Budgeting and advocacy to improve WASH in healthcare facilities

A case study on using costs data to advance policy and practice

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Background and objectives

Water, sanitation, hygiene, waste management, and environmental cleaning (WASH) are critical for safe and functional healthcare facilities. Yet WASH is underprioritized in health systems budgets. Only one-third of countries have nationally costed road maps to reach universal access to WASH in healthcare facilities. Ensuring sufficient funds for long-term operations and maintenance is particularly challenging, as costs are poorly understood.

In 2022, we conducted costing and advocacy activities in Thakurbaba municipality, with the aim of accompanying the municipality to create budgets and an operations and maintenance (O&M) policy for WASH in healthcare facilities. We documented this process to provide a case study for how costs data can inform advocacy and policy making for WASH in healthcare facilities, particularly for executing the Eight Practical Steps recommended by the WHO and UNICEF to reach universal access. Our study objectives were to:

- Describe the process and methods used for budgeting and advocacy
- Assess the costs of achieving and sustaining basic WASH services in the eight healthcare facilities of Thakurbaba municipality
- Report the outcomes of policy development and advocacy activities

Our process and methods for costing and advocacy are shown at right. Summaries of budget and policy outcomes are reported below.

Costs of WASH in healthcare facilities

We assessed the costs of achieving basic WASH services in eight rural healthcare facilities of Thakurbaba municipality, serving between 210-1,418 outpatients per month. Four of the eight facilities offered laboratory and maternity services; the remainder were outpatient only.

- Total annual costs for all basic WASH in all facilities was USD 58,900
- Per facility annual costs for basic WASH ranged from USD 4,880 to 9,530
- Costs per outpatient visit ranged from USD 0.56-2.76
- Cleaning had the highest average annual cost (USD 2,160 per facility per year)
- Hygiene had the lowest average annual cost (USD 200 per facility per year)

The largest single contributor to annual costs was infrastructure investments, of which the primary cost drivers were construction of infrastructure for water supply, sanitation, waste management, and fencing. However, the combined annual O&M costs for infrastructure maintenance, trainings, consumables (e.g., soap, waste bags), personnel, and support (e.g., communication, capacity development) exceeded annualized capital costs in all facilities.

Policy and advocacy outcomes

Municipality level

To-date, Thakurbaba municipal government has developed and formally adopted the O&M policy, allocated funding for its implementation, and begun deploying funds. These an important step for capacity building and systems strengthening. The O&M policy:

- Established a municipal recovery fund that can be used for WASH infrastructure O&M
- Provided guidelines on core O&M activities and implementation procedures

Funding allocated to-date comprises

- USD 3,830 to the municipal recovery fund, to be replenished annually as funds are used
- An additional USD 150 per healthcare facility for additional spending

Regional and national levels

Cost estimates and learnings from these activities have informed national-level advocacy and contributed to ongoing efforts to develop nationally costed roadmaps for WASH in healthcare facilities. Terre des hommes Nepal has hosted advocacy workshops at the district and province levels to encourage replication of these activities in other municipalities.

Budgeting and policy development process

Costing used a bottom-up approach. We enumerated all resources used to achieve and sustain basic WASH services into a spreadsheet, using evidence from prior research. We pilot tested then tailored these spreadsheets for the Nepal context. Spreadsheets were designed to automatically calculate three budget measures:

- Capital costs to establish WASH (infrastructure, start-up trainings)
- Annualized capital costs (total capital costs averaged over lifespan)
- Annual O&M costs (infrastructure maintenance, personnel, consumables, recurrent trainings, support)

Policy development was led by the municipal government. A policy formulation committee, chaired by the vice mayor, drafted the initial policy. The committee was supported by a task force of municipal bureaucrats, which supported collecting and reviewing information, and non-governmental organizations Terre des hommes Nepal and Geruwa Rural Awareness Association, which led budgeting activities. The committee drafted the initial policy, and shared it to stakeholders for review and feedback. Feedback was incorporated, and the finalized policy was adopted by the municipal assembly.

