The Last 50 Mile:
Using VLE Networks For Increasing Clean Energy Access

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Finally, we would like to say that this report and the work is dedicated to the entrepreneurs that we work with and the wonderful work that they are doing in providing clean energy access to India’s underserved populations.
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CHAPTER 1:
INTRODUCTION TO VLE NETWORKS

VLE networks (VLEs) are groups that work with local villagers to improve the access of different products across remote rural areas. VLE networks also incubate and foster the promotion of Village Level Entrepreneurs through specific targeted training and support activities.

A Village Level Entrepreneur or VLE is a local village based individual who acts as the last mile to reach consumers, thus improving access for the low-income population to diverse products by taking on market innovations at the grassroots level. The word “entrepreneur” should be understood in the social context of where these individuals operate. They are small business persons who have decided to be an agent of certain goods and services to augment their income.

The main VLE networks in the country are ITC-echoupal/sagar choupal, HUL-Shakti, TERI Lighting a Billion Lives, VLE India, Basix CSC, Sakhi Retail, Villgro Stores, Adharam Energy, Srei Sahaj, Urja Unlimited and Project Dharma. However, not all these VLE networks work with clean energy products. In the current report, we profile most of the VLE networks in the country and the different approaches they undertake to take the product through the last mile to the consumer.

1.2 Types of VLE Networks

The goal of this report is to inform clean energy companies and VLE networks about opportunities of working together to reach India’s rural Bottom of Pyramid (BoP) market. The purpose of our study is to present an overall picture of the growing VLE networks and alternatives for the clean energy companies to partner with.

New Ventures India interviewed, conducted workshops and field visits to most of the leading VLE networks across India to understand their models. In our study, we have categorized the existing VLE networks in the country in two main types.

1. **General Purpose VLE Network:** VLE networks that deal with FMCGs and consumer durables

2. **Clean Energy VLE Network:** VLE networks focused just on clean energy products

In the following chapters, we have captured the key attributes for each of the VLE networks across India based on our interviews and field visits. The larger of these VLE networks work across the length and breadth of India; however the smaller networks tend to focus on a few states.

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Geographical spread of VLE networks across India
For the states that a given VLE network is operational in, the district wise spread is restricted to 6-7 districts per state with the exception of Srei Sahaj, that works in over 15-20 districts in a given state. A breakdown of the district wise VLE network spread can be seen in the table below. This table and the above map will help clean energy access companies in identifying the VLE networks they can partner with.

### States with district wise break up of VLE networks

<table>
<thead>
<tr>
<th>VLE Network</th>
<th>State</th>
<th>District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basix CSC</td>
<td>Pan India:</td>
<td>Nashik, Nandurbar, Dhule, Jalgaon, Ahmednagar (Maharashtra) East-West</td>
</tr>
<tr>
<td></td>
<td>Key States:</td>
<td>Khasi Jaintia Hills, East-West Garo, Ri-Bhoi (Meghalaya)</td>
</tr>
<tr>
<td></td>
<td>Maharashtra, Meghalaya, Tripura</td>
<td>Ganjam, Gajpati, Rayagada, Phulbani (Odisha) Dhalai, North-South Tripura</td>
</tr>
<tr>
<td></td>
<td>and Odisha</td>
<td></td>
</tr>
<tr>
<td>VLE India</td>
<td>7 states overall:</td>
<td>Nashik, Nanded, Latur, Solapur (Maharashtra) Jhajjar (Haryana)</td>
</tr>
<tr>
<td></td>
<td>Key States:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maharashtra and Haryana</td>
<td></td>
</tr>
<tr>
<td>Sakhi Retail</td>
<td>Tamil Nadu</td>
<td>Gobichettypalayam</td>
</tr>
<tr>
<td>Srei Sahaj</td>
<td>Assam, Odisha, West Bengal,</td>
<td>Assam (Dhemaji, Dibrugarh, Golaghat, Jorhat, Lakhimpur, Tinsukia,</td>
</tr>
<tr>
<td></td>
<td>Bihar and Tamil Nadu</td>
<td>Kokrajhar, Nalbari, Udalgur etc.) Bihar (Araria, Begusarai, Bhojpur,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bhabua, Nalanda, Patna, Rohtas, Magadh, Gaya, Jehanabad, Nawada, East</td>
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<tr>
<td></td>
<td></td>
<td>Champaran etc.) Odisha (Nayagarh, Khurda, Puri, Cuttack, Sambalpur,</td>
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<td></td>
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<td>Sonepur, Bolangir, Malkangiri, Koraput, Nabarangpur, Nuapada etc.)</td>
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<tr>
<td></td>
<td></td>
<td>Tamil Nadu (Dharmapuri, Krishnagiri, Thiruvannamalai, Vellore) Uttar</td>
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<td></td>
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<td>Prades (Gorakhpur, Hardoi, Lucknow, Mahrajganj, Rai Bareli, Allahabad ,</td>
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<tr>
<td></td>
<td></td>
<td>Varanasi etc) West Bengal (Darjeeling, Jalpaiguri, Murshidabad, Mednipur,</td>
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<td></td>
<td></td>
<td>Burdwan, 24 Parganas, Howrah, Hooghly, Bankura, Birbhum)</td>
</tr>
<tr>
<td>Adharam</td>
<td>Tamil Nadu</td>
<td>Sevaiyoor</td>
</tr>
<tr>
<td>Energy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TERI</td>
<td>Pan India</td>
<td>23 states and multiple districts</td>
</tr>
<tr>
<td>Project</td>
<td>Maharashtra, Bihar,</td>
<td>21 districts in Maharashtra, 6 districts in Bihar, 3 districts in Uttar</td>
</tr>
<tr>
<td>Dharma</td>
<td>Uttar Pradesh and Karnataka</td>
<td>Pradesh.</td>
</tr>
<tr>
<td>ITC- choupal</td>
<td>Pan India:</td>
<td>All states and multiple districts</td>
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<td></td>
<td>Key States : MP and</td>
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<td></td>
<td>Maharashtra</td>
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<tr>
<td>HUL- Shakti</td>
<td>Pan India:</td>
<td>Multiple districts</td>
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<tr>
<td></td>
<td>Key states:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Karnataka, Maharashtra</td>
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CHAPTER 2:
INTRODUCTION TO VLE NETWORKS

General purpose VLE networks engage with the local community to promote and sell consumer goods and services. These VLEs networks can be operated by corporate houses, NGOs, MFIs (Micro Finance Institutions) or even small private organizations.

The general purpose VLE networks profiled in the study were Basix, VLE India, Villgro Stores, Sakhi Retail, SKS VLE Project, ITC-echoupal/choupal sagar, HUL-Project Shakti, Srei Sahaj-Common Services Center Program.

MODEL: Basix

• **General Introduction**

BASIX- a leading microfinance institution in India- focused on the government’s Common ServicesCenters (CSC) program and employed local youths to run the kiosks on a fixed salary and commission. Basic training support and infrastructure was provided by BASIX and the initiative was able to generate enough business through financial services and other documentation services.  

Common Service Centres (CSC) offices were set up using the PPP model by the Indian government in 2006 to provide official government services across villages in India. The CSC scheme is intended to provide video, voice and data content and services in areas such as agriculture, health and education, utility services etc. through local kiosks.

In the initial period of the VLE’s relationship with BASIX, the VLE is employed and does not the financial risk. Basix had a firm ground presence across the regions that the model was tried out in, thus providing support to the VLEs.

• **Identifying the VLE**

Basix reiterates that choosing the right VLE is essential for increasing access of products across rural channels. They try to identify the best VLEs across villages where they work in by conducting a thorough background check. Basix established its first network of VLEs based on thorough research in the villages they are operational in. The new VLEs are usually referred across by existing VLEs in their network.

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• **Terms of agreement**

Through the incentives offered, Basix makes sure that the VLEs on their network stay for at least 6 months if not longer. The services that the VLEs offer range DTP, Photocopy, internet browsing, Mobile Recharge, DTH sale and recharges, are delivered from the CSCs. Basix also lends financial support to the VLE to set up operations. Thus far, Basix has given micro loans up to a total of Rs 106.64 Cr. They VLEs return the loan in small tranches as they start making profits.

• **Structure**

Basix CSC model has over 3000 VLEs in its network and it is planning on incorporating an additional 4000 by the next 6 months. The VLEs are on a salary plus commission model initially till they are able to scale up operations and sustain themselves. When they are sustainable enough, the model falls back to a simple commission model mostly.

• **Cost Sharing**

Basix provides the VLEs with loan support to set up the infrastructure initially after which the VLE repays the capital. The profit sharing varies based on the different services the VLEs cater to.

• **Average Turnover of Individual VLEs**

This is different in different states because of the variation in income levels across rural markets:

- Maharashtra: 6000-7000
- Odisha: 1500
- Punjab: 5000-600

The difference in turnover across various states largely reflects regional market conditions.

• **VLE Training**

Basix conducts workshops throughout the year to promote the VLE network. The workshops are very local in nature and are accessed by the local partner VLEs and also villagers who want to use this as an opportunity to come on board. Basix engages with community through village meetings where some of the concepts are explained. Basix shows the villagers the array of the services that they can offer. Based on the services they pick, Basix personnel train the VLEs. There are regular village meetings for 15-20 days to make sure that the VLEs have understood the concept well. Basix has a dedicated team working on the VLE-CSC model who also designed the training material. Basix offer a lot of incentives, right from initial loan support to set up the CSC kiosk to training the VLEs at regular intervals. Their expertise as a leading MFI also helps us in financially structuring the entire VLE model in a way that it’s beneficial to the local villagers.
• **Marketing and Promotion**

Most of the Basix CSC sales are through word of mouth publicity that the VLEs do. The CSC outlets also serve as places where some of the products such as lanterns, daily use items etc. can be displayed and where people can come in and learn more about their features.

**MODEL: VLE India**

• **General Introduction**

VLE India is run by a private limited company called Magnum Opus and started off as an online web platform that integrated local villagers to sell consumer services across various small towns and villages in India. VLE India and their various B2C partners train VLEs to do business with B2C products in Rural Market. VLE India is active in more than 7 states of India. VLE India founders – Girish Lad and Prashant Karhade - came in with a lot of experience of working in the rural markets. They started off with Mobile and DTH Recharge, General insurance, SIM, School Education eLearning, booking tickets etc.

• **Identifying the VLE**

Initially, the founders of VLE India identified VLEs by reaching out to villagers. However, the new VLEs who come on board are usually referred to by the existing VLEs. VLE India identifies people who are willing to invest a nominal amount of money to be a part for the VLE network.

