention areas, with 90% of households achieving at least three of the household water security standards, 76% of households do not meet one or more standard. Affordability and water quality are the weakest aspects of household water security, with about 40% of households not meeting standards in each of these categories.

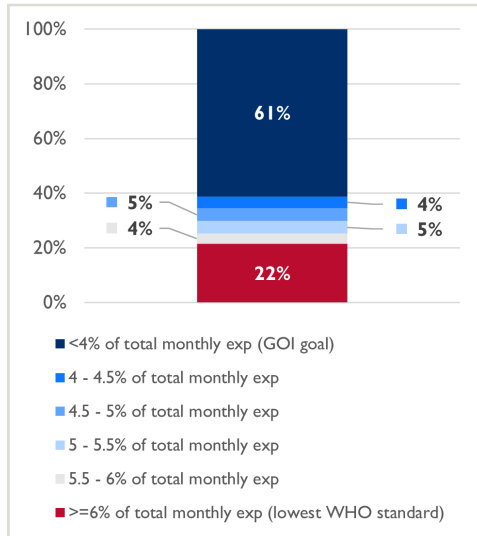
### Water Sources

Kiosks and packaged water sources are the most common source of drinking water, though most households rely primarily on piped water, protected wells, or boreholes for most of their water needs. At least 85% of households have at least one improved source of water on premises that is available when needed.

Water Source	Price per liter (IDR/Liter)	Liters collected per person (lpcpd)	% Households that use as primary drinking water
<b>Bottled or sachet water</b>	1,052	1	19.6%
<b>Water Kiosk</b>	257	2	31.9%
<b>Piped source on premises</b>	4	157	17.2%
<b>Protected wells</b>	0	183	13.4%
<b>Borehole</b>	0	192	13.7%

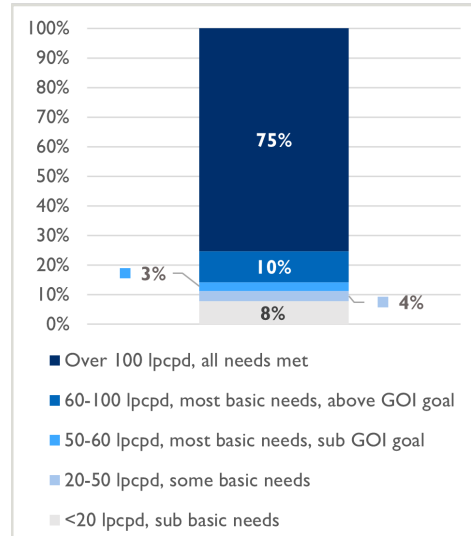
## Affordability

Percent of households by Total Monthly Expenditure Spent on Water



## Quantity

Percent of households by Quantity of Water Collected per Day



## Water Quality

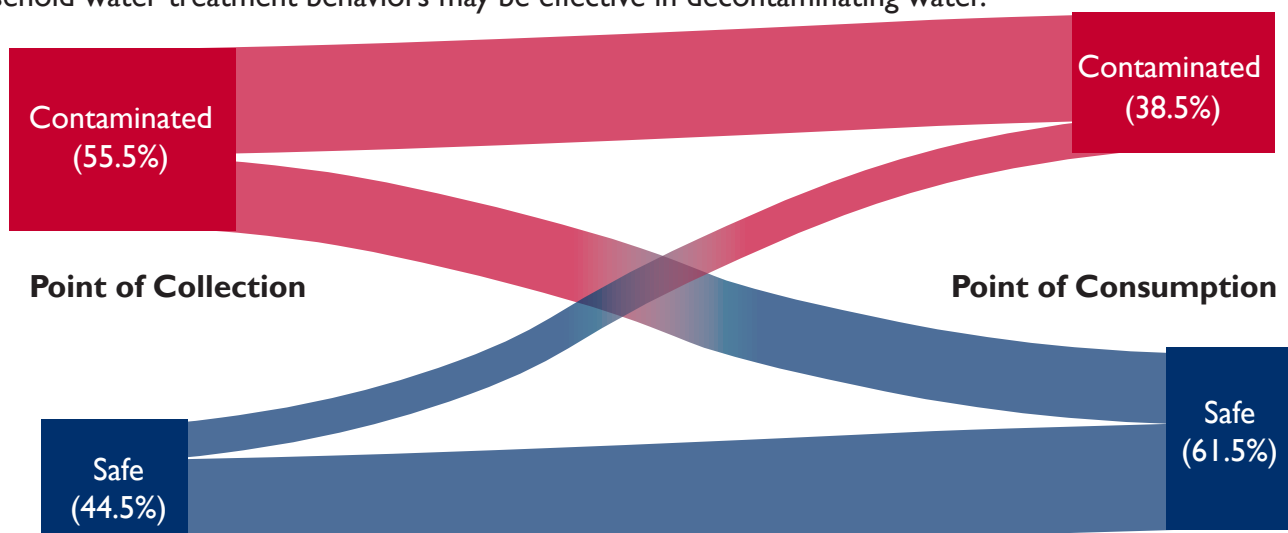
60.7% of households had no E. coli in their drinking water, but contamination was very severe where it did occur. Protected wells were the most frequently contaminated water sources, while water kiosks, boreholes, and piped sources were contaminated at similar frequencies.

Percent of samples with E. coli Absent at Point of Collection and Point of Consumption, by Source

Source for Drinking Water	Point of collection	Point of consumption
Protected Well	6.2%	59.3%
Water Kiosk	55.1%	58.4%
Piped source on premises	59.1%	53.3%
Borehole	60.9%	74.1%
Bottled water*	N/A	67.7%

\*Bottled water not tested at point of collection

Water quality generally improves from the point of collection to the point of consumption, indicating that household water treatment behaviors may be effective in decontaminating water.



Quality from Point of Collection to Point of Consumption Among Households Whose Main Source Is Not Bottled Water