UpEnergy Uganda- Leveraging decentralized MFIs to boost the affordability and accessibility of energy-efficient stoves in Uganda.

Organization Profile:
- Established: 2011
- Country: Uganda
- Organization Type: Stove distributor
- Grant: Pilot Innovation Round I, 2013

Organization Overview
UpEnergy fights poverty, improves health, and protects forests by making clean energy technologies available to more people in Uganda. UpEnergy works with technology manufacturers and local partners to deliver high quality products such as efficient cookstoves, water purification technologies, and solar lights reaching poorly served households at affordable prices. UpEnergy achieves extensive market penetration by engaging in direct sales to end users via UpEnergy’s local SmartHome sales team and by developing strong partnerships with local retailers, community organizations, NGOs, and governments.

Grant Objectives:

The grant’s central goal was to scale up sales through Savings and Credit Cooperatives (SACCOs) to boost the affordability and accessibility of energy-efficient stoves in Uganda. SACCOs are an attractive distribution channel since they usually have high levels of membership (500 to 25,000 members each), regular interaction with their members and have the ability to extend credit. With prices for stoves increasing due to the carbon market recession in 2013, UpEnergy’s goal was to distribute stoves more effectively where they are not available and to make credit available to end-users.

UpEnergy sold cookstoves to SACCOs who would sell for them for cash or on credit to their customers. When credit was provided, the credit unions required a 40% cash payment upfront, and would then either profit from a margin on the product or from charging interest rates of up to 10%. Most credit unions offering credit asked for full repayment in three monthly installments.

Grant Achievements:

The grant allowed UpEnergy to reach some of the most remote customers in Uganda with improved stoves, who would otherwise be unable to access this technology by selling through Savings and Credit Cooperative’s. UpEnergy found that SACCOs were able to reach areas that they could not have reached otherwise- where firewood is scarce, the retail infrastructure limited, and the areas so remote and costly to reach that most companies don’t consider them to be valuable market opportunities.
However, from a quantitative perspective the outcomes of the grant period unfortunately fell short of expectations. UpEnergy Uganda sold 486 stoves to Savings and Credit Cooperatives during the grant period.

There were a few external factors that could have caused slow sales through the SACCO channel. First, the Alliance secretariat required a realignment of the budget due an impending expiration date of the grant funds. This meant that 50% of the budget was directed from human resources, transportation and marketing budgets to inventory. While this was helpful, enabling UpEnergy to both disburse the money in time and stock up on products, it drew valuable resources away from budget items that were intended to generate sales through the SACCOs channel. Human resources and marketing were needed to develop this channel, and the need to get resources spent in such a short timeframe prevented UpEnergy from adequately funding these items.

Second, UpEnergy experienced financial difficulties throughout 2013, with the down turn of the carbon credit market and investors failing to materialize. This impacted strongly UpEnergy’s capacity to invest in innovative programs, and meant that all non-PIF related marketing innovation programs were cut, resulting in a drastically underfunded program.

Lessons learned:

_Unless the product is extremely attractive, credit unions will not prioritize credit over cash sales._

Overall, UpEnergy found that the SACCOs were selling stoves, but were often not issuing loans to borrowers. They were more interested in receiving a margin on the product than underwriting a low margin loan. This exposes the limits of working with credit unions and the need to rethink how stove companies engage with them. For example, it could be more effective for SACCOs to prepare standard loan agreements and then UpEnergy staff to accompany loan officers in the field. UpEnergy can then sell the product and the loan officer can determine whether the customer is sufficiently creditworthy to finance the product. This approach allows each organization to focus on their core expertise: the stove distributor focuses on selling products, the SACCOs on selling credit.

_Credit does not replace the need for effective and properly incentivized sales mechanisms._ Building on the first lesson, credit unions who are not properly incentivized may never sell stoves when they have many other, higher margin products to consider that may be more suitable for lending. In addition to not issuing loans for stoves, UpEnergy found that loan officers spent more time pitching loans for farm equipment and motorcycles than stove loans. In short, the availability of stoves and credit at a SACCO does not guarantee a sale if staff fails to actively sell the product.

_Leveraging hyper-localized active credit union partners can reduce costs and risks and makes stoves available in the most remote places._ For a rural population with little opportunity to travel, it is unlikely that they will have access to an energy-efficient stove. For that same population, it is also unlikely that
they will be able to pay for a stove in cash. UpEnergy found through the pilot that SACCOs were best positioned to reach this population as seen through the sales data in figure 1.

![Sales Data Figure]

Figure 1: Share of sales per channel in Uganda and in Western districts with and without borders with other countries

The share of sales per channel in Western districts with and without a border with the DRC and Rwanda (and located further away from the capital city Kampala), shows that NGO and retailers share of sales decrease by 25 and 11 percentage points respectively in districts with a border. SACCO share of sales increases in these same districts by 23 percentage points, with direct sales increasing by 13%.

UpEnergy’s increased reliance on both methods showcases the limits of the traditional retail networks and the opportunity that SACCO sales (and to a lesser extent direct sales) represent.

The changes in the carbon market caused stove price fluctuations that slowed sales. Purely by coincidence the start of the grant period was contemporaneous with UpEnergy’s strong need to reduce its dependency on carbon finance. Carbon credits had lost most of their value and buyers were becoming increasingly hard to find. In order to become more financially sustainable in this uncertain market, UpEnergy was required to source less expensive products, while simultaneously raising prices. Ezy Stoves proved exceedingly challenging to sell to SACCOs at the new price compared with earlier, less expensive and more desirable products that were subsidized with carbon credit sales. Prices to SACCOs rose from between 38,000 UGX and 42,000 UGX for the Envirofit G3300 before the carbon market shift to 51,000 UGX. The Ezystove price to end-users rose from 45,000 UGX to 50,000 UGX before the carbon market shift to 60,000 UGX during and after the grant period. The lack of interest for the product
coupled with the increase in price meant that the sales rates dramatically decreased. This unavoidable change in strategy was dictated purely by the reality of the carbon markets, and what UpEnergy needed to do to secure a financially sustainable future.

While SACCOs did not prove to be a high volume channel for sales, UpEnergy was not able to eliminate it as a target distribution channel as a result of the pilot. It is difficult to know whether slow sales in the channel can be fully attributed to SACCOs’ product uptake or the change in product and price. UpEnergy still distributes through SACCOs today, but spends the majority of their resources on direct sales channels.