



ANNUAL REPORT

2019 - 2020

SELCO FOUNDATION





EMERGENCY RESCUE BOAT
BRAHMAPUTRA RIVER BASIN RESILIENCE
BUILDING PHASE 1
2014-15
CONTRACTED BY
NILA MEMPH
SDFPT

Climate Resilience

Rescue operations in Assam need mobile energy solutions to carry out their work throughout the day- providing relief to communities that get flooded every year.





2019 SELCO FOUNDATION

SELCO Foundation is dedicated to innovating and replicating customised solutions, processes and ecosystem building methodologies for poverty reduction and equitable development by using sustainable energy as a critical.

INNOVATION PARTNERS

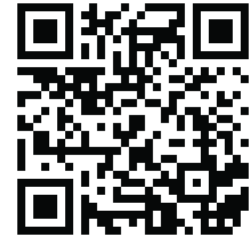


REPLICATION PARTNERS



TATA TRUSTS



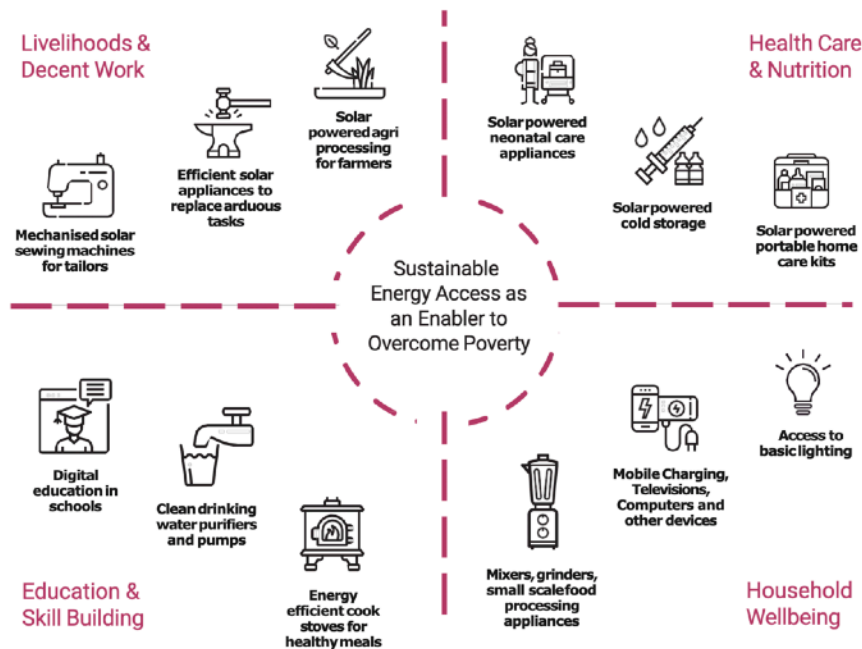


Watch how Rajeshwari and her village Thulasikere, a remote, forested village in MM Hills, Karnataka, India, are using solar energy in various ways.

A local healthcare organisation provides medical services to remote communities using solar, delivered by a local solar enterprise.

Year 2019-2020 | Recap

SELCO has always viewed SDG7 as an important catalyst in enabling sustainable delivery of essential services like health, education, livelihoods etc. This approach envisions energy as an integral part of solution design, and not separate from it. Energy, especially sustainable energies like solar, are never considered as components of any design of health, education or livelihoods services from the start of a specific program. The need of energy is evaluated as an after-thought. Such an approach leads to inefficiency of design and directly results in higher costs and lesser intended impacts.



In the year 2019-20, SELCO Foundation took this approach forward and strengthened the role of sustainable energy in the livelihood, health and built environment ecosystems specifically. While the geographical focus remained as Karnataka, Odisha, Jharkhand, Assam, Meghalaya and Manipur, SELCO also saw keen interest by partners in adoption of its approach in other states as well.

It also expanded its Incubation Program to include technology enterprises that innovate, manufacture and deliver energy efficient technologies that can be powered by sustainable energy, and are focussed towards improving livelihoods, well-being and health of people living in poverty.

1

Energy + Livelihood

SDG7 for SDG8

Pg. 5

Decentralising Livelihoods with Sustainable Energy, with specific attention to following value chains: Cereals (Rice, Millet, Wheat), Dairy, Pottery and Textile.

