



SME TRAINING  
CASE STUDY

# DEVELOPING THE SOLAR SUPPLY CHAIN IN ETHIOPIA



**LIGHTING AFRICA**  
Catalyzing markets for modern off-grid energy  
ETHIOPIA



AN INNOVATION OF  
**WORLD BANK GROUP**

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## Overview



Ethiopia has a population of over **100 million people**, or approximately **20 million households**, and is estimated to be growing at an **annual rate of almost 3%**

The vast majority of the population reside in rural areas, where energy access is only **5%**



Of these households, most rely predominantly on kerosene and spend about **4.5%** of their total household consumption expenditure on lighting.

**Kerosene**, which is unhealthy, polluting and expensive, is the traditional lighting source for these consumers and unfortunately is seen as the only affordable and available option for lighting for rural households.

Small and Medium Enterprises (SMEs) are a powerful vehicle for growth and development in emerging markets and represent the main source of employment in most countries, thereby alleviating poverty by promoting social and economic development .

The Lighting Africa/Ethiopia program, implemented by IFC's Energy & Water advisory services unit, was launched in 2015 to mobilize the private sector to create markets for clean and affordable lighting products. Business development support is a critical pillar of the Lighting Africa/Ethiopia program. **Through training on best business practices and business-to-business linkages, we help off-grid energy companies fine tune their business models, sales and marketing strategies, and product distribution networks, so more clean and affordable lighting products reach households all around the country.** Together with the SME and Value Chain (SVC) Advisory team, Lighting Africa/Ethiopia conducted training for owners, managers, and employees of SMEs integrated in the solar supply chain to strengthen their business management skills.

# The Training



***The overall objective of the training assignment was to build the capacity of SME retailers of solar products in all 11 regions of Ethiopia, to enhance their knowledge of off-grid solar products, and strengthen their business, management, and technical capacity.*** Preparation for the training course commenced with a detailed training needs assessment in the targeted regions to identify the internal and external gaps and challenges faced by SMEs. This was then used to customize the training material. It was also translated into Amharic, the official language of Ethiopia.

From June 2016 to August 2017, we conducted nine, three-day SME trainings, with 420 participants from 300 SMEs. The three-day training curriculum provided the solar entrepreneurs with skills in marketing, sales and distribution, business planning and financial management. In addition, the participants were taken through the importance of product quality, the Lighting Global quality framework and various business models for after-sales service.

***During the training program, the entrepreneurs had time to interact with critical stakeholders.*** These include Lighting Africa/Ethiopia associate manufacturers/distributors that supply Lighting Global quality verified products, microfinance institutions (MFIs) that help consumers access finance for off-grid products, and staff at the government's Regional Energy Bureau. This enabled participants to form direct linkages with suppliers of quality products, discuss opportunities for financing and understand the support the Government of Ethiopia provides solar entrepreneurs in the regions.



# Impact



Following our training,  
the local farming cooperative  
union now sells an average of  
**150 solar lights per month**  
translating into monthly revenues of

**\$3,000**

compared to prior sales of  
just 40 units per month.

About half of the union's members access  
consumer financing for these products  
while the other half pay cash.

## Smallholder Farming Cooperatives

Located in Butajira, approximately 130km from Ethiopia's capital Addis Ababa, the Melike Silties Farmers' Cooperative Union brings together **76 local cooperatives with over 93,000 members (approx 21,000 women and 72,000 men)**. **The members are mainly smallholder farmers who produce barley, wheat and teff.** The union's activities include supplying agricultural inputs to farmers, aggregation and marketing of farm produce, and capacity building for its members. In addition, the union provides its members with short-term consumer financing for household products such as solar lanterns and cook stoves. Staff from the union's marketing department attended the training to further develop their marketing skills.



L-R: Shukri Dinsefa- Input/Output Expert, Sifa Denagu-Marketing Expert and Kelifa Ulsero-Manager

Having honed their financial and marketing skills as a result of the training, the union wrote a business plan that helped them **access two loans worth a total of 35 million Birr (USD 1.26mn) from the Commercial Bank of Ethiopia**. The loans will be used to develop and expand the union, while also increasing its stocks of solar products for sale.

*"We learned a lot of business skills and these included customer service, how to handle competition, shelving and display, record keeping, managing expenses and human resources,"* Union member and training participant, Sifa Denagu.

*"We learned about solar maintenance and how to differentiate between the quality and non-quality verified products. I am confident when selling these products because I now know how to better explain them to the farmers."* Union member and training participant, Shukri Dinsafu.

*"The quality verified products are popular among members who prefer it to other forms of lighting because it helps their children study more. They also like that they are enjoying cleaner air as opposed to smoke inhalation caused by other lighting fuels they previously used. As a matter of fact, solar lights have become the biggest gift we give to our families,"* Shukri Dinsafu.

## Individual Retailers

For Zemedu Mulatu, a solar kiosk operator in Butajira, participating in the training was an eye opener on how to better run his business. Prior to the training, a baseline survey identified several shortcomings in the way his four solar kiosks operated. This included lack of receipts issued to customers, poor employee performance, and issues with book-keeping and inventory.

***The training enhanced his business skills in customer relations, people management and marketing.***

One of Zemedu's biggest take-aways from the training was learning how to engage with MFIs. He was introduced to a local MFI and is now able to link his customers to the MFI to help them access financing to purchase his solar products.

***"Once I receive orders, I contact the MFI and connect the customer with them. The MFI conducts its due diligence and if successful, the money is disbursed to the customer to pay for the product."*** Zemedu has not only increased his sales, but also enabled many last mile consumers in his area to access finance for solar products.



*Zemedu now manages five solar kiosks in his area*

After the training, Zemedu's sales of solar products jumped from just six units per month to 50 units, each priced at an average of \$20. He also opened an additional kiosk bringing his total number of solar kiosks to five.

***"I have trained my employees about quality verified solar products, marketing and customer care so that even in my absence, they can still manage the kiosks well."*** Zemedu Mulatu.

As the sole supplier of solar products in the area, his kiosks have become congregation points for the community. As a result, he has diversified his business to include phone charging, sale of chilled soft drinks from a solar-powered fridge, and an entertainment center with television and radio for watching the news and other events. This also gives the community first-hand contact with quality-verified solar products leading to further sales.





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## Lessons Learned

- ***Use of local trainers and translation of the training material from English to Amharic increased learner interaction.*** The SVC team, whose focus is on SME development, has specialized methodology and material for SME training. Collaboration with the SVC team was extremely useful as the program used local SVC-certified trainers who were able to apply the methodology and customize the training material to the local language.
- ***Participation of solar distributors, regional energy experts and MFIs*** to address various concerns raised by the participants boosted overall interest and impact of the training.
- ***The training was more effective for established businesses as opposed to start-ups.*** Provision of post-training support through mentorship is highly recommended, especially for start-up businesses as these require more support in their formative stages.

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## What Next?

- The next critical step is to continue engaging with start-up businesses to link them with solar distributors and MFIs. With access to finance and stocks of quality verified products, coupled with the business skills acquired during their training, entrepreneurs will be better able to participate actively and effectively in the solar value-chain at the last mile.
- This experience in Ethiopia coupled with that from the Lighting India program has also been very useful in informing the design of similar retail channel development activities for the Lighting Africa/Tanzania program. It is expected to lead to replication in other countries.

### Contact in Ethiopia

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