



# The cost of meeting basic WASH standards in health care facilities

Preliminary findings for the 47 Least Developed Countries (LDCs)

# “Do not call it a health care facility if there is no WASH”

## Globally, major coverage gaps persist



1 in 4 lacks basic water—facilities serving 1.8B people



1 in 10 has no sanitation—800M people use facilities without toilets



1 in 3 lacks hand hygiene at points of care



1 in 3 does not segregate waste safely

Source: *Global Progress Report on WASH in Health Care Facilities: Fundamentals First* (WHO/UNICEF 2020)

# Motivation and Vision

- Call to action by UN SG - universal access of WASH in HCFs by 2030
- JMP provides a picture of the extent of the needs
- There is need for greater and more sustained investment in WASH in HCFs
- Global commitment to accelerate efforts on WASH in HCF's and achieve the goal by 2030



# Cost estimates include four services plus mark-up for other activities

Coverage target of 100% by 2030 in the 47 LDCs

Service	LDC coverage (2019)	Capital (Capex)	Recurrent (O&M)
Water	50%	Install or improve WASH infrastructure in <b>all facilities not yet meeting Basic standards</b> , including planning, construction, and related software activities.	Operate and maintain new and improved services through 2030 in <b>facilities receiving the capital investment</b> , including repairs, hygiene supplies, water, and waste treatment and disposal.
Sanitation	37%		
Hygiene	74%		
Waste Mgmt	30%		
Environmental Cleaning + Other activities	Insufficient data	Estimated indirectly using primary cost data	
		Upfront planning and capacity building—mark-up of 7% (hospitals) and 9% (non-hospitals) on each country’s total Capex for the four service areas above	Cleaning staff and supplies, refresher training, planning, monitoring, and supervision—mark-up of 121% (hospitals) and 84% (non-hospitals) on each country’s total O&M

**Notes:** Though this was not a full life-cycle cost analysis, estimates are expressed in present value terms. Recurrent costs include an annualization of capital maintenance costs (CapManEx). Total costs will be higher when including O&M for facilities already at the Basic standard.



# Key data sources

Bottom-up costing requires prices and quantities

## Price data

Per-facility prices collected via survey conducted in several countries

- Respondents relied mainly on official government cost norms and/or project administrative records
- Findings reflect data received from 34 of the 47 LDCs; updates ongoing
- Missing values imputed based on regional and all-LDC averages

## Quantity data

Needs defined using JMP basic coverage indicators for 2019, where available

- Facilities sorted between needing full and partial investment package to reach Basic standards
- LDC averages used for missing values using similar JMP methodologies

WHO, Global Health Observatory, and national sources provided facility counts

# Achieving the targets by 2030 in all LDCs will cost US\$ 3.6 billion

## \$ 1.2 billion

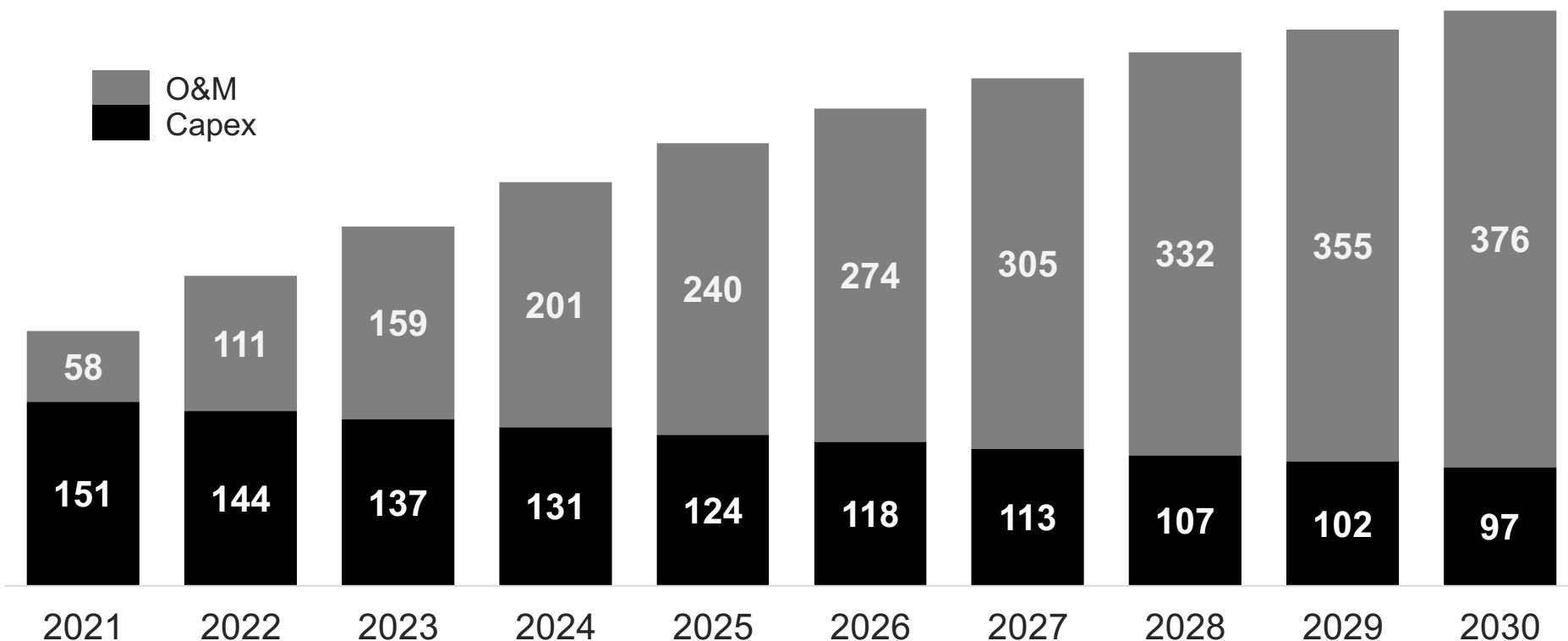
in capital investment,  
equal to US\$ 1.04 per  
capita

