Sarala Development and Microfinance is a microfinance institution (MFI) operating in Northeastern India. With the support of the Partnership to Advance Clean Energy—Deployment Technical Assistance (PACE-D TA) Program, Sarala has launched and quickly scaled a clean energy lending program for its microfinance client base. In just under two years, Sarala has helped over 100,000 women access clean energy, improving clients’ quality of life with reliable and clean energy, and reduced dependence on harmful traditional fuels.

Sarala is headquartered in Delhi, India, and has a total of 354 employees in 68 branches across the three states of West Bengal, Bihar, and Assam. As of March 2017, Sarala had a customer base of 139,034 clients with a total outstanding portfolio of USD 25.3 million. Sarala’s energy lending program has sold 130,907 solar products through financing, employing 260 Loan Officers and USD 2.5 million disbursed in clean energy loans.
Sarala Development and Microfinance ("Sarala") is an initiative of the non-profit Sarala Women Welfare Society (SWWS). With the support of the USAID-funded Partnership to Advance Clean Energy - Deployment Technical Assistance (PACE-D TA) Program, Sarala has piloted and scaled a solar energy lending program for its clients which has helped thousands of women in its client base gain access to clean energy, increase their income-generating activity, and reduce the damaging effects of traditional fuels.

SWWS was founded in 2006 in Howrah, West Bengal, with a mission to serve poor women who are excluded from formal banking channels by providing them with access to credit. With small loans, Sarala’s clients are able to invest in new livelihood activities that will increase their long-term economic self-reliance.

Recognizing the critical link between economic empowerment and access to modern energy, Sarala launched its energy lending program in June 2015, as a part of the PACE-D TA Program’s microfinance activity. Sarala is one of the seven partner microfinance institutions (MFIs) selected under the Program to be provided with Technical Assistance (TA) to catalyze clean energy finance. With the Program’s support, Sarala has sold over 130,000 portable solar lighting and charging products through 260 Loan Officers in its 68 branches in just two years across West Bengal, Bihar and Assam. Sarala’s rapid growth has been driven by high customer demand, access to finance, effective sales strategies, and, even more importantly, it has a management team committed to enabling its clients with access to high quality, affordable clean energy products that provide measurable economic, social and environmental benefits.

A shopkeeper lights her store with a lantern
Customer Profile

In keeping with its core mission to help poor women become economically self-reliant, all Sarala’s energy lending clients are women. Approximately 40 percent of these women live in villages, and 60 percent live in urban and semi-urban areas.

From May to June 2016, the PACE-D TA Program conducted an independent customer survey of a representative sample of 400 Sarala clients that had purchased clean energy products. The survey showed that:

- 99 percent of respondents have access to the grid and 97 percent have more than 16 hours of electricity access a day, but reliable grid access – without frequent, unannounced blackouts and brownouts – is a persistent issue.
- The primary sources of client income are: microenterprises, regular wages and skilled labor.
- The majority of Sarala’s rural clients fall between the extreme poverty line (USD 1.90 per person per day, 2011 PPP) and the economically vulnerable poor (USD 3.80 per person per day, 2011 PPP).
- 3.5 percent of rural clients and 7.6 percent of urban clients are below the extreme poverty line.
- 60 percent of rural clients and 38 percent of urban clients are among the economically vulnerable poor.

A sculptor in West Bengal works under the light of an affordable solar lantern
To identify and select its products, Sarala conducted a study of the products offered by other MFIs, surveyed its staff, and conducted client-based market research to determine the appropriate products to fit client needs. Upon receiving positive feedback from its staff and market research on design, functionality, and brightness, Sarala decided to select a solar lantern and mobile charging device produced by Barefoot Power, an industry leading product manufacturer with operations in India.

Sarala’s management also considered factors related to availability of funds, cash flow management, in-house technical expertise and lender preferences for the selection of the product companies. Barefoot Power fit these criteria and also offered an attractive and extended credit period of one to two months. Sarala wanted to include multiple product companies in its portfolio, however, and shortly after launching in May 2015, Sarala diversified its product portfolio to include additional devices manufactured by Greenlight Planet and d.light.

“Some thought we should not start the program too big, but we knew the demand was there. When we saw how many were sold in the pilot, we knew we were right to be confident.”

–Subrata Singha, Operations Officer, Sarala Development and Microfinance
SARALA’S ENERGY LENDING PROGRAM

Affordability Mechanism: Microfinance

The energy loan product
Sarala’s energy lending program is managed by SWWS, which uses its corpus funds to provide energy loans. SWWS has an agreement with product companies whereby products sold are considered direct sales from the product companies to clients, facilitated and financed by SWWS. Product companies pay SWWS a fee for facilitating sales, creating awareness, generating demand, delivering the products to clients, and providing after-sales service. These fees are paid to SWWS as commissions.