	A	B	C	D	E	F	G	H	I	J	K
4	**CONSUMABLES**				**Current**					**Additional costs needed for upgrading**	
5	**Item**	**Unit**	**Unit cost**	**Quantity/ year**	**Annual cost**	**Remarks**	**Unit**	**Unit cost**	**Quantity/ year**	**Annual cost**	**Remarks**
6	**Waste management materials**										
7	Disposable waste containers	No.	1000	10	10,000	waste bins (not disposable , they reuse				-	
8	Waste bags	No.	150	100	15,000					-	
9	**Cleaning materials**										
10	Soap	Pc.	40	500	20,000	only hvs	Pc.	40	146	5,840	
11	Detergent	Kg	110	60	6,600		Kg	110	60	6,600	Self buy and enough
12	Harpic	Pc.	100	48	4,800		Pc.	100	24	2,400	only 3 pcs provided by palika
13	Phenyl	Pc.	100	48	4,800		Pc.	100	24	2,400	
14	Virex	160gm	50	400	20,000		160gm	50	317	15,850	
15	**Cleaning tools**										
16	Mop	No.	200	12	2,400		No.	200	12	2,400	
17	Trolly						No.	500	4	2,000	
18	Buckets	No.	500	15	7,500	20/30 L buckets	No.	500	6	3,000	
19	Mug	No.	100	15	1,500		No.	100	6	600	
20	PPE	Set	2000	50	100,000						
21				**Total**	**192,600**				**Total**	**41,090**	

	Annual cost
Water	
Sanitation	
Hygiene	
Waste management	**25,000**
Cleaning	**208,690**

Figure 1. Excerpt of costing spreadsheet used for data collection

1. Tool development

Developed an Excel-based costing spreadsheet

- Pre-populated a spreadsheet with line items for basic WASH, based on prior research
- Collected pilot data to observe conditions, discuss local needs, and test the spreadsheet
- Tailored the spreadsheets to specific line items for the Nepal context (Fig. 1)

2. Initiation workshop

Oriented stakeholders using a workshop

- Explained the purpose of the project and described the costing process
- Built support among stakeholders
- Created a policy formulation committee to steer policy development and a taskforce to support

3. Preliminary costing

Collected costs data with focus groups and records

- Held focus group discussions with healthcare facility staff to estimate costs (Fig. 2)
- Project engineers estimated infrastructure costs
- Consulted records where available
- Entered information into spreadsheets

4. Discussion workshop

Shared results and received feedback

- Presented results of preliminary costing
- Received feedback from the municipality that cost estimates were inaccurate (too high)
- Agreed to conduct data validation and certification to improve accuracy
- Discussed possible elements of the O&M policy

5. Data validation & certification

Iterated data collection to validate and certify

- Engaged additional staff to report and review data
- Prioritized additional efforts to collect and triangulate data, due to the formal nature of the municipality's request
- Received a formal letter endorsed by the healthcare facility in-charge certifying the data

6. Budget calculations

Budgets computed using an Excel spreadsheet

- Calculated upfront capital costs to establish WASH (infrastructure, start-up trainings)
- Annualized capital costs into annual budgets
- Estimated annual O&M costs for infrastructure maintenance, personnel, consumables, recurring trainings, and support

7. Policy finalization

Policy drafted by committee and approved by municipal assembly

- Consulted key stakeholders (patients, civil society organizations, healthcare staff and management)
- Incorporated suggestions from the discussion workshop (Step 4) and budgets (Step 6)
- Drafted and circulated a policy for feedback
- Formally approved the policy

8. Dissemination & advocacy

Disseminated learnings and advocated for replication in other municipalities

- Held district- and province-level workshops to advocate replicating the budgeting and policy development process (led by the municipality with support from the project team)
- Costs data shared to national team developing costed roadmaps and included as a reference in the draft national costed roadmap

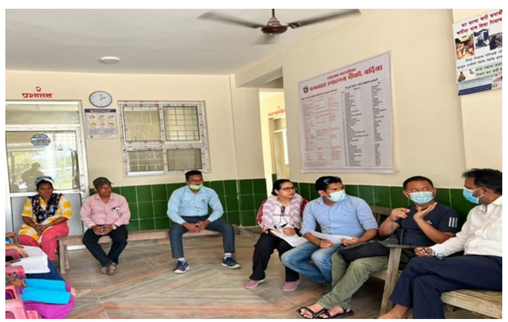

Figure 2. Data collection at a healthcare facility (Step 3).

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