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Aditya—The Solar Shop: Social entrepreneurship at the crossroads

Nobin Thomas and Joshy Joseph wrote this case solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

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One evening in July 2016,[[1]](#footnote-1) Manjaly Antony was sitting at his desk, having second thoughts about his decision to launch the retail store Aditya—The Solar Shop (Aditya). What concerned Antony most was poor sales of solar energy devices. Despite a fully-stocked showroom, a service technician available throughout the day, and a wide variety of solar products displayed on the shelves, most customers visiting the shop seemed unsure about switching to solar energy.

Compounding the problem was a delay in reaching a deal with the solar equipment manufacturers Antony had met two days earlier. He had yet to decide which manufacturers to choose, from a long list of interested companies, to take part in the Ministry of New and Renewable Energy (MNRE) project (formerly known as the Ministry of Non-conventional Energy Sources[[2]](#footnote-2)). After his selection, Antony would have to prepare a quota allocation plan for the maximum number of items that each manufacturer could provide to Aditya under the MNRE subsidy initiative. He had promised to prepare a quota allocation plan very soon, but he was still contemplating how to respond to queries from manufacturers asking him “Antony, sir, have you decided on the ratio of the distribution of units covered under the subsidy scheme?” Calls from manufacturers were no longer as pleasant as they once were.

Another key issue that Antony had to consider was the effect that his selection of manufacturer would have on Aditya’s profit margin. Some companies promised to deliver higher margins to Aditya, but only if the shop agreed to display that manufacturer’s non-subsidized products on the store’s premium shelf spaces.

When the phone rang, it brought Antony back from his thoughts. The president of the Community Sponsorship Organization (CSO)[[3]](#footnote-3), of which Antony was a member, was calling to confirm a meeting to discuss various social welfare activities he was planning:

Antony, I’m just calling to confirm tomorrow’s meeting. Do you agree with our proposal to spend the surplus money generated for social welfare activities and development projects? But if Aditya does not take off, we would lose not only money but also our credibility among the government officials, other social service organizations, and the public.

Before Antony could even utter a word in response, the phone went silent. Just then, his newly recruited service technician, Sudeep Roy, barged into Antony’s office and said with frustration: “Am I going to get to the field anytime [soon]? Remember Antony, I joined on the condition that I will [only] do the installation of solar equipment; please don’t count on me for after-sales support.”

Roy quickly left the office and Antony remembered another possible derailment of his plans. After MNRE stopped contributing subsidies through the program, how would Aditya survive? CSO would not be interested in a social cause project without a business element to earn income. Antony had many issues to resolve, but few answers thus far.

About CSO

CSO was a social service non-governmental organization from the South Indian state of Kerala. CSO worked closely with the Queens School of Sociology (QSS) in the developmental sector. QSS was an institute launched in the early 1950s to develop professionals in the field of social services. To facilitate the ability of social work students to practice what they had learned, QSS had established Live Labs, where students could receive hands-on training in professional social work. The Live Labs were organized by CSO, which directed social welfare activities and developmental projects with support from both state governments and the Government of India, as well as financial support from other generous sponsors.

About Antony

As the Kerala state head for CSO, Antony oversaw all socially conscious developmental projects for the state. He had a postgraduate degree in social work and was deeply committed to improving the lives of people through his efforts. Having been associated with CSO for more than a decade, he had become a familiar figure among social workers.

CSO and the Kallupara Project

In December 2012, CSO became involved in a community development project in Kallupara, a remote village in South India. The village’s narrow roads were a factor contributing to the difficulty in delivering electricity to many of the people living in that area. The development project aimed to provide electricity throughout Kallupara. The extremely challenging rocky and hilly terrain in the village made most conventional models for providing electric power unsuitable, even for a minimal amount for household and street lighting services. As head of CSO, Antony suggested using solar energy as a solution. He had heard that MNRE supported such programs and provided subsidies for the installation of solar energy lighting systems, so he thought, “This may be the ideal place to put up a solar lighting system with the assistance of MNRE.”

Antony’s plan was also a perfect fit with the Government of India’s initiative to provide rural lighting through non-conventional energy sources. The project in Kallupara was a very successful example of how electric power could be provided to remote areas. The project earned CSO praise from the government, the public, and the media. The project’s successful outcome also helped convince the government of Antony’s ability to oversee such a project with significant social impact. Some government officials suggested that Antony and CSO should be considered for similar government-supported rural development projects in the future, especially regarding providing electric power through non-conventional energy sources.

