

# Aqua Clara Kenya



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The Care Economy  
Knowledge Hub

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# Profiling Businesses in the Care Economy

The care economy consists of paid and unpaid labor and services that support caregiving in all its forms. In Africa, Asia and Latin America, women spend between three to five times as many hours on unpaid care and domestic work as men. This represents 80 percent of a household's total hours devoted to unpaid care work.

Care economy businesses can help recognize, redistribute, reduce and reward – also known as the 4 Rs – unpaid and paid care and domestic work in the following ways:



**Recognize:** Initiatives that increase visibility and recognition of paid and unpaid care and domestic activity as "productive" work that creates real value and contributes to economies and societies.



**Redistribute:** Services and initiatives that redistribute care work from individuals to public and private sector entities, and redistribute care and domestic work within the household.



**Reduce:** Products and initiatives that reduce the time spent on and burden of unpaid care and domestic work.



**Reward:** Products, services and initiatives that ensure that care and domestic workers are paid fairly and have professional growth potential. This provides them with financial reward and security.

The Care Economy Knowledge Hub aims to address the knowledge gap around care businesses by showcasing various business models and creating a resource base for relevant stakeholders. It also aims to raise awareness and increase knowledge of the state of impact-driven care economy business models and attract a broad range of funders to invest in care economy solutions by showcasing opportunities. These business profiles are intended to showcase said potential investment opportunities. They have been created from information and data provided by the business itself.

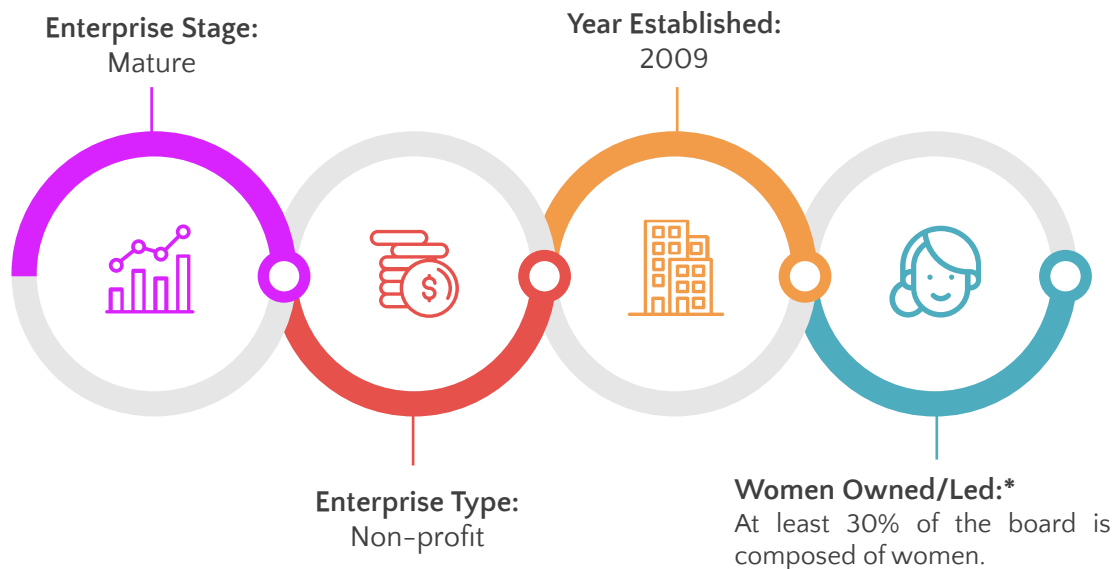
This project is supported by Canada's International Development Research Center, in partnership with the Soros Economic Development Fund at the Open Society Foundations. Building on their track record and commitment to transforming the care economy and mobilizing finance for gender equality, they have jointly launched this action research program to help transform the care economy through impact business and investment.

## Executive Summary



### Reduce

Aqua Clara Kenya (ACK) is a non-profit enterprise that provides affordable and easy-to-use water filters, sanitation, and hygiene products, as well as pumps and rainwater harvesting systems. ACK also offers training programs on water treatment and Water, Sanitation and Hygiene (WASH) practices to individuals and organizations. The enterprise likewise provides consulting and advisory services to organizations for the improvement of existing WASH programs. Aqua Clara's products have reduced care work, particularly for women and girls, as they no longer have to boil water or travel long distances for water collection. The enterprise has also enabled more than 500,000 people to have access to safe drinking water. ACK has 22 full-time employees and earned a revenue of US\$479,836 in 2021.



