

Executive Summary

Eighty to ninety percent of people in East Africa live without access to electricity. Most families burn kerosene, candles, and wood to light their homes and to cook food. Solar Sister strives to eradicate energy poverty through the sales of solar lanterns and clean cookstoves, but Solar Sister does more than just provide clean energy. The impact of its energy products touches every aspect of customers' lives, from business to education to household safety and more. Solar Sister entrepreneurs develop their own capacity through earned income selling clean energy technology in their communities, often investing into their own families and businesses.

To form a deeper understanding of Solar Sister's social impact in the context of East Africa, we conducted 21 semi-structured interviews with customers and 12 focus groups with Solar Sister entrepreneurs in 15 villages. After each focus group, we distributed a 33-question paper survey to each microentrepreneur to gather data in three categories: baseline monitoring and evaluation, the social impact of clean energy technology, and their local community networks. During our eight weeks in the field, we took about two thousand photos. We traveled to five East African regions in Tanzania and Uganda: Kilimanjaro, Tanga, Singida, Manyara, and Rakai.

Our research surfaced patterns of social impact such as increased productivity, purchasing power, improvement in education, and community empowerment. We crafted profiles of Solar Sister entrepreneurs and customers whose personal stories illustrate these impact patterns. In all of the stories, we found emergent themes that characterize the remarkable impact Solar Sister makes in communities. Solar Sister harnesses local expertise, and these entrepreneurs foster trust within their community, which in turn increases market penetration. For both entrepreneurs and customers, the money saved or earned increases agency and also improves their social status. Solar Sister's products are versatile in use and also create intergenerational impact.

The entrepreneur and customer profiles capture their stories, which help Solar Sister understand and share its social impact in East Africa. We integrated our survey data into Solar Sister's Salesforce account for each entrepreneur surveyed. We distilled all the photos we took into a collection of 285 to share with Solar Sister. The photos capture how both entrepreneurs and customers integrate the technology into their lives, bringing our data to life.

To continue to build a deep understanding of its social impact, we suggest Solar Sister gather more data on its customers. Our entrepreneur focus groups were successful in revealing impact patterns among specific groups. We believe that focus groups could be helpful in gathering customer data and discerning end users' commonly experienced benefits.