• **Terms of agreement**

VLE India typically charges the VLEs for coming into its network. Unlike BASIX it does not loans to the VLEs either. It has differential terms for different roles that the VLE might play. Currently VLE India charges the following per registration:

- **VLE India Registration per year for VLE**
  - Wallet request Rs. 1000/-
  - Total Payment Rs. 2500/-

- **VLE India Registration per year for District Co-ordinator**
  - Wallet Request Rs. 10000/-
  - Total Payment Rs. 20000/-

- **VLE India Registration per year for Taluka Co-ordinator**
  - Wallet Request Rs. 5000/-
  - Total Payment Rs. 10000/-
Typically each VLE has a wallet amount, which is the total amount worth of which they can avail services. Once they exhaust this amount, they can replenish this and provide services worth the amount they can sell. There is a minimum deposit that the VLEs have to pay up front to become a part of the VLE India network. This amount is later adjusted in the wallet amount.

In order to retain the VLEs in their network, VLE India offers a lot of incentives. Right from awarding the most successful VLE in each of the workshops to giving out prize money to the pioneers in championing the VLE work in their village.

- **Operations**

  VLE India has over 600 VLEs in its network and operations across 7 states in India out of which Maharashtra, Rajasthan, UP, Bihar, Uttarakhand, MP and Haryana are the prominent ones. They are looking at the states of Odisha and Karnataka over the next year. The VLEs are on a commission based on the sales they make. The VLEs make profits of beyond 20 percent based on the products or services they provide.

- **Cost Sharing**

  The VLEs need to provide a small space where they can do the business with a laptop of their own. For the B2C services, there is no inventory carrying cost and the margins are also pretty significant. VLE India charges the initial registration fee, which is standard across wherever they function. Other than that on specific products they charge a nominal 10 percent transaction fee at times.

- **Average Turnover from VLE Sales**

  Each VLE earns anywhere between Rs.3500 to Rs.8000 per month.

- **VLE Training**

  VLE India conducts regular workshops throughout the year and tries to promote the VLE network at various village level meetings. The workshops are local in nature and are accessed by the local partner VLEs and also villagers who want to use this as an opportunity to come on board. In the workshops, the VLEs are trained how to use the computer to provide the basic services that VLE India is offering. In addition to that, companies are invited to come in and explain the product features to the local VLEs, who can then use it as a marketing pitch to customers they serve.
- **Marketing and Promotion**
  
  VLE India does not prepare a marketing pitch for the product. Companies such as Vodafone, Airtel and TataSky who have used their VLE channel have all brought in company specific product material. Most of their sales are through word of mouth publicity that the VLEs do. VLE India also reaches out to villagers through local village meetings and showcases some of the products they retail through small hubs/kiosks where the VLEs operate in.

- **Challenge**
  
  Local villagers need more than one training session to understand some of the basic functions. The additional training workshops add to the cost of sales. VLE India needs support from the companies to conduct some of these workshops more regularly.

**MODEL: Villgro Stores**

- **General Introduction**
  
  Villgro Stores started off as Samruddhi - a project administered by Villgro - a social business incubator. Villgro Innovation Marketing Private Limited, the company’s official name, was registered in 2009. Villgro Stores’ field office is located in Gobi, Erode District. Currently, 10 Villgro Stores are located within 15 km of the office. Each Villgro Store has 3 regular staff and 6 village level entrepreneurs (VLEs). These VLEs obtain products from Villgro Stores and sell them in rural areas that are within 8 km of the store. Villgro Store employees run field-testing and trials, live demonstrations, awareness-raising campaigns, and product promoting village-level meetings. Most of Villgro Stores’ offerings are agricultural, but others fall in the categories of energy (e.g. Biomass cookstoves), water, and personal care (e.g. Affordable reading glasses).

- **Identifying the VLE**
  
  The VLEs recruited by Villgro are the farmers Villgro works with. Since the rapport with the farmer is established during the various projects undertaken by Villgro, there is a level of comfort that is shared between the VLE and the VLE network.

- **Terms of agreement**
  
  Villgro Store VLEs can carry a basket of products to the tune of Rs. 40,000. This basket includes Agri-based products, farm tools and daily use products. These VLEs source products from Villgro Stores and sell them into rural areas that are within 8 km of the store.

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4 Ibid
**Operation**

Villgro stores have a total of 46 VLEs currently. The VLEs are on a commission based on the sales they make. On an average, the VLEs make profits or anywhere between 7-9 percent based on their sales.

**Cost Sharing**

Typically the VLEs share some of the cost risk of the product that they carry. Villgro Store gives the VLE products where the VLE needs to put in half the cost up front and the rest after the sales are done. Villgro store also gives the VLE an option to change products that are not sold with the ones that are getting in maximum revenues.

**Average Turnover from VLE Sales**

The VLEs make anywhere around Rs.3000 to Rs.5000 per month.

**VLE Training**

Villgro Stores conduct a workshop for every VLE who partners them. Essentially the training is focused on explaining the product features and the benefits of the product in the long run. Additionally, Villgro Store gives some of the products to the VLEs to use, so that they can explain it better to the end consumers. The training material was developed mutually in partnership with the local villagers who later on became a part of the VLE network.

**Marketing and Promotion**

Villgro reaches out and engages with farmers at village meetings where they also give demonstration of some of their products. The villagers can then buy the products from the Villgro stores. The stores are local hubs where people can come in and see some of the products that they are buying. This is similar to a rural supermarket. Villgro Store employees use quantitative data highlighting the benefit of products and testimonials from though leaders in the village to promote the product. However, the Villgro Store’s staff or VLEs are not trained to sell clean energy products currently. Villgro Store has expressed interest in working with clean energy companies to increasing the ability of the VLEs to communicate the benefits and features of clean energy products and sell them more effectively.

**MODEL: Sakhi Retail**

**General Introduction**

The parent organization of Sakhi Retail is Mumbai-based Swayam Shikshan Prayog (SSP) – an 18-year old NGO that works in disaster relief and focuses on women’s empowerment programs. Prema Gopalan, SSP’s Executive Director, has founded two social enterprises (Sakhi Social Enterprise Network in 2006 and Sakhi Retail in 2009), a non-profit micro-finance organization (Sakhi Samudaya Kosh), and a community health trust (Sakhi Arogya Samudaya Trust).
- **Identifying the VLE**
  Sakhi retail has an open system where the VLEs can register directly at the Sakhi Office or be referred by someone. Sakhi Retail works with women VLEs who belong to the village where they want to sell their products. Once a basic registration is done, Sakhi Retail does a background check of the VLEs they take on board.

- **Terms of agreement**
  Sakhi Retail has a profit sharing agreement with the company and the local VLEs. They charge a margin of 20 percent on the cost of the product and the profit is shared in the ratio of 40:60 between Sakhi Retail and the VLE. The VLEs contribute Rs 10,000 for equity and assume the responsibility of an entrepreneur in a particular village. A Sakhi earns around Rs 2,000 per month as commission on sales of various products.

- **Structure**
  Sakhi Retail has over 1000 Sakhi’s reaching out to an estimated 4,50,000 consumers. The VLEs are based on a commission. This commission varies for the different products. While the margin on solar lights is less, something small refrigerator such as Godrej Chotu Kool can get them a commission of Rs.150 per sale.

- **Cost Sharing**
  Sakhi Retail’s women entrepreneurs are the part of the product portfolio evaluation committee. This ensures that products that are chosen will get maximum interest from the villagers. Sakhi Retail receives a margin from sales (usually 12-15 % of the sales price).

- **Average Turnover Per Month**
  The Sakhi’s make anywhere between Rs.2000 to 5000.

- **VLE Training**
  The Sakhis have been trained in business techniques in sales and marketing by Sakhi Social Enterprise Network – the training arm of SSP. Sakhi Retail prepares dedicated material for training the Sakhi’s.

- **Marketing and Promotion**
  Other than the material provided by the company, Sakhi’s prefer showcasing some of the product benefits through demonstrations. The VLEs use local market pitch after Sakhi Retail has explained them the benefits of using the products. Sakhi Retail also aids the VLEs with flip-charts and posters which will make their job easier.
MODEL: ITC eChoupal

• General Introduction

ITC established the e-Choupal as a platform to connect with the rural farmers via the internet so they can buy and sell produce and agricultural inputs, as well as access information services such as agricultural advisory and weather forecasts. The programme involves the installation of computers with internet access in rural areas of India to offer farmers up-to-date marketing and agricultural information. The VLE, who is a lead farmer, or “Sanchalak”, acts as an interface between ITC and the local farmers. His or her role is to aggregate produce, demand for agricultural inputs and consumer goods, and he earns a commission for his services from ITC. ITC made capital investments in the initiative and set up the IT infrastructure needed at each eChoupal. ITC also has “Sagar Choupal” acting as the rural agricultural retail hypermarket Sagar Choupals also doubles up at a decentralized ITC collection centre.

• Identifying the VLE

ITC works with VLEs called as SANCHALAKS. The sanchalaks are the opinion leaders in the rural setting. ITC takes time in identifying the opinion leader and then appoints him/her as a sanchalak. Once they have the opinion leader of the village on board, it’s easier to get the rest of the villagers follow suit. ITC undertakes a lot of on the ground research to get a deep understanding of the villages the ITC e-Choupal and Choupal Sagar model is operational in.

• Structure

ITC has the dual structure e-Choupal and Choupal Sagar model. ITC in its current model has chosen to strengthen an existing institution in rural areas—the choupal—which serves as the local hub for gathering and exchange of ideas by word of mouth in rural communities. Factors contributing to the success of e-couple are the partnerships built with academia and grassroots NGOs to create and document pertinent intelligence about agricultural practices that are useful for farming communities. Another success factor was the participatory method in which ITC tried to understand the information needs of rural communities. The products and the services offered through the choupal model are the ones that have a demand in the specific rural community. ITC has 6,500 e-Choupal across 40,000 Villages in 10 states and 25 Choupal Sagars.


Agri based goods and services see the most traction in ITC’s network and this is what has helped ITC sustain the model so well. It was reported that the farmers’ profits increased by 33%, and the cultivation of soybeans increased by an average of 19% in districts with kiosks. ITC did try out promoting the solar lantern in places but discontinued solar lanterns after customer complaints about costs and after sales service. Thus ITC has gone ahead with the more conventional emergency lantern option in a few Choupal Sagar’s.

• Training and Cost Sharing

ITC covers the equipment cost; the sanchalak pays for day-to-day operational costs, such as electricity and Internet charges. These costs vary from Rs 3,000 to Rs 8,000 per year. Training is given to the sanchalak, who also doubles as an ITC salesman. He is paid a commission of .5 percent per ton of processed product. ITC spends an average of Rs 5,000 annually for the support and maintenance of each e-choupal.¹⁰

MODEL: Srei Sahaj

• General Introduction

The most successful implementation partner of the Government Common Service Centers (CSC) program is Srei Sahaj. Srei Sahaj e-Village Limited is a subsidiary of Srei Infrastructure Finance Limited.¹¹ It is a business Integrator in the field of IT infrastructure with a focus on rural India.