SWWS entered into an agreement with Sarala whereby Sarala’s staff originate the loans under the energy lending program. SWWS pays Sarala staff periodic incentives directly based on guidance provided by Sarala. In this way, the energy loan portfolio remains on the balance sheet of SWWS while all field operations are carried out by Sarala staff.

Sarala’s energy loans are individual loans given to current members of women’s groups under the microfinance program, disbursed as additional loans on top of members’ microcredit loans. These clients meet in weekly group meetings, at the end of which Sarala’s Loan Officers create awareness, demonstrate products, and facilitate energy sales. The product purchase terms are that clients must make a down payment of 10 percent of the product price, and then can choose to take an energy loan for the remaining 90 percent of the product price.

Energy products are priced between INR 400 (USD 6) to INR 2,399 (USD 36) and range from INR 400 (USD 6) for a basic lantern to INR 2,399 (USD 33) for lanterns with mobile charging facilities. Clients make repayments on a weekly or bi-weekly basis, over a period of four to 22 weeks, depending on the product.

Sarala does not charge any interest on the energy loan extended to its microfinance clients. For the moment, Sarala can offer these interest-free clean energy loans because the service fees paid by the product companies are sufficient to cover the cost of operations and generate a surplus.

Energy team organization
Sarala adopted a Loan Officer-led model of energy lending. The decision to pursue this approach was based on the assumption that Loan Officers, who maintain long-term relations with their clients, could easily increase trust, comfort and interest in solar products among clients. Sarala therefore focused on creating a process that made it straightforward for Loan Officers to facilitate energy sales and reward them with incentives provided by SWWS.

Sarala established a central team that includes a full-time Energy Coordinator to manage the energy product supply chain including: monitoring cash flow, maintaining inventory levels, communicating with branches, and ordering products. Sarala brought on an Operational Head to lead the microfinance and energy program and ensure

A Sarala client takes a loan to finance a solar lamp for her family
that staff at all different levels in the microfinance channel gave due attention to the energy program. The Operational Head is also responsible for motivating the branch staff, designing a framework of incentives and promotions, and liaising with product companies. Based on a mapping of the existing microfinance operations, Sarala identified areas of synergy within the existing microfinance program, where the energy lending program could be implemented with minimal cost and maximum integration of the two programs. For example, solar products are marketed only at the time of loan renewals and new loan disbursements, when clients have the liquidity to invest in energy products that can reduce their long-term energy expenditure.

**Program evolution: Scale up and diversification**

Initially, Sarala’s management team launched the pilot in ten branches, with at least one branch in each of the eight regions where Sarala operates. Sarala trained its staff at the branch and regional levels, developed a management information system (MIS) and a database for the energy lending program, and set up client accounts. Sarala’s management decided to scale up its energy lending service once the pilot initiative was successful. The ten pilot branches demonstrated that there was sufficient demand for solar products and that the program would be profitable and have an impact.

SWWS’s executive team committed INR 10 million (USD 152,000) to launch the energy lending program, with assurance of additional funding to Sarala if required. With the business case for clean energy lending clearly established, Sarala launched the energy lending program and to date has achieved the results illustrated in Figures 1 and 2.

As shown in Figure 1, Sarala has invested INR 22 million (USD 333,000) (as of October 2016) to achieve a turnover of approximately INR 200 million (USD 3 million). With net margins of around 10 percent, the program broke even in only 18 months. At a unit level, gross margins on energy products are around 25 to 30 percent. Adjusting for
The energy loan product

A key driver of Sarala’s ability to connect with its clients and gain their trust lies in the history of the organization and its focus on clients. Before launching its banking services, SWWS introduced a “Credit Plus” program. This program offered health care to poor women, including weekly check-ins with doctors in each branch, yearly check-ups for families, generic medicine, free glasses, and even its own pension program. This outreach to clients instilled trust in Sarala among its clients.

This trust is also an essential part of Sarala’s clean energy program. As the clean energy industry grew in India, many solar products were introduced every year to the market, and some poor-quality products had left a negative impression both for clients and MFIs. Now that the technology has stabilized, there is a range of high-quality products available to consumers. By building on a foundation of trust, good will and assurance of after-sales service, Sarala’s Loan Officers can introduce the benefits of solar energy to clients who may have had prior negative experiences.

taxes, operational expenses and other incidental costs, Sarala generates a 10 percent profit margin on each product sold.

Encouraged by these results and enabled by a surplus generated under the program, Sarala is now planning to diversify its offerings with the goal of helping clients purchase larger, higher capacity products such as solar home systems, solar fans, solar TVs, etc. An independent study conducted by the PACE-D TA Program confirmed that there is demand for these bigger products among Sarala clients.
Sarala’s management observed high demand for multiple lights among households: one light for a home, one light for a relative, and one light for outdoor use, for example. Based on this feedback, Sarala removed some of the typical constraints on loan conditions seen in other MFIs that prohibited clients from buying more than one energy product at a time. Sarala also designed client-friendly processes such as delivering the products to clients’ homes, reducing the time between a client placing an order and final delivery through effective inventory management, and timely resolution of any service or other related issues.