#### Enterprise Contact

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# 1. About The Enterprise

## 1.1 Problem

It is estimated that only 58% of the population of Kenya has access to drinking water within a 30-minute round trip. Further, only 30% of the population has access to basic sanitation.<sup>1</sup> Traditionally in Kenya, the responsibility to procure water for families predominantly falls upon women and girls. Water collection not only increases domestic responsibilities, but also increases exposure to physical assaults. These kinds of incidents are commonly observed in Kenya.<sup>2</sup> With an increase in drought conditions and water scarcity, women and girls in rural areas often have to walk longer distances to obtain water. One report indicated that water collection activities may take up to 8 hours a day.<sup>3</sup> Research also highlights that women experience health issues as a result of repeatedly carrying heavy water containers.<sup>4</sup> Finally, the time spent on water collection reduces the time available to undertake income-generating and leisure activities.

It has also been observed that women and girls in Kenya have increased risk of sexual assault and violence, specifically as they travel longer distances, or to more isolated areas for access to water and sanitation facilities. Furthermore, in some areas of Kenya girls sacrifice attending school in order to support in water collection.<sup>5</sup>

As a result of the lack of access to clean drinking water, women and girls in the household must spend time purifying and boiling procured water. This often includes burning unsustainable sources of biomass like wood or charcoal. Thus, boiling contributes to reduced forest cover and increased carbon emissions, as well as higher exposure of household members to hazardous smoke.

Lastly, a lack of access to clean drinking water and sanitation also increases the incidence of waterborne diseases in the country. In some parts of Kenya, incidences of cholera are frequently observed,<sup>6</sup> leading to high medical expenses for households, children missing school, and adults having reduced productive hours for income-generating activities.

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<sup>1</sup> Ishaq, J. (2021, January 01). The Standard–Kenya has no access to Clean Water and Sanitation. <https://www.standardmedia.co.ke/business/national/article/2001427862/kenyans-have-no-access-to-clean-water-and-sanitation>

<sup>2</sup> Ouma, V. Nyakundi, W. Malisa, S. Kiome, E. Malik, S (2020, July). SEX FOR WATER PROJRCT- Promoting Safe Space for Girls and Young women in Kibera Project <https://www.susana.org/resources/documents/default/3-3965-270-1606746371.pdf>; United Nations–Kenya: UN steps up protection for drought-hit women and girls. (2022, October 23) <https://news.un.org/en/story/2022/10/1129747>

<sup>3</sup> Water Integrity Network– *The role of women in Kenya’s Rural Water Sector: Win in Conservation with Caritas Switzerland*. (2019, May 28). <https://www.waterintegritynetwork.net/2019/05/28/partner-feature-caritas-switzerland/>

<sup>4</sup> Panthea, P. Nidhi, N. Michela, M. (2020, April 15). *A Systematic Review of Water and Gender Interlinkages: Assessing the Intersection with Health*. <https://www.frontiersin.org/articles/10.3389/frwa.2020.00006/full>

<sup>5</sup> Varalakshmi, V. Ward, J. (2018, September). *Kenya Development Response to Displacement Impact Project–Understanding and Addressing Gender-Based Violence* <https://documents1.worldbank.org/curated/zh/102451537203164341/pdf/129961-WP-P161067-KDRDIP-GBV-Composite-Note.pdf>

<sup>6</sup> Alexandra, B. (2020). *The Water Project in Kenya–Water in crisis–Women in Kenya* <https://thewaterproject.org/water-crisis/water-in-crisis-kenya-women>

## 1.2 Solution

The enterprise has designed a range of affordable and easy-to-use WASH products in order to improve water quality, access to water, and sanitation conditions for its customers:

- **Water Filters:** The enterprise offers a range of water filters, such as household filters, bio-sand filters and community filters. These can be used in households, as well as in community institutions such as schools and hospitals. These filters don't require electricity to operate and have a life of 5 to 10 years.
- **Sanitation and Hygiene Products:** ACK provides several sanitation products, such as pit latrines and toilet pans. Some of these sanitation products are designed to reduce water consumption. The enterprise also sells hand washing stations.
- **Access to Water Products:**
  - Rain Water Harvesting System: This is used by schools, hospitals and households. They incorporate the first-flush system in order to route dirt and other materials away from the storage tank, before entry. ACK also offers project assessment, design, installation, training, and maintenance services to its customers.
  - Rope Pump: This product enables households to pump water from wells. The rope pump has a filtration capacity of 10,000 liters per day and is human powered, therefore no electricity is needed to obtain water.