Common Service Centres (CSC) offices were set up using the PPP model by the Indian government in 2006 to provide official government services across villages in India. The CSC scheme is intended to provide video, voice and data content and services in areas such as agriculture, health and education, utility services etc. through local kiosks. The local kiosks were operated by VLEs who acted as the CSC operator. The model requires the VLE to make substantial financial investments. In a midterm assessment study of the scheme done by IMRB International, it was reported that the initial investments required for setting up the kiosk serves as a deterrent for entrepreneurs. The report also highlights that there needs to be a standard incentive scheme to promote VLEs through the CSC scheme.¹²

¹⁰ Ibid
• **VLE Selection:**

Srei Sahaj has stringent criteria for selecting the VLE who becomes a part of their network. The VLE aspirants for each state have to send in a detailed form with an INR 50 demand draft towards Srei Sahaj. Srei Sahaj then analyses the applications and selects the VLEs on preset criteria. The Criteria for selecting the VLEs\(^\text{13}\):

- VLE should be a graduate
- Basic Computer knowledge is a must
- Strong community leadership skills.
- Preference given to women.

• **Cost Sharing:**

For setting up the VLE CSC centre, a 120 square feet permanent construction with electricity connection\(^\text{14}\) has to be owned by the VLE. This costs around INR 1, 60,000 on an average. The VLE can avail a loan for the same but the cost has to be borne by the VLE. The form has a section on the amount of loan that is required. In addition to this, the centre should have\(^\text{15}\):

- Painted as per Sahaj norms for uniformity.
- High Speed internet connectivity.
- Hardware should include two laptops, digital camera, printer & multifunctional devices.

• **Structure:**

It has 65 offices across 6 states (Tamil Nadu, Bihar, Uttar Pradesh, Assam, Odisha and West Bengal) and is emerging as one of the largest implementers of ICT-based projects in India. Srei Sahaj uses a network of Village Level Franchisee Partners to bring essential government services and various products to the rural consumers. More than 20,000 CSCs have been established under the Private-Public-Partnership (PPP) arrangement. Each CSC is operated by a VLE. Currently the state wide break-up of VLEs is as follows:

- Tamil Nadu: 1045
- Assam: 2833
- West Bengal: 6797
- Bihar: 5565
- Uttar Pradesh: 8118
- Odisha: 3648

• **VLE Training**

Srei Sahaj conducts extensive training sessions and workshops for the VLEs. The workshops range from e-governance to financial inclusion. The training sessions are conducted by Srei Sahaj in collaboration with partners such as the State Bank of India, NIIT etc.

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\(^\text{14}\) Ibid

\(^\text{15}\) Ibid
MODEL: SKS MFI

• **General Introduction**

Ever since it transformed into a for-profit NBFC in 2005, SKS has raised both equity and debt to broaden its operations. They have been the pioneers of introducing financial instruments into the MFI sector. SKS has always wanted to provide options to the lower income groups in villages to be able to increase their income and have a better standard of living.

• **Identifying the VLE**

SKS Microfinance worked with the VLE model in Odisha to increase clean energy access. Since SKS has been active in Odisha because of its microfinance operations, they used the same base and reached out to the retailers who were best located (had access to more than 3 villages). These retailers were trained to act as VLEs who could sell solar lanterns. SKS also took into consideration the keenness the VLEs showed while taking up the product.

• **Terms of agreement**

SKS reached out to a total of 1500 consumers through 50 VLE retailers roughly. SKS’s role was to extend financial packaging support for the product and the rest of the work around identifying the correct after sales service, training the VLEs and bearing the transport cost to take the product to the VLE retailer was borne by the product company. SKS also provided the warehousing support to stock the products. The initial stock that was sent through was on a credit extended by the company but once the sales started the VLEs needed to repay back the company up front.

The SKS model’s initial work with D. light Design was fairly successful; however the scale up is on hold currently.

MODEL: HUL Shakti Programme

• **General Introduction**

Project Shakti was launched by Hindustan Unilever (HUL) in 2001 to expand its distribution of consumer goods to poor rural areas. This is a VLE model where HUL sells fast moving consumer goods (FMCG) to the rural populations through women VLEs known as “Shakti Ammas.” The project is designed to help these women set up a direct-to-consumer retail business, in which they travel door-to-door selling products such as soap and shampoo to rural households, small businesses and convenience stores. Project Shakti has access in over 100,000 villages across 15 states with over 45,000 “Shakti

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Ammas19.” As per HUL, a “Shakti Amma” has sales in the range of INR 10,000 to INR 15,000 per month and earns a profit of 10 percent on an average per sale.20 Project Shakti has several support partners across different states and a well established training program that trains the “Shakti Ammas” on business pitch and product sales techniques.21 No asset investment is required from the VLE, but she has to fund her own working capital to buy stocks of goods from HUL. To ensure that “Shakti Ammas” have sufficient working capital, HUL has restricted the program to members of partner self-help groups that provide financial support to the VLE.

Table 1: Summary of General Purpose VLE networks

<table>
<thead>
<tr>
<th>Organization</th>
<th>Basix CSC</th>
<th>VLE India</th>
<th>Villgro Store</th>
<th>Srei Sahaj</th>
<th>Sakhi Retail</th>
<th>ITC eChoupal</th>
<th>HUL Shakti</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product</strong></td>
<td>E-Governance and Agri Based</td>
<td>E-Governance and Agri Based</td>
<td>Agri Based and Clean Energy</td>
<td>E-Governance</td>
<td>Daily Needs, Grocery items mostly.</td>
<td>Agri Inputs, Daily Needs</td>
<td>Daily Needs, Cook Stoves</td>
</tr>
<tr>
<td><strong>Defining attribute</strong></td>
<td>Set up by a leading MFI which provides financial loans to VLEs</td>
<td>Services such as ticketing and exam facilitation provided by the VLE</td>
<td>Relationship with local farmers.</td>
<td>The geographical spread and the stringency of the VLE selection process</td>
<td>Women VLEs with excellent local connects.</td>
<td>Set up by one of India’s largest conglomerates and focus on providing useful services to farmers.</td>
<td>Women VLEs selling well known brands.</td>
</tr>
<tr>
<td><strong>VLE Income</strong></td>
<td>Wage + commission</td>
<td>Commission</td>
<td>Commission</td>
<td>Commission</td>
<td>Commission</td>
<td>Commission</td>
<td>Commission</td>
</tr>
<tr>
<td><strong>Financial support provided by the VLE network</strong></td>
<td>Loan and wage</td>
<td>None</td>
<td>Partial working capital for products.</td>
<td>Loan provided/facilitated.</td>
<td>Case to case.</td>
<td>Initial equipment cost and cost of maintenance.</td>
<td>Facilitates working capital.</td>
</tr>
</tbody>
</table>

The above table and the detailed descriptions show that the models for running VLE networks have some similarities but some differences. Almost all the General Purpose VLE networks we interviewed spend resources in identifying the correct VLE within their network. The processes range from very stringent (Sahaj Srei) to more open (Sakhi Retail) but almost everybody uses some form of background checks and community referrals. Training the VLE and incentivizing the VLE to remain within the VLE network is critical to most organizations.

Where VLE networks differ is the investment they need to make in getting the VLE inside their system. Basix provides a loan and some initial salary, ITC invests in the equipment, Srei Sahaj helps facilitate loans. Others avoid making investment in the individual VLE. The fact that growing VLE networks follow a range of models is important – it shows that financial assistance, though important, is not key. What is key is the basket of products and services that the VLE network brings. The expectation of income drives the VLEs themselves and our research shows that the range of income varies from state to state but expectations are often in the range of Rs. 5000 per month. Women VLEs and VLEs in poorer states have lower expectations of Rs. 2000 per month.

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19 Ibid
20 Ibid
CHAPTER 3: CLEAN ENERGY VLE NETWORKS

Since 2008-09, some VLE models have tried to address the issue of providing clean energy access using their network. Amongst the many models that have been tried, Adharam Energy, Villgro Store Model and Project Dharma have clean energy access as a key program area for their respective VLE networks.

MODEL: Adharam Energy

- **General Introduction**
  Adharam Energy Private Limited was promoted by the “Covenant Centre for Development” (CCD) in 2006 as a for profit to be the distributor for (BP) Oorja Stoves.

- **Identifying the VLE**
  VLEs are usually a part of their NGO network from Covenant Centre for Development. Adharam Energy Private Limited was the commercial venture to be the distributor for British Petroleum (BP) Oorja Stoves.

- **Terms of agreement**
  Adharam Energy identifies VLEs with a maximum outreach. They typically pick VLEs with some previous sales experience. Adharam Energy gets a percentage of the sales revenue and the rest goes to the VLE. Adharam works with both full term and short term VLEs.

- **Structure**
  Adharam energy has over 600 VLEs. The VLEs are on a commission based on the sales they make. The VLEs make profits of around 10 percent based on their sales. Typically a full time VLE earns around 5000 a month.

- **Cost Sharing**
  This varies in different states. Adharam would prefer the VLEs to take more risks but since their income flow is not very steady, they do extend them a working capital loan. This has helped them work with VLEs in parts of Tamil Nadu they are operational in. The margins offered by Adharam Energy are good and the pellets that the VLEs sell makes sure that they have a sustained income over a period of time instead of having just a single sale.

- **Average Turnover From Sales**
  Adharam has sold over 50000 cookstoves sold till date. The VLE makes around Rs.5000 per month on an average.
• **VLE Training**

Adharam Energy uses the promotion material given to by the product company is also used in training the VLEs. For training a VLE, they essentially explain the product features and the benefits of the product in the longer run.

• **Marketing and Promotion**

Adharam Energy highlights the benefits of using an energy efficient cook stove. This is crucial for the sales. Other than the material provided by the company, they prefer showcasing some of the benefits such as less smoke, flame control etc through live demonstrations. Adharam Energy also tries and makes sure that the VLEs are using the product they are promoting.

MODEL:TERI Lighting a Billion Lives Model

• **General Introduction**

TERI Lighting a Billion Lives has extensively used VLE networks across the country to increase the usage of clean energy. Lighting a Billion Lives is based on an entrepreneurial model of energy service delivery. These entrepreneurs are VLEs mostly. The solar lamps are disseminated through micro enterprises set-up in un-electrified villages. These micro enterprises are operated and managed by a local entrepreneur trained under the initiative, who rents the solar lamps every evening, for an affordable fee to the rural population. The two models of delivery that TERI uses are:

- Fee for service model: Daily rental model. Capital costs are supported by grant to a large extent.
  - Loan finance model: Providing an option to the operators to take up solar enterprises as their own enterprise by facilitating loans (through financial institutions) and subsidizing partial cost of the enterprise (through TERI and/or the partner organizations including government agencies).

