

RENE Retail – Financing Challenges for Rural Energy Products

I had the opportunity to participate in a workshop on 'Financing Challenges for Rural Energy Products' organized by Shell Foundation in Bangalore on August 13, 2008.

Shell Foundation under its 'Breathing Space' program in India supports [Envirofit](#) and [D.Light Design](#). This program is an initiative to curb indoor air pollution. Traditional wood based cooking and kerosene lamps are major pollutants which is what Envirofit and D.Light are aiming to replace with their new technology cook stoves and solar lights, respectively.

The objective of this workshop was to identify how to catalyze and take to scale the rural stove and solar light markets. The viable options for distribution and consumer finance. What are the most appropriate revenue and business models and who could be the potential partners in such an endeavor. All of these are the exact problem areas that RENE under its retail efforts has been working to resolve.

The event saw participants from across sectors including product manufacturers Envirofit and D.Light; MFIs with experience in consumer financing like Graameen Koota, Basix, SKDRDP, Spandana; venture capital firms Acumen Fund, Aavishkar, Nexus Capital and Goodwell; financial institution like Yes Bank and technologists from IIT Delhi.

This event was a big morale booster for me. During the session I realized that many of our initiatives are very much on track with the issues on the ground.

Further, RENE has been engaged in doing a pilot on working as a conventional wholesaler of Envirofit stoves at villages in Thanjavur for nearly 6 months now and have recently started retailing solar lights too. This experience has provided us highly valuable insights and much more deeper understanding of ground realities. It added a lot of credibility to my statements and also helped clarify many issues. For e.g. the VC firm Aavishkar and some others wanted to know if fuel savings is really a big selling factor as fuel is mostly free for rural people. The standard reply from Envirofit was that even if wood is not purchased by people, collecting it is a huge effort and time consuming process, hence fuel savings is valued by people. This is not completely incorrect, however, the question to ask is whether they value the decrease in effort and time to collect wood as much as worth paying Rs.1,500 for a stove. The answer then is no. What then sells these stoves is the no / less smoke factor. This factor places it on par with LPG stove, which is an aspirational product, and has been the biggest motivator for the sales we have made in Thanjavur.

There are many more such examples of finer details. The biggest boost however came when at the start of our discussion session each of us were individually asked to identify one major challenge in selling rural energy products. I was last in the order to speak, usually when you are last almost all points get covered. To my surprise, in

this case, I ended up saying the most critical one and it got acknowledged as the most critical one since the rest of the discussion revolved around this!!

The major points that came from others were:

- (a) The need for concept selling or awareness creation
- (b) The product through its benefits and price should have a clear value proposition for the end user
- (c) The operational constraint for an MFI in using existing resources to retail consumer products
- (d) Providing after sales support for repairs and replacement of the product
- (e) Problems with distribution reach.

These are very valid issues, but even before all this, the biggest challenge we have faced is how do we identify which technology or product works and which doesn't. This manifests into two issues. On one side, every product manufacturer wants to tie-up with an MFI because they recognize the existence of a trust factor between the MFI and their clients. This puts the onus on the MFI to ensure that they introduce only those products that does not jeopardize their credibility. Further, when it comes to a standardized product, it can never satisfy a customer's every need. For e.g. the same solar light product gets a positive feedback from one household and a negative feedback from another. The only difference being the size of the rooms, one smaller and the other bigger . Hence, there was sufficient light in one case and not enough in the other.

On the other side, the end customer also has no means to determine which product works which doesn't . They do not want to take this technology risk and hence ask for credit. Credit gives them the option to invest little and not pay the whole price, if the product is not good. We initially thought the reason people wanted credit was only because they had irregular cash flows which meant that they did not have sufficient cash to make the whole payment at a given point in time. This is further complicated by lack of access to saving products. This reason is true in some cases, but is not the complete picture. The option to default over bearing the technology risk, is a factor too. Which increases the pressure on MFIs or any other financial partner to identify good products.