ACK's products are tested and approved by the Kenya Bureau of Standards (KEBS). The enterprise leverages its partnerships with microfinance institutions, through which low-income households can obtain loans for purchasing ACK's products. It also partners with NGOs to subsidize WASH products for vulnerable households and schools.

**Training Programs:** Under the H<sub>2</sub>OPE (Water Products & Expertise) Accelerator program, ACK offers training workshops (ranging from 1 to 5 days) to NGOs and individuals in the community. The workshops are focused on WASH-related solutions that can be implemented rapidly. Participants attend workshops from three main thematic areas: household water treatment, WASH education and promotion, and sanitation.

**Capacity Development and Awareness Creation:** The enterprise partners with County (regional) Governments in Kenya to train and support Community Health Workers (CHWs). The CHWs then introduced an innovative approach called WASHiriki. CHWs form WASHiriki clubs, where members learn good practices on WASH, aiming to prompt a behavior change and increased demand for WASH products.

**Consulting and Advisory Services:** ACK provides consulting and advisory services to NGOs and the Government. Support includes responding to simple/technical queries by phone or email, as well as on-site support. Services aim to identify water access and WASH related issues in order to develop processes and systems to overcome them.

## 1.3 Customer Segment

Customer Segment	Product / Service Provided	Paid / Unpaid
Low-income, rural or urban, households that earn less than US\$5 per day	Water filters, sanitation and hygiene products, rope pumps and training programs	<p><b>Paid</b></p> <ul style="list-style-type: none"> <li>• <b>WASH Products:</b> Households pay for these products. In some cases, vulnerable households may receive a subsidy from NGOs/donor agencies</li> <li>• <b>Training programs:</b> The cost of programs is borne by third party entities, such as: NGOs, donor agencies, and county governments</li> <li>• Households participate in the training programs free of charge</li> </ul>
Schools and hospitals	<ul style="list-style-type: none"> <li>• <b>WASH Products:</b> Provision of community filters (larger filtration capacity), sanitation and hygiene products, handwashing stations, rainwater harvesting systems and rope pumps</li> <li>• <b>Awareness Sessions:</b> Provision of training programs and community WASH awareness sessions</li> </ul>	<p><b>Paid</b></p> <ul style="list-style-type: none"> <li>• Institutions directly pay for products and awareness sessions. In some cases, the institutions receive these products and/or awareness sessions through other entities, such as NGOs or donor agencies</li> </ul>
Non-Government Organizations (NGOs) and county governments	Water filters, sanitation and hygiene products, water supply products, training programs, and consulting and advisory services	<p><b>Paid</b></p> <ul style="list-style-type: none"> <li>• Institutions directly pay for the products and services</li> </ul>
Corporations	Sale of Gold Standard Verified Emissions Reductions (VERs) carbon credits	<p><b>Paid</b></p> <ul style="list-style-type: none"> <li>• Corporations directly pay for the services</li> </ul>

## 1.4 Team And Governance Structure

The enterprise has 19 full-time employees and 12 part-time employees. At Aqua Clara Kenya, 3 employees work in administration and strategy, 2 in finance, 4 in operations, and 2 in sales. Four employees work in the H<sub>2</sub>OPE Accelerator Program, 2 in Institutional WASH, and 2 in Monitoring and Evaluation. Currently, 50% of the full-time employees and 50% of the part-time employees are women. Aqua Clara Kenya’s board has 10 Directors, 5 of whom are women. The board of directors also serves as the advisory board for the enterprise.

