SELCO Foundation

2013-14 Annual Report

Purpose

SELCO Foundation was officially registered in October 2010 with the mission to:

1. Systematically identify diverse needs of underserved communities, and understand and define the role of sustainability and energy in these communities.

2. Create and support innovative and sustainable solutions that positively impact well-being, education and livelihoods and work towards the alleviation of poverty

3. Foster ecosystem development in the social sector through holistic thought processes in technology, finance, entrepreneurship and policy for the benefit of the underserved.

Vision

SELCO Foundation envisions a socially sustainable society: we seek to create avenues for asset building, enhancement in quality of life and wealth creation that will uplift deprived sections of society through sustainable energy applications.

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Sewing Centre (Urban),

Agri machine being utilized (Rural),

An ecosystem approach to sustainable development across underserved communities.

Digital Education (Education),

Integrated Energy Centre (Urban)

Open Letter

Greetings from the SELCO Foundation. We are pleased to share with you our 2013-14 annual report.

This year's report has been structured to comprehensively convey our values and priorities across our organization, context of how we measure and design for impact and so on. —as part of a greater process for transparency, and accountability that also includes our website and internal documentation.

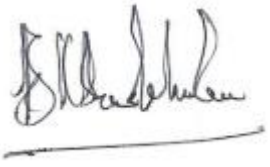
We aim to provide much more context of how we understand and design for impact. Because our very existence is to develop solutions and innovations for the benefit of the underserved, we seek to make impact measurement a priority taking note of the fact impact takes place through outcomes, processes and contexts that can in turn be scaled, replicated and maintained sustainably.

As in previous reports, we provide a snapshot of our outcome metrics, as well as more specific information on our work, some of the most important projects of 2013-14 across our teams, and our financial statements.

SELCO Foundation is a platform for innovation and service; to look at energy access, sustainability and poverty alleviation, and address these issues through context-specific interventions that have direct impact on underserved and vulnerable communities and across the ecosystem for energy services. It is important to both emphasize the collaborative nature across teams and projects, and the specific structure focused on creating significant outcomes across local community contexts, focus issues and ecosystem development.

2013-2014 year saw the maturity of SELCO Rural Lab and Urban Lab. Both the labs have made a significant impact in the geographies they are working in. The foundation for creating the Livelihoods and Tribal labs will be the focus of year 2014-2015. The Policy team has been representing various small and medium size energy entrepreneurs and their issues to the policy makers. The technology team has worked on taking various technologies to the field and developing models for rural and urban uses . In 2014-2015, we hope to continue building our teams, and to develop more sustainable processes for the development of the local communities. We are eager for partners and entrepreneurs to utilize our learning and to collaborate with us.

On behalf of the families and underserved communities we work with, and our staff, thank you for your support.

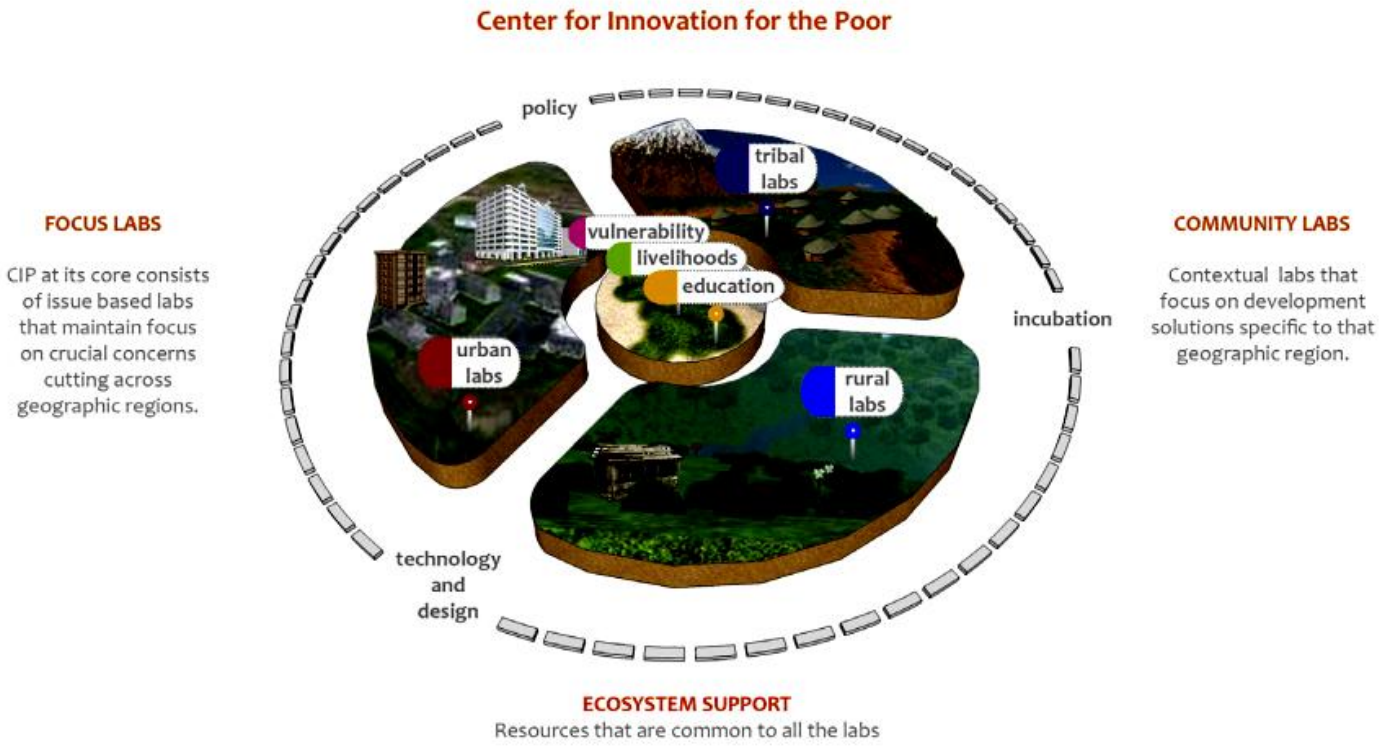


Mr. B.R. Prabhakara –Managing Trustee

Our Model

SELCO Foundation uses a holistic innovation approach that comprises research and development Labs working on sustainable solutions for under-served communities to tackle issues of energy access, poverty alleviation and climate change. Centre for Innovation for the Poor (CIP) is a think tank that anchors these different Labs and ensures cross over learning across Labs and to other similar contexts external to Labs.