More than 15 other value chains identified

Impact Reach
18,211

2

Energy + Health

SDG7 for SDG3

Pg. 11

Energy Efficiency and Sustainable Energy Solutions across the Health Value Chain.

- Public Health Infrastructure
- Maternal Health Care
- Portable Solutions

Impact Reach
569,805

3

Sustainable Built Environment

SDG7 for SDG11

Pg. 14

Energy Efficiency and Sustainable Energy Solutions for:

- Health Centres
- Educational Infrastructure
- Homes and Productive Use Spaces

Impact Reach
906

4

Energy Incubation

Pg. 19

Skilling and Entrepreneurship for SDG7

Clean Energy Enterprises Incubation

Energy Efficient Technology Incubation

Highlighted Partnerships: ATAL Innovation Mission
and Assam State Rural Livelihood Mission

Impact Reach

3,672

5

Dissemination of Learnings

Pg. 21

Events, Workshops and Trainings

India: Innovation Centre for Global South

SDG 7 for SDG 8: Sustainable Energy and Livelihood Nexus

North East Trade Facilitation Fair



When migration is
the only way out.

Tribal communities in Kotra,
Rajasthan, India need access
to basic services & greater
incomes. For now, migrating is
the only option.



1 Energy + Livelihood

SDG7 for SDG8

In the year 2019-20, SELCO Foundation worked identified more than 150 points for sustainable energy, with a potential to improve livelihoods and decentralise the value-add to small and marginal farmer.



Reviving Livelihoods

Reducing Drudgery, improving incomes and making livelihoods aspirational with sustainable energy driven blacksmith solutions in Manipur.



VALUE CHAINS:

Any livelihood practice if looked at through the lens of value chain approach helps determine the gaps and requirements at every stage. Any solution looked at in a silo ignores the holistic nature of the problem at hand. For example, in agriculture - pre-farming, farming, market level and processing are the broad stages of any value chain which require to be studied for mapping gaps and the interconnectedness of issues. Solutions lie in nodal points which are spread across the phases of the value chains.

In 2019-20 SELCO identified and focused on developing and implementing 61 nodal point solutions: One Off (36) Testing and Prototyping (20) Programmatic Pilot (14) and Replication & Scale (8). Following are the key value chains identified in the year.

| Agriculture | Animal Husbandry | Food Processing | Crafts |
|--------------|------------------|-----------------|----------------|
| Paddy | Dairy Farming | Roti/Chappati | Pottery |
| Flour | Poultry Farming | Chips | Cotton Textile |
| Millet | | Khowa | Silk Textile |
| Spices | | Pedha | Rope |
| Cold Storage | | Vermicelli | Bamboo |

Value Chain: Cereals (Paddy, Millet, Wheat, Maize)

One of the identified value chains in the year 2019-2020 was that of Cereals. Critical Energy points in the value chain was further worked on to improve efficiency, integrate with sustainable energy and develop models for financing and ownership. An example has been detailed below. [A more detailed description of the developed solutions can be found here.](#)



Paddy/ Rice

TECHNOLOGY SOLUTIONS

Rice Huller



50%
Energy Savings

The rice huller improves the output efficiency to 95% from 80-85% of the locally available machine.

Rice Polisher



25%
Energy Savings

Polishes 45-70 kgs of rice every hour depending on the polishing rate (1%, 5%, 14%)

Rice Mill (Separator + Huller + Polisher + Grader)



68.5%
Energy Savings

Processes 150 kgs/ hour of rice - semi automatic and 350 kgs/hour of rice - fully automatic

CLUSTERS OF LIVELIHOOD:

Many traditional livelihoods are practiced in clusters - implementations are being focused on providing solar powered livelihood solutions for clusters. This also enables better linkages to financing, skill and capacity building, subsidies etc with larger numbers.

In 2019-20, cluster approach interventions for coir yarn making machines (38), integrated agri processing projects at cluster villages like Bairapura Thanda, Pochikatte, Avalagere in Tiptur, Karnataka were implemented. Pottery clustered approach implementations were done through the District Pottery Association and Pottery Cottage industry loans for its members.