Promoting Solar Energy

Realizing the importance of renewable energy sources as the best alternative to conventional fuels, a solar photovoltaic (SPV) program was implemented by MNRE in all Indian states (see Exhibit 1). CSO had garnered an outstanding reputation in the field after many years in social service activities in Kerala, as well as the successful Kallupara project. Therefore, MNRE did not hesitate to approve CSO as the only nodal centre for the SPV program in Kochi, the commercial capital of Kerala.

The SPV program was intended to sell solar products at a subsidized rate to consumers, with CSO acting as the intermediary in the process. Therefore, CSO decided to open Aditya as a shop and showroom to display and distribute energy saving devices—specifically, solar energy systems. The shop’s name, Aditya, of Indian origin, was chosen because it was a term meaning the sun. The SPV program also allowed Aditya to sell non-solar energy saving equipment and distribute SPV systems at regular market prices, but these items would not receive subsidies from MNRE.

CSO had never operated a commercial business before, but Antony welcomed the challenge of operating a solar shop and showroom for several reasons. Mainly, he was encouraged by the fact that MNRE provided support and subsidies for any type of marketing establishment that promoted energy saving systems. Financial support from MNRE, for a limited period of two years, helped Aditya pay for the shop’s rental fees and salary expenses for the shop’s manager. Antony was also encouraged by Aditya serving other social causes, such as providing employment opportunities for at least two individuals—a shop manager and a full-time service technician—and assisting with the economic development of the local area. Although profit had never been Aditya’s primary objective, Antony hoped that any surplus revenue generated through the commercial enterprise could be directed toward various social service activities.

Antony identified a suitable space for a showroom in a prime commercial location in Kochi. He negotiated with the landlord for a discounted rental rate for the shop of only ₹8,000[[4]](#footnote-4) per month, which was approximately 20 per cent below market rates. The landlord agreed to the discount based on Aditya providing a social service. The landlord also committed to extend the same rate for two years and to waive the security deposit, which normally ranged between ₹200,000 and ₹300,000 for rentals in that area.

MNRE allowed CSO to levy a service charge for every alternative energy unit sold. That service charge would consist of Aditya’s surplus, or profit. The subsidy amounts provided to the end consumer and the service charge allowed to the nodal agency were set and communicated by MNRE (see Exhibit 2). Eligibility requirements to obtain a subsidy under this initiative were also dictated by MNRE (see Exhibit 3), as were the maximum amounts of subsidy distribution to CSO, both in monetary terms and in number of units sold (see Exhibit 4).

CSO was required to keep records of all customer transactions and report regularly to MNRE on the progress of the SPV program. This bookkeeping requirement served two main purposes: monitoring the efficiency of nodal agencies such as CSO, and ensuring that financial assistance was actually reaching the intended beneficiaries. However, after paying a lower amount due to the subsidy, an end consumer could not be stopped from reselling the energy system at a profit.

To ensure fair competition, CSO was required to allow participation in the program to all eligible manufacturers of SPV systems. As well, CSO had to evaluate each manufacturer, set pricing for energy units, and provide a maximum quota of subsidy sales for each manufacturer. The quota was the maximum number of units that each manufacturer could sell under the government subsidy plan. Beyond that number, the manufacturer had to sell the units at the regular market price.

Antony evaluated the long list of manufacturers interested in taking part in the MNRE project, from which he finally chose three manufacturers to partner with Aditya. The selection was based on product quality, manufacturer reputation, and variety of products manufactured. Antony was still working on a suitable plan to set the quota allocation for each manufacturer. For his convenience, the three selected manufacturers of SPV systems agreed to begin displaying their units in the shop starting on opening day.

Meeting with the manufacturers

To ensure fair competition and assist the business community, MNRE advised CSO to hold joint meetings with manufacturers of energy efficient products to derive strategies for wide distribution of SPV systems. A meeting was held between CSO and representatives of the three manufacturers chosen to display their products in the shop starting on opening day. The meeting’s objectives were to set each manufacturer’s maximum number of SPV systems allotted for Aditya, and to set the shop’s margin, which was the sales incentive paid to the retailer by the manufacturer. MNRE also provided CSO with a service charge for units distributed through the SPV program (see Exhibit 2). The manufacturers, who were aware of the MNRE handling charge, offered CSO the same amount as their dealer margin for solar lanterns and twice that amount for home lighting systems (see Exhibit 5).