Context-driven solutions include socio-cultural, financial and environmental aspects, developed with a focus on local empowerment, replication and ethical scaling. Thought processes, learning and methodologies that drive innovation are documented, cross-referenced for projects and shared across labs. Holistic innovation is the key to solving developmental issues. We believe this can be achieved by identifying and bridging missing links. Initiating and sustaining a solution can be considered as bridging the ecosystem:



Under-served communities represent a wide spectrum of impoverished or underprivileged segments of the world's population.

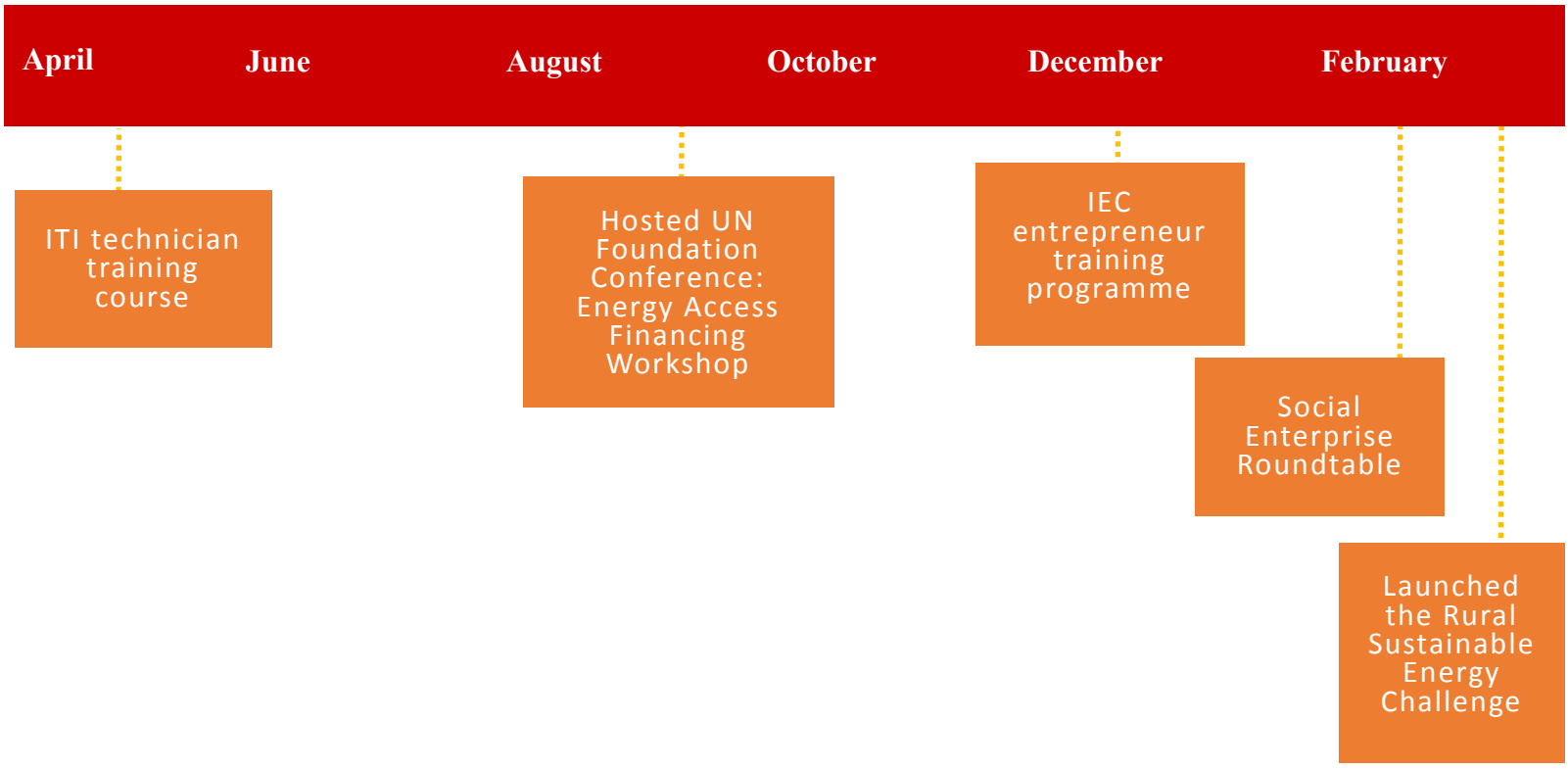
- The **Community Labs** design solutions that consider the needs of varied segments–from migrant labourers in urban areas and small scale farmers in rural regions, to tribal communities in remote regions and disadvantaged groups across these contexts.
- Through a dynamic and complementary structure the **Focus Labs** prioritize the issues of Education, Livelihood and Vulnerability through impactful interventions.
- **Ecosystem Support** provide a foundation for effective support, scale and implementation of solutions across the social sector, considering identification and development of appropriate technology; incubation and capacity building; and leveraging the practitioner's perspective in policy.