UNLOCKING POLICIES FOR SUSTAINABLE ENERGY ADOPTION IN LIVELIHOODS

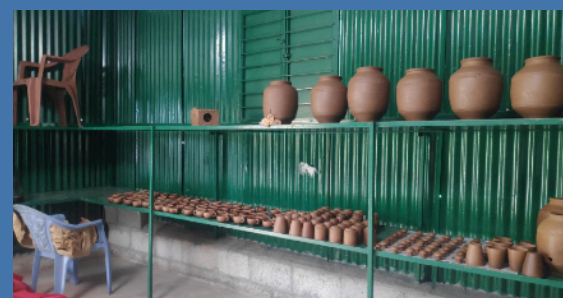
In 2019, several policies and government schemes were unlocked for micro and small entrepreneurs uniting sustainable energy to improve their livelihoods. These included Udyogini Scheme from the Women & Child Development Department, PMEGP/CMEGP scheme from Department of Industrial Commerce, Mudra loans under the MSME Departments and other handicraft schemes for craft based enterprises.

Case Study

Woman Entrepreneur (Potter) invests in sustainable energy solution for her enterprise with support from Karnataka State Women Development Corporation

Ms. Geetha VD, a resident of Ramabhai Nagara in Mysore is a highly skilled pottery entrepreneur. She went on to take up a professional pottery training at central village Institute, Khanapur, Belagavi with the help of a local NGO called Samarthanam. In order to meet the family needs, she along with her widowed mother ran a small pottery business, in a rented tin shed, next to their rented house. They used a traditional pottery wheel which is very drudgery & labour intensive to make the products. They wanted to invest in solutions but another barrier was electricity - due to being landless and renting a space, their landlord did not allow them to get a commercial connection installed in the pottery space making renewable energy very important for any productive use assets to be adopted by them.

A representative of SELCO Foundation intervened to address the financial gap. The Udyogini scheme for Women by Karnataka State Women Development Corporation (KSWDC) under Women and Child Welfare Department, encourages women to take loans from banks and other financial institutions to take up income generation activities listed by KSWDC or other profitable activities for which KSWDC assists in the form of subsidy. After roping in the WCD representative, and the contribution by SELCO Foundation, the banker was willing to give her a loan. She received the loan from the local Canara bank under the Udyogini scheme after having multiple discussions to showcase the overall increase productivity, income, savings as a guarantee with the co-ordinator from KSWDC, Mysore and the Canara bank manager. Once, realising that she can earn and repay the loan, the bank agreed to sanction the loan for Pottery wheel, Blunger, Pugmill and part of the portable working unit construction cost.





Case Study

Vittal Jagtap Dairy Farmer

[Watch Video](#)

Mr. Vittal Jagtap from Gadegaon village of Solapur district, Maharashtra is one of the more entrepreneurial shopkeepers of the village. He owns a saloon at the village market which is his primary business and source of income. Mr. Jagtap also does dairy farming for a secondary income and owns 6 cows, which on an average give 12-15 liters of milk every day. Due to his primary business, he was unable to give time to the milking process.

After investing in the milking machine, Mr. Jagtap is able to invest more time in his saloon shop while earning more money compared to manually milking the cows. He can save upto 2 hours a day which would otherwise be engaged in milking and allied activities. If Mr. Jagtap engaged a hired labourer in the task he would have to shell out approximately 300 INR per day for the service provided. Now his dairy farm is primarily handled by his wife and milking has become much easier for her as she can handle the milking process and the cows by herself.

With the addition of the milking machine technology now, Mr. Jagtap plans to invest on additional cows and thereby increase his total earnings. The machine has also reduced their physical drudgery and as milking machine is considered to be safe and hygienic compared to hand milking it would also avoid any health issues associated with the hand milking method.



Case Study

Shivamma & Shivamurthy

**Agri Processing Entrepreneurs
in a remote forested location**

[Watch Video](#)

Nestled in the remote wilderness of MM Hills, Thulsikere has always been disconnected from the main grid, and is known for Bedegampana Tribes, one of the tribal communities scattered across the hilly ranges of southern Karnataka.

Although the nearby stone quarry is where majority of the 300 odd families in the villages work, small scale agriculture continues to exist- Ragi being one of the primary crops. **Having associated with the region for a while with different implementations, to facilitate the operations, Shivamma and Shivamurthy, a couple from the village, as the operators and caretakers of the machine were selected by the NGO and the locals. Catering to around 800 households in four nearby villages (Thulsikere, Indiganatha, Nagmale and Mandare), the machines are the first of their kind to be installed in the 8 km radius. So, the right location coupled with the enthusiastic couple who are taking care of the machines, the implementation has showed success.** The number of Ragi and Jowar growers who are coming to get their product De-Stoned and Milled into flour is steadily increasing. It used to take one woman labour an hour to de-stone 15kgs of Ragi, whereas the 2.5 HP De-Stoner does 200kgs/hr. The 2 HP flour mill is also capable of milling 30kgs/hour, Since it is the only machine in the vicinity, the price of INR 7-10 for 5kgs presently charged can be increased in coming days.