## \$ 2.4 billion

more in recurrent  
spending,  
equal to US\$ 1.97  
per capita

# Incremental capital investment drives mounting recurrent costs

Total capital (Capex) and recurrent (O&M) costs, 2021–2030 (US\$ millions)



# Which countries need the most investment for WASH in HCFs?

Rank order of contribution to total costs for LDCs

- |               |                |
|---------------|----------------|
| 1. Tanzania   | 6. Afghanistan |
| 2. D.R. Congo | 7. Sudan       |
| 3. Ethiopia   | 8. Senegal     |
| 4. Bangladesh | 9. Myanmar     |
| 5. Uganda     | 10. Madagascar |

The top 10 countries account for roughly two-thirds of total costs.



# Costs are modest compared to WASH and health resource flows...

...and they only represent a small fraction of needed investment to provide universal basic WASH to all people in LDCs by 2030

**US\$ 0.30**

(Cap: US\$ 0.10,  
O&M: US\$ 0.20)

**Annual investment needed per capita  
for WASH in HCFs in LDCs (2021–2030)**

**US\$ 0.87**  
(range: US\$ 0.01–4.81)

Capital health spending per capita  
by 26 LDC governments  
(Global Health Expenditure Database)

**US\$ 2.64**

ODA per capita for WASH in LDCs in 2018  
(OECD CRS 2020)

**US\$ 3.09**  
(range: US\$ 0.01–16)

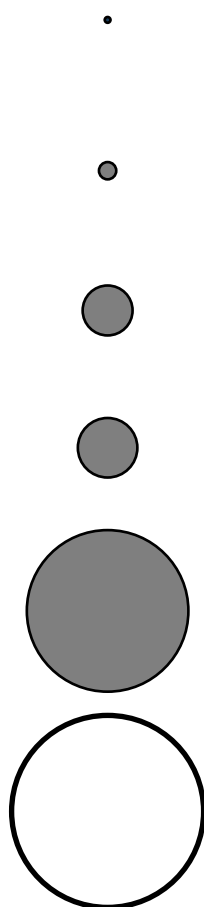
Annual spending per capita on  
WASH by 22 LDC governments  
(GLAAS 2019 Report)

**US\$ 10**  
(range: US\$ 3–553)

Recurrent health spending per capita  
by LDC governments in 2018  
(Global Health Expenditure Database)