2013 in Review

During the 2013-14 financial year, many important changes took place at SELCO Foundation. We are glad to share these outcomes and achievements with you.

- The Education Lab has utilized previous pilot programmes to develop a long term implementation plan for the School Sustainability Lab, Digital Education and its future interventions in the space.
- The Urban Community Lab has successfully completed its Integrated Energy Centre pilot (identifying processes for replication), and structured its work in Energy, Water and Built Environment.
- Rural Lab finalized its Agri—Machine thresher & transplanter pilot for small farmers and worked dryers, taken several to market, overcoming specific market linkages and dissemination challenges.
- The Policy team has made considerable advances in shaping the guidelines for the Phase II of the National Solar Mission, creating a network for energy access entrepreneurs and practitioners, and collaborating for a reporting framework for social enterprises.
- The Technology and Design team set up an automated test bed for all types of solar equipment, created a remote monitoring unit to collect data from remote locations and established a technical collaboration with two corporate partners. These efforts have facilitated innovations on water pumps, sewing machines and televisions.

Key Awareness and Capacity-building Initiatives



BY THE NUMBERS

SELCO Foundation works across communities, contexts and issues to design and implement solutions for the specific needs of underserved communities. Our projects span geography, user segments and areas of impact —from education to livelihood support and opportunity generation, to skills transfer and quality of life enhancements. Given the range and depth of our work, we also utilize a milestone processes perspective to measure the medium-term outcomes of our work .

Program	Metrics	Targets	End Year Actuals
Product Innovation	Technical products worked on	3	9
	Products taken to market: sale and purchases of our products or services by an external entity, or community.	1	7
	Business innovations introduced	1	4
Technical Testing and Evaluation	State of Market reports: preliminary or field assessment, performance and feasibility of a product or service	1	2
	Corporate relationships: collaborations, idea testing or introducing their products to under-served communities	2	8
Community Organizations	Organizations worked with	3	18
	Products introduced	2	9
University and student relationship	Capacity Building with students	750	2435
	Interns with SELCO Labs	10	30
Rural training Institutes	Rural technicians; village level workers	90	200
Entrepreneur Incubation	Small and mid-sized	3	14
Policy	Number of policies impacted	1	3
Process Documents	Internal documents that capture the Foundation's approach, learning and formulation of processes	4	8

In 2013-14 we exceeded several targets and recognize this as a shortcoming in internal planning. We are working more closely to increase our projections and standards for strategy and implementation.

Additionally, we present overall impact data but believe they do not fully capture the context, experience and processes implemented through our programmes and interventions. This challenge has pushed us to rethink impact measurement across our work. These outcomes are expanded on the following sections.

	Metric	Target	End Year Actuals
End users impacted	Direct Impact	4000	14723
	Through Partners	5000	9850
	Through Entrepreneurs	2000	700

SCALE

In 2013-14 SELCO Foundation reached 12,169 students and 625 families, through several larger projects that include Light For Education and Digital Education, and Integrated Energy Centres respectively. These larger programmes have been developed over the past several years from ideation, pilots, into model solutions, undergoing impact and performance assessments, strong partnerships and adoption by other entities or individuals.

Our organization looks at scale with nuance, requiring responsibility and strategic clarity in expanding our work. We do not see scale as the only way to achieve impact, instead, we encourage partner organizations, social enterprises and individuals to adopt our solutions through collaboration, replication and knowledge-sharing. We are still developing support and linkage mechanisms for entrepreneurs and hope to see the number of end-users impacted through entrepreneurs to grow considerably, in the next few years, as our projects are taken up by others.

We are constantly trying out new methods, designs and services, we do not immediately impose goals for scale or growth. Instead, across our work we strive for a cohesive vision, medium-term implementation plans and enough potential for impact to commit resources for learning and development. We strive to establish and mature our projects into proven solutions, sharing our learning in both success and failure.

SCALE STORY: INTEGRATED ENERGY CENTRES

Urban Community Lab, *Livelihood, Energy Access.*

Integrated Energy Centres (IECs) are decentralized energy powered community centres that can host a range basic services and activities lacking in an under-served community. The centre aims to positively impact quality of life and livelihoods by addressing fundamental energy needs and services relying on energy.

The one year pilot phase of this intervention was completed with 12 IECs successfully offering energy services (ranging from lighting, cellphone and laptop charging, to solar projectors, community televisions, soldering guns, and sewing machines) with stability of operations and quality service. Each IEC reaches approximately 60-100 families in slums that range from 150-200 households. At the same time, additional communities continue to demand IECs, most of which are being operated by local entrepreneurs with SELCO Foundation's support. The pull for centres has compelled the Urban Community Lab to expand its field presence & community partners, explore and pilot additional energy services. The total number of centres has now increased to 15, as local communities and entrepreneurs push for their development.

All IECs are currently working towards full financial sustainability, with entrepreneurs and partners purchasing and investing in the centres. The Foundation has now moved to develop and innovation of additional services, such as refrigeration, community television and media download.

IMPACT

We think about impact in terms of processes and outcomes. Across our projects we routinely do feasibility assessments, benchmark measurements and final impact assessments that track direct impact and positive externalities through qualitative and quantitative methods.

Across our projects we strive for clear benefits for underserved communities; interventions that empower and strengthen individuals and communities in fighting poverty and becoming more resilient. In this sense, we aspire to create a range of interventions that may holistically support underserved segments —ranging from children in their studies, farmers' livelihood, and women across their homes and informal businesses.