The success of the implementation is a proof that the remoteness of the tribal community cannot be a barrier for the right solution.



Case Study

Shridevi Melavanki

Handicapped computer trainer and entrepreneur

'Shri Guru Madivaleshwara Computer Tarabeti Kendra', the basic computer training and photocopy centre is housed in an old Panchayat building that was built in 'Gram Rozgar Plan' in Neginahal village. Shridevi Melavanki, runs the centre, and it has kept her busy since its inception around 6 months ago. But the situation was quite different pre-intervention. Shridevi, who along with her brother Praveen, are unfortunate to have been the victims of polio during their childhood when both of them lost their walking abilities.

They had been searching for jobs for a very long time, but were never successful apart from a couple of part-time stints. Considering the basic computer training experience Shridevi had acquired in the past, a solar powered computer set up with a printer and a photocopying machine were conceptualized, and established with the support of Gram Panchayat, and other members of the village community. Today, Praveen drops Shridevi to the computer center in the morning in his modified two-wheeler, and on a weekday, she would already have a few customers waiting with some documents to be photocopied.

"There will be around 150-200 pages to photocopy every day, and now I earn around INR 300 a day. We have constant power-cuts here, so when people cannot get their copies done in nearby shops, they come to my shop, so the number of people coming here is increasing even more", says Shridevi as she is serving a customer who had come with a few bank documents.

Today, she is not only busy with printing and photocopying, but also using her experience in computers to conduct basic computer courses to a few village students. "In last few months since we started, I have trained 4 students, and currently there are 3 girls who come here to learn how to operate computer for basic applications", she charges around INR .900 for a three month course, and it's made their financial conditions even better. Today almost everyone in the village of Neginahal knows about Shridevi and Praveen. Their constant efforts after the intervention have not only helped them beat the odds in creating a decent livelihood for their family, but also have made them a source of inspiration for people with similar circumstances.

2 Energy + Health

SDG7 for SDG3

The health-related SDGs have focused the world's attention on the need for expanded access to skilled care, essential medicines and medical technologies for priority diseases and health conditions. From the energy perspective, attention has been brought towards the energy or electrification gap in the health infrastructure. Comparatively less attention, however, has been given to the health infrastructure gap which has not developed due to lack of innovations in energy delivery models and decentralised and efficient technology. Decentralised Renewable Energy, thus, can play a vital role of being an enabler of health care delivery.

The health infrastructure gap has not been plugged because of lack of innovations in energy delivery models and absence of efficient medical appliances. The gap has resulted in high transaction costs for the poor, thus leaving millions around the world without reliable health services. In many cases, accessing healthcare for a simple diagnosis has resulted in loss of daily wage, or even loss of employment.

SELCO Foundation identifies value chains for various health care centres to develop sustainable energy, efficient technology and sustainable built environment solutions for each point of the value chain. This approach is critical to ensure holistic health care services to underserved communities.

In 2019-2020, SELCO Foundation worked with over 15 health service providers across sub-sectors of maternal health, NCD care, geriatric care, vision care and family planning.

Primary Health Care Value Chain



Pre-Natal Care

Portable Solar Powered kits for community health workers to deliver basic care at home



Intra-Natal Care

Mobile/Stationary labour room with equipments for emergency/regular delivery and stabilization



Neo-Natal Care

Efficient neo-natal equipments for reliable care at the primary level

Improved Reliability, Quantity and Quality of Services

Availability of reliable power is essential to provide continual and timely services especially surgeries at primary and secondary health centres. Intermittent power supply and extensive use of generators incur huge costs on diesel consumption and procurement. Optimised solar system designs along with efficient equipment can ensure reliable and increased number of health services.

