



YEMEN COST EFFECTIVENESS STUDY

Comparing 2 projects in Yemen, working with communities to build latrines with cash for work was three times faster and 20% cheaper than hiring contractors to deliver latrines to communities. Communities built more latrines in 6 months than contractors did in 18 months.

Why Does This Matter?

Speed and cost-effectiveness are especially critical in humanitarian contexts, where having clean water can be the difference between life and death. Getting latrines built quickly can significantly reduce the spread of waterborne diseases like cholera, which pose huge risks in a crisis. Communities are more likely to maintain latrines where they have some buy-in, so cash-for work also builds latrines that are likely to have a longer payoff for communities.

Cash for work was 20% cheaper

- The annual cost per person for latrine access was \$38.38 under cash for work and \$46.17 under the contractor model. The total construction cost per latrine was estimated \$553 for cash for work and \$642 for contractor-built latrines.
- Implication: wherever possible, plan for communities to lead on construction projects that are possible with their level of expertise.

Higher staff costs do not mean more expensive models.

- Even though it was cheaper, cash for work spent more of the budget on national staff (42%) than the contractor model (29%). They also spent more money on travel. That's because Cash for Work needs more supervision and more interactions with communities to ensure results.
- Implication: Planning for more contractors instead of staff does not mean models are cheaper. Getting the right staff at the last mile can be a cheaper option than driving down all staff costs.

Hiring and procurement processes drive speed

- Cash for Work was 3 times faster than hiring construction firms because it allowed for faster hiring and procurement. In addition to the additional time it took to hire contractors, the contractors themselves then had procurement delays and challenges. Contractors also saw inflation drive the costs of latrines from \$430-\$700 per latrine over the life of their contract.
- Implication: Outsourcing the work did not make it faster or more efficient, or solve major procurement challenges. Working with communities to solve the problem did.

Locally led lasts longer

- Because communities had to learn skills to build the latrine, and contributed materials themselves, they are more able and more likely to maintain the latrines. 55 local workers got paying jobs and built the skills they needed to construct and maintain latrines. The contractor model left few opportunities for communities learn how to build or maintain latrines in the long-term, shortening the life of the investment.
- Implication: Contractor driven models are not necessarily longer lived



Implications and Actionable Insights



Promote Cash for Work where feasible



Consider Hybrid approach for contractor-led projects by incorporating community contributions and local ownership



Plan for maintenance and durability. But models were designed for 5 years but neither included maintenance cost



Include hygiene promotion as it increases usage and maximizes the health benefits of the investment.



Adapt designs based on local conditions

Method 1: DRA Project (Contractor Modality):

- Constructed 40 latrines in Al-Aradhi for 262 individuals.
- Took 18 months to complete.
- Costs increased significantly (from \$430 to \$700 per latrine) due to inflation and currency changes.
- Included hygiene promotion and fluoridation activities.

Method 2: USAID H2O Project (Cash-for-Work Modality):

- Constructed 50 latrines across three villages for 350 individuals.
- Completed in just 6 months. Relied on local skilled labor, community contributions (materials and manual labor), and created job for 55 local workers.
- Included hygiene kits, behavior change efforts and emphasized knowledge transfer and community ownership.
- Average cost per latrine was \$553.

Methods

CARE conducted an analysis comparing two different ways CARE Yemen built latrines under two donor-funded projects: one by Dutch Relief Alliance (DRA) and the other by USAID's H2O initiative. A tool called Dioptra, which helps measure cost-efficiency, was used to see which method gave better value for money in Yemen's difficult humanitarian context.

Contact Information: [Martin Buening](#)