**US\$ 11.59**

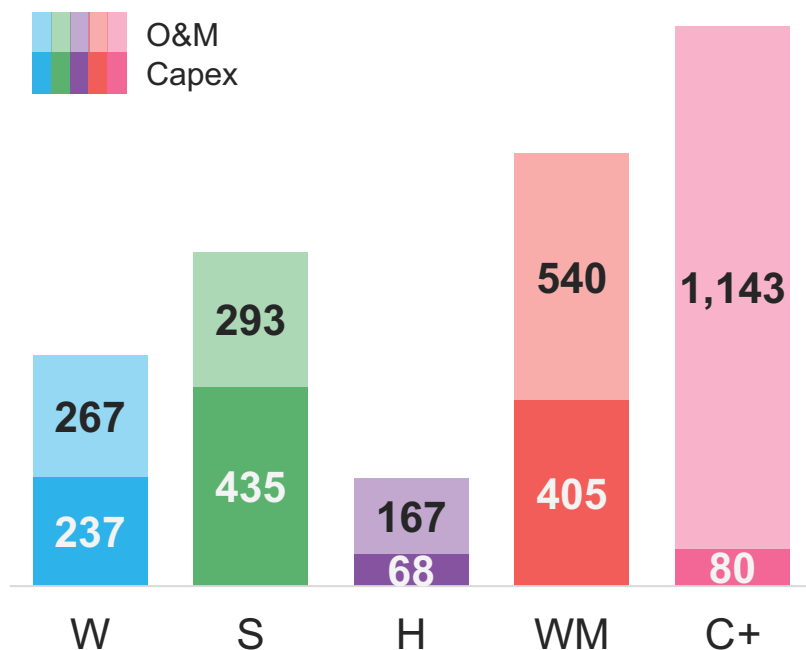
Annual investment needed per capita for  
universal basic WASH in LDCs (2015–2029)  
(Hutton & Varughese 2016)



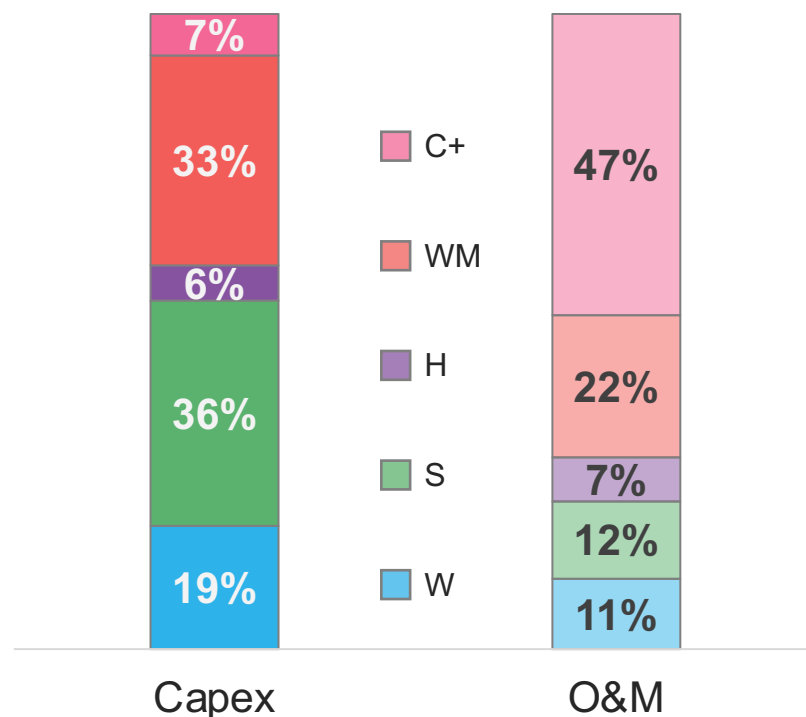
# Most upfront investment needed for Sanitation and Waste Management

Cleaning and other activities (C+) drive half of recurrent costs

**Total costs by service area**  
(US\$ millions)



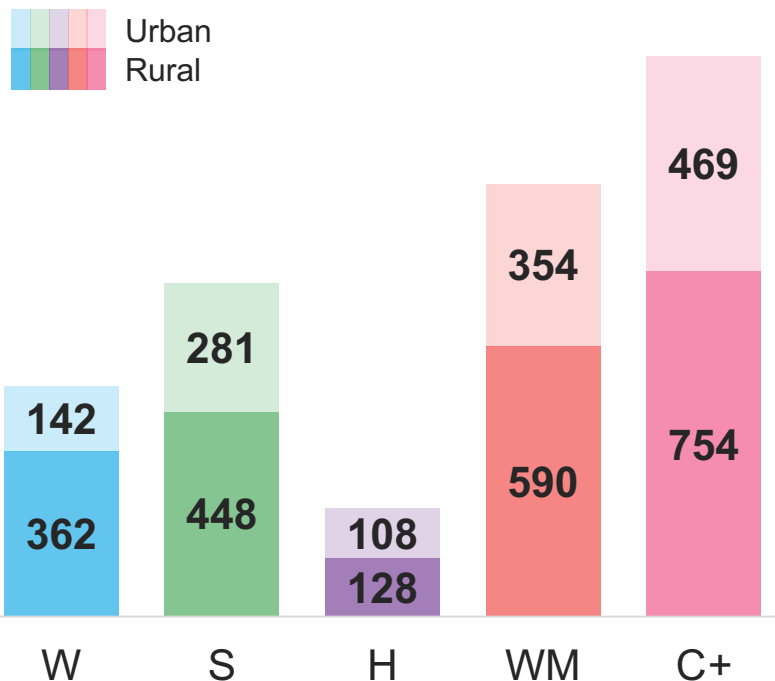
**Composition of Capex and O&M costs by service area**



