



# HWTS & Markets

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[hwts.info/network](http://hwts.info/network)

# About the HWTS Network

The Household Water Treatment and Safe Storage (HWTS) Network is a global coalition promoting water quality initiatives, including HWTS and point-of-use (PoU) technologies, to improve access to safe drinking water. The Network's initiatives contribute toward Sustainable Development Goal 6: Ensure access to water and sanitation for all.

The HWTS Network is made up of hundreds of organizations, including international development agencies, academia, governments, non-governmental organizations, and private sector actors.

## Rationale for the paper

A well-functioning free market system is an important tool to support the growth of the Household Water Treatment and Safe Storage (HWTS) sector. This paper will establish a common understanding of the importance of HWTS markets and its components.

This paper also highlights seven key principles that HWTS players should follow to support HWTS markets and avoid undermining them through well-intentioned actions with unintended negative consequences.

## The case for HWTS

Ideally, everyone in the world would have continuous access to clean water, piped directly to their home. In practice, this is difficult to achieve, especially in dispersed or remote communities. It is estimated that 2.2 billion people use a drinking water source with fecal contamination<sup>1</sup>. In addition, even where water is provided free of contamination at the point of collection, it is often contaminated during transportation and storage. Even in urban settings with fresh water systems in place, poor handling and storage practices can lead to water contamination. In these situations, alternative solutions should be sought, such as treating drinking water in the home<sup>2</sup>. Household water treatment and safe storage has also proven to be an important tool for those responding to humanitarian crises.

## A cautionary tale

The use of household water treatment and safe storage has been growing as an effective solution to address contaminated drinking water. Increased awareness has led to higher demand for HWTS solutions and increased the number of HWTS manufacturers, distributors and vendors. But not everybody offers the same solutions. Different organizations using different distribution models more commonly overlap. While this overlap means more choice for households, it also creates several potential challenges. One of these challenges is the distortion and hampering of HWTS markets.

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1. United Nations Children's Fund (UNICEF) and World Health Organization (WHO), "Progress on Household Drinking Water, Sanitation and Hygiene: 2000-2017. Special Focus on Inequalities" (New York, 2019), <https://washdata.org/sites/default/files/documents/reports/2019-07/jmp-2019-wash-households.pdf>.

2. CAWST, "Household Water Treatment and Safe Storage Knowledge Base," Household Water Treatment and Safe Storage Knowledge Base, accessed November 23, 2020, <https://www.hwts.info/the-big-picture>

For example, imagine a district where a social enterprise has been selling a liquid chlorine water treatment product to households for several years. They have built trust within the communities where they operate, they are employing a local workforce, and are beginning to see significant uptake among local populations. They are also committed to staying in the area for the next decade, providing ongoing support services to those who need it.

What would happen if another organization decided to distribute a new water filter for free, then moved on? Those who get the new, free filter might stop using liquid chlorine. People in neighbouring villages might decide to wait for a free filter instead of sourcing chlorine to clean their drinking water. Liquid chlorine sales would decline, and the social enterprise supplying the product might go out of business. That would mean job losses for locals and leave communities with no support for water purification. Others in the supply chain would lose out, too. And when the filters need replacement or spare parts, there would likely be no product support. The well-intentioned efforts to provide free filters might ultimately destroy a community's only sustainable water treatment option.

This scenario is relatively common<sup>3</sup> and demonstrates why stable household water treatment and safe storage markets matter for people. It also shows how easily markets can be destroyed despite the good intentions of others.



HWTS technologies

3. An example of such a situation is described at: [https://ssir.org/articles/entry/development\\_malpractice\\_in\\_ghana](https://ssir.org/articles/entry/development_malpractice_in_ghana)

## The case for HWTS markets

### What are markets?

Wherever sellers and buyers come together, you have a market<sup>4</sup> — the give and take of supply and demand. Markets generally find an equilibrium where a seller provides a product that buyers want at a mutually agreeable price.

For sellers and distributors, robust market strategies depend on an effective market analysis.