Currently there is no standard process of identifying products that work. What we did at RENE was to go meet users of Envirofit, collect feedback from them on a standardized questionnaire and analyzed this. For the solar lights, we gave it to some people from the villages we planned to sell (our field staff) to try the product for a month and then give their feedback. Grameen Koota, which had partnered with Envirofit to provide finance for their stoves, had done a pilot at one of their branch and then rolled out to others. This is a very expensive process and not everyone can undertake this.

Also, as stated above, with standardized products it is not possible to solve all of the customer's needs. Every time we have to analyze the negative feedback to distinguish between the failure in the product's performance against its stated claim vs failure due to expectations beyond what the product was designed to perform. Which is always not easy to do.

The discussion that followed on this topic was very interesting. Everyone admitted that identifying the right technology is not easy. One other factor that came up was that most of these technologies are at an upward learning curve. For e.g. Envirofit's generation 3 stoves, which they are going to introduce now, are far superior than the previous versions. Similarly, D.light is planning to introduce solar lights with embedded panels. They are now selling torches with separate solar panels (imagine how it would be to have mobile batteries charged automatically. That is the difference between embedded and separate solar panels). If an MFI had tied up at an earlier product stage and later introduces the newer version, then the older customers would feel cheated. This is the situation Grameen Koota and we are facing today since we both worked with Envirofit's generation 2 stoves.

Prof. Ambuj Sagar from IIT Delhi who is working with the Ministry for New and Renewable Energy (MNRE) and Bureau of Energy Efficiency (BEE) suggested that Shell Foundation should set-up some mechanism for accreditation and evaluation of these technology products. This is exactly what RENE is working on with Prof. Ashok Jhunjhunwala's team at IIT Madras. We are looking to create a web portal where product manufacturers can provide details of their products and we can collect user feedback on it along with reviews from technologists.

The other suggestion from Spandana, was that if there was some fall back for MFIs to cover financial loss from defaults that may come from endorsing energy products, then that would be good. Again, RENE is working exactly on this. We are exploring the possibility of partnering with Corporate Social Responsibility (CSR) initiatives for providing guarantee against loans extended by MFIs for financing energy products. CSR initiative, through this arrangement, can impact more people than otherwise and MFIs have a fall back, a win-win for both. Ambuja Foundation have in principal agreed to try this with us.

Finally, there were two other suggestion that stood out, not specifically on the technology issue, but on the other challenges of distribution, awareness creation and financing.

The first was that we should think of a single rural appliances company that works with multiple products across technologies as there are synergies to be exploited and it is not effective for each entity to separately create channels. And this is what RENE has been doing through our pilot in Thanjavur. We are now exploring the idea of establishing a multi-level marketing setup like the Tupperware or Amway model for several energy products.

The second was why product manufacturer's, while they are building channels, should not consider extending finance themselves since the search costs of identifying partners willing to extend consumer finance is high and difficult to materialize. RENE has initiated a project with CDF and TIDE, an institutional stove manufacturer, to help them build in house capabilities to extend finance.

The other thing that came up during informal discussions was that Envirofit was seeking working capital finance for their business and they have not been able to secure any commercial financing. They have been operational for nearly two years now and have sold ~60,000 stoves. Still it has been a major challenge for them. We have heard this story from many product manufacturers and I was curious to know if Envirofit was able to overcome this. Sadly no. RENE is working on two initiatives on this issue. In the first initiative, we are using a grant funding to provide guarantee for working capital financing extended by a commercial bank for a solar light manufacturer. The other initiative is the CDF project with TIDE. One part of this study is to determine what would be TIDE's working capital requirement and how best to finance this. In both the cases we aim to understand the risks involved in extending such finance to energy product manufacturers.

Overall, it was quite an exhilarating experience to realize that we are on the right track. I believe it is a matter of time before all of this shapes up.

Anu Valli is part of the Rural Energy Team.