Realize an inclusive community handwashing station

(COVID-19 response)

Suggestions and recommendations for HI's field programs

What is a community handwashing station?

A community handwashing station is a device that can be installed at community level (not household) in areas where water sources are scarce in order to allow people to wash their hands frequently and therefore increase their protection against bacteria and (in the COVID19 case) viral contaminations.

IMPORTANT: the water used in handwashing stations is not always safe to drink; make sure that, in case it is not, a very clear alert panel is installed close to the taps.

How is a handwashing station built?

There is no standard design for handwashing stations. They can be of different dimensions and materials, they can be realized **on site, with permanent/local materials** (type A), or assembled using **ready-made components** created on purpose (type B).

Erika Trabucco | e.trabucco@hi.org Sarah Hermon-Duc | s.hermon-duc@hi.org


Figure 1 Type_A, locally made handwashing stations



Figure 2 Type_B, ready-made handwashing stations

They can be realized using **running water** (type C) when they belong to a public building (school, clinic) but more often they rely on a **water tank** that has to be periodically replenished (type D).



Figure 3 Type_C, running water systems

Erika Trabucco | e.trabucco@hi.org Sarah Hermon-Duc | s.hermon-duc@hi.org


Figure 4 Type_D, water tank system

In general, and especially in emergency situations, handwashing stations that can be made on site with locally available materials are to be preferred, instead of ready-made ones that need to be shipped from abroad.

How does a handwashing station work?

It depends on how it is realized, but the easiest way to do it is using a water reservoir and gravity, in order not to need a water pump. This means that the water tank has to be on a **raised pedestal** and equipped with **faucets on its bottom**. In this way, when the faucet is open, the water will flow through it only thanks to gravity with no need of a mechanical pumping system.

IMPORTANT: Make sure that the top of the reservoir is covered, so that no dirt gets in the water (dust, insects, leaves, etc.). Also, make sure that the reservoir's opening is easy to reach, so that replenishing it will not be too hard.

Main accessibility problems and tips

1. Handwashing stations can be realized directly on the ground, in the middle of an open space, and sometimes they are difficult to reach and use by persons with mobility impairments: the soil close to them and underneath the water container can be muddy, uneven, sandy, and difficult to be walked on by persons with crutches or on a wheelchair, for example.

Figure 5 Examples of inaccessible ground around handwashing stations

- **ACCESSIBILITY TIPs:**

  Make sure there is an accessible path to get to the handwashing station, and that the floor underneath the water faucet is accessible too (especially for persons using mobility aids):

  - Flat (max acceptable slope: 5-8%)
  - Even (realized in compressed marram, concrete, wood or other stable similar material; not in gravel, muddy soil, sand, grass, etc.)
  - Regular (with no obstacles like rocks, holes, grids, branches, etc.)
  - Large (at least 90cm, preferably 120-150 cm)
  - Anti-slip (no slippery tiles)
  - Possibly with one handrail at least on the side of one tap (to support persons with balance difficulties)
  - Signposted (location clearly identified with direction arrows; panel close to the handwashing station to indicate its position and function, as well as whether the water is drinkable or not)
  - Also, if possible the path to the handwashing station and the area around it should be marked with a raised border

NOTE: Make sure that a drainage system is in place underneath the faucet, and that a soap holder is always available.

2. Sometimes the **tap** is made in the same color of the tank, so it is not easy to see by persons with visual impairments.