This comprises:

1. Carefully choosing and understanding consumers;
2. Developing products and services that perform well and are attractive to consumers;
3. Pricing products and services to be affordable and to recover costs;
4. Ensuring effective supply chains; and
5. Effectively promoting products to create demand<sup>5</sup>.

### Why HWTS markets are important

As the global household water treatment and safe storage sector grows, a greater range of solutions are being developed, and a wider array of methods are being used to get them into the hands of those who need them.

Every intervention in the market — a new product, a new seller, a new buyer — will have an impact on the economic field of play, whether intentional or unintentional. There are no market-neutral interventions<sup>6</sup>. There is also a growing popularity for approaches that enable and expand HWTS markets. Where external funding is scarce, organizations are beginning to realize the potential of HWTS markets to unlock new funding streams. Organizations are recognizing that these new revenue streams are key to rapidly increasing the scale of their operations.

HWTS funding comes from various sources, including donors, investors, corporations, and governments. HWTS market actors are uniquely positioned to take advantage of investments by households themselves. Recent analyses show that household investments in water and sanitation are vast, but they are underutilized<sup>7</sup>. Developing strong markets supports the ability to capture this funding and HWTS actors must work in harmony to ensure emerging and existing markets are not undermined.

Strong household water treatment and safe storage markets provide many advantages. Mature markets for products and services increase the number of products available, give users choice, increase efficiencies in the supply chain, drive down cost, and boost local economies. Sustainable market-based supply chains for HWTS products and services also support increased adoption and continued use of HWTS. That means more people drinking clean water.

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4. Will Kenton, "What Everyone Should Know About Markets," Investopedia, accessed November 23, 2020, <https://www.investopedia.com/terms/m/market.asp>

5. N.H. Borden, "The Concept of the Marketing Mix," Journal of Advertising Research 4 (1964): 2–7.. N.H. Borden, "The Concept of the Marketing Mix," Journal of Advertising Research 4 (1964): 2–7..

6. "Guidance on Market Based Programming for Humanitarian WASH Practitioners," Resource Centre, accessed May 21, 2021, [https://resourcecentre.savethechildren.net/node/15664/pdf/gwc\\_mbp\\_wash\\_guidance\\_190725.pdf](https://resourcecentre.savethechildren.net/node/15664/pdf/gwc_mbp_wash_guidance_190725.pdf) [guidance on markets](#)

7. Kerstin Danert and Guy Hutton, "Shining the Spotlight on Household Investments for Water, Sanitation and Hygiene (WASH): Let Us Talk about HI and the Three 'T's,'" Journal of Water, Sanitation and Hygiene for Development 10, no. 1 (March 1, 2020): 1–4, <https://doi.org/10.2166/washdev.2020.139>

HWTS markets come with challenges, too. Markets take significant time and energy to develop. They also require a range of strategic inputs such as training and government oversight, including regulation. Markets can be susceptible to external shocks as they are being built and there are concerns that markets fail to benefit the poorest and most vulnerable. HWTS actors are beginning to address these issues through the development of payment plans and micro-financing for those who need financial support. A growing number of initiatives are demonstrating the ability to serve both households that can afford HWTS and those who cannot through the use of subsidies for vulnerable groups, such as those living with HIV/AIDS.

Overall, HWTS markets create the opportunity to sustainably provide safe drinking water to more people and leverage their ability to invest in their own solutions. These markets can also help build local economies and provide springboards for targeting those most in need. However, HWTS markets are relatively young, requiring both support and protection from well-intentioned action with damaging consequences.

## Principles for implementers

To help support the creation and growth of HWTS markets, while avoiding unintended negative consequences, the HWTS Network proposes adherence to the following principles:

### 1. Seek to understand existing markets

#### *Why it matters*

People in the household water treatment and storage sector should be focused on improving the lives of people who do not have ready access to clean water. The products and the services households require rely heavily on sustainable supply chains. By taking time to understand the market in which they work, HWTS actors will be better placed to provide the right inputs to increase uptake and continued use. Understanding existing markets will ensure that actors do not disrupt maturing supply chains and continue to serve households in need.