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• **Identifying the VLE**

TERI uses local partners who can be NGOs, Civil Societies, For Profits or even the local government to identify the VLEs.

• **Terms of agreement**

TERI started off with grant funding from MNRE and UN to provide training support to the VLEs. The grant was also used by TERI to set up the VLE service and charging stations for solar lanterns. TERI reaches out to local partners to identify the VLEs. More recently, VLEs have started putting in some equity to set up the charging stations. The cost split between the VLE and TERI is 25:75 currently.

• **Structure**

TERI assesses its impact more in terms of the villages covered. So far, they have reached out to 1793 villages across 22 states of India. The total number of solar lanterns that the TERI VLE network has sold is 79,910 lanterns. They have trained over 5000 VLEs so far.

• **Cost Sharing**

The VLEs make money by charging the solar lanterns retailed by the LaBL model. As of May 2012, the monthly income generated by the VLEs through these streams ranged between Rs. 2100 to 4300. The rents charged ranges between Rs.3 – 10 / solar lantern or day, depending upon the demand and the frequency of renting by a customer. The mobile charging fee ranges between Rs 1 – 5/mobile charging.

• **Average Turnover From VLE Sales**

As indicated above, TERI VLEs make anywhere between Rs.2000 to Rs.5000 per month.

• **VLE Training**

TERI’s strongly focuses on training VLEs and building the business relationships that helps the VLEs work successfully. TERI identifies the product company, and the village market to take the product to, the rural bank to provide loans to the VLE. TERI also creates the training material customized to the local needs. In general, the training material will have information on solar lantern and how it is beneficial. Other than this, the focus is on explaining how to leverage the rural bank partnerships. TERI often modifies the base training material based on the requirement and context of the village.

• **Marketing and Promotion**

The VLE takes efforts in promoting the work they do. TERI works with the partner companies so that they come forward and help the local VLEs with marketing and promotion of the product. TERI also conducts village meetings for the new villages that helps the local consumers understand solar products better.
MODEL: Project Dharma

- **General Introduction**

Project Dharma is a social enterprise, supported by Shell Foundation, that serves the needs of rural households by creating a rural retail network providing customized products and services. These goods are sold to the BoP at an affordable price point. Dharma also aims to provide micro-finance/credit solutions for rural entrepreneurs and consumers. Currently, the company has about 400 village-level entrepreneurs (VLEs) in 15 districts in Maharashtra, 5 districts in Bihar, 3 districts in Uttar Pradesh and is currently launching its operations in Karnataka. The company works with Pratham (India’s largest NGO). Products currently offered include solar lighting, smokeless cookstoves, water purifiers and nutritional drinks, mostly manufactured by large MNCs.

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Adharam Energy</th>
<th>TERI LaBL</th>
<th>Project Dharma</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product</strong></td>
<td>Energy Efficient Cookstoves</td>
<td>Solar Lighting Products</td>
<td>Solar lighting, smokeless cook-stoves, water purifiers and nutritional drinks, mostly manufactured by large MNC</td>
</tr>
<tr>
<td><strong>Defining attribute</strong></td>
<td>Was set up to promote BP Oorja cookstoves. VLEs sell both cookstoves as well pellets; the latter provides a regular income.</td>
<td>VLEs make regular income with Solar lantern rentals.</td>
<td>Multiple products (with focus on clean energy) with support from Shell Foundation.</td>
</tr>
<tr>
<td><strong>VLE Income</strong></td>
<td>Commission</td>
<td>Solar charging rentals.</td>
<td>Commission</td>
</tr>
<tr>
<td><strong>Financial support provided by VLE network</strong></td>
<td>Working capital</td>
<td>The initial cost of setting up the VLE charging station was provided through a grant (full grant replaced by partial grant as the model has progressed). Additional loans facilitated.</td>
<td>Working capital/facilitation of loans</td>
</tr>
</tbody>
</table>

The above table and the associated descriptions indicate that the issue of training is common to all the clean energy VLE networks. All of these networks have to invest in product training as they are selling a new product category in their markets. Here, like in general purpose VLE networks, the difference lies in the financial investment made in the VLE. TERI’s LABL invests most significantly in the VLE and provides a full/significant grant to set up the charging station. When compared to the General Purpose VLEs, this is similar to ITC’s e-Choupal model where ITC invests in the computer equipment of the VLE. It is obviously hard for a grant model to achieve significant numbers in this scheme of things. ITC e-Choupal has a reach to 40,000 villages as compared to TERI’s LABL 1793 villages. Financial investment in the VLE is however not the only way of recruiting VLEs. The appropriate basket of products and services that allows VLEs to earn a regular income appears to be more important. The income expectation of VLEs working in clean energy access networks is exactly the same as those working in general purpose VLE networks: Rs. 5000 is the higher end of income expectation.
CHAPTER 4: PROPRIETARY VLE NETWORK

In addition to the above VLE networks, there are a few clean energy companies that have experimented with the VLE model to promote their product. In the course of our project, we spoke to a few of those proprietary networks to understand how the companies work with the VLE model and specifically address the issues related to marketing and servicing of the products.

Greenlight Planet- Saathi Model

- **Identifying the VLE**

  Greenlight Planet has its own direct to village network of sales agents, known as “Saathis”. The “Saathis” are VLEs who go from house to house selling the lamps. These “Saathis” are identified by the local dealer and distributor network that Greenlight Planet has. The Saathis are typically well-known individuals in their communities who, as locally known and credible individuals, can ideally overcome the barriers of trust that make introducing a new product quite difficult in remote areas.

- **Terms of agreement**

  Currently Greenlight Planet has over 1500 Saathis in India operating out of different states. The Saathis earn commissions on each lantern they sell. Greenlight Planet estimates that the Saathi’s have increased their incomes on average 25-35% and for some, upwards of 40-100%, depending on the number of lamps they sell.

- **Operations**

  Currently GLP has over 800,000 customers across 80 talukas of Odisha and Bihar. Bihar and Odisha work best with the Saathi model because it increases the footprint of the company into regions that are not easy to get through to. Bihar and Odisha also have a pronounced problem with lighting. GLP works with a 3-level distribution scheme

  - State-depots in every Indian state, directly supplied by the company
  - Business owners in main and middle cities provided from the state-depots by regular transport (business owners are on main roads and there is enough commercial activity to provide them with the product at a low cost). These business owners function as stockists.
  - Local entrepreneurs who already go to the nearest city/market on a weekly basis for their own matter and can purchase the lanterns from the business owners.

  The last tier is the VLE or the Saathi network.
THE LAST 50 MILE: USING VLE NETWORKS FOR INCREASING CLEAN ENERGY ACCESS

- **Average Turnover From Sales**
  
  Saathis earn an incremental income of up to Rs. 3,000 per month, which in many cases was about 40 per cent increase in their monthly income.

- **VLE Training**
  
  Saathis receive product education and sales training, giving them the marketing tools to create awareness about the products and build up clientele. Saathis were trained about the product and they offer considerable credibility to local customers. They also provide post-sales service.

- **Marketing And Promotion**
  
  GLP created the marketing material and the tools that the Saathis use to sell our lanterns across India. Posters, demonstrations and word of mouth techniques are commonly deployed by the Saathis to sell the lanterns.

**Nuru Energy**

- **Identifying the VLE**
  
  Nuru provides small portable lights which can be charged using power cycles. Nuru energy markets the product and also locates the VLE in premises that have large footfalls in the village. An example would be a milk chiller and in this example the VLE would be a local milkman/woman) to be their agent. Nuru Energy prefers to have women sales agents, since they seem to have a better connect with the rural markets; the women entrepreneurs nominate a person from amongst them to run the service station. The service station VLE makes profits based on the recharging of solar lanterns. Traditionally to identify some of the VLEs, Nuru Energy also goes in with NGO partners locally such as Indian Grameen Services and PRADAN. NGOs have good relations with federations and co-operative bodies where they find some of the VLEs.

- **Terms of agreement**
  
  Recharge is done on a nominal fee as mobile recharges are done and the federation makes money when recharge is done. Nuru Energy goes to federations and sets up partnerships

  Nuru Energy shares 2 revenue streams with groups.

  - Carbon credits
  - Power Cycle option. Centralized recharging options not lucrative.

- **Operations**
  
  Nuru Energy has around 3 partners and 10 VLEs: 25-33 percent of the sales are through the VLE channel. More sales are coming through the distribution network of partners
than the VLEs at this point. Nuru Energy is expecting to increase their number of VLEs to 150 by next year. The VLEs get commission based on the sales they do every month. Nuru Energy pays NGO partners access fee to train VLEs. Since the NGOs are not used to working in the for profit space, it can be challenging at times. Nuru Energy is now focusing on retailer to carry product using the VLE network as an extension. The retailers or service providers can get commission based on the sales they achieve.

- **Cost Sharing**

The cost sharing differs quite a lot for different regions that the VLE network is being set up in. For example, since the electricity situation has improved a lot in the areas across Odisha where Nuru Energy sets up its units, so they have to provide more incentives for the VLEs to work. In Bihar it has not changed a lot, so VLE network still works.

- **Average Turnover Per Month**

The VLEs on the network make between Rs.500 to Rs.1000 per month. 15 lights a month can give the VLE profits of upto RS.500 a month

- **VLE Training**

Nuru Energy developed a VLE training material recently and used this in a small pilot with Basix. For the VLEs who come on board, they have training sessions and then a test to see how much they have understood about the product. Nuru Energy also gives them lights to use and ask them to use it as consumers. They use this practical knowledge to the consumers. The training material is a market pitch explaining some of the product features. This is more or less FAQs based and is very basic in terms of formatting. The module is more comprehensive for Bihar where are for other parts it will be different and need to be tweaked. Nuru Energy created this training material by using feedback that they received to different villages. Women and end users helped Nuru Energy understand the context better

- **Marketing And Promotion**

Nuru Energy uses a marketing kit. The kit includes made-up of banners, t-shirts and caps, wall painting. However this kit is cost intensive, so now they are looking to set up traditional kiosks. Nuru Energy also provides their sales staff with a foldable kiosk. Nuru has also used local PR in the past: Radio and TV. They invite government officials to launches and that attract the local media.
CHAPTER 5:
EXPERIENCES OF GENERAL PURPOSE VLE NETWORKS WITH CLEAN ENERGY PRODUCTS

General purpose VLE networks have often experimented with selling clean energy products. In particular, Basix and SKS have partnered with Nuru Energy and d.light respectively. Villgro, VLE India and ITC e-Choupal have tried to stock solar products. Clean Energy access companies such as SELCO has also tried to work with some VLE networks in the course of their long history.

Many of these partnerships have not been very successful till date. Apart from the microfinance crisis, there are a number of challenges in retailing a clean energy product through a general VLE network that deals mostly with consumer goods, agricultural products and government services. Servicing of the clean energy product along with marketing and consumer awareness creation are the key challenges as can be seen from the following examples.