## 1.5 Enterprise Policies

Policy	Yes / No
An overall HR Policy	Yes
Equal pay for equivalent work policy	Yes
Non-discrimination / Equal employment opportunity / Diversity and inclusion policy (gender, LGBTQ, PWD, etc.)	Yes
Anti-bullying and Sexual Harassment policy/Respectful Workplaces policy	Yes
Whistleblower policy / Employee grievance mechanism	Yes
Maternity / Paternity leave policy	Yes
Policies related to safeguarding vulnerable groups (children, elderly, PWDs, etc.)	No
Policies related to safeguarding the environment or reducing detrimental impact to the environment (covers reducing carbon footprint, reduced water consumption etc.)	Yes

## 2. Impact

### 2.1 Mission Statement

The enterprise's mission is to increase access to safe drinking water in Africa by developing local capacity, providing effective solutions, and implementing sustainable approaches in the WASH sector. The ultimate vision of the enterprise is an Africa where everyone has access to safe drinking water.

### 2.2 Intended Impact

The enterprise's water filtration and water supply products (rope pumps, water harvesting solutions, etc.) **reduces** the time women and girls in households spend on collecting and purifying water for drinking, cooking, and cleaning purposes. Further, less waterborne illnesses results in women and girls spending less time taking care of ill family members.

### 2.3 Monitoring And Measurement

Aqua Clara Kenya maintains a record of the following metrics:

- Number of products sold
- Number of trainings conducted
- Number of people impacted through trainings
- Tonnes of carbon emissions reduced by water filters
- Number of people that have gained safe and clean water access through ACK's products and services

ACK has a Performance Monitoring Plan (PMP) that was developed and recommended by the Center for Affordable Water and Sanitation Technologies (CAWST), which is one of ACK's initial donors. This PMP includes indicators for each of the products and services offered by the enterprise. It also outlines data collection, including tools and sampling methods.

For the WASHiriki program, assessment of behavioral change prompted by training is completed through random selection of community members. The enterprise conducts focus group discussions with structured questionnaires, in order to collect data and assess the impact of its WASH training. ACK also conducts periodic follow-ups and random visits to households that have acquired filters to ensure that they are using the filters correctly.

ACK also conducted a survey in 2021 to gauge the positive impacts of water filtration on free time, income generating, or leisure activities. Data indicated that usage of the product is resulting in less time spent on care duties, as intended.

## 2.4 Results To Date

- Number of filters sold: 15,500
- Volume of safe drinking water provided to beneficiaries: 108 million liters<sup>7</sup>
- Number of people that gained safe and clean water access through ACK's products and services: 500,000
- Number of people reached in training: 325,000
- Tonnes of carbon emissions reduced by water filters: 205,000

**Time saved:** A survey conducted by ACK in 2021 indicated that 90% of respondents (from the 589 randomly selected households) indicated time spent gathering fuel and purifying water had decreased since they started using ACK water filters.

ACK is aligned with the following Sustainable Development Goals (SDGs):



<sup>7</sup> Calculation based on the number of water filters sold

## 3. Financials

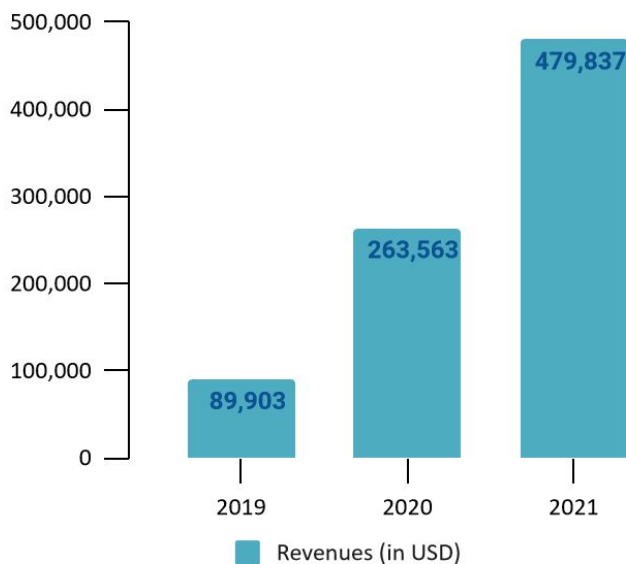
### 3.1 Financial Status

The enterprise is financially profitable.