#### *How it can be achieved*

Each implementer should understand the HWTS markets in their areas and the extent to which their intervention might affect those markets. Where their intervention is likely to be detrimental to local markets, they should seek different strategies (preferably ones that support and expand existing markets).

### 2. HWTS is sometimes seen as an interim solution, but it should never be viewed as only a short-term fix

#### *Why it matters*

Ideally, everyone should have a safe and reliable in-home water supply. HWTS is often seen as an interim solution to that end, however households and communities might be reliant on HWTS for years, even decades before safe piped water is available. When people think HWTS is a short-term fix, it leads to short-term uptake. Short-term thinking ignores long-term supply chain issues, such as when HWTS solutions need maintenance, parts or replacement. A short-term attitude discounts the long-term consequences of their actions, often resulting in well-meaning actions that damage both existing markets and household coping mechanisms.

### *How it can be achieved*

HWTS actions are long-term investments. There is a need to plan for ongoing maintenance, repair and replacement parts, while establishing supply chains that support continued use. If the products and services needed are in place, the benefits of HWTS will last as long as required to have safely managed water. HWTS actors should consider more broadly how their actions support the growth of HWTS markets and how they strengthen markets as a whole.

## **3. Seek to understand HWTS users**

### *Why it matters*

By taking time to understand their customers, HWTS promoters, distributors, and sellers will be better placed to provide the right products to the right people through the best channels. It will improve understanding of which households can afford to pay full-market rates and which vulnerable groups may require subsidies. Understanding potential customers will be essential for developing effective promotion strategies.

### *How it can be achieved*

Before entering a market, gather information to better understand households' desires, potential motivators for purchase and what constraints residents face, including how much they can afford. This data can be collected by gathering existing studies, talking to market actors, conducting new consumer surveys and forming focus groups. This information can be used to determine the characteristics of key customer groups and help match the right people with the right products and services.

## **4. Use existing products, services and supply chains where possible**

### *Why it matters*

When actors bring in products from outside a local region, or set up supply chains that bypass local people, they can jeopardize the businesses and organizations already involved in grassroots safe water initiatives. This could mean that products and replacement parts vanish and households are left without a means to treat their water. Local businesses might be reluctant to invest in building future markets for similar products. Where local supply chains are used and reinforced, they are more likely to continue to supply new products, spare parts and support services. Supporting local supply chains helps more money flow into the local economy, benefiting local families.

### *How it can be achieved*

Before introducing new products or establishing new supply chains, study what exists in the target area. Determine which elements might be utilized to strengthen the supply of products and services for your initiative. Consider what may broadly benefit the local economy.

For smaller or short-term initiatives this will likely mean using existing products, services and supply chains. Larger or long-term initiatives will likely require coordination with other market stakeholders.

There are significant benefits to be gained from interventions that do not introduce new products, or directly provide services to customers, but instead focus on actions that benefit the market as a whole. Examples include social media marketing of HWTS as a solution, lobbying for zero tariffs for HWTS providers and setting up a national product approval system, among others.

## 5. Work together and share data

### *Why it matters*

Actors promoting, distributing and selling HWTS should work together and coordinate to ensure their work is aligned and complementary. This is especially important for new organizations whose initiatives could adversely affect local HWTS markets. It is important that actors align with guidance from local and national governments to ensure they maintain their ability to oversee and regulate HWTS activities.

### *How it can be achieved*

In many counties, districts, and municipalities, groups of HWTS actors have joined together to share information on their work, promotion strategies, and in some cases, lobby governments for changes that would support their work. Such coordination and exchange of ideas can help grow the overall market for HWTS and avoid working against one another.

The public sector plays an important role in enabling healthy markets, ideally as a regulator. Where local or national government policies exist, organizations should follow them. Where no HWTS policies exist, communicate with the responsible agencies and support them to develop and enact meaningful policies.