Our range of impact varies from access to energy and its associated benefits, to economic savings or supplementary income, convenience and quality of life improvements, education outcomes and awareness about sustainability. Although we currently only track impact measurements in the short-term, we take strong consideration of long -term effects, ensuring continued services and opportunities for the communities we are working with, even after our programmes may have ended.

Impact story: School Sustainability Lab

Education Lab, *Rural*

In an effort to work with select low-income schools primarily in rural areas, this intervention aimed to create awareness about sustainability, empowering local children to improve their school and community. The four month after-school lab pilot explored different sustainability themes and approaches of how to learn about problems and build solutions tailored to local context. Baseline assessments informed the project structure of target lab-hours per week. The pilot was designed to allow for guided research of topics, given very limited access to information. A sample short term goal outlined exposure of students to ideas of teamwork, planning, documentation, management of funds and report writing. Longer term goals included making community interactions effective, facilitating transfer of awareness and knowledge between students and the community.

The pilot covered 54 students across 9th grade. Though students did not produce independent ideas through their research projects (an initial goal), by the end of the project students developed an in-depth understanding of specific issues. For example, the Kitchen Garden group built a drip irrigation system, and the Insects group discovered a traditional bio-controlling method for houseflies after talking to community members. An unexpected impact included increased participation by more reserved and diffident students (mostly girls) and students with weakest academic record.

The concept of an informal learning environment (where participation and questioning is encouraged) was new to them. Though timid at first, the students warmed up to this teaching style. According to the school science teacher, as the project progressed, "students started participating more actively in regular classes" and displayed motivation and independence. This pilot has stimulated the teachers and administration to implement some level of activity-based learning.

The pilot culminated with student presentations of research projects attended by school administrators, partners and SELCO Foundation. Our local partner, Namma Murthur announced its vision to continue and expand the project across other grades, creating a five year plan. The Foundation will replicate this project across 5-10 other Government schools in the coming year.

FEATURE STORY






Kumar M. is a 50 year-old entrepreneur in Kariyammana Agrahara slum, Bangalore. He began doing odd jobs when he was just a child, and has been entrepreneurial ever since. A trainer carpenter, he set up a hotel in the past, and is the proud owner of a petty shop.

In end May 2013, Kumar first met SELCO Foundation during a visit. When he learned about the Integrated Energy Centre model, he saw a way to expand his petty shop. Interested and open to the experience, Kumar agreed to have a demo light in his shop for a week. At first there was no real interest, only curiosity. The Kariyammana Agrahara community didn't respond to his explanations of the clear economic, health and comfort benefits of using LED light systems. Then during the formal demo people walked out saying it was 'too expensive' and they were unwilling to pay. Only one person took the light immediately, and a three people promised to take it in the next few weeks when they could afford it. This one person made all the difference. People saw the benefit. Within a week the 40 lights has been leased out, and the community wanted more.

The IEC structure was supported by EADS Group and set up with landowner permission, with an area for education interventions. Kumar gladly agreed to operate the centre to co-locate his shop. Initially an IEC operator, this meant taking care of the space, charging the battery units throughout the day while working in the shop, and tracking payments and rentals at night when each family picked up the battery units. NGOs or community organizations would normally use the back room for activities with children. Things were busy from the start. The petty shop was getting more customers, both passersby and community members, and the energy service was gaining more visibility. Kumar wanted 30 more lights, but resources were scarce and he had no access to finance. Strengthening his partnership with SELCO Foundation and moving to become an entrepreneur, the IEC expanded to 60 lights. In a community of over 500 migrant household laborers, they were taken up quickly.

In December, Kumar actively participated in the IEC Operator Trainings. He spoke to other operators on the value for the community. "Operators have Ok business, it is profitable, but the benefit is more for the community. Everyone now calls me 'uncle'… because the service is useful, convenient and helpful to them." That day, he emphasized many unseen slums remain in darkness, and IECs must reach them.

This February, the Centre expanded to 96 lights. He has added a community fridge to sell colas, curd, milk and vegetables in the hottest months, and centralized cellphone charging to minimize overuse and create a more robust system. He intends to continue to expand in reach and services and is in the process of starting an IEC in another slum, which his son will operate. Kumar continues to manage the IEC with the support of his family. Most days, his wife and daughter front the petty store, and he works in a carpentry shop before the IEC becomes busy at night. It is a family effort.

Education Lab

Educational interventions at SELCO Foundation have grown organically from fixed solar lighting for schools and hostels, to Light for Education —study lamps for students—, solar powered digital education — efficient computers and projects— to the realizations that there remain missing gaps in education quality in the form of content, teaching methodology and awareness on sustainability issues.

The main function of the Education Lab has evolved to explore ways in which education at the K-12 and college levels can be enhanced by exposing students to concepts surrounding environmental, financial and social sustainability.

Below, we present our more mature models and our most recent innovations, in two tables.

Projects	Milestones	Outcomes & Impact	Next Targets
Light for Education	Introduced new variant: fixed lighting in study areas Portable battery model: designed new lamp with brighter light and 4 year warranty.	New variant: 135 hostels, and reaching 10,000 students Portable battery model: 80 schools and 4,000 students	New lamp deployment Second Impact Assessment campaign
Digital Education	Assimilated the learning from the last year's program on digital education. Worked towards ensuring operational continuity by raising funds. Process document for smoother implementation, selection, monitoring and assessment	508 students reached through solar projectors 290 students reached powering computer science labs 636 students reached with Ncomputing software	Identify an additional partner for digital content on sustainability, to strengthen education impact Develop or utilize two digital education tools and content