<i>(Amounts in US\$)</i>	FY 2019	FY 2020	FY2021
Total Revenue	89,903	263,563	479,837
Total Expenses	87,564	260,928	441,564
EBITDA OR Profit/Loss	2,339	2,635	38,273
EBITDA Margin	2.60%	1.00%	7.98%

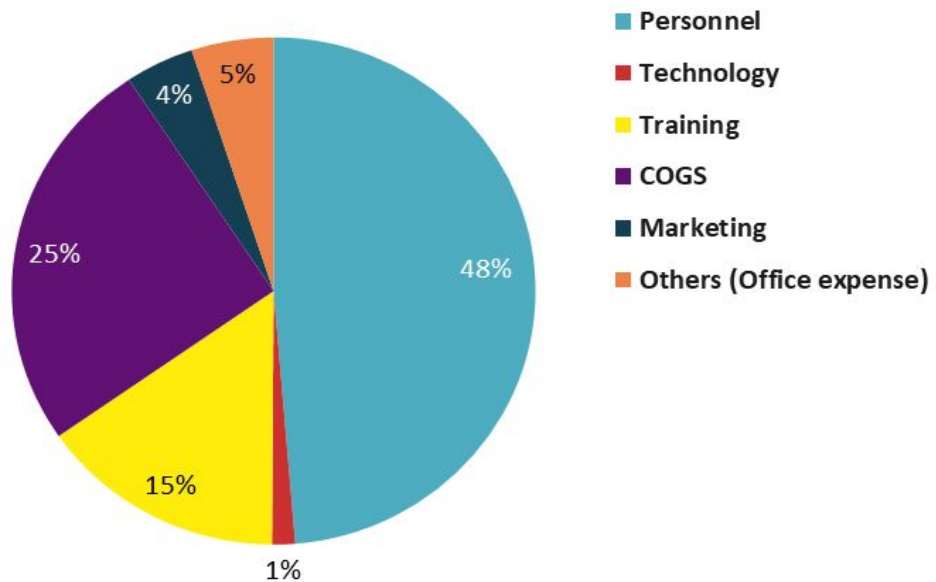
#### 3.1.1 Revenue Streams

On average, it is estimated that about 50% of ACK’s revenue comes from the sale of products and services: 48% coming from the sale of water filters and the remaining 52% coming from the sale of carbon credits. All other revenue comes from grants.



### 3.1.2 Expenses

The following pie-chart provides details of the key areas of past expenditure for the enterprise in the year 2021:



### 3.2 External Funding Sources (Past and Current)

The enterprise has received grants from various sources:

- The enterprise has received US\$10,000 in funding from Aqua for All, to pilot ACK’s first container hub in Kisii, Kenya. A container hub is a remodeled shipping container that serves as an office, showroom, and warehouse for ACK’s products.
- Procter & Gamble has provided ACK with a US\$190,000 grant to build 10 new water kiosks. It is expected that this will result in the provision of safe drinking water to over 10,000 people.

### 3.3 Challenges Faced In Accessing Capital

- **Inability to access all pools of capital:** The enterprise faces challenges in obtaining funds from equity investors, as the entity is registered as a non-profit. To address this issue, the enterprise aims to establish a for-profit subsidiary. Furthermore, ACK’s long-term return on investment limits investors’ interest.
- **Cost of capital:** Capital from mainstream financiers (such as banks and other institutions) is too expensive for the enterprise.