Building on a historic relationship of trust and maintaining quality service, Sarala has successfully introduced a new market of clean energy to its client base, and enticed around five percent of clients to return for multiple energy loans.

Management attention, integrated leadership and staff buy-in

The rapid growth in Sarala’s energy program is a direct result of top management dedication to this program. After initial consultation and due diligence, Dr. Arabinda Sinha, Chairman of Sarala, and Mr. Pranab Rakshit, Managing Director of Sarala, committed the financial and non-financial resources required to launch and operate the program. Mr. Rakshit was personally engaged in selecting product partners, adapting the MIS and devising the incentive structure. Though Loan Officers in many MFIs are trained on the job through informal conversations with their superiors, Mr. Rakshit ensured that Sarala’s Loan Officers were provided with formal trainings following a carefully designed curriculum, where Loan Officers can give undivided attention to learning the information needed to succeed in their work.

Sarala’s energy program is led by the Head of Microfinance Field Operations. This has allowed for seamless integration of the energy program operations into existing microfinance operations. Though other MFIs have faced challenges integrating these two programs, Sarala held consultations at all levels of the organization, explained the vision of the energy lending program to each staff member, and provided guidance to staff on how to allocate their time and attention across both the programs.

This process ensured that all of Sarala’s staff is fully engaged, committed and educated on the rationale and processes of the program.

Empowering and incentivizing loan officers

Sarala’s management recognized the need to empower Loan Officers with technical product information and sales and marketing skills. Whereas microfinance loans are typically a demand-led “pull product”, low customer awareness of the technologies and benefits of solar energy means cross-selling energy products requires a more sales-oriented approach.

Sarala implemented two training modules for Loan Officers: (i) a technical training module covering topics related to product features, usage and troubleshooting; and (ii) a sales and marketing module.
covering topics such as developing client-centered sales pitches and conducting sales systematically. Sarala conducted over 3,000 hours of these trainings for its entire staff.

During the pilot, the performance of individual officers varied from branch to branch, due to several factors, including:

- Branch size: Bigger branches have a larger potential client base;
- Branch location: Certain locations experience higher demand than others, due to factors such as grid access or reliability, income levels, etc.; and
- Operations Managers’ performance.

Sarala devised an incentive plan to motivate all microfinance staff from Loan Officers to Operation Heads:

- Loan Officers, for the number of sales closed;
- Branch Managers, for the number of products sold by his or her team of Loan Officers;
- Regional Managers and Operations Supervisors, for the number of products sold by their teams; and
- The central Operations Head and Energy Coordinator, for total sales of the energy program.

In the first two years of operations, Sarala staff on average earned 30-40 percent of their annual salaries from these energy lending incentives. Two-thirds of this amount is disbursed monthly, while one-third is disbursed as an Annual Incentive, from which any delinquency charges may be deducted. In addition to financial incentives provided by SWWS, product companies carry out routine sales campaigns, in which high-performing Loan Officers receive rewards such as mobile phones, watches and pens directly from the product companies.

The thorough training and multiple incentives Sarala offers its Loan Officers has enabled and motivated staff to actively sell energy loan products.

Management Information System, supply chain and cash flow management

Sarala designed an integrated MIS with three components:

- A loan module to tag and track energy loans separately within Sarala’s portfolio;
- An account module to create a separate ledger to track energy lending program entries individually; and
- An inventory-management module to maintain inventory information at each point along the chain, in order to track stock, track inventory movements across various stock points, manage orders, provide alerts for critical inventory levels, manage product replacements, sales and create business intelligence reports.

Sarala manages cash flow efficiently and pays close attention to sales patterns by scheduling payment to the product companies according to business volume, cash sales and payments received on its energy loan portfolio. Sarala has also negotiated with product partners for a credit period to manage periods of lower liquidity.

After-sales service

For Sarala, after-sales service starts with creating awareness of product warranties among clients. Independent client surveys reveal that 85 percent of energy clients were aware of warranties available on purchased energy products. Ten percent of the respondents reported experiencing problems with their products, out of which 56 percent of problems were related to battery performance and recharging. Though some of these problems were genuine and promptly addressed by Sarala, some complaints were the result of inadequate client understanding of the products or unrealistic expectations. Sarala has addressed this concern by re-emphasizing what customers can expect in product performance clearly and conservatively.