- **VLE India: Clean Energy Product Experience**
  VLE India works with a local solar company based out of Maharashtra now. However, there is no marketing and training support to sell the product from the company thus not much demand that has come in from villagers.

- **Villgro Stores: Clean Energy Product Experience**
  Villgro stores have sold Oorja stoves through their VLE network. However, maintenance and servicing becomes an issue, so they have not focused on increasing their clean energy product portfolio.

It is also important to understand from some VLE networks that did not succeed the challenges that are an integral part of the operations. IFMR-RENE is one such network. The biggest challenge that IFMR-RENE faced was that it was mostly a backend support VLE network without much on the field staff who could work closely with the VLEs. The details of IFMR-RENE are highlighted in the box.
IFMR RENE

- **OPERATIONS**
  
  IFMR Renewable Energy Network Enterprise is now a defunct VLE network that has lessons that can help other upcoming VLEs. IFMR RENE had around 10 VLEs at the time of closing. These VLEs could access between 2-3 villages each. They were operational in Tamil Nadu.

- **COST SHARING**
  
  IFMR would charge an initial platform support fee from the enterprise. There was no fee based on the sales initially. However IFMR planned to adopt a fee per sales model had the sales number been high. IFMR piloted this in one district (Thanjavur).

- **CLEAN ENERGY PRODUCT EXPERIENCE**
  
  The RENE Network was used to promote just clean energy products. Envirofit and d.light design did well. The other products being retailed were Sustaintech Stoves.

- **VLE TRAINING**
  
  No VLE training was conducted beyond sharing the products, marketing material and conducting the live demonstration.

- **CHALLENGE**
  
  Since the VLEs were just part time, it was a challenge to retain them in the network. The cost of maintaining a back end platform was also costly and the overall model was not sustainable enough. As an incentive for retaining the VLE, based on the sales he achieved, could go on and become distributors of the product at a later stage. IFMR RENE also shared the products with the VLE, so that they are sellers, as well as customers of the product.

At the same time there are several examples of where the relationships between VLE networks and clean energy access companies are maturing:

- **Sakhi Retail: Clean Energy Product Experience**
  
  Sakhi Retail sells the Oorja stove and biomass pellets, other products sold by the Sakhis include Unilever’s Pureit and Godrej’s ChotuKool, solar lanterns from D.Light, organic fertilizers, cattle feed supplement, and the Market Light SMS information service for farmers. Sakhi Retail’s best selling products are biomass pellets, D.Light 550, and organic fertilizers. The companies provide marketing support to the VLEs. Sakhi Retail has received USAID funding to scale up the clean energy access operations of its VLEs as well as expand the number of VLEs in its network.

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• **d.light partnerships**

  d.light has partnered with Sahaj Srei and Project Dharma. The partnership with Sahaj Srei has been inked recently and, as we have seen earlier, Sahaj Srei has an extensive reach which should also help in increasing d.light’s retail sales.

  The lessons from these successes and failures can be best summarized in a quote from Ashish Sahu COO of SELCO “(clean energy access companies) cannot expect outsource critical activities to VLEs. From SELCO’s standpoint, financing, installation and servicing are critical activities.” SELCO does use “Business Associates” who are incentivized by commission on sales but do not function as stockist (that is they do not have to make working capital investments). We believe that VLE networks can serve as a marketing and distribution chain. Companies need to be however cognizant about the issues that VLEs would face in marketing and sales and work around them.

**Experience of micro grids in using VLE networks for promoting clean energy access**

In addition to product companies, there are micro grid companies that have worked with the VLE channel. The most prominent ones of them are Mera Gao Power and Minda Group. Mera Gao Power used the VLE network for revenue collection and maintenance mainly while the Minda Group looks at the VLE players as a client themselves.

**Operator models not using VLE networks or who moved off the VLE model.**

**Mera Gao Power**

• **General Introduction:**

  Mera Gao Power builds and operates micro lighting utilities in Uttar Pradesh, India serving off-grid customers with lighting and mobile phone charging services. By tailoring its micro grid design to meet the specific needs of poor, off-grid households, MGP has developed the lowest cost micro grid in operation.

• **Operations:**

  As of 2012, MGP has constructed lighting utilities in 103 villages of Reosa Block and Rampur Mathura Block of Sitapur District, Uttar Pradesh serving 2,240 households and approximately 12,000 people with improved lighting and mobile phone charging.

• **VLE Experience:**

  Mera Gao Power initially used VLE channels for collection of revenue and maintenance of systems. For this, they had to train one individual in the village to take up VLE operations. However, the VLEs faced difficulty in collection since the villagers would be known to the individual VLE. Gradually, MGP moved off the model as MGP wanted more control over the network.
Build and Transfer Model are using VLE networks

Minda NextGen Tech

- **General Introduction:**

  Minda NexGenTech Ltd. was incorporated as an entity in 2011. Minda has a Power Generation vertical – that focuses on off grid power plants, micro grids and rural electrification, followed by grid connected power plants and finally, backward integration into cell-to-panel manufacturing.²⁶

- **Operations:**

  Minda has setup a 1.2 Kw Solar Power plant in Village Nagla Dhuli, Dist. Firozabad, UP. In addition to this in the year 2013, they plan to do 100 villages and the year after, 1,500. The future plants will be of different sizes, ranging from 240 W to 100 kW.

- **VLE Experience**

  Minda Group wants to directly work with the VLEs, engaging them as clients. The company’s business model is not to provide power and earn money; rather the company is in the business of selling the system. The power plants and the gridlines will be owned by entrepreneurs. For making this possible, Minda is also focusing on the subsidies that the VLE can avail to purchase any of the power plants.

  As highlighted in the two different examples above, the use of a VLE to increase clean energy access by a service company depends on the overall business model that the company is adopting. In the case of Mera Gao Power, the model requires more hands on management, thus the requirement of full time employees is higher.

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CHAPTER 6:
HOW SHOULD CLEAN ENERGY ACCESS COMPANIES WORK WITH VLE NETWORKS?

In the previous chapter, we looked at several examples of where clean energy access companies and VLE networks have partnered (both where partnerships have worked and where partnerships have not been so successful). We have also distilled a few lessons from those experiences: evaluating the partnership in the context of the business model, the importance of training VLEs and the setting of expectations of what VLEs can do and what they cannot.

The market potential of promoting clean energy products using a VLE network is significant. Currently around 55 percent of rural households are electrified in India, compared with more than 92 percent of urban households. Similarly, more than 85 percent of rural households rely on traditional cooking fuels such as firewood and dung, compared with only 30 percent of urban households. This outlines the incredible potential that VLEs have in increasing clean energy access. However, before this potential is realized companies will need to work carefully to overcome specific challenges. We discuss these strategies in the current chapter.

To help probe this question in more detail, New Ventures organized three workshops in the November-December of 2012 bringing together executives from the clean energy access companies and VLE networks together. The tactics and strategies to solve specific challenges have emerged from these workshops. The details of these workshops is provided in Annex 2 (list of participants) and Annex 3 (workshop agendas)

Strategies in response to challenges for VLEs to promote clean energy products

IDENTIFYING AND CONVINCING THE MORE ENTERPRISING VLES WITHIN A NETWORK

New Ventures conducted workshops across the country that saw the participation of leading VLE networks and clean energy companies. One of the key discussion points in the New Delhi workshop was identifying individual VLE’s within a VLE network who are keen to promote clean energy products. According to Project Dharma and VLE India, only about 25-30 percent VLEs in a network are product sales oriented and they are the ones who will be keen to promote and sell a clean energy product.

- **How can companies work around this?**

  Clean Energy access companies need to work at the VLE Network level to identify areas where they want to focus and specific VLEs that would help them achieve their targets. VLE India has a proposal that allows clean energy (and other consumer durable companies) to work with them at a company level. VLE India offers the services of its company executives and a call center to achieve mutually defined goals. The company is responsible for training the VLEs in jointly organized sessions. VLE India is responsible for retaining and performance managing the VLEs.
UNDERSTANDING THE CLEAN ENERGY PRODUCT TYPE

The diverse kinds of clean energy products available in the market make it challenging for the VLE networks to identify the ones that are best suited for the geographies they operate in. The types of solar systems for household use range from solar lanterns to solar packs, similarly a cookstove can be forced draft or natural draft etc. Networks such as VLE India, Basix and Villgro highlighted this as one of the key challenges.

• How can companies work around this?

The need for training VLEs and making product promotional material available that empowers VLEs is of paramount importance. The marketing promotion techniques' used includes demonstration, customer meetings and use of collateral. However, the importance VLE himself/herself using the products cannot be underscored. In the course of our workshop and research we saw a general lack of awareness of the various types of clean energy products among VLE networks (solar lanterns, solar home systems, various types of cookstoves). In Annexure 1 of this report we have the data around the various solar products produced by the top manufacturers of India. Companies need to translate these technical product specifications into functional benefits in a way that sales agents and their customers understand.

IDENTIFYING THE MARKET FOR CLEAN ENERGY PRODUCT

Understanding income and consumption patterns across rural India is critical for VLE networks working with clean energy products. Most of the general purpose VLE networks struggle at identifying the right market to sell a clean energy product.

• How can companies work around this?

Census data is available on the sources of lighting at a district level. New Ventures proposes to make this data available to the industry at a large in a form that can be easily consumed by the industry. This data can be used with the on the ground experience of VLEs in a given region. This data is also helpful in highlighting the product type that is best suited for a given market.

FINANCIALLY PACKAGING THE CLEAN ENERGY PRODUCT/TRADE FINANCE

Clean energy products are at times priced prohibitively for rural markets. Given the fact that most of rural India still depends on agriculture as a mainstream for revenue generation, the disposable income at any given point of time during the year is low. The same also applies for seasonality of income in rural India. Most of the households have disposable income during harvesting season. This is one of the significant challenges for clean energy companies’ as well.

Individual VLEs often face the challenge of stocking energy products or extending small personal loans to consumers. The availability of trade finance will ease the personal burden of some of these VLEs. In case of the above highlighted example of Minda, trade finance can support the VLEs in setting up the Minda systems and providing power to the end consumers directly.
• **How can companies work around this?**

There are no easy solutions to this problem. Individual banks such as Aryabhatt Grameen bank, Gurgaon Grameen Bank, Prathma Bank and large nationalized banks such as Canara Bank have provided solar loans. This category is now a priority sector in India. There is a strong argument for industry wide action to help develop standard loan products and umbrella lines of credit for making both end user financing as well as trade finance available.