## 4. Path To Scalability

### 4.1 Potential Avenues For Growth

- **Expand customer base:** ACK plans to establish a decentralized distribution model in order to expand its customer base. It will do so by leveraging container hubs in various towns throughout Kenya. A container hub is a remodeled shipping container that will be installed at schools, as well as serve as an office, showroom, and warehouse for ACK's products. Partner schools that agree to host the hub will receive free WASH training. The hub will be operated by a professionally trained and managed sales force that will use mobile software to sell products. Any items sold may be paid either in full, or through agreed upon installments. Trained technicians will be available to install the WASH products and a customer support team will be on hand for both resolution of issues and telemarketing. ACK currently plans to build 20 Hubs by the end of December 2024. With this, ACK could gain 10,000+ customers per month, provide 50,000+ people per month with improved WASH conditions, as well as reduce 600,000 tonnes of CO2 per year. ACK also stands to generate US\$20,000 of operating profit per month.
- **Enhance marketing efforts to reach new customer segments:** ACK plans to aggressively invest in a 3-pronged plan to market its products. This will include leveraging marketing channels (such as online, radio, and television) to ensure that a broader base of customers is aware of ACK's solutions. This will increase the demand for ACK's products.
- **Enhance product design for the water filter:** ACK's current water filter is not considered aesthetically appealing. Many customers have expressed a willingness to pay more for a filter with a better design. ACK therefore anticipates that an aesthetically appealing water filter will enable the enterprise to target more customers: current estimates show a potential 3X increase in sales.
- **Increase the products offered:** The enterprise aims to launch new solutions for water supply, sanitation, and hygiene (including menstrual hygiene) for its customers.

### 4.2 Risks And Challenges

- **Operational (customer):** Target customers are often unaware of the need to treat water and might be unable to afford ACK's products. Furthermore, MFIs (that ACK has partnered with to provide loans to its customers) often do not find such customers credit-worthy. Therefore, customer acquisition and marketing costs are high. ACK cannot rely on cheaper channels (such as internet or mass media) to reach this lower-income customer base.

- **Operational (partnerships):** The enterprise has established partnerships with microfinance institutions in order to reach low-income households. However, the enterprise has observed that there is potential to increase efficiencies in processing through these partners.
- **Social norms:** Men traditionally control household finances. However, women are the main users of the products or solutions offered by ACK. Thus, while women may understand the problem and appreciate the solution, they cannot necessarily implement said solution, as a decision cannot be made without the interest of the male head of household.

### 4.3 COVID-19 Impact On The Enterprise

ACK worked with its partners, including the county (regional) governments in Kenya, to ensure that communities in Kenya were better equipped to combat COVID-19. Initiatives that the enterprise took include:

- **Sensitization on COVID-19:** The enterprise conducted COVID-19 sensitization sessions for a group of community WASH promoters. By the end of 2020, WASH training was provided to more than 21,000 households, 460 schools, and health centers.
- **Distribution of handwashing stations and soap:** In the wake of COVID-19 in Kenya, ACK installed nearly 700 handwashing stations and distributed 6,000 liters of soap to towns near its headquarters in Rigoma Town. The enterprise also trained people on proper hand-washing practices. Bomet County received 153 hand washing stations, Nyamira County received 100, and Community Health Officers in Sotik Sub-County received 48.
- **Distribution of water purification solutions:** Over 1.2 million Procter & Gamble water purification sachets were distributed to provide people with access to clean water solutions.

### 4.4 Support Received To Date

The enterprise has received technical assistance and support from the following institutions:

- Training and consulting support from the Centre for Affordable Water and Sanitation Technology (CAWST)
- Business development support from Aqua For All
- Pro-bono legal advisory services from C. Mputhia Advocates, a member of the TrustLaw Foundation
- Mentoring and coaching support from the Acumen and IKEA Social Entrepreneurship East Africa Accelerator

## 4.5 Inputs Required For Growth

### Financial:

The enterprise seeks grants to scale-up its operations. Further details on the expected funding use is provided below:

- ACK seeks debt investment of US\$800,000. This funding will be used to further the enterprise's efforts in sales and marketing (US\$250,000), research and development (US\$150,000), new distribution hubs (US\$200,000), and inventory pre-financing (US\$200,000).
- Further, the enterprise will utilize grant funds to update its training and awareness sessions.

### Non-Financial:

- **Business Development:** The enterprise seeks support in conducting market assessments to identify products that it can add to its inventory. This will enable the enterprise to increase customer engagement and the lifetime value of the customers served.
- **Partnerships:** The enterprise seeks assistance in establishing partnerships with microfinance institutions to aid in expanding its model.
- **Marketing:** The enterprise seeks assistance in developing its marketing strategy to expand its customer base and reduce the current cost of customer acquisition.
- **Personnel:** The enterprise seeks at least two personnel to support its growth plans. First, a finance officer to aid in the development of financial models and valuations for investor pitches. Second, a human resources (HR) officer to improve existing HR processes. This will streamline the development of appraisals, benefits, and recruitment (local) tools to help incentivize recruitment and staff retention.