Directly reached a total 15,488 students

2 mature Programmes

Children become familiar with Solar Projector

Education Lab

Key failures, learning and insights

- **Importance of holistic interventions: Ensure that renewable energy installations in educational institutions are a means to an end. Technology and tools are a part of a broader, holistic objective and our goal is to improve the overall effectiveness of education through interventions that increase technology/computer literacy of students and teachers, and develop an in-depth awareness about renewable energy and community-capacity building**
- **Investing in teacher training: In the case of projects such as School Sustainability Lab, it is fundamental to invest resources in teacher training either directly, or indirectly through partners, since the success of such projects is so heavily dependent on the delivery on-ground.**
- **Forge key partnerships: It is essential to partner with other organizations working in the education sector so that knowledge and skills can be shared. The Education Lab must form partnerships with practitioners (individuals or organizations) in different areas of sustainability in order to have a strong knowledge resource for our programs.**

Projects	Milestones	Outcomes & Impact	Next Targets
School Sustainability Lab	4 month pilot in Muthur Government School completed Created a 5 year plan for implementation, replication and scale.	54 students reached Overall class presented higher awareness Science teacher and administration adoption of practices.	Work with pilot school for continuation and handover of project activities. Identify and begin implementation of another Sustainability Lab.
Invention Education	Developed and tested 3 toolkits (experiential learning, needs assessments, inventor's toolkit) through school visits and small focus groups piloting	Expected 2014-15	Facilitator training. Implement baseline assessment and introduce the first toolkit to 10 government schools,.

Girls answer questions about their learning in Digital Education

Rural Lab

The Rural Lab was first born in 2009, as SELCO Labs but has since evolved to focus solely on the rural ecosystem. This ecosystem is typically characterized by communities with access to natural resources, somewhat unreliable energy services, poor market linkages, and high outwards migration. The lab works in the rural environment with small farmers, villages, rural schools and community institutions in the areas of small-scale agriculture, and energy access.

Some of the highlights of the year include: installation of solar and biomass hybrid dryers—fish and chilli dryers; taking to market threshers; proving there is rental business of the transplanter; Rural Sustainable Energy Challenge. In the past year, the team has also given more focus on need assessment and problem capture.

In the next year, the Rural Lab aims to:

- Link the tested technologies and products to other parts of the ecosystem —entrepreneurs, finance, end-users, etc.
- Pilot projects of Solar Cooking and Mini Grids to test different business models as well as technological solutions.
- Innovate 3-5 new technology interventions in the field of sustainable energies for rural households and businesses.

Key failures, learning and insights

- **Learning of agri machines: with very little capacity for marketing and the considerable marketing challenges of rural space, the team continues to look for partners and community leaders to champion agri machine usage. Additional orders for thresher agrimachines have emphasized for patience in this endeavor, and confirmed the technology is suitable and adds value to small-scale farmers.**
- **The resources required in development, testing and marketing the agricultural machines are fairly high and long-term. This requires institutional capacity and a nuanced choice of what agri machines to develop. In this effort, additional innovations are required to make the dryers more viable with respect to performance and financing.**
- **Rural Sustainable Energy Challenge is an important outreach activity to create more balanced and multidisciplinary learning spaces for rural tertiary education students. These initiatives require ample planning with college administration and professors in related courses to be complementary to the academic calendar and academic courses.**

Rural Lab

Below, a revision of the Rural Lab's performance across our different projects. Additionally, a Solar Cooker Intervention has been under development.

Projects	Milestones	Outcomes / Impact	Next Targets
Dryers	Installed two dryers for institutions: • Hybrid dryer in College of Fisheries Mangalore, drying capacity of 100Kg per day. • Greenhouse dryer for chili products	Fish Dryer served as pilot project to reach fishermen community; and sell 2 additional dryers; directly reaching 40 families and local networks, and drying 200kg/day.	Installation of 2 more Hybrid Dryers for KFDC Mangalore Needs Assessment for 5 food products Lab testing of 1 food product.
Agri-Machines	Concluded development of own products, changed focus to testing and validating available products and increase reach to more farmers.	2 Threshers sold, with rental to other small-scale farmers, reaching 30 families. 1 Transplanter rental model, during transplanting season reached 5 farmer families.	Establish sales entity for Agri-machines through partners, to reach greater scale. Sell at least 10 more threshers, and scope the future of Agri Machines through needs assessment report.
Mini Grids	Installed one pilot project in Mangalore. IBM providing a technology platform an AC micro-grid, giving the ability to test out different payment models.	350 people provided with lighting, 25 set to receive power for TV and fan in the next fiscal year. *Numbers vary as houses are rented by labourers on a temporary basis.	Install or facilitate 5 additional mini-grids. Establish a replicable design model for institutional and labor-camp mini grids. Create ecosystem linkages with suppliers and partners
Rural Sustainable Energy Challenge	Visited 11 colleges and reached 1,600 students through information sessions	Awareness creation and student involvement: 25 teams participated in first round, 10 teams submitted final reports	Outline next competition iteration. Increase student participation, more responsive to academic schedule

Urban Community Lab

In 2013-14, UCL worked on strengthening its community engagement and partnership efforts, through which its key projects expanded from Integrated Energy Centres (IEC), to Airlite, designing built environment for slums and water purification. Highlights of the year included:

A. The development of an IEC entrepreneur training program,

B. A comprehensive Airlite program,

C. A Built environment intervention,

D. A livelihoods sewing centre for women

E. A market linkage intervention for a nomadic community,

F. The expansion of services by IEC entrepreneurs into refrigeration, laptop download shops and mobile charging kiosks.

The team also developed a health centre design, for which partners are currently welcome. In the financial year 2014-2015, UCL aims to mature and standardize some of the services in the IEC model, strengthen its newer interventions (outlined below) while reaching out to labour camps to disseminate and implement UCL's current interventions for the benefit of migrant laborers.