**IDENTIFYING THE AFTER SALES NETWORK FOR THE PRODUCT**

Quite a few of the VLE networks –having worked for a long time with the rural consumers- bring in brand value and trust of the consumers in the geographies they operate in. Such networks want to be sure that the clean energy product that is a part of their VLE portfolio has a well established service network that has a quick service turn back time to ensure the credibility of the brand. This has proven to be a challenge for networks such as Villgro and Basix, where they have not been able to identify clean energy companies with a well established service network.

• **How can companies work around this?**

Companies will need to own the servicing component themselves. They can work in tandem with rural BPOs (for call center), local ITs and NSDC to train technicians and work with organizations like Schneider Electric which has a specific rural electrician training program.

**PRODUCT QUALITY ASSESSMENT**

Assessing the quality of the clean energy product that VLE networks retail is not standardized yet. TERI Lab has in house testing facilities that can be used for standardizing the quality assessment for clean energy products, so that VLE networks can be assured of the quality of the clean energy product that they have on their portfolio.

• **How can companies work around this?**

The VLE networks working in the space face the challenge of losing out on customer trust if the clean energy product they retail is not up to standard. This was highlighted in all the workshops conducted by us. TERI has proposed to help the VLE networks by creating a standard template and testing the clean energy products for the benefit of VLE networks. This template will be based on feedback from clean energy companies and VLE networks that were a part of the study.

The challenges and tactics that we have discussed above can be implemented by more collaboration between clean energy companies and VLE networks. However, challenges on finance, such as financial packaging of the product and trade finance to VLE members needs to be addressed by bringing in more financial institutions such as banks with a rural focus and microfinance institutions into the picture. Creating this collaboration has been the objective of our project and report. In the final chapter, we will learn more about use of information technology to increase the productivity of VLEs within all three types of networks that we have analyzed so far.
CHAPTER 7:
VLE - SOFTWARE SUPPORT PARTNERS

In addition to clean energy companies and VLE networks, a group of service providers that form an equally important part of the ecosystem are VLE software support partners. Most VLE networks have their proprietary software with the typical functions being:

- Small CRM system (Records information on users).
- Inventory Management
- Registration for Government Services

However, the ITC choupal system being a farmer focused network provides specific services such as:

- Information on Agri-produce market rates
- Weather updates
- Agricultural best practices

Beyond the proprietary software’s, there are a few companies working at creating platforms and software’s that can support VLEs in working more effectively. One such software company is Bangalore based Artoo.

Artoo

- General Introduction

Started in 2010, Artoo is a technology support company that creates platforms and solutions for enterprises that have field employees working at the Base of the Pyramid.

- Operations:

Companies working on financial inclusion, healthcare and energy access require intensive fieldwork and accurate data maintenance. Artoo reduces the paperwork by transferring the field data onto a cloud based platform. The initial prototype Artoo Slate was designed for the microfinance industry but can be easily adapted for a VLE network. The system is designed to operate in an online-offline manner, collect any kind of data – transactions, text, images, audio, videos – and be utilized for any field process: customer acquisition, fee collection, marketing, and training. Artoo
conducted its first pilot with Ujjivan (MFI) field agents and we validated that productivity increased by 35%. Their existing customer base includes Grameen Foundation and Brighter India Foundation (www.brighterindia.in), with a projected reach of over 11 million end customers.

- **Cost**

Currently, Artoo uses volume based pricing for large clients (100+ field agents):INR 700 per month per agent (quarterly) and Flat fee for small clients (< 100 field agents):INR 35,000-INR 50,000 per month. Additionally, Artoo has partnered with Dell and Samsung to provide the devices on a pay per use model (INR 1500 per month).
CHAPTER 8:
SUMMARISING AND THE WAY FORWARD

The ideal way of taking VLE networks and clean energy companies’ partnership to the next level is by helping each of the parties understand each other better. This report and the associated workshops is a tool that can help some of the clean energy companies identify VLE networks that they would like to partner with, given the geography they operate in, the size and scale of operation. Similarly, the VLE networks can look at some of the product types highlighted in the Annex section and identify the ones that are best suited for their region of operation and VLE skill set.

Citi Foundation’s express goal in supporting this project is to help accelerate these relationships. New Ventures India will track how these relationships between VLE networks and clean energy access companies emerge in the next few months and track back lessons from these partnerships.

We are also equally cognizant that the issue of clean energy access in India is a serious issue and a daunting challenge. We believe that additional work that emerges from this project is on the following lines:

- What are the other channels of distribution that clean energy access companies can use?
- What are the lessons of marketing and distribution that we can learn from large companies with rural brands?
- How can national level end user financing and trade finance products be used to promote clean energy access in India?
## ANNEX 1: CLEAN ENERGY PRODUCT TYPES AND SPECIFICATIONS

### SOLAR LANTERNS

<table>
<thead>
<tr>
<th>Company</th>
<th>Product Categories</th>
<th>Product Type</th>
<th>Specification</th>
<th>Mobile Charging</th>
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<tbody>
<tr>
<td>d.light Design</td>
<td>S250</td>
<td>Solar Lantern</td>
<td>1.3 W poly crystalline solar panel&lt;br&gt;NiMH Battery of 6 V, 1.3 Ah4 brightness settings with 50,000-hours of LED life</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>S10</td>
<td>Solar Lantern</td>
<td>0.3 watt poly crystalline solar panel&lt;br&gt;Rechargeable Battery: NiMH 3.6 V 350 mAH</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>S1</td>
<td>Solar Lantern</td>
<td>1 Light Intensity/ 4 Hours of Lighting @ Full Charge</td>
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<tr>
<td>Greenlight Planet</td>
<td>Sun King Solo</td>
<td>Solar Lantern</td>
<td>130 Lumens Per Watt, 5 Years Battery Life, 700 mW Solar Panel ,Battery Capacity: 1000 mAh</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Sun King Pro</td>
<td>Solar Lantern</td>
<td>120 Lumens Per Watt, 5 years Battery Life, 7.8 V Polycrystalline 2.5 W Solar Module, Battery Capacity : 1450 mAh</td>
<td>Yes</td>
</tr>
<tr>
<td>Solid Solar</td>
<td>SS 1009</td>
<td>Solar Lantern</td>
<td>2 Watt system, 1 LED, Battery 6V-4.5 Ah, 6V-3Wp solar panel</td>
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</tr>
<tr>
<td></td>
<td>SS-1014</td>
<td>Solar Lantern</td>
<td>3 Watt system, 12 LEDs, Battery 6V-4.5 Ah, 6V-3Wp solar panel</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>SS-1020</td>
<td>Solar Lantern</td>
<td>7 Watt system, CFL, Battery 12V-7 Ah, 12V-10Wp solar panel</td>
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<tr>
<td></td>
<td>SS-1021</td>
<td>Solar Lantern</td>
<td>3 Watt system, 3 LEDs, Battery 6V-4.5 Ah, 6V-3Wp solar panel</td>
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<tr>
<td>Nuru Energy</td>
<td>NL 1</td>
<td>Solar Lantern</td>
<td>11 lumens LED, Battery: Rechargeable NiMH (3 x AAA in package) , 3.6 volts DC , 740 milliamp hours</td>
<td>No</td>
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<tr>
<td>Power Cycle</td>
<td>Solar Charging Unit</td>
<td></td>
<td>Power output of 50 W/ Can charge 6 Nuru Lights simultaneously</td>
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</table>
## SOLAR HOME SYSTEMS

<table>
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<tr>
<th>Company</th>
<th>Product Categories</th>
<th>Product Type</th>
<th>Specification</th>
<th>Mobile Charging</th>
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<tbody>
<tr>
<td>Solid Solar</td>
<td>SS-5001</td>
<td>Solar Home Pack</td>
<td>One 9 W CFL, 50 W 12 V Solar Panel, 60 Ah Battery</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>SS-5002</td>
<td>Solar Home Pack</td>
<td>3 LED of 3 W each, 10 W 12 V Solar Panel, 12 V 7 Ah SMF</td>
<td>Yes</td>
</tr>
<tr>
<td>Duron Energy</td>
<td>Breeze</td>
<td>Solar Home Pack</td>
<td>2 No 1.5 W LEDs, 6 W Fan, 15-watt solar panel, Energy capacity 48 WH</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Lite</td>
<td>Solar Home Pack</td>
<td>3 No 1.5 W LEDs, 15-watt solar panel, Energy capacity 34 WH</td>
<td>Yes</td>
</tr>
<tr>
<td>Orb Energy</td>
<td>Solelectric 15</td>
<td>Solar Home Pack</td>
<td>2 Lights 1.5 W each, 5 W solar panel, 12.8 V 3 Ah battery</td>
<td>Yes</td>
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<tr>
<td></td>
<td>Solelectric 30</td>
<td>Solar Home Pack</td>
<td>4 Lights 1.5 W each, 5 W solar panel, 12.8 V 3 Ah battery</td>
<td>Yes</td>
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<tr>
<td>SELCO</td>
<td>Compact 1 Light</td>
<td>Solar Home Pack</td>
<td>Solar Home Pack with 1 Light @ 10 W and 10 Ah Battery</td>
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<tr>
<td></td>
<td>Compact 2 Light</td>
<td>Solar Home Pack</td>
<td>Solar Home Pack with 2 Light @ 10 W solar panel and 10 Ah Battery</td>
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</tr>
<tr>
<td></td>
<td>Compact 4 Light</td>
<td>Solar Home Pack</td>
<td>Solar Home Pack with 1 Light @ 18 W solar panel and 20 Ah Battery</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Compact 2 Combo</td>
<td>Solar Home Pack</td>
<td>Solar Home Pack with 2 Light @ 12 W solar panel and 15 Ah Battery</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Premium 4 Light</td>
<td>Solar Home Pack</td>
<td>Solar Home Pack with 4 Light @ 40 W solar panel and 60 Ah Battery</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Premium 6 Light</td>
<td>Solar Home Pack</td>
<td>Solar Home Pack with 6 Light @ 60 W solar panel and 80 Ah Battery</td>
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</tr>
<tr>
<td></td>
<td>Premium Fan Combo</td>
<td>Solar Home Pack</td>
<td>Solar Home Pack with 3 Light and 1 Fan @ 50 W and 80 Ah Battery</td>
<td>Yes</td>
</tr>
</tbody>
</table>
## ANNEX 2: LIST OF WORKSHOP PARTICIPANTS