Antony had not received any expression of interest from manufacturers for street lighting systems, so this matter was not discussed. However, he argued that the margin offered for home lighting systems was well below expectations. The manufacturers responded that because there was no guarantee about number of sales at the start, they were reluctant to offer more, but they agreed to revisit the margin rate if sales volumes increased. Antony was disappointed with the prices of solar lanterns and home lighting systems quoted by the manufacturers, as well as the dealer margins they offered (see Exhibit 5).

The rest of the meeting focused mainly on the distribution of 1,000 solar lantern units, which were covered under the financial assistance plan among the three companies. Since prices of the solar lanterns varied considerably across the three companies, an agreement could not be reached on the ratio of the distribution of units covered under the plan.

Another point of contention was after-sales support. The manufacturers were unwilling to provide annual maintenance and services at their cost, which they claimed would affect their profit margins. Antony did not have enough staff to provide after-sales support and could not afford to hire more staff with the limited reimbursement from MNRE. This was a major stumbling block for Antony’s future plans.

Soon after the meeting, Antony started receiving requests from other manufacturers interested in the MNRE project. Word of mouth was helping generate interest, but it was also raising new issues. The manufacturers also started approaching Antony with specific requests for the display and sale in the shop of other energy saving products, such as pressure cookers, thermal rice cookers, compact fluorescent lamps and accessories, and high-efficiency kerosene stoves. Even though MNRE supported the sale of other products through Aditya shops, no subsidy was extended to buyers of these products.

During a meeting with a manufacturer, Antony inquired about the possibility of receiving stock without payment and keeping it in the shop until its sale before making a payment to the manufacturer. However, the manufacturer did not agree to allow this strategy. Antony knew that there was a potential to earn revenue from the sale of other energy saving devices. The advantage in selling such devices through Aditya was the convenience of using the same outlet and staff for all types of products.

The Dilemma

By Aditya’s opening day, Antony had advertised the new shop in local newspapers with details about available subsidies for customers. Although the advertising attracted many inquiries, most people were interested in solar lanterns, which were discounted by 40 per cent from the market price after accounting for MNRE subsidies. Customer inquiries, operations guidelines, and staff and showroom being ready for business were all positive indicators. But initial sales were poor, which was not a good sign.

Antony was aware that solar energy devices were an expensive purchase for many families, even with the subsidy, but he had not anticipated the resistance potential customers would face from family members, despite the appeal of green energy and the promise of long-term savings. Antony spoke to people visiting the newly opened shop to learn about their purchasing decisions. Many customers were apprehensive about gaining approval from their children and older family members in particular, who were accustomed to a particular energy source and were reluctant to change. Antony realized that changing consumer mindsets would take time, but he had to find ways to prevent a purchasing roadblock.

Poor sales were making it more difficult for Antony to determine how best to allocate quotas for each manufacturer. He was wondering if he should simply distribute the MNRE quota equally among all three manufacturers. He was also unsure how to respond to inquiries from newly-interested manufacturers. Based on the SPV program’s guideline, he was committed to allowing equal opportunity to each manufacturer, so what criteria could he use to select manufacturers in the future? Some companies promised higher margins for CSO, but Antony was unsure if that would come at the cost of the items’ quality.

The meeting with manufacturer representatives had proven unsuccessful in determining the best quota allocation for solar lanterns or home lighting systems. However, pressure from CSO was mounting on Antony to complete negotiations with the three selected manufacturers. In addition, the manufacturers seemed averse to providing after-sales support to purchasers of solar equipment and accessories, but Antony’s only service technician, Roy, was adamant that his only responsibility was installation.

CSO was also insisting that surplus funds generated from sales should go toward existing social welfare activities and developmental projects, but Antony had different ideas. Financial support from MNRE was scheduled to end after two years, and Antony wanted to have some funds set aside to sustain the business after that point. Therefore, he planned to reinvest the surplus capital into the business, at least during those initial two years. A meeting with the CSO president was scheduled for the next day. If uncertainties continued, Antony risked losing potential business opportunities. MNRE could also decide to reconsider its decision to choose CSO as its nodal agency. Antony had to draft a strong operational strategy for Aditya. His credibility was at stake.