C+ includes upfront planning and capacity building costs that are only required once in infrastructure lifespan (Capex), and annual costs for environmental cleaning personnel and supplies, refresher training, supervision, planning, and monitoring (O&M).

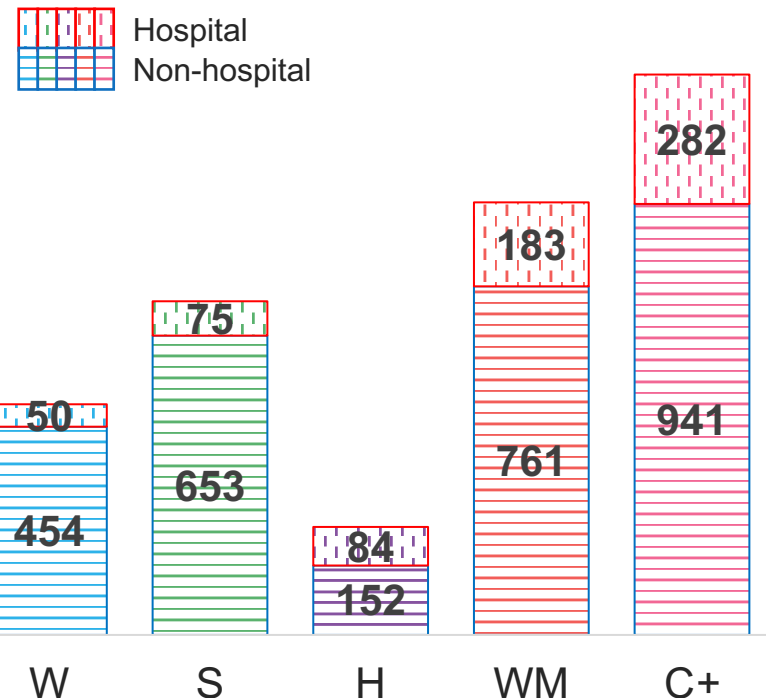
# Most of the investment should be channeled to rural health facilities

**Costs by rural urban**  
(US\$ millions)



The rural poor stand to benefit the most from improved WASH in health care facilities.

**Costs by facility type**  
(US\$ millions)



The PHC and UHC movements cannot succeed without a strong WASH foundation.

# Key takeaways from the analysis

- The cost of meeting WASH in HCF targets in the 47 LDCs is manageable: from 2021 to 2030, US\$ 3.6 billion more will need to be invested, or an average of US\$ 360 million per year (US\$ 0.30 per capita)
- Reaching and sustaining basic standards are not the same—recurrent spending will quickly overtake capital investment and so needs to be planned and budgeted for from the outset
- Costs of Sanitation, Waste Management and Cleaning account for the majority, while Water and Hygiene will cost the least to achieve
- Gaps in coverage and price data hinder more extensive analysis—we can't ignore the considerable needs outside LDCs
- Better WASH services are key to manage public health outbreaks, they have an impact on quality of care and consequently health outcomes

# Questions to explore

- Where will financing come from at the global and country levels?
- How can countries be best supported to address these needs in routine planning and budgeting?
- How will financial and operational responsibilities be allocated across sectors and levels of government? How can multi-sectoral planning, financing, and implementation be strengthened?
- What principles and approaches will minimize derelict infrastructure? Are governments and partners willing to invest in systems and policies for sound asset management, budgeting, and operation of WASH infrastructure?

# Thank you!

Steering Group: UNICEF, WHO, World Bank, Global Water 2020, WaterAid  
Consultants: Michael Chaitkin & Samantha McCormick