### BANGALORE

<table>
<thead>
<tr>
<th>VLE Networks</th>
<th>Clean Energy Access Companies</th>
<th>VLE Software Support Companies</th>
<th>Funders and Donors</th>
<th>Experts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girish Lad (VLE India)</td>
<td>Ashis Sahu (SELCO)</td>
<td>Kavita Nemmaiah (Artoo)</td>
<td>Abhay Garg (Acumen Fund)</td>
<td>Anjula Gurtoo (IISc)</td>
</tr>
<tr>
<td>Ashutosh Sinha (Villgro)</td>
<td>Venkatesh K (Duron Energy)</td>
<td>Ravi Chivukula (Adiro Systems)</td>
<td>Nagaraja Prakasam (Acumen Fund)</td>
<td>Ashok Das (TIE Chair- Bangalore)</td>
</tr>
<tr>
<td>Suresh Shanmugham (Villgro)</td>
<td>NP Ramesh (Orb Energy)</td>
<td>Siva Devireddy (GoCoop)</td>
<td>Dattakiran Jaggu (UKFCO)</td>
<td>Platosen Samarsam (ASSIST Asia)</td>
</tr>
<tr>
<td>Ajaita Shah (Frontier Markets)</td>
<td>KP Ravi (Envirofit)</td>
<td></td>
<td>Muralidharan T (Hivos India)</td>
<td></td>
</tr>
<tr>
<td>Avinash Krishnamurthy (s3idf)</td>
<td>Michael McHarg (Simpa Networks)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upamanyu Patil (Sakhi Retail)</td>
<td>Loknath Chattar (Simpa Networks)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mukundan Narasimhan (Tata Power Solar)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ravi Annavajjhala (Energram)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Debasis Bhattacharya</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**VLE Networks**
- girish@magnumopus.in
- ashutosh@villgro.org
- ssuresh@villgro.org
- ajaita.shah@frontiermkts.com
- avinash@s3idf.org
- upmanyupatil@sakhiretail.com

**Clean Energy Access Companies**
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- venkatesh@duronenergy.com
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- lokanath@simpanetworks.com
- mux@tatapowersolar.com
- rannavajjhala@gmail.com
- debasis_bh@hotmail.com

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- cravi@adirosys.com
- siva.devireddy@gocoop.com

**Funders and Donors:**
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- nagapr@yahoo.com
- murali@hivos-india.org

**Experts:**
- anjula@mgmt.iisc.ernet.in
- das@sunmoksha.com
- platosen@assistasia.org
### VLE Networks

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaurav Mehta - Project Dharma</td>
<td><a href="mailto:gmehta@gajam.in">gmehta@gajam.in</a></td>
</tr>
<tr>
<td>S Gosain - Project Dharma</td>
<td><a href="mailto:sgosain@dharma.net.in">sgosain@dharma.net.in</a></td>
</tr>
<tr>
<td>Vivek Jha - TERI</td>
<td><a href="mailto:vivek.jha@teri.res.in">vivek.jha@teri.res.in</a></td>
</tr>
<tr>
<td>Ajai Kumar - Basix</td>
<td><a href="mailto:ajaykumar.g@basixindia.com">ajaykumar.g@basixindia.com</a></td>
</tr>
<tr>
<td>Amin Shaikh - Maha VLE</td>
<td><a href="mailto:amin.shaikh@magnnumopus.in">amin.shaikh@magnnumopus.in</a></td>
</tr>
<tr>
<td>Puneet - Urja Unlimited</td>
<td><a href="mailto:puneet.ahuja@urjaunlimited.in">puneet.ahuja@urjaunlimited.in</a></td>
</tr>
<tr>
<td>Sharad Tiwari - Development Alternatives</td>
<td><a href="mailto:stiwari@devalt.org">stiwari@devalt.org</a></td>
</tr>
<tr>
<td>Shrashtant Patara - DA</td>
<td><a href="mailto:spatara@devalt.org">spatara@devalt.org</a></td>
</tr>
</tbody>
</table>

### Clean Energy Access Companies

<table>
<thead>
<tr>
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<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gautam Mohanka (Solid Solar)</td>
<td><a href="mailto:Gautam@gautampolymers.com">Gautam@gautampolymers.com</a></td>
</tr>
<tr>
<td>Shubhra Mohanka (Solid Solar)</td>
<td><a href="mailto:shubhra@gautampolymers.com">shubhra@gautampolymers.com</a></td>
</tr>
<tr>
<td>Praveen Bhasin (Minda)</td>
<td><a href="mailto:pbhasin@mindagroup.com">pbhasin@mindagroup.com</a></td>
</tr>
<tr>
<td>Kartik Wahi (Claro Energy)</td>
<td><a href="mailto:kartik@claroventures.com">kartik@claroventures.com</a></td>
</tr>
<tr>
<td>Nikhil Jaisinghani (Mera Gao Power)</td>
<td><a href="mailto:njaisinghani@meragaopower.com">njaisinghani@meragaopower.com</a></td>
</tr>
<tr>
<td>Shyam Patra (Nature Tech Infra)</td>
<td><a href="mailto:s.patra@naturetechinfra.com">s.patra@naturetechinfra.com</a></td>
</tr>
<tr>
<td>Gaurav Malik (Nuru Energy)</td>
<td><a href="mailto:gmalik@nuruenergy.com">gmalik@nuruenergy.com</a></td>
</tr>
<tr>
<td>Sacchit Naik (Grameen Infra)</td>
<td><a href="mailto:sacchit.naik@grameeninfra.com">sacchit.naik@grameeninfra.com</a></td>
</tr>
<tr>
<td>Umang Maheshwari (Grameen Infra)</td>
<td><a href="mailto:umang.m@grameeninfra.com">umang.m@grameeninfra.com</a></td>
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### Funders and Donors:

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<th>Email</th>
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<tr>
<td>Hari Natrajan (GIZ)</td>
<td><a href="mailto:hnatraj13@gmail.com">hnatraj13@gmail.com</a></td>
</tr>
<tr>
<td>Santosh Singh (GIZ)</td>
<td><a href="mailto:santosh.singh1@giz.de">santosh.singh1@giz.de</a></td>
</tr>
<tr>
<td>Anuradha Bhavnani (Shell)</td>
<td><a href="mailto:anuradha.bhavnani@shell.com">anuradha.bhavnani@shell.com</a></td>
</tr>
<tr>
<td>Sanjay Khazanchi - Rockefeller</td>
<td><a href="mailto:khazanchi.sanjay@gmail.com">khazanchi.sanjay@gmail.com</a></td>
</tr>
<tr>
<td>Shiva Shanker (Grassroots Business Fund)</td>
<td><a href="mailto:sshanker@gbfund.org">sshanker@gbfund.org</a></td>
</tr>
<tr>
<td>Chris Neidl (Arc Finance)</td>
<td><a href="mailto:chris@arcfinance.org">chris@arcfinance.org</a></td>
</tr>
<tr>
<td>Ryan Spong (Main Street Advisors)</td>
<td><a href="mailto:ryan.spong@mainstreetadvisors.ca">ryan.spong@mainstreetadvisors.ca</a></td>
</tr>
<tr>
<td>Richa Goyal (IFC)</td>
<td><a href="mailto:rgoyal1@ifc.org">rgoyal1@ifc.org</a></td>
</tr>
<tr>
<td>Anjali Garg (IFC)</td>
<td><a href="mailto:Agarg1@ifc.org">Agarg1@ifc.org</a></td>
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### Partners

<table>
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<tbody>
<tr>
<td>T.S. Panwar (WWF)</td>
<td><a href="mailto:tspanwar@wwfindia.net">tspanwar@wwfindia.net</a></td>
</tr>
<tr>
<td>Kadambari Yadav (WWF)</td>
<td><a href="mailto:kyadav@wwfindia.net">kyadav@wwfindia.net</a></td>
</tr>
<tr>
<td>Karuna Sharma</td>
<td><a href="mailto:karuna.sharma.in@gmail.com">karuna.sharma.in@gmail.com</a></td>
</tr>
<tr>
<td>Alieda Baig</td>
<td><a href="mailto:alieda.b@gmail.com">alieda.b@gmail.com</a></td>
</tr>
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### MUMBAI

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Mayank Sekhsaria (Greenlight Planet)</td>
</tr>
<tr>
<td>Aravind Kumar (Greenlight Planet)</td>
</tr>
<tr>
<td>Ankit Mathur (Grameen Infra)</td>
</tr>
<tr>
<td>Francesca Jones (Grameen Infra)</td>
</tr>
<tr>
<td>Deepak Punwani (Nuru Light)</td>
</tr>
<tr>
<td>Yogesh Raut (VLE India)</td>
</tr>
<tr>
<td>Aniruddha Rahalkar (VLE India)</td>
</tr>
<tr>
<td>Pradeep Rathi (Earthen Life)</td>
</tr>
<tr>
<td>Nilima Achwal (Villgro)</td>
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<tr>
<td>Maneesha Chadha (Citi Foundation)</td>
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<td>Shireen Havewala (RBS Foundation)</td>
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<tr>
<td>Chris Neidl (Arc Finance)</td>
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<td>Tanvi Shah (Arc Finance)</td>
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<td>Nilanjan Chaudhary (FWWB)</td>
</tr>
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<td>Snehashis Sarkar (HSBC)</td>
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<table>
<thead>
<tr>
<th>Organisers:</th>
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</thead>
<tbody>
<tr>
<td>Sanjoy Sanyal (New Ventures)</td>
</tr>
<tr>
<td>Sreyamsha Bairiganjan (New Ventures)</td>
</tr>
<tr>
<td>Shailesh Shreedharan (WRI-IRT)</td>
</tr>
<tr>
<td>Pamli Deka (New Ventures)</td>
</tr>
<tr>
<td>Richa Gaur (New Ventures)</td>
</tr>
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## ANNEX 3: CONTACT DETAILS

