



## Safe Water Enterprise – Site Selection Criteria and Guidelines

The Safe Water Enterprise (SWE) uses an ultra-filtration technology (SkyHydrant) that can treat most sources of raw water and make it safe for drinking. The aim of the project is to provide appropriate safe water to communities who rely on contaminated water and as a result are suffering from waterborne diseases like diarrhea or cholera. The Safe Water Enterprise should operate as viable and tangible self-sustaining social micro business enterprise within the local community. This means that the community as well as implementing partners need to commit time and resources into making a Safe Water Enterprise work successfully.

The Safe Water Enterprise, which is essentially a water kiosk, should typically be placed within an anchor organization within the community, which takes responsibility of the overall kiosk management. The kiosk is operated on a daily basis by a capable entrepreneur, who is selected by the community and the local organization. They will sell the treated water in clean containers at a fair price determined by the community. The kiosk operator and management team can thus ensure financial sustainability of the enterprise as well as earn a reasonable salary for their work.

The Safe Water Enterprise with its water filtration technology and operational model is a suitable solution for sites that fulfil specific criteria in terms of need, water source and water quality, community, anchor organization and operational structure.

In order to assess which sites are most suitable for the Safe Water Enterprise Solution, local organizations are requested to fill out the "Preliminary Assessment Checklist". They are also requested to send a written description of the proposed Safe Water Enterprise site, their organizational set-up, community and possibly some photos and location maps.



# **SIEMENS** | Stiftung



## Site Selection Criteria

#### Need

- 1) <u>Need for safe drinking water:</u> Safe drinking water is a real and immediate community need.
- 2) <u>Need for water treatment:</u> The water sources used by the community for drinking purposes are not safe for drinking and cause waterborne diseases. Is there any data available on waterborne diseases within the community?

#### Water Source

- 3) <u>A water source must be available.</u>
  The water source can be from a creek, river, dam, well or other suitable (nontoxic) supply.
- 4) <u>The envisaged water source is close to both the community and the planned kiosk site.</u>
   The kiosk should ideally be built at an existing popular community center (market, road) in order to ensure easy accessibility and uptake.

- The kiosk should also be as close as possible to the water source used. Pumping and piping bring extra challenges. The distance should not exceed 400 meters.

- The water source should ideally be higher than the proposed kiosk location, so that water can flow to the kiosk raw water tank with gravity and without need for a pump.

5) <u>The envisaged water source is reliable and not seasonal.</u>
- The water from the source flows sufficiently and is available all year long with no important interruptions or breakdowns.

- The water from the source is sufficient to supply 400-500 families. (Note: the filtration unit can supply up to 10,000 liters per day.)

- 6) <u>There are no (or no major) alternative sources of water in the community.</u>
   The kiosk is suitable where communities do not have any (major) alternative sources for drinking water, such as adequate water vendors, piped water etc.
- An existing water project can be upgraded into a SWE.
   If there is already an organization or a strong community group successfully selling or providing water to the community, but this water is not safe for drinking, this is a good case to upgrade the project to a Safe Water Enterprise.

#### Water Quality

- 8) <u>Water from the source needs treatment to make it safe for drinking.</u>
   Water is contaminated with bacteria or other pathogens. Note: You need to do a raw water analysis. Please ask us for assistance in case you do not know how to manage this.
- 9) <u>The water treatment needs can be met through the SkyHydrant filtration technology.</u>
   The water does not contain any harmful chemicals or salt. These cannot be removed by the SkyHydrant water filter.

# **SIEMENS** | Stiftung



#### Community

- 10) <u>Population Size:</u> There are at least 200 to 500 households (within a distance of 1-2 km) who use water from the envisaged source or who are willing to buy water from the Safe Water Enterprise.
- 11) <u>Acceptance:</u> The population accepts a Safe Water Enterprise run by a local organization and/or operator from the community who will be trained in operational and entrepreneurial skills.
- 12) Need for safe water and willingness to pay:

- The community is interested in buying safe water for a fee on a regular basis. Note: To make the safe water kiosk sustainable, there must be a price to the water and an income to cover the cost of the kiosk operator and running costs.

- The community members can afford to pay the price of water set. Note that it is them who should agree a price that is both affordable to the community members and at the same time high enough to cover running costs of the SWE.

13) Local Support:

- The local community genuinely supports a water kiosk in their area.

- There are no political issues or conflicts of interest from individuals or local players. There should be no payment of fees or commissions.

- The local community is willing to actively assist/ help to build the water kiosk.

- The community clearly understands that this Safe Water Enterprise is not just a "gift" but a partnership arrangement, with some tangible contribution requirements.

- The water kiosk will be built under a cost sharing agreement. The community should be willing and ready to make their own contribution (for instance building of the concrete slab that the kiosk stands on).

### Anchor Organization and Operational Structure

14) <u>There is a strong anchor organization in the community that has a clear interest and ability</u> to manage the Safe Water Enterprise.

- The anchor organization can be a community center, a health center, a local NGO or other community based organization with strong and sustainable management structures.

- The anchor organization is based within the community and can ideally host the Safe Water Enterprise on, or close to, their premises.

- The anchor organization has an intrinsic interest in running the Safe Water Enterprise for the benefit of the community.

- The anchor organization is able and willing to take responsibility and dedicate reasonable time and resources to the successful implementation of the Safe Water Enterprise.

- The anchor organization has the required entrepreneurial mindset to be able to run a financially self-sustaining social micro business enterprise.

- The anchor organization has the full legitimacy of the community to run a SWE.

- The anchor organization clearly understands that this Safe Water Enterprise is not just a "gift" but a facility that will improve basic services through social business activity. The success and positive impact of the Safe Water Enterprise will crucially depend on the input and operational team that the anchor organization puts in place to run the SWE.

#### 15) <u>A capable Kiosk Operator with a "business minded" attitude is selected by the anchor organization and the community.</u>

- The Kiosk Operator can have an Assistant to support in running the kiosk.

- The Kiosk Operator (or his Assistant) is available to run the kiosk reliably on a daily basis.





- The Kiosk Operator (and his Assistant) have an entrepreneurial mind-set and attitude.

- The Kiosk Operator (and his Assistant) have a basic technical affinity that will enable them to understand how the SWE filtration system works and how to maintain it.

- Note: Tasks will include assisting customers with supply of clean drinking water, ensuring regular opening hours, promoting the water kiosk and safe water to the community, record keeping, daily cleaning of the water filtration unit, daily maintenance of the water kiosk, keeping the kiosk in a clean condition.

- 16) <u>Sales:</u> A minimum amount of sales is required for the kiosk to be financially self-sustainable. Minimum target sales depend on the price per jerry can, on the salary for the kiosk operator as well as on further potential operating costs (e.g. cost for water or pumping). We recommend basing the salary of the Kiosk Operator and his Assistant on the sales performance. It will be necessary to establish a financial sustainability plan.
- 17) <u>Land issues:</u> The land on which the water kiosk is built should be public land. In case of private land, there should be a long-term lease agreement or transfer of land to the water project operators.
- 18) <u>Approvals:</u> The Local Water Service Provider and the government agree with the project. The local administration should be informed and provide the approvals needed for the setup of project.
- 19) <u>Permits:</u> The community will seek and obtain the necessary approvals for the project from the Department of Health/Water Utility and a local business permit in case this is required.

**Note:** A very good site for a Safe Water Enterprise can be existing projects that already sell or provide raw water to the community, but where this water is not treated and not safe for drinking. Such a project can be upgraded into a SWE to provide safe drinking water for a healthier community.