



Winnovators 2023

**Timor-Leste Solve
Sanitation &
Hygiene Challenge**



The Challenge



Timor-Leste is located in the far corner of Southeast Asia, and is one of Australia's closest neighbours. People there live across varying terrain, from high mountains in central areas, to low-lying coastal areas.

Around 70% of the population live in rural areas where access to quality health services is challenging.

The Challenge: Design a solution to healthcare waste management challenges for rural healthcare facilities in Timor-Leste



WaterAid/ Tariq Hawari

Background



Safe, reliable water, adequate sanitation, hygiene, environmental cleaning, and waste management services and behaviours in healthcare facilities (HCFs) are vital for safe, quality healthcare provision. WASH services in healthcare facilities are especially critical for the health of mothers and newborns to support quality, safe delivery and post-partum care.

The provision of WASH in healthcare facilities serves to reduce the risk of infections, control the spread of disease (including COVID-19) and slow the development and spread of antimicrobial resistance.



Background



WASH also protects patients and their carers, health workers and surrounding communities; and upholds the dignity of vulnerable populations including pregnant women, newborns and children, and people with disability.

Clean and safe healthcare facilities can: increase demand for, and trust in, services; reinforce the role of healthcare services and staff in setting hygiene norms; increase the motivation, satisfaction and retention of healthcare workers; and, result in cost savings from infections averted and more efficient service delivery.



WaterAid/ Tariq Hawari

Background



In Timor-Leste WaterAid is supporting WASH in HCF in rural health posts (very isolated and low resource settings), and healthcare waste management is one of the poorest performing WASH areas.

In Manufahi and Liquica, WaterAid has found that healthcare waste management was poor at all healthcare facilities with fewer than one in ten (9%) healthcare facilities achieving basic service levels. In Manufahi, almost all facilities reported no level of service (85%), indicating limited waste segregation and unsafe disposal of infectious and sharps waste are commonplace.



Background



There are existing practices of some rural health posts transporting their sharps waste to Community Health Centres (CHC) for safe disposal, depending on distance and availability of transport, however, no CHCs met a basic service level for waste across the two districts.

Some HCFs have incinerators but they are either not functioning, not used effectively, or it is unclear if they process the waste effectively. Ineffective waste management at HCFs exposes surrounding communities to poor air quality and unpleasant smells when healthcare waste is burned in dysfunctional incinerators or in open pits which has additional risks to contaminating nearby water sources.



What's the challenge?



Design a solution that enables HCF staff in rural Timor-Leste to safely segregate healthcare waste in an environmentally sensitive manner, and then treat and dispose of sharps and infectious waste safely.

This should include a hardware/infrastructure solution as well as the behavioural solution for HCF staff to use the infrastructure effectively.

A solution to this problem has real benefits for healthcare facility staff, users and the environment. Improving the management of healthcare waste takes dangerous materials out of the facility and the local environment, reducing the risk of infections and injury. This can have a significant impact for the most vulnerable members of the community, including infants and the elderly. A solution to this problem can also help to make the workload and demands on HCF staff more manageable, safer, and boost morale which is important to maintain, support and grow the health workforce.

What are appropriate solutions?



For a solution to have a significant impact here, it needs to respond to the context that staff and users of the healthcare facilities move around in everyday. It should also be a solution that embeds a climate-resilient approach with minimising environmental impacts.

The materials and tools required need to be locally available and relatively affordable, the design needs to be simple enough to be operated safely by staff who have to deal with a range of urgent demands on their time, and varying expertise. The sustainability of the solution should be addressed including how healthcare waste management can be embedded into roles and responsibilities of existing staff, incentivised, budgeted and supported within the broader municipal health systems.



What do we have to submit?



A solution in the form of **one or more** of the following:

- 1,000 word report (including appendices)
- A3 poster/board
- 5-minute video
- 10-slide PowerPoint

Final submissions are due **Friday 25 August.**



What can we win?



- Best Water Solve
- Best Sanitation & Hygiene Solve
- Best Fund

If your team excels in all three aspects of **Solve**, **Fund** and **Learn**:

- Global Overall Winner



What are next steps?

- Contact the Winnovators team at WaterAid with questions – we're here to help auswinnovators@wateraid.org.au
- Get ready for the kick-off webinar with the WaterAid team from Timor-Leste on April 20th at 12pm AEST.
- Remember to post! We want to see what brilliant things you're coming up with!
- See the **Submissions Examples** for Solve and Fund on the resource library.
- Start preparing your fundraising pitch for your seed funding, due May 12th.



Thank You