Rajpur Community Health Centre, Barwani District (In Partnership with Government of Madhya Pradesh)

Rajpur Community Health Center (CHC) caters to the healthcare needs of 1.50 lakh population and one of the important health centre which covers 200-300 numbers of patients per day. This health centre used to face erratic power supply combined with frequent power cuts which hinder the basic service delivery, vehemently. Besides, the power backup available in the centre was not able to cater to the healthcare needs even during an emergency.

To develop and provide sustainable renewable energy solutions (both in terms of infrastructure and technology), the SELCO Foundation in partnership with the Government of Madhya Pradesh and TRIF initiated Energy Efficient and Renewable Energy interventions in the Rajpur CHC. As a result, the general ward, labor room, newborn care center, emergency unit and documentation room (OFFICE) of the CHC were solar-powered. The energy-efficient Baby Warmer and Phototherapy unit were also provided in the labour room which is run on solar.

The usefulness of solar energy solutions lies in the continuous power supply to the health centre. As a result, all the power supply related issues of the CHC are completely solved, and also a huge reduction is seen in the electricity bills adding to the benefit of the government. The uninterrupted power supply is available for the institutional deliveries, in all the necessary places and also in the Operation Theatre (OT). Solar energy provides a 24*7 power supply for which it is difficult to recognize when the grid supply goes off and comes back in the CHC.

Jhulwania Primary Health Centre, Barwani District (In Partnership with Government of Madhya Pradesh)

In the heartland of India, Jhulwania Primary Health Center (PHC) is situated in the Rajpur town of the Barwani district in Madhya Pradesh. It caters to the health needs of the population of 19 villages with an average patient footfall of 50-100 per day which sometimes extends up to 100 in numbers. This projects the large scale dependency of the population on the public health system. With 8 hours of power outages every day, the hospital was able to provide a limited number of services only when there was the power supply. Both the patients and health staff had to wait for long hours waiting for the power supply to be restored which also affects the critical services like deliveries and surgeries.



Healthcare in Madhya Pradesh

In partnership with Government of Madhya Pradesh, sustainable energy was used to improve quantity and quality of health services in an efficient manner.



Better Access to Last Mile and Underserved

The National Health Mission calls for last mile connectivity for health care services. Thus, communities who are living in remote and hard to reach areas need to be brought into the gamut of health care services.

Maternal and Neonatal deaths continue to remain high among the populations of the Global South who are dwelling in hard to reach geographical terrain.

Accessing health care centres also incurs out of pocket expenditure for such communities which may inhibit positive health seeking behaviour.

Portable Maternal and Child Care Kit

Challenge: Pregnant Women who reside in hilly and remote terrains often miss regular ante-natal check-ups because health care centres are often at long distances.

Solution: An innovative portable maternal and child kit was developed. It has all the essential equipment for maternal care to be offered at the door step. The kit is solar powered and contains all the required devices meant for antenatal & postnatal check-ups. These kits were piloted by Karuna Trust in Karnataka, JSS in Chattisgarh and Swasthya Swaraj in Odisha.

"ANM is providing us all the tests at our doorstep. This has reduced our frequent visit to health centres & it saves us time and energy"

**- Community Member
at BR Hills, Karnataka**

"The kit is useful to provide all the essential services for Pregnant women at their door-step and helps to identify a complicated cases in the early stage."

- Auxillary Nurse & Midwife



3 Sustainable Built Environment

SDG7 for SDG11

Urban housing shortage in India stands at 18.78 million units, out of which about 96% is in the Economically Weaker Section (EWS, 56%) and Low Income Group (LIG, 40%) categories put together. 25% Anganwadis functioning from Kuchcha houses, or open/partially covered space. 50% with no toilet facilities and 32% with no drinking facilities.

However, in addition to the infrastructure shortage, SELCO Foundation has been working towards solutions that also build the resilience of the infrastructure- ensuring savings for people in poverty. The problem statement identified specifically focusses on the following challenges observed in under resourced communities.

- Increasing incidents due to heat stress- indoor heat stress
- Increasing dependency on technologies due to under-performing built environments
- Reduced productivity resulting in reduced incomes
- Increase in health expenditure

In 2019-2020, solutions were developed for households, health and education infrastructure. The solutions developed for health centres were specifically taken forward with reference to the Government of India's IPHS guidelines. Special attention was also paid in understanding energy efficient built environment solutions for livelihoods. This will be taken forward in the following year.