- Livelihoods: For example setting up more sewing machine centres - Establish a strong consistent market linkage and work out a financial model through which the women can own the machines.
- Water - Plan and raise funds for a complete solar water purification pilot project in three or more locations
- Built Environment – Prototype and develop an implementation plan for potential solutions that are desired, feasible and viable.

Working in the "urban space" the team has been able to reach out to some of the most vulnerable and insecure populations. The challenge of land ownership, political and unfortunate social issues, lack of financing for poor households and entrepreneurs has only pushed the team to think of more innovative and feasible bottom-up solutions.

15 IECs

4 process documents

Learning construction techniques from local builders

URBAN COMMUNITY LAB

Key failures, insight and learning

- **Understanding urban communities: Communities reached out to can be described as: Slums - Low income households - Labor colonies - Poor institutes & community groups - Small scale businesses. The social dynamics, awareness levels, priorities and vulnerability levels differ across these categories and there is no existing pool of qualitative or actual data that one could use for water, energy, built environment needs across these underserved communities. UCL has made an effort to systemize, document and harness gathered community information for creating sustainable interventions (through technology, finance & market linkages).**
- **Prioritizing interventions: There are three types of categories even in underserved communities: Critical, Poor, and Manageable. The UCL team has learned to roughly categorize communities and assess each vertical (water, energy and built environment) based on need, urgency and potential for impact. This leads to more efficient use of limited resources and a greater, more active response from community members.**
- **Developing a holistic assessment format: The UCL team follows the Human Centered Design (HCD) methodologies. However, in product/design interventions (providing Airlite or providing furniture), the HCD process alone will not fully address the dynamics that shape situations and may result in 'stop gap' solutions rather than long-term, sustainable ecosystems. Keeping this in mind, a range of strategies have been formulated which involve both infrastructural and behavioral components.**

Area	Project Milestones	Outcomes / Impact	Next Targets
Energy	**Integrated Energy Centres:** 15 IECs •Streamlining of collections and operator training •Processes for system shift and relocation. •Laptop, fridge, soldering iron services developed	•5 entrepreneurs jobs created, all operators reaching 80-100% added income. Over 300 households served. •Benefits in extended productive hours, kerosene expenditure savings, air quality, and increased safety, among others.	•Development of new Services •Expansion to North Karnataka •Increase percentage of entrepreneurs
Built Env.	**Airlite:** 11 installations in urban labor camps, slums and institutes including an orphanage.	Lower expenditure on energy, better lighting source, improved ventilation by 20-30%	Handover: identify an entrepreneur that can continue to expand the business.
	Slum modification: development of assessment formats, strategy and approach to slum houses design.	Expected: improved wellbeing and basic services (including thermal efficiency, natural lighting, ventilation, cooking & drainage)	•Develop 2 concept designs • Explore new building techniques and alternative materials. •Prototype a full solution
Livelihoods	**Dholak Waale:** Marketing support materials developed, two fairs attended, training and design support.	Monthly income increases approx. tripled; soft skills development; community integration; empowerment and aspirational change	Business mentoring and additional market linkages
	Sewing Centre: garment stitching, workshops on cloth bag making and kowdi art training completed. Several large orders completed.	Training (jobs or own tailoring units) for 20 women.	•Find a consistent market linkage. •Continue training cycles of 20 women each time; every 4-5 months

Policy Group

The policy group undertakes in-depth analysis strongly influenced by field perspectives and facilitates the uptake of recommendations in the areas of decentralized energy access and social enterprise issues. In 2013-14, the Group focused on strengthening existing verticals through engagement and varied ecosystem stakeholders. The group also worked on building the team to include consultants from technology and finance backgrounds.

To have long-term, concrete impact on certain issues that were taken up last year, two significant projects were initiated:

A. A formal partnership was established with CII– Centre for Excellence in Sustainability, to create an appropriate rating tool for social enterprises, with the support of leading social enterprises.

B. A single network for decentralized clean energy access practitioners, research think-tanks and donors. In partnership with the Council for Energy, Environment and Water (CEEW) and other founding members, a concept note and proposal for network establishment was written. The Alliance is being named as CLEAN.

Next year the Policy Group plans to further hire additional members, take relevant research-level and cross-sector issues to the next level of active policy engagement. This will be in addition to taking up greater responsibilities in efforts such as Social Enterprise Impact Rating Tool initiative and the Practitioner network (CLEAN).

3 policies impacted

Working across state, national, international levels

Level	Cross Sector	Energy Access	Social Enterprises
International		Portable system vs. home lighting systems	Social impact rating
		Climate funds: Green Climate Fund, National Clean Energy Fund	Social investment
		Urban poor —climate change mitigation	
National	National Rural Livelihood Mission	National Solar Mission (Financial and ecosystem development)	Database: Public financing schemes
	Maternal health	Clean Energy Access Network (CLEAN)	
		Energy efficiency in livelihoods	
		Mini grids analysis	
		Solar water pumping	
		Energy mapping	
State (Local)		Decentralized energy financing (end user)	
		Value added tax	
		Advising state energy policies	
		Solar invertors	
TOTAL	2	13	3

Policy Group

Key failures, learning and insights

- **Leveraging partnerships:** Although finding suitable partners may be an arduous task, once identified, partnerships play a vital role in taking a project to the next level. Like-minded partnerships with credible organizations can be extremely important in creating a common voice and gathering critical mass to move the project forwards. Partnerships help leverage expertise and reduce duplication of efforts.
- **Creating champions within the target entity:** Whether it is on Impact Investments and Financing for entrepreneurs, or on Energy in the Rural Livelihood Mission, creating one or more champions within the target group can be extremely useful. Key individuals who buy into the concept and can influence the thinking of others (albeit slowly), combined with actionable next steps could make for a more effective approach than mere activism.
- **Unified practitioner voices:** A critical reason for establishing the Clean Energy Access Network (CLEAN) was to consolidated fragmented voices facing similar ecosystem issues and to consolidate these viewpoints to relevant bodies or individuals. Over the past year, the policy team has taken critical steps to ensure that the voice of energy access practitioners are heard especially at the Ministry of New and renewable Energy.

