"Now I will not fear people's eyes..."

Mr. Meseret Kegnge is the head of Guhalla town's (the woreda town for East Belesa woreda) water service office, where CARE Ethiopia is implementing the IWRA (Improved WASH System and Resiliency in Amhara) project in East and West Belesa woredas of Amhara region for the period December 2021 to December 2023.

During the last couple of years, the water supply system of Guhalla town experienced difficulties as the system frequently failed to function due to pump failures. Meseret office head described how the situation of water



Figure 1: Meseret Kegnge – Guhalla town's Water Service office head

availability was several years ago as well as how it is currently: "It was a difficult time for me as the head of the town's water service office, for my staff, and for the woreda administration to look into the eyes of Guhalla town's people. In every social event and public meeting, people first questioned the benefit of our existence in the non-water [supplying] town. This has imposed social stress and a negative trickle-down effect on the planning and implementation of other development activities.

Previously, Guhalla town's borehole and booster station relied on power from a grid substation situated 190 kilometers away from the location, which resulted in continuous power breakdowns and frequency drops that burnt out 4 submersible pumps.



Figure 2: Solar-powered water system at the borehole - 10.5km away from the town.

The woreda council repeatedly allocated a budget to replace the pumps that frequently failed. However, it was not easy to immediately replace the failed pumps as budget availability and the pumps' replacement process were uncertain. Last year, the town's people were exposed for an extended period of eight months

without a functional water system. During this period, the people of the town were fetching untreated and unsafe water from the distant area of the rivers and hand-dug wells around the town. They faced multiple challenges that were worse for the girls, women, elders, and people with disability. People used to wait overnight from 8:00 pm until the morning for their turn to fetch water. This situation has many burdens on girls and women. Girls were experiencing sexual violence like being raped and beaten by the men and boys in the community. Girls and boys performed worse in their education since they stayed up overnight to fetch water. Most of the water points around the town the inhabitants used to fetch water from were far away, taking up to an hour's time for a round trip. This significant amount of time used for fetching water could otherwise be used for another productive purpose. The situation negatively affected the productivity of people and students' education performance.

Hotels in Guhalla town were suffering to provide services at their best potential and acceptable hygiene and sanitation standards. They faced a multitude of challenges as guests were not staying in the town without access to water, they were paying up to 3, 000.00 ETB birr to fetch water from the river and hand-dug wells by cart at a cost of up to 15.00 ETB per 20-liters container. It was hard for health institutions to provide standardized services, too. The situation put a general burden on the overall living conditions of the people in the town.

Understanding such burdens, CARE Ethiopia's IWRA project upgraded the on-grid system to a solar-powered system and established a functional water system in May 2022. The project connected both the borehole and booster station to a solar-powered system with a generator using a change-over switch operating system. IWRA further installed 150 and 180 solar panels with 335W each at the borehole and the booster station, respectively.

Now 23,949 (12, 879 women) people of Guhalla town are accessing adequate and safe water supply on a rotating basis (every three days during the dry season and 24/7 in the wet season) at six distribution sites. The rotation base is due to the low discharge potential of the borehole during the dry season. Notwithstanding the rotational water supply, people in the town are receiving adequate water as they can fetch water by using containers.





Figure 3: The community fetching water from the solarized water schemes in Guhalla; and pump testing after the installation of the solar-powered water schemes.

The town's water service office is now earning an income by providing water and can pay the salary of 21 staff members (including 8 guards for the borehole and booster station). Before the system was upgraded, since the town's water service did not collect water and service fees, staff used to live without a salary for up to three months until the woreda council allocated a budget that would otherwise be covered by the water and service fees.

The town's water service is currently distributing treated and safe water to the community, giving proper care and management to the solar panels and distribution sites to use them sustainably. The whole woreda has been thankful to CARE Ethiopia and the IWRA project for supporting the people of Guhalla. The woreda is committed to ensuring the systems' sustainable use, however, technical staff training is needed on operation and maintenance and on how to create formal contact in case of maintenance demand," Meseret said.

Including the Guhalla town's water supply system, the IWRA project has upgraded a total of three towns' water systems from an on-grid to a solar-driven system and thereby benefitted 35,547 people (19,173 women) in three rural towns.