During the first month of the energy program, Sarala’s management learned the importance of after-sales service from direct experience. Each of Sarala’s branches now holds extra inventory to be able to replace a faulty product if necessary. It has trained its officers to troubleshoot a series of common issues (i.e. if the product is not positioned correctly, not connected properly), and if an issue cannot be fixed at the branch level, Loan Officers are trained to make a call and report the issue for replacement, which in turn is reviewed by product partners, after which clients are promptly provided with a replacement.
Sarala’s energy lending program has seen impressive growth in its two years of operations. In some branches, 90 percent of clients have received a clean energy product and loan. As a result, Sarala’s management is now addressing the question of how it will maintain sales growth. The plan for this includes:

**Geographic expansion**
Sarala sees opportunities to expand its energy lending program geographically, in parallel with its MFI operations. It aims to more than double its microfinance client base. During 2015-2016, Sarala expanded its microfinance and clean energy lending program to Bihar and Assam, which comprised fifteen percent of sales, while West Bengal accounts for 85 percent of sales. It is planning to expand further in Bihar, as well as expanding in Odisha.

**Diversifying product mix**
Client surveys reveal that around 47 percent of existing energy clients are interested in buying bigger solar products such as solar fans, inverters and TVs.
In addition to diversifying its product mix to meet this demand, Sarala is contemplating offering both credit and cash sales to both microfinance clients and non-clients in its areas of operation. Sarala is currently in talks with product partners that offer larger renewable energy products such as solar inverters, solar fans and solar home systems (SHS). The PACE-D TA Program and Sarala are working together to launch a pilot for larger energy product sales.

**Energy agent model**

Sarala also plans to expand through initiating an agent-based business model. Currently in its pilot phase, the program has recruited 25 energy product agents in 10 branches. Agents are provided with credit to purchase an inventory of clean energy products which they sell to non-clients. Sarala’s target is to grow this program to 500 agents, and leverage this network to create a market for larger livelihood-enhancing products, including water filters, induction cook stoves, etc.

In Sarala’s pilot program, these agents – all women – are given a credit line from SWWS to buy small products that retail for around INR 1,000 each (USD 15). Agents pay 20 percent of the loan upfront as a down payment. Agents are charged one percent interest on their credit line, and sell products at a fixed margin. Sarala also plans to provide capacity-building support (business planning, IT-based monitoring tools) and working capital to these agents in the future.

**Portfolio health and accumulated surplus**

All of Sarala’s energy loans have been repaid on time and its portfolio at risk is zero. Sarala’s energy portfolio has been a net source of revenue for the organization. This portfolio performance over the last 18 months gives Sarala confidence to expand the program, and Sarala plans to use the energy program revenue to provide more integrated solutions that meet all the lighting and functional demands of its client base.

**Investment in client awareness and education campaign**

Before Sarala began its solar initiative, its clients were not aware of solar products, their features or potential benefits. To create awareness and develop a market for clean energy products, Sarala and the PACE-D TA Program designed specific “Solar Ambassador” trainings. With the support of the PACE-D TA Program, Sarala delivered 1,200 hours of trainings to approximately 400 women clients. These clients are now Solar Ambassadors in their communities and promote clean energy alternatives, which in turn directly results in product sales. Sarala is committed to expanding these trainings to many more women clients in all its branches.

“The most important asset to us is the trust of our customers. Since we started as a welfare organization, our clients knew we were working for them in the beginning. All our work is implemented bearing in mind the objective to keep this trust.”

– Pranab Rakshit, Managing Director, Sarala Development and Microfinance
Lessons Learned

Sarala has achieved significant success in its first two years of operations, which can be attributed to the following factors:

1. **Demand creation through suitable and affordable products**
   Sarala addressed low customer awareness by launching its energy program with products that were useful, affordable, and appealing, even to clients unfamiliar with solar lighting solutions.

2. **Committed leadership**
   Sarala’s leadership is committed to sustainably serving its clients beyond microfinance services. In the geographic context in which Sarala works, energy solutions are a natural extension of these services. Sarala committed INR 10 million (USD 15,000) upfront to ensure that the pilot could be scaled. The enthusiasm of SWWS leadership for the energy program did not waver when challenges arose; a batch of faulty products, for example, was used as a learning experience and chance to make adjustments to the program’s processes. Now that Sarala’s energy program is creating a profit, its leadership is committed to re-investing this into piloting innovative new products that will benefit Sarala’s clients.

3. **Business planning and careful execution**
   Sarala’s management created a detailed month-by-month expansion plan, including cash flow management, trainings and supply chain management. Sarala ensured it would have real-time access to business performance, and could regularly gather client feedback to ensure its energy program did not create unintended negative consequences for its core microfinance program.

4. **Market development approach and rapid scaling**
   Sarala invested resources in creating awareness of solar products among its clients and their communities. Based on the success of its pilot and the results of monitoring efforts, Sarala decided to expand swiftly, and established energy programs in all its branches, to compete effectively in this growing market.

This case study series is a core offering under the Microfinance Support Program of the PACE-D TA Program.