## 6. Use ONLY smart subsidies and micro finance instead of general subsidies or giveaways

### *Why it matters*

Subsidies are a controversial issue for the WASH sector as a whole. Those against subsidies argue they are unsustainable and their blanket application means the money goes to those who would have bought products even without subsidies. Those in favour of subsidies argue that products would otherwise be unaffordable for people living in poverty. These arguments hold as true for HWTS as they do elsewhere in the sector. Given the prevalence of fledgling HWTS markets around the world, the damage that can be caused by blanket subsidies or product giveaways can be substantial. However, HWTS will remain out of the reach for people living in poverty without some form of financial support. Microfinance and smart subsidies may be able to bridge this gap, reducing the initial cash investment required and allowing specific vulnerable groups to be served.

### *How it can be achieved*

By being innovative, responding to local conditions, and clearly thinking through the consequences of any subsidy, organizations can target the most vulnerable while building local markets. One example is when an organization partners with a micro-finance institution to help spread the cost of HWTS solutions across a number of regular payments. Targeting specific groups with vouchers — such as mothers attending birthing clinics — is another. Subsidizing activities that build markets, such as social marketing, product certification/approval schemes, product development, increasing supply chain efficiencies, and helping actors overcome barriers to market entry can also be useful. Subsidies will cause some distortions in the market. They may make a product appear cheaper than its real market cost, or cheaper in comparison to other products. Subsidies might also inadvertently create a prevalence of products that don't do the job, but are accepted because they are artificially cheap. Efforts should be made to keep the negative effects of subsidies to a minimum, while maximizing the number of people who can benefit from HWTS solutions.

## 7. Monitor and evaluate the impact of HWTS initiatives on local markets and the ability to reach the most vulnerable

### *Why it matters*

We need to know how HWTS markets work to understand how best to support market creation and growth. While there is already significant monitoring of the impact of HWTS on households, there is almost no monitoring of the health of HWTS markets and supply chains. By monitoring market health and evaluating the impact of particular actions on the market, we gain a greater understanding of the best practices that should be applied across the sector. Similarly, understanding how well markets are able to reach the most vulnerable will help define what additional actions are required to reach everyone. Collecting and collating this information will allow market-based actors and external supporters to better shape their actions, understand impacts and adapt their tactics when necessary.

### *How it can be achieved*

In each country, national and regional coordinating bodies should be formed. These bodies should make efforts to collate and disseminate information related to the HWTS and its markets, and formulate guidance that will support their success. They should support the sharing of information and lessons learned across stakeholders, and coordinate actions where relevant. These bodies may be headed by governments or may simply be a shared interest group. Where possible, these bodies should conduct joint market assessments to better understand actions that support market growth and formulate strategies to enable that growth.

## Special note on emergency responses

Even in crisis situations, we urge all emergency responders to adhere to these seven principles.

By flooding a local market with new products and utilizing new global supply chains, it is easy to collapse existing markets. This destroys businesses and livelihoods, as well as vital supply chains for clean water products and services. Ultimately, such actions can leave populations more vulnerable than before the initial emergency.

Actors should work through existing markets and utilize products and support services already in the local area. Where local markets are strong, providing cash directly to those impacted by emergencies should be considered. This enables households to stimulate recovery and reinforces local supply chains. If there are no appropriate products and services in the area, emergency actors should work to support the growth of local HWTS markets. Actors may also want to familiarize themselves with the recommendations from the WASH Cluster on market-based programming for humanitarian WASH practitioners<sup>8</sup>. It is very much possible to do this in advance of an emergency, develop key strategies, and share them with incoming actors, where necessary.

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<sup>8</sup>“Guidance on Market Based Programming for Humanitarian WASH Practitioners,” Resource Centre, accessed May 21, 2021, [https://resourcecentre.savethechildren.net/node/15664/pdf/gwc\\_mbp\\_wash\\_guidance\\_190725.pdf](https://resourcecentre.savethechildren.net/node/15664/pdf/gwc_mbp_wash_guidance_190725.pdf) guidance on markets