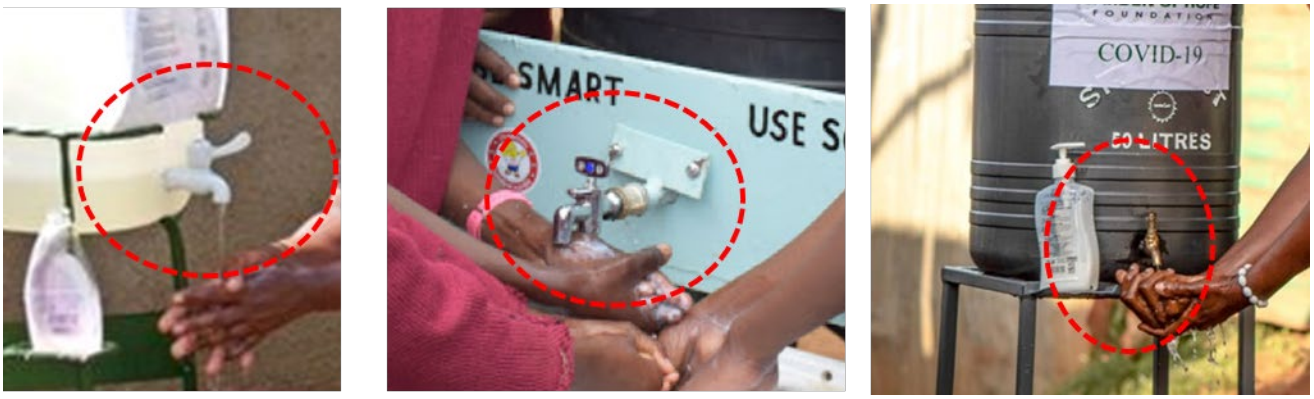

Figure 6 Examples of water taps not very visible

❖ **ACCESSIBILITY TIPs**

Install water taps that are in a contrasted color with the tank, to make them more visible:

Figure 7 Examples of visible, color contrasted water taps

3. Sometimes the **tap** is a screw-down type, and other times it's of a push-type only operable with thumb and fingers, both not easy to use by persons with difficulties in grasping objects.

Figure 8 Examples of taps difficult to operate

❖ **ACCESSIBILITY TIPs**

Install water taps operable with a simple lever:


Figure 9 Examples of simple lever taps

4. The **height of the tap** can be tricky for persons using a wheelchair, persons using crutches, and persons with other mobility impairments. The tap can be too high to be reached but also too low to be easily operated by elderly persons or persons with limited mobility. The width and the position of the **sink** (where available) can also be an obstacle if not properly chosen and installed.


Figure 10 Examples of taps at an inappropriate height

❖ **ACCESSIBILITY TIPs:**

Make sure that the handwashing system is of easy access and use for all.