Energy Efficient Housing in Bidar

*BEFORE: Indoor Temperature was recorded **6°C higher** than outdoor temperature*

*AFTER: Indoor Temperature was recorded **4°C lower** than outdoor temperature. **This has resulted in an over 10°C difference in the indoor temperature for the family from the older house to the new house.***



Improving Space Cooling Efficiency: Energy Efficient Portable Educational Spaces

Ahmedabad saw the urgent need for developing the Heat Action Plan post 2010 heat wave which led to the death toll of 1344 people. With the current climate stress reaching maximum temperatures of 40-45 °C, cooling for thermal comfort of 26-28°C is required for improved productivity and wellbeing.

One such case is a school at Prahladnagar, Ahmedabad, the school would use two Air Coolers and six fans every day, especially in the summers for 2 months straight to achieve respite of – T 6°C to 8°C at max for only 2 hours per day due to the high consumptive load of inefficient appliances. Children usually study and play in dark, hot ad-hoc shelters with poor ventilation in hot climatic conditions of 35°C to 50°C with limited learning material impeding them further from accessing any form of learning or growth.

To achieve the thermal comfort and reduce the consumption of energy inside the structure both passive and active cooling measures were taken.

Modifying food cold storage solutions for efficient space cooling is more viable than using conventional air conditioners

In traditional cold storages, required temperature ranges from 4 to 15 °C depending on the commodity stored as opposed to 24 to 26°C requirements for space cooling. PCM based cooling technologies by InfiCold India Private limited cooling was required for day time occupancy for humans only.

This technology has added advantages like having a customisable VFD compressor (variable frequency drive against traditionally inverter based compressor) that is compatible with solar. The work done by the compressor is higher in cold storage than space cooling due to the occupancy type. Space cooling for day time occupancy doesn't require thermal storage or battery storage.

Traditional coolers have low initial investment (Costs 10-15% of a traditional Air Conditioner). The InfiCold solution costs 1.5 times less than traditional inverter based Air Conditioner as no backup energy storage is required.

Using high thermal conductive material for building structures in the hot and dry climate zone like Ahmedabad, can have adverse effects on children's psychological and physical well being, due to higher temperatures. Passive Cooling measures included:

- **Prevent Heat Infiltration** by using low thermal conductivity and insulated building material and including external shading devices.
- **Forced Ventilation Techniques** by incorporating wind and chill effect
- **Ventilation and Heat Extraction** by efficiently incorporating windows and ventilators





The passive solutions brought down the temperature of indoor environment up to $T - 4^{\circ}\text{C}$ to 5°C , compared to the outdoor environment. This ultimately reduces the dependence on the active cooling measures, especially in the case of solar powered devices, as it increases its efficiency.

First Point of Care During COVID-19: Energy Efficient Health Facilities

The Rural Health Statistics of 2015-'16, brought out by the Ministry of Health and Family Welfare, reports that out of total 1,55,069 sub-centres in India, 86% do not meet the Indian Public Health Standards set up by the government. As on March 2016, one-fourth did not have electricity supply.

According to health practitioners, this infrastructure gap further results in absenteeism of health staff- critically compromising the foundation of the public health system.

Gumballi and the Health Infrastructure

Gumballi is a village located in Chamrajanagar District in the State of Karnataka. In this region, every Primary Health Centre (PHC) has 5 Sub Centres (SC), however the Gumballi PHC did not have sufficient number of sub centres under it. With the initiative of Karuna Trust (an organization running government health centres in a public-private partnership), permission was obtained to construct 3 Sub Centres. One such centre (in YK Mole), was chosen to pilot climate responsive, energy efficient guidelines developed by SELCO Foundation. The land was allocated by the panchayat with discussions held with various stakeholders including the ANM who is from a tribal community in BR Hills (nearby village in Chamarajanagar). Earlier, she had to travel from her village to the SC which was very arduous and far due to which she had rented a small room in a village close to YK Mole. She had to pay rent and transportation costs from her minimal salary and faced security issues.

YK Mole Sub Centre: Overview

The Sub Centre was designed with 2 rooms keeping in mind the requirements - an examination room which is big enough to conduct emergency deliveries, as well as a room with a desk for the ANM to administer patients. The rooms were constructed where people could seek counsel, and be comfortable in. A spacious courtyard was designed for people to use as waiting space as well as to conduct monthly immunization drives which is a critical part of the ANM's work. It was also designed keeping in mind the alternate use of the SC as a community space where the villagers could meet and have awareness sessions and meetings. A staff quarter was built separately next to the sub centre for the ANM to reside in with a separate toilet, room, and hall space. There is a collapsible gate which has been made to ensure safety for the ANM as well as to administer medication from her quarters at night, if required.