Exhibit 1: Solar Photovoltaic Systems

| Solar energy devices work on the principle that energy from the sun, or solar power, is captured using photovoltaic cells and then stored in batteries. Devices powered by solar energy include lanterns, home lighting, and street lighting. | |
| --- | --- |
| Solar **lanterns** consist of a lamp; battery; and suitable housing made of metal, plastic, or fiberglass. They also include a photovoltaic module that charges the battery. The lantern is portable and can be used both indoors and outdoors. | Image of Solar Lanterns |
| **Home lighting systems** consist of a photovoltaic module that can power a variety of electric household items such as lights, fans, and various electronic devices, for a limited number of hours. | Home lighting systems |
| **Street lighting systems** consist of a compact fluorescent lamp, a lead-acid battery, and a photovoltaic module that works with a sensor to store solar energy during the day and power the street lights after dark. | Image result for Street Lighting Systems |

Source: Company documents.

Exhibit 2: MNRE subsidy for end customers and Service charge levied by CSO

| **Type of Solar Photovoltaic System** | **Subsidy Amount  (to the End Consumer)** | **Service Charge Amount (to CSO)** |
| --- | --- | --- |
| Lanterns | ₹1,500  (Fixed price for all brands) | ₹100 |
| Home Lighting | ₹6,000 | ₹200 |
| Street Lighting | ₹12,000 | ₹0 |

Note: MNRE = Ministry of New and Renewable Energy; CSO = Community Sponsorship Organization;   
₹ = INR = Indian rupee.

Source: Company documents.

Exhibit 3: Eligibility to obtain subsidy

| **Solar Photovoltaic System** | **Eligibility** |
| --- | --- |
| Lanterns | Individuals and non-profit organizations; limit of one solar lantern per individual |
| Home Lighting | Individuals and non-profit organizations |
| Street Lighting | Non-commercial organizations, state nodal agencies, electricity boards, Panchayat and Zilla Parishad, District Rural Development Authorities |

Note: Panchayats and Zilla Parishads were local administrative authorities in villages; District Rural Development Authorities were agencies that supported the development of rural areas in all districts in India.

Source: Company documents.

Exhibit 4: Subsidy units for CSO and Estimated Financial Assistance

| Agency | **Maximum Number of Units that Can Receive a Subsidy** | | | | Financial Assistance (Estimate) |
| --- | --- | --- | --- | --- | --- |
| Lanterns | Home Lights | Street Lights | |
| CSO | 1,000 | 250 | | 50 | ₹3,750,000 |

Note: CSO = Community Sponsorship Organization; ₹ = INR = Indian rupee.

Source: Company documents.

Exhibit 5: Prices and Margins offered by manufacturers

|  | **Lanterns** | | **Home Lighting Systems** | |
| --- | --- | --- | --- | --- |
| MSRP | Margin | MSRP | Margin |
| Manufacturer 1 | ₹3,835 | ₹100 | ₹14,000 | ₹400 |
| Manufacturer 2 | ₹4,000 | ₹100 | Not producing | |
| Manufacturer 3 | ₹4,200 | ₹100 | ₹14,500 | ₹400 |

Note: MRP = Manufacturer’s suggested retail price; ₹ = INR = Indian rupee.

Source: Company documents.

1. The timeline of the case was altered to protect confidentiality. [↑](#footnote-ref-1)
2. The Ministry of Non-conventional Energy Sources was initiated by the Government of India in 1992 to develop and deploy renewable energy to supplement the country’s energy requirements. [↑](#footnote-ref-2)
3. The MNRE project partnered with CSO and required that all eligible manufacturers of solar energy cells be allowed to participate, to ensure fair competition. However, it was the responsibility of CSO to evaluate manufacturers and set a quota allocation with a maximum number of units that each manufacturer could sell under the MNRE subsidy, as well as set prices for all items. Beyond the maximum quota amount, manufacturers could still sell solar products through CSO’s Aditya retail store, but they would be sold at regular market prices without a subsidy. [↑](#footnote-ref-3)
4. ₹ = INR = Indian rupee; US$1 = 67.23 on July 1, 2016. [↑](#footnote-ref-4)