### VLE Networks

<table>
<thead>
<tr>
<th>Name</th>
<th>Details</th>
</tr>
</thead>
</table>
| Villgro    | Villgro Innovations Foundation  
3rd Floor, IIT Madras Research Park, Kanagam Road, Taramani,  
(Behind Tidel Park, on Old Mahabalipuram Road), Chennai - 600113.  
Phone: 91-44- 66630400 |
| VLE India  | VLE India, Magnum Opus IT Consulting Pvt. Ltd.  
52, CINEMAX , 1st Flr, Ghod Bunder Road, Opp. to Kapur Bawadi Bus Stand, Thane (w). |
| Frontier Markets | Delhi Corp Office: Regus, Level 2, Jasola Dist Center, Mathura Road, New Delhi 110025  
Jaipur Head Office: D-52 City Vijay Point, Ahinsa Circle, C-Scheme, Jaipur, Rajasthan 302015 |
| Sakhi Retail | Sakhi Retail Pvt.Ltd  
Ground flr, Taluka Shikshaak Society Patsanstha building,  
Samta Colony, Samta Nagar, Osmanabad-413 501 (India)  
Ph:02472 226309 Cell: 9422557520  
Email: info@sakhiretail.com, sakhiretail@gmail.com |
| S3idf      | Small Scale Sustainable Infrastructure Development Fund  
No. 700, Ground Floor  
15th Cross, 24th Main  
J P Nagar 2nd Phase  
Bangalore – 560078, India  
PHONE:+91 (0)80-65902558 or +91 (0)80-26594880 |
| Project Dharma | Project Dharma, GAJAM India Private Ltd.  
2nd Floor, R9Anehru Enclave, Nehru Place, New Delhi, 110019.  
Tel: +91 11 4101 8858  
Email: admin@dharma.net.in |
| Basix India | BASIX  
D 9, First Floor,  
Greater Kailash Enclave – I, New Delhi 110 0 48.  
Ph: 011 4173 0252 , 011 4173 0454 |
<table>
<thead>
<tr>
<th>Clean Energy Access Companies</th>
</tr>
</thead>
</table>
| Srei Sahaj | Sahaj e-Village Limited  
Mirania Garden, Plot No # 43  
10/B, Topsia Road (East)  
Kolkata - 700046  
Phone: +91-33-6602 3282 / 3051  
Fax: +91-33-6602 3094  
e-mail : enquiries@sahaj.co.in |
| TERI LaBL | Darbari Seth Block, IHC Complex, Lodhi Road,  
New Delhi - 110 003,  
Tel. (+91 11) 2468 2100 and 41504900  
Fax (+91 11) 2468 2144 and 2468 2145  
mailbox@teri.res.in |
| ITC Choupal | ITC LIMITED,  
37 J.L.Nehru Road,  
Kolkata - 700071,  
West Bengal, India  
Ph: +91-33-22889371  
E-mail - webmaster@itc.in |
| HUL Project Shakti | Hindustan Unilever Limited,  
Unilever House,  
B. D. Sawant Marg,  
Chakala, Andheri (E),  
Mumbai - 400 099.  
Tel : +91-22-39830000 |
| Adharam Energy | Address: 18-C/11 Kennet Cross Road, MADURAI 628016,  
TAMIL NADU  
Tel: 91 4522602790 |
| d.light Design | India Office, CL House, T-95  
Fourth Floor, Gautam Nagar  
New Delhi, 110049, India  
Tel: +91 (0)11 4315 6700 |
| Greenlight Planet | Greenlight Planet India Pvt. Ltd.  
Mathuradas Mill Compound  
NM Joshi Marg, Lower Parel  
Mumbai 400013 India  
Tel: +91 22 49 111 555 |
<table>
<thead>
<tr>
<th>Company</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid Solar</td>
<td>E-245, Grater Kailash, Part-II, New Delhi -110 048 Solar Power Plant : +91 9310141990 / +91 9310141982 <a href="mailto:gogreen@gautampolymers.com">gogreen@gautampolymers.com</a></td>
</tr>
<tr>
<td>Duron Energy</td>
<td>3rd floor, No. 50, Zatakia Center Above Reliance Footprint 100 ft Road, Indiranagar Bangalore, Karnataka – 560 038 India, Telephone: +91 80 4347 9393</td>
</tr>
<tr>
<td>Orb Energy</td>
<td>No. 12, Srigandhada Kavalu, Sunkadakatte, Magadi Road, Bengaluru - 560 091, Karnataka, India</td>
</tr>
<tr>
<td>SELCO</td>
<td>SELCO Solar Light (P) Ltd. #742, 15th Cross, 6th Phase, J P Nagar Bangalore – 560078, India. Tel: +91-80-266-545-09</td>
</tr>
<tr>
<td>Nuru Energy</td>
<td>Nuru Energy Pvt. Ltd (India) Email: <a href="mailto:India@nuruenergy.com">India@nuruenergy.com</a></td>
</tr>
<tr>
<td>Envirofit</td>
<td>Hemant Shree Apartment, Survey No. 47/B, Flat No. 202, Off Paud Road, Near Paranjape Gloria, Bavdhan Khurd, Pune - 411021 Telephone: +91-020-71800200 Fax: +91-020-71800211</td>
</tr>
<tr>
<td>First Energy Oorja</td>
<td>First Energy Pvt Ltd Address: Office No. B-101 to B-105, First Floor, B-Wing, Signet Corner, S.No-134, Baner, Pune Tel: +91-20-67210500 / +91-860500602</td>
</tr>
<tr>
<td>Greenway Grameen Infra</td>
<td>Greenway Grameen Infra Pvt. Ltd 301, Chawla Complex Sector 15, CBD Belapur Navi Mumbai 400614 Tel: +91 2241239169, +91 09833319269</td>
</tr>
</tbody>
</table>
ANNEX 4: WORKSHOP AGENDA’S

Delhi

**Date:** November 27, 2012 / Time: 2 PM to 5 PM  
**Venue:** WWF India, Secretariat, 172 B Lodhi Estate, New Delhi-110003

2:00 PM: Opening Remark by Citi Foundation  
2:05 PM: Significance of the Project - Sanjoy Sanyal (New Ventures)  
2:10 PM: Climate Solver Partnership - Mr. T.S. Panwar (WWF India)  
2:15 PM: Findings of the Project: Sreyamsa Bairiganjan (New Ventures)  
2:25 PM: Question and Answer Session on the Findings

**Clean Energy Company Session**

2:30 PM: Solid Solar (Gautam Mohanka/Subhra Mohanka)  
2:40 PM: D.light Design (TBD)  
2:50 PM: Nuru Energy (Gaurav Malik)  
3:00 PM: Claro Energy (Kartik Wahi)  
3:10 PM: Mera Gao Power (Nikhil Jaisinghani)  
3:20 PM: Naturetech Infra (Shyam Patra)  
3:30 PM: Minda Group (TBD)  
3:40 PM: Tea Break

**VLE Network Session**

3:55 PM: Basix India (Ajai Giri)  
4:05 PM: Project Dharma (Gaurav Mehta)  
4:15 PM: Urja Unlimited (Puneet Ahuja)  
4:25 PM: VLE India (Amin Shaikh)  
4:35 PM: TERI LaBL (TBD)  
4:45 PM: Open discussion on Clean Energy Company and VLE Networks  
5:00 PM: End
The Last 50 Mile: Using VLE Networks for Increasing Clean Energy Access

Mumbai

Date: December 05, 2012 / Time: 2 PM to 5 PM
Venue: World Resources Institute - India, Godrej and Boyce Premises Gaswork Lane, Lalbaug Parel Mumbai 400012 India, Tel: +91 22 24713565

2:00 PM: Opening Remark by Citi Foundation
2:15 PM: Significance of the Project - Sanjoy Sanyal (New Ventures)
2:30 PM: Findings of the Project: Sreyamsa Bairiganjan (New Ventures)
2:50 PM: Question and Answer Session on the Findings

Clean Energy Company Session

3:00 PM: Greenlight Planet (Mayank Sekhsaria)
3:15 PM: Nuru Light (Deepak Punwani)
3:30 PM: Environet (KP Ravi)
3:45 PM: Grameen Infra (Ankit Mathur/ Francesca Jones)
4:00 PM: Tea Break

VLE Network Session

4:15 PM: Sakhi Retail (Prema Gopalan)
4:30 PM: VLE India (Amin Shaikh/ Girish Lad)
4:45 PM: Open discussion on Clean Energy Company and VLE Networks
5:00 PM: End
Bangalore

Venue: Indian Institute of Science, Bangalore
Date: December 20, 2012 / Time: 2 PM to 5:15 PM

2:00 PM: Welcome Note: Professor Anjula Gurtoo (Indian Institute of Science)
2:05 PM: Opening Remark by Citi Foundation- Maneesha Chadha
2:10 PM: Significance of the Project - Sanjoy Sanyal (New Ventures)
2:20 PM: Findings of the Project: Sreyamsa Bairiganjan (New Ventures)
2:30 PM: Question and Answer Session on the Findings

Clean Energy Company Session

2:35 PM: SELCO (Ashis Sahu)
2:45 PM: Duron Energy (Venkatesh K)
2:55 PM: Orb Energy (NP Ramesh)
3:05 PM: Envirofit (KP Ravi)
3:15 PM: Simpa Networks (Michael McHarg)
3:25 PM: Tata Power Solar (Mukundan “Mux” Narasimhan)

VLE Training Support Session

3:35 PM: Schnieder Group (Venkatesh G)

VLE Network Session

3:45 PM: VLE India (Girish Lad)
3:55 PM: Villgro (Ashutosh Sinha)
4:05 PM: Frontier Markets (Ajaita Shah)
4:15 PM: S3idf (Avinash Krishnamurthy)
4:25 PM: Sakhi Retail (Upamanyu Patil)

VLE Software Support Session

4:35 PM: Artoo (Kavita Nemmaiah)
4:45 PM: Adiro Systems (Ravi Chivukula)
4:55 PM: GoCoop (Nand Sherman)
5:05 PM: Closing Remarks
5:10 PM: End
SANJOY SANYAL

Sanjoy has over 20 years of experience in finance and entrepreneurship, with a particular focus on the education and green infrastructure. He is concurrently the Director of New Ventures India. Under his leadership, New Ventures has developed a strong network of institutional investors and also been able to help early stage green entrepreneurs raise US$ 10 million in funding. Previously, Sanjoy was part of the management team at SumTotal Systems, a global leader in Talent Management software, where he managed services delivery out of India. As an entrepreneur, he has co-founded and run Aesthetic Technologies, which had major Indian and international firms as its clients and received venture capital funding from Indian investors. In addition, Sanjoy has worked at ITC Classic Finance Ltd. and ICICI Ltd., where he evaluated credit risk and managed debt and equity syndication for project financing. He also provides mentoring to early stage entrepreneurs in his capacity as a Charter Member of TiE. Sanjoy has a Post Graduate Diploma in Management from the Indian Institute of Management, Calcutta and a Bachelor of Technology degree from the Indian Institute of Technology, Kharagpur.

SREYAMSAA BAIRIGANJAN

Sreyamsa has 6 years of experience in social and clean tech enterprise engagement with a special focus on BoP markets. He is currently responsible for environmental enterprise evaluation for the New Ventures India program. Sreyamsa has expertise in analyzing and evaluating social and environmental enterprises for investment. He has authored reports focused on clean energy for BoP markets such as “Power to the People: Investing in Clean Energy for the Base of the Pyramid,” “The Base of Pyramid Distribution Challenge,” and “Bringing Clean Energy to Rural India.” His work highlights the investment and operational needs across clean tech products and services for the BoP markets.

Sreyamsa has been a panelist at leading world forums such as the G20 – Inclusive Business Workshop, Berlin, Rio +20- Corporate Sustainability Forum, Rio de Janerio, and the International Business Forum, Pretoria. He has also presented his work across universities such as John Hopkins, NYU, Duke and University of North Carolina in USA. Previously, he worked as a senior researcher for IFMR- Rural Market Insights. He also worked for the Multi Commodity Exchange of India where he focused on developing trading models for the exchange of certified emission reductions (CERs). Sreyamsa did his MBA from the Indian Institute of Forest Management, Bhopal and has an Advanced Investment Manager Degree from the ANDE Program of Aspen Institute, Washington D.C.