Figure 11 Example of accessible handwashing mechanism

Possible design_Model 1

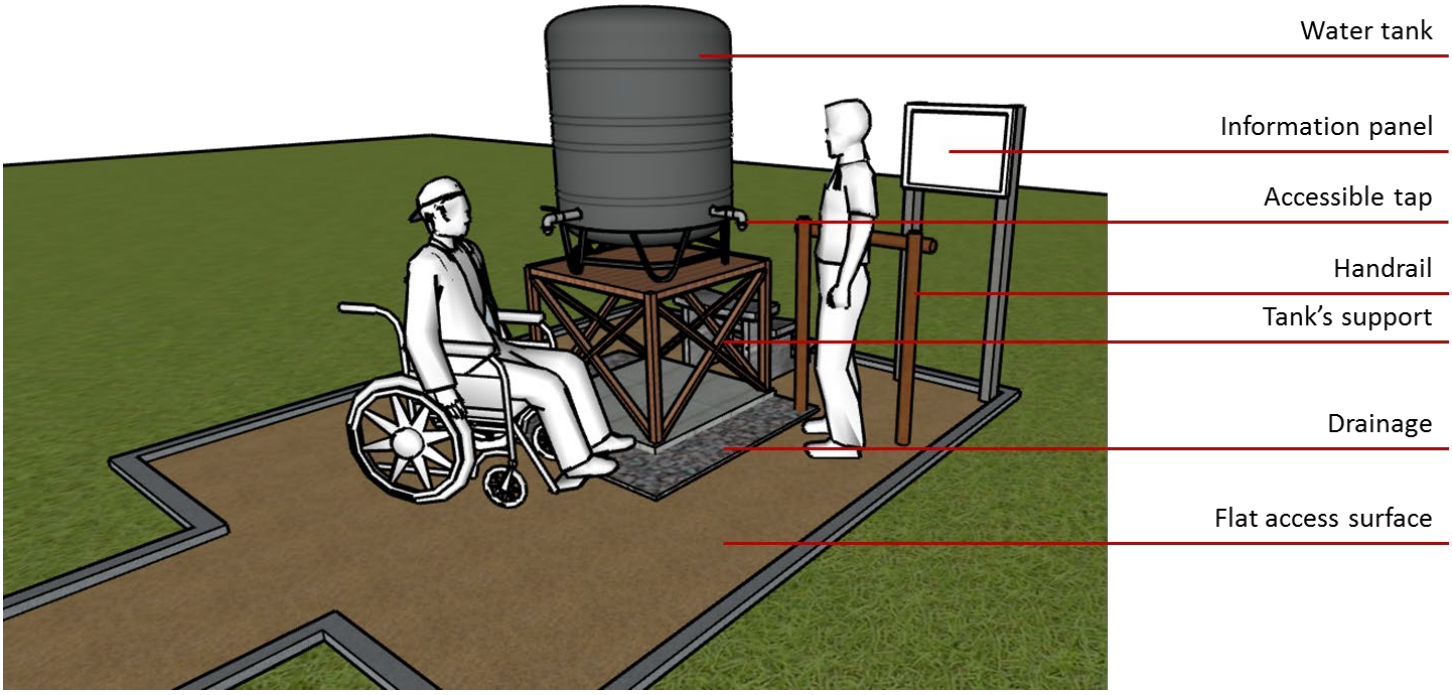

Figure 12 Example of raised tank with faucets (perspective)

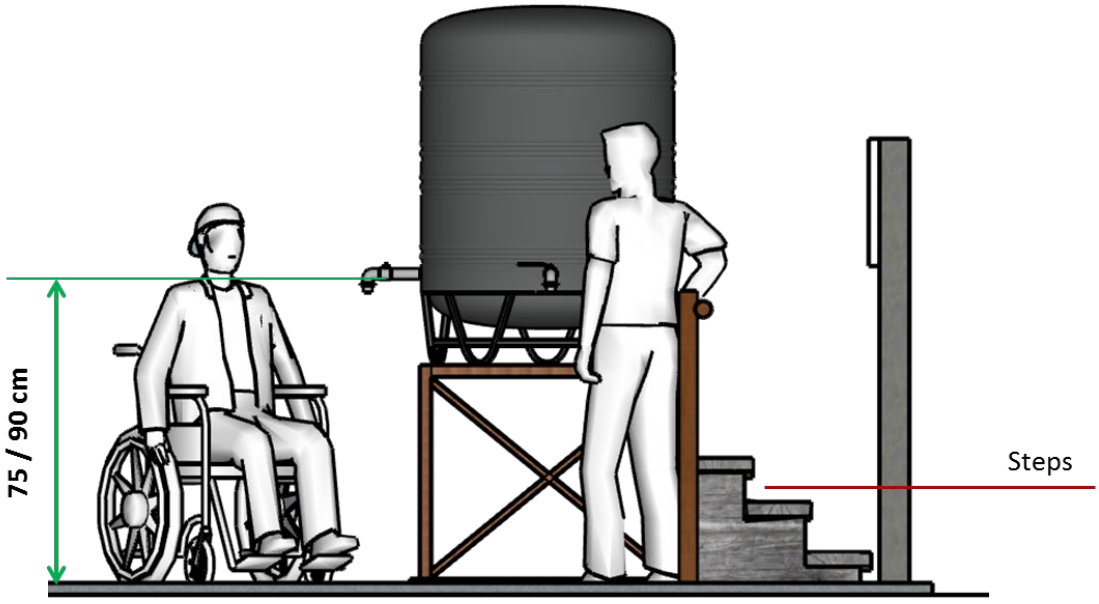

Figure 13 Example of raised tank with faucets (elevation)