The clinic and her residential quarters are completely solar powered with lights and fans ensuring that she is not affected by frequent power cuts observed in the region.

IMPACT



Constant Energy available due to Solar:

With patients now visiting the clinic post sundown up till 11 PM, the need for constant power is imperative. Other sub centres in the region which are not solar powered or have efficient lighting, have bills ranging from INR 700-800 per month.



Safety and Security: Many ANMs who were posted here before Bhagya had asked for transfers due to uncomfortable and improper living conditions. Currently during COVID-19, Bhagya is able to cover screening of about 100 households per day and keep the clinic open till late night for emergency cases.

“

With patients coming and visiting only in the night due to COVID-19 duties, it is very convenient for me to be living next door. The clinic is very comfortable and cool at all times and I remain unaffected by power cuts at odd hours due to having a solar connection.

Bhagya,
Auxiliary Nurse Midwife, YK Mole Subcentre



4 Energy Incubation

Skilling and Entrepreneurship for SDG7

SELCO Foundation incubates enterprises and institutions across the sustainable energy value chain with hands-on mentorship, in order to achieve wider access and scale of energy driven services for the bottom of the pyramid via local enterprise building and service provisions. Grassroot entrepreneurs are supported and encouraged to evolve geographic and segment specific business model and processes, which is based on SELCO's inclusive philosophy of customized solutions, doorstep financing and services.

Clean Energy Enterprise (CEE) Incubation Program

The program was initiated in 2015 to support and inspire grass-root level entrepreneurs in developing sustainable energy enterprises that deliver need based solutions to the community with a strong intent to replicate/scale the impact to multiple end users. In the year 2019-2020, the program supported 32 enterprises across the states of Odisha, Assam, Manipur, Meghalaya and expanded its work in Jharkhand specifically.

Incubation for Energy Efficient Technologies to further the Sustainable Energy Ecosystem

In 2019, SELCO expanded its incubation program to focus on supporting enterprises with a focus on innovating and manufacturing technology for the SDG7 ecosystem. The Technology Incubation Program will focus primarily on:

- Application based technologies developed for or in partnership with low income, very poor and vulnerable populations
- Technologies and products that are futuristic and can enable drastic/ transformative change in the climate or social sustainability paradigm (Building assets, opportunities, services and investments for the poor which are capable long term positive environmental and social impacts)

In 2019, 10 enterprises were mentored through the program.



Partnership with Assam State Rural Livelihood Mission

A partnership with ASRLM was initiated in order to tap into the entrepreneurship potential in the state of Assam specifically. ASRLM has a solar program where they conduct training on marketing, assembling etc. Five women groups were identified who are being onboarded as incubatees who are interested in building the portfolios of their enterprises.

Partnership with ATAL Innovation Mission, NITI Aayog



SELCO Foundation brought the vital inclusive incubation philosophy and practice to national focus by entering into a partnership with NITI Aayog to initiate an incubation program in the North East. Atal Incubation Centre-SELCO Foundation is the incubator for North East with financial and technical support from AIM. The inauguration was done by Rajiv Kumar, Chairman of NITI Aayog. AIC-SELCO Foundation is based out of Guwahati and aims to support and encourage start-ups in sustainable energy sector and would provide them with necessary infrastructure facilities and other value-added services.

Picture: Inauguration of Atal Incubation Centre-SELCO Foundation by Rajiv Kumar, Chairman of NITI Aayog