Issue	Milestones	Targets
National Solar Mission	•Achieving Fiscal/subsidy changes (Phase 2) •HR Training courses	•Training through ITIs •Bankers' training •Continue to provide inputs to NSM goals
Energy in Rural Livelihood Mission	•Report on energy interventions and livelihoods •Engagement with NRLM and one State Livelihood Promotion Society •Concept note on micro energy entrepreneurship through SHGs (Self Help Groups_	•Pilot project facilitation in two states (SHGs as micro entrepreneurs and energy interventions for relevant livelihoods)
Reporting framework for social enterprise	•Established partnership with CII-Centre for Sustainability) •Key Stakeholders consultation •Proposal for 1 year study	•Funding for 1 year project •Advisory group and core working group

Above, our main issues areas for 2013-14. Other interventions, research and advocacy programmes under development in 2013 include: Mini grids feasibility analysis, Energy efficiency solutions for MSME sector, and Energy interventions in the National Rural Livelihood Mission. We continue to take forward our work in Impact investments and financing schemes and the Clean Energy Access Network.

Technology & Design Team

The Technology & Design Team is an ecosystem catalyst that supports internal Foundation teams, and collaborates with external stakeholders such as end-users, social enterprises and clean energy technology suppliers.

In 2013-14 the team was reoriented to increase its relevance for various ecosystem stakeholders. At the same time, the team identified key long-term project areas, useful to the clean energy sector as a whole: new product/package rollouts, mini grids, solar water pumping, energy efficiency and livelihoods, and inverters and inverter retrofit.

The team also initiated several new vendor relationships this year, with the aim to maintain strong partnerships into the longer-term for end-user and social enterprise advocacy with technology suppliers and manufacturers

Plans for the coming year include replication of two test beds and forming two new corporate and university partnerships. Below, an overview of our projects.

Project	Milestones	Targets
Solar pumping	•Pumping test bed set up, 2 types of pumps tested •Good knowledge developed on pump design and installation, FAQ created •First 3-phase pump installed successfully in Belgaum Investigated non-agriculture applications using DC pumps and set up drip system •Active vendor relationships established	•Implement 3 installations •Develop standardized package for standard configurations •Test new offering for domestic and gardening applications
Testing and Characterization	•Solar component testing rig set up •Panels, batteries, luminaries, cabling tested and reports provided to the stakeholders •In house simulators and data loggers developed to support testing, remote monitoring of systems now possible	•Replicate the test rig in two more locations •Reduce manual testing and improve automated data collection techniques
DC TVs	•Design and costing finished. Identification of site for field test in progress. •Active vendor relationships established	•Identify and install first set of DC TVs •Identify business model opportunities
Energy Management in Livelihood	•Active interventions in several livelihoods in energy efficiency and introduction to renewable energy •Silk reeling and tailoring evaluation	•Evaluate, test and develop energy management solutions in 5 livelihood segments
Inverters and retrofit	•Gained a more detailed understanding of the performance of solar PCU/inverters from 3 manufacturers through lab and field tests.	•Establish a clear best product for retrofitting solar to UPS •Clearly understand the payback of these systems and give direction to system integrators.

Technology & Design Team

Key failures, learning and insights

- **Engaging technology partners:** Vendors are very willing to sell products (pumps are one example), offering one year warranty but not necessarily offering competitive prices or after-sales services. Depending on vendors for technology testing, development, and redesign remains difficult and requires a change in business mentality and stakeholder inclusion.
- **Access to financing:** The primary reason for reluctance to invest in technology of higher initial cost in order to gain better profit in future, is lack of convenient financing options. Finding financing entities willing to customize its financial instruments to specific livelihoods remains a challenge.
- **Test bed: simulating actual field conditions.** With the test bed the Tech & Design team can better understand the capacity and performance of the pumps and controller, and adjust power configurations of the PV system. The test bed serves to compare available technology and to allow the project to utilize the best pumps and controllers available. This project has implied learning to place the different components of the test bed (pressure gauge, control wall, flow rate meter) to support testing to come; an important foundation for technology development.

Testing, designing and redesigning technology for greater impact

Advocating improvements to vendors & suppliers

More than 20 products tested in 2013

A solar water pumping installation

FINANCIAL HIGHLIGHTS

SELCO Foundation
 # 12, 15th Cross, 6th Phase, JP Nagar, Bangalore 560078

BALANCE SHEET AS AT 31ST MARCH 2014

PARTICULARS	Schedule	Current Year 31-03-2014	Previous Year 31-03-2013
FUNDS AND LIABILITIES			
Trust Funds or Corpus			
Contribution received during the year		-	-
Secured Loans		-	-
Income and Exp. Account			
Surplus carried from Income & Exp. A/c		22,16,132.00	41,97,798.00
Total Liabilities		22,16,132.00	41,97,798.00
PROPERTY & ASSETS			
Fixed Assets	1	4,08,884.00	3,06,603.00
Current Assets, Loans & Advances			
Cash and Bank Balance	2	20,92,666.00	40,48,495.00
Current Assets	3	7,93,576.00	5,22,914.00
Less Current Liabilities & Provisions	4	10,78,994.00	6,80,214.00
Net Current Assets		18,07,248.00	38,91,195.00
Total Assets		22,16,132.00	41,97,798.00