Possible design_Model 2

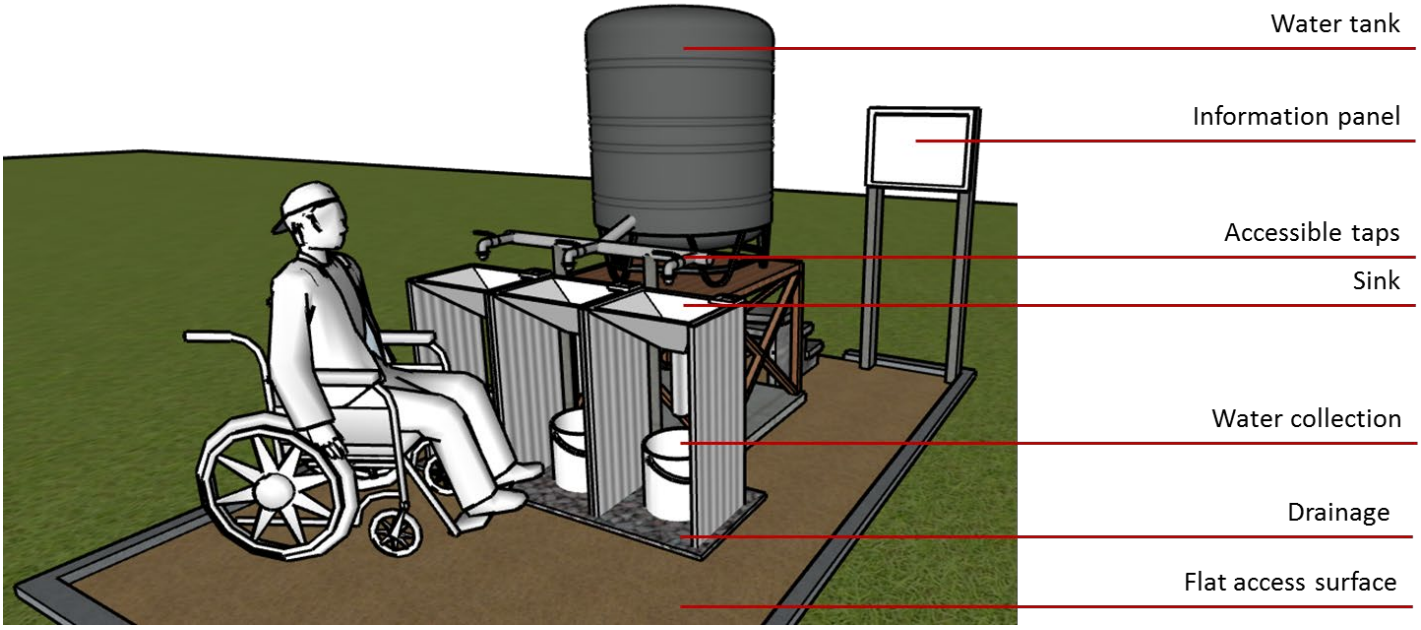

Figure 14 Example of raised tank with sinks (perspective)

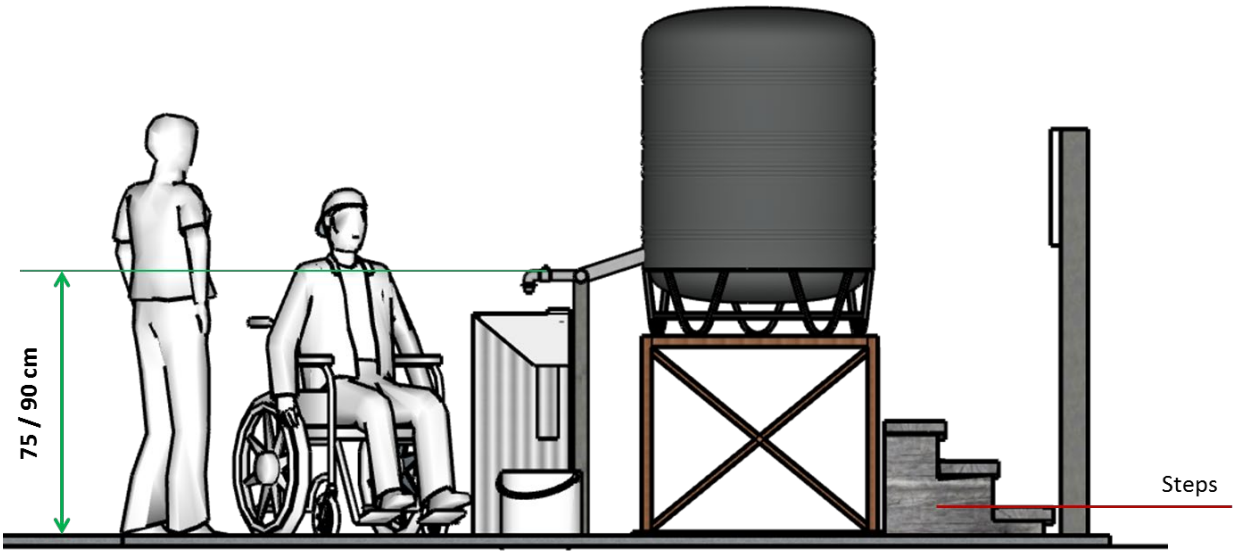

Figure 15 Example of raised tank with sinks (elevation)

Erika Trabucco | e.trabucco@hi.org Sarah Hermon-Duc | s.hermon-duc@hi.org