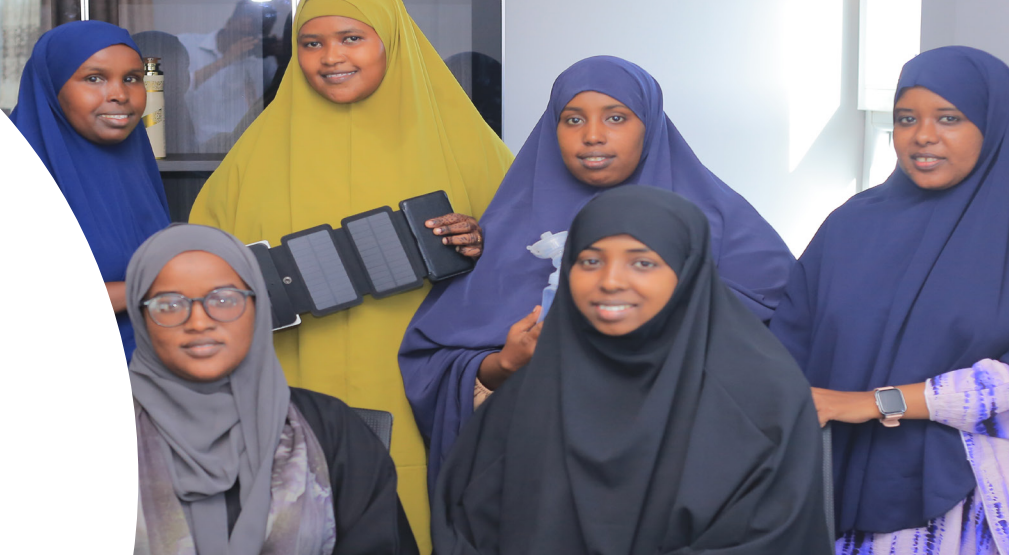




Fund for Innovation and Transformation

Fonds pour l'innovation et la transformation



LISS TECHNOLOGIES INC.

Improving Breastfeeding Rates in Somalia Through Low-Cost, Solar-Powered Electric Breast Pumps

Context

Women in Somalia face significant barriers accessing health services. Following more than two decades of civil war, and years of ensuing conflict and civil unrest, gaps in health service delivery, particularly maternal health care, are apparent. High rates of poverty and low levels of employment, education, and literacy among women exacerbate these issues. Though exclusive breastfeeding for 6 months is recommended by the World Health Organization, UNICEF, and nearly every national government, including the Federal Government of Somalia, only 34% of mothers are exclusively breastfeeding their babies for the first 6 months of life.

The Innovative Solution

Supported by FIT, LISS Technologies and its local partners tested an innovative solution that provides easy-to-use, low-cost, solar-powered breast pumps to mothers in Somalia and tested their experiences breastfeeding against those of a control group. The purpose was to identify whether electric breast pumps developed specifically for mothers living in low resource contexts would increase breastfeeding rates and duration. Additionally, an e-learning course was developed for health care providers containing gender-sensitive and culturally resonant information on breastfeeding and breast milk expression best practices.

Advancing Gender Equality

The Gender Equality Strategy addressed two key barriers to exclusive breastfeeding among mothers in Somalia – perceived or actual inadequate milk supply and competing activities such as employment, education, familial and household responsibilities, that prevent mothers from exclusively breastfeeding.

A gender lens was integrated into the sensitization activities and materials include the e-learning course developed for health care providers, video recordings, handouts on safe breastfeeding and technical support correspondence and sessions with mothers. The gender consultant played an integral role in ensuring that tools and materials were sensitive to cultural norms and practices.



COUNTRY
Somalia

AMOUNT
\$174,922

TESTING PERIOD
10 months
Ended March 2023



GENDER RESPONSIVE (GE2)

THEME: HEALTH & NUTRITION

Testing Framework

Testing compared an intervention and control group. By endline, 54 mothers tested the breast pump (45 at home and 9 at hospital).

Purposive sampling was used when recruiting participants for the purposes of moderated user testing, to include a variety of user profiles (i.e., mothers who have delivered via caesarean and naturally, mothers who delivered both preterm and term gestation, mothers with <2 parity and >2 parity, etc.).

Results and Impact

The results identified that access to a breast pump may support mothers to breastfeed for longer. Some 65% of mothers in the breast pump group were still breastfeeding exclusively, versus 37% in the control group. The interventions were well-received by participants and health care professionals, with the majority of mothers using the pump 1-2 times daily.

Mothers reported several benefits of using the breast pump including continued breastfeeding, as well as the ability to leave their home or let others feed the baby. All said they would recommend the breast pump to others.

There was a significant improvement in the mothers' understanding of the relative nutritional value of breast milk versus formula, with all mothers correctly identifying that formula does not have better nutrition than breast milk by the end of the project.

At baseline, 75% of health care providers felt confident about supporting mothers in Somalia with gender and culturally sensitive knowledge and practical breastfeeding support. At endline, following the e-learning course, this increased to 100%.

Key Lessons

1. Due to the worsening security situation in Somalia, training for health care providers was moved to an online format. This pivot required a greater investment of time, virtual technical support and budget allocation than initially anticipated.
2. In order to maintain the safety of participants by limiting travel, breast pumps had to be delivered directly to mothers. The deliveries were made by a driver and a woman from the innovation team, to provide one-on-one guidance.
3. The timing of the innovation had to be adjusted due to a two-month shipping delay for the breast pumps, related to ongoing conflict in the region.

"I used to use a manual pump. I would buy it from the pharmacy if I needed to pump milk. But when I was told that this [breast pump] was a machine that works using power/electricity, I was scared. I thought 'what if it gets stuck on my breast, or it electrocutes me?' I was really scared when the girls [Research Assistants] brought it to me. But it was actually not what I thought it would be. It didn't electrocute me, it was actually something soft and comfortable, and it benefited me a lot!"

- Participant

PARTNER ORGANIZATIONS

Noble Health Consultancy (NOHEC); Banadir Maternity and Children's Hospital; and The School of Public Health and Research, Somali National University

TARGET PARTICIPANTS

84 women (54 breast pump users, 26 non-breast pump users and 4 health care providers)

FOR MORE INFORMATION

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ABOUT FIT

The Fund for Innovation and Transformation supports Canadian small and medium-sized organizations (SMOs) testing innovative solutions that advance gender equality in the Global South.

