

Oxfam Strategy on Household Water Filters in Emergencies

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Due to the enormous quantity of different household water filters on the market or in development this brief paper is to clarify Oxfam's position on HH Water Filters.

Scenarios where Oxfam would use HHWT

- Situations where displaced people are in small dispersed gatherings and access is difficult
- Where people are still in their houses in rural dispersed situations but the water supply is disrupted and there is surface water available.

Oxfam does not promote household filters in camp situations as having a chlorinated safe centralised supply is more efficient and sustainable. Dense populations would also fall under this category.

If you decide HHWT is appropriate then these are the actions promoted by Oxfam

- 1) Assess what is in the local or national market.
- 2) Is there any in country feedback on these products?
- 3) Is there any external feedback on these products – ask Andy Bastable and or look at the CAWST website.
- 4) If the feedback is positive, buy in-country where possible
- 5) If there is no feedback available, you have the choice of importing Oxfam's preferred filter or piloting the most suitable filter. (see below)

Learning from Oxfam's previous HHW Filter programmes

Since 2004 Oxfam has had programmes using candle filters, ceramic pot filters, Tulip syphon filter, biosand, chulli filter, silverised briquettes, Sodis, membrane filters – specifically GriffAid, Nadi, Nerox filter and more recently filtercap and the Lifesaver Cube in addition to experiences shared by other agencies. Headline lessons learnt are;

- The success of any HHW intervention is directly proportional to the number of follow up visits. No product is so intuitive that it does not need promotion/demonstration/follow up.
- If a family accept and use a HHW filter they are more likely to observe other good hygiene practices such as handwashing.
- While pumping water through a filter directly into a cup or cooking vessel avoids secondary contamination this is not how most families manage their water. The majority of families prefer a storage vessel of 20L or more.

Virus removal: there are a limited number of harmful virus's that can survive any length of time in water ie adenovirus, astrovirus, hepatitis A and E **viruses**, rotavirus, norovirus and other caliciviruses, and enteroviruses, including coxsackieviruses and polioviruses. However, it is still very unclear in a lot of contexts whether the transmission route for viruses is waterborne or in fact person-to-person, etc..

Currently, Oxfam has in the UK Stores both the ceramic candle kit and the Cube. Though bulkier the feedback has been generally positive for the ceramic filter as long as it is cleaned correctly and not over cleaned to the point where holes are worn in the candle. As it is a tall filter, 80cm, it does not "fit" well in makeshift shelters.



The Cube was seen as a filter involving less promotion, however, from its use in a number of countries it is not as intuitive as previously thought. It does require as much if not more follow up than other filters.



- Therefore, before choosing a filter which eliminates viruses which are inherently more complicated and expensive investigate if there are any water borne viruses in the area you are in.
- Every filter has benefits and drawbacks, and trade-off's. You need to select the filter fit for your context"

Criteria for Emergency Household water Treatment filter

- Affordable – Less than \$20.00 per family
- Easy to use – Intuitive, simple design
- Fail-safe – End of life mechanism that prevents the product from providing water when no longer clean
- Durable – Can withstand typical emergency settings
- Packable – Minimal logistic footprint
- Safety – the design limits opportunities for post collection contamination (especially the dispensing mechanism)
- Life Span – 1 year for a family of 5 @2.5 l/d/p (4.5 m3/yr)
- Consumables - Does not require additional provision of chemicals during duration of unit
- Protection levels – 99.9% Bacteria, virus, protozoa protection
- Flow rate – not less than 0.02 l/s

To be read in conjunction with the Oxfam Technical Brief TB4 on Household Water Treatment and Safe Storage.

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