For SELCO FOUNDATION

Trustee

Trustee

Place : Bangalore
Date : 15.07.2014

As per Our report of even date
For Ramesh Ashwin & Karanth
Chartered Accountants

Prashanth K
Partner
M No. 211257
F.R No. 010681S

FINANCIAL HIGHLIGHTS

SELCO Foundation
 # 12, 15th Cross, 6th Phase, JP Nagar, Bangalore 560078

INCOME & EXPENDITURE ACCOUNT FOR THE PERIOD ENDED 31ST MARCH 2014

PARTICULARS	Schedule	Current Year 31/3/2014	Previous Year 31/3/2013
INCOME			
Grant Received - Foreign		106,48,645.00	91,31,200.00
Donations - Local		95,30,718.00	147,45,695.00
Service Income		5,200.00	21,529.00
Interest received		3,64,191.00	3,95,794.00
Other income		-	23,332.00
Total Income		**205,48,754.00**	**243,17,550.00**
EXPENDITURE			
Project Cost		187,27,720.00	185,69,523.00
Research & Development Costs		14,10,511.00	6,73,732.00
Administration Costs	5	22,61,398.00	13,51,961.00
Depreciation	1	1,30,791.00	1,30,170.00
Total Expenditure		**225,30,420.00**	**207,25,386.00**
Surplus		(19,81,666.00)	35,92,164.00
Provision for Taxation		-	-
Surplus (Carried to Balance Sheet)		(19,81,666.00)	35,92,164.00
Significant Accounting Policies & Notes to Accounts	6		

For SELCO FOUNDATION

Trustee Trustee

Place : Bangalore
Date : 15.07.2014

As per Our report of even date
For Ramesh Ashwin & Karanth
Chartered Accountants

Prashanth Karanth
Partner
M No. 214235
F.R No. 010680S

FINANCIALS—AUDITOR'S NOTE

M/s Ramesh Ashwin & Karanth | CHARTERED ACCOUNTANTS

Premier Presidency
35/17, 1st Floor
Langford Road
Opp. St. Joseph College
Bangalore – 560 025
Phone: 080 41464630

15th July 2014

INDEPENDENT AUDITOR'S REPORT

To the Trustees of Selco Foundation

We have audited the accompanying consolidated financial statements of Selco Foundation (Trust), which comprise the Balance Sheet as at March 31, 2014, and the Statement of Income and Expenditure and the Receipts and Payments Account for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation of these consolidated financial statements that give a true and fair view of the consolidated financial position, consolidated financial performance and consolidated Receipts and Payments of the Trust in accordance with accounting principles generally accepted in India. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the consolidated financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with the Standards on Auditing issued by the Institute of chartered Accountants of India. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements,

M/s. RAMESH ASHWIN & KARANTH BANGALORE 560 025.

FINANCIALS—AUDITOR'S NOTE

whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and presentation of the consolidated financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion and to the best of our information and according to the explanations given to us, the consolidated financial statements give a true and fair view in conformity with the accounting principles generally accepted in India:

(a) In the case of the Balance Sheet, of the state of affairs of the Trust as at March 31, 2014;

(b) In the case of the Income & Expenditure Account, of the Deficit for the year ended on that date; and

(c) In the case of the Receipts and Payments account, of the cash flows for the year ended on that date.

For Ramesh Ashwin & Karanth
Chartered Accountants
F.R.No.010680S

M/S. RAMESH ASHWIN & KARANTH * BANGALORE 560 025. * Chartered Accountants

Prashanth Karanth
Partner
M No. 214235

SPECIAL ACKNOWLEDGEMENTS

Primary Resource Partners

Good Energies
Halloran Philanthropies
Menda Foundation
DOEN Foundation
The Lemelson Foundation
USAID
REEEP

Partners

Agasthya
America India Foundation
Applied Materials
Apsa
Be Fund
BVT
CII- Centre for Excellence in Sustainability
Council for Energy, Environment and Water
Enfold
GMRVF
GNI
IBM
Karnataka Fisheries Department
Kinara Capital
Namma Muthur
Premier Magnetos
Qwarids
SDM Institute of Technology
SELCO India
SELCO Incubation
Shop for a Cause
Sir Ratan Tata Trust
Soul Sante
Sri Kshethra Samsthe
Small-Scale Sustainable Infrastructure Fund
Usha Janone

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Our Team

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Assistant Manager, Finance

Sam Cocks
Lead Electrical Engineer

Deepti R Bhat
Community Solutions Engineer

Girish NR
Community Solutions Engineer

Joseph Daniel
Technical Manager

Sreejith Narayanan
Senior Technical Manager

Yashwin Iddya
Staff Mechanical Engineer

Roshan Mascarenhas
Project Manager

Nagaraj Pattar
Field Coordinator

Jonathan Bassett
Principal Electrical Engineer

Deeptha Kumar
Project Manager

Interns, Volunteers, Fellows and short-term Hires

Abhishek Shastry
Adrien Coussy
Amandeep Saluja
Amith Jaiswal
Ana Lucia Grajales
Anand Kashyap
Andrew Whyte
Ashwathi Iyer
Arun Murthy
Chintan Jadwani
Deepak K Srivatsa
Divish Gupta
Harshita Venkatesh
Jonathan Brown
Joy Merwin Monteiro
Karishinee Pendharkar
Kirsten Campbell
Kyle Donohue
Leopold Lanne
Mani Thomas
Manus Pierre
Monica Simha
Natacha Faullimmel
Pranith Iyengar
Rakesh C Sambhram
Santosh Harish
Shravya Jain
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