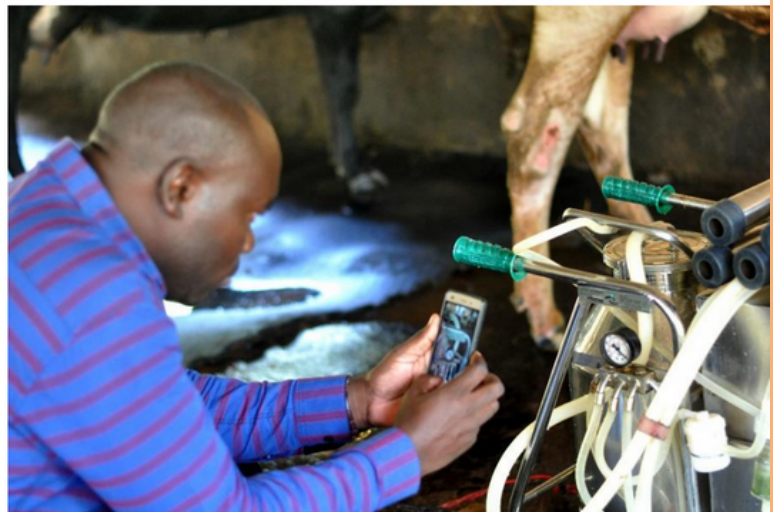
Atal Incubation Centre - SELCO Foundation in Guwahati is a center that enables and empowers sustainable energy based innovators and entrepreneurs to scale in the North East of India.

Objectives of the the incubation center:

- Inculcate a design thinking process that is rooted in the realities and challenges of climate change and poverty alleviation, bringing out solutions that are context driven and promote environment preservation.
- Create and deploy innovative solutions, involving technology and finance, that positively impact the well-being, health, education and livelihoods of the poor and the underserved.
- Build sustainable social business models that use sustainable energy as a tool for poverty alleviation in an environmentally sustainable manner.
- Inspire and encourage participation of local entrepreneurs from remote regions, to take the lead in building enterprises, using sustainable energy technologies.

5

Dissemination of Learnings Events, Workshops and Trainings



India- Innovation Centre for the Global South

The [SHG conference](#) in partnership with SKDRDP was held between 30th October - 2nd November 2019 which had a two day formal conference involving international sector specialists dealing on a myriad of issues ranging from SHG movement in the forefront of transformation, to the digitization and bank linkage etc. Stakeholders from Tanzania attended the conference with discussions on building interlinkages between the programs. Field visits were conducted with the partners to meet with grassroot champions and beneficiaries. Along with this, deep dive discussions on chosen modules for implementations with sector specialists were conducted.

A Learning Exchange Visit was organised with Organizations in Ethiopia to facilitate understanding the criticality of sustainable energy interventions and participation of different ecosystem stakeholders at different points in various agriculture value chains. The visits and discussions with various ecosystem stakeholders were designed to lay the foundation for agriculture- energy nexus programs in Ethiopia with visited organizations. The identified actors for learning exchange programs had sufficient understanding on the role of energy access, and thus the visit also provided a great platform for SELCO to learn and understand the effective models from Ethiopia.

SELCO conducted a detailed sustainable energy - livelihood assessment of refugee camps in Djibouti with the partnership of UNITAR. This was done in order to develop and recommend strategies for implementations in sustainable energy - livelihood nexus in Djibouti. Conversations with UNHCR and Global Plan of Action (GPA) are underway to explore partnerships in implementing sustainable energy implementations in Djibouti.

SDG7 for SDG8: Sustainable Energy and Livelihood Nexus

The conference brought forward the importance of sustainable energy in developing livelihood interventions at the grassroots level, leading to inclusivity and democratisation of wealth distribution. It also brought to light some of the much-needed livelihood related opportunities, that are primarily poor centric, and the related challenges with appropriate solutions. Livelihoods, powered by sustainable energy, are diverse in nature.

Over 30 solutions were also showcased (live demonstrations) varying across sectors - from agriculture to dairy to textiles.

The panels and workshops focussed on solutions and created an open platform where diverse set of participants, across all stakeholders, could contribute and learn. The two day event brought together over 300 stakeholders to discuss replicable models and processes that can scale sustainable energy, livelihood solutions and transform under-served communities.

[Link to a Brief on the Proceedings](#)



North East Trade Facilitation Fair

In February, SELCO Foundation hosted a 2 day event, North East Trade Facilitation Fair, to showcase sustainable energy based solutions and technologies focussed towards the development of the North Eastern Region of India specifically. The two-day convention Trade Facilitation Fair brought together different stakeholders to exchange, demonstrate and understand models and processes to replicate sustainable livelihoods through decentralized and renewable energy and encourage opportunities for disadvantaged communities.

In addition to insightful panel discussions, focused on the role of sustainable energy in facilitating livelihood improvement in the North East, the event showcased over 70 vendors, manufacturers, innovators and entrepreneurs and demonstrated their solutions and saw participation from over 4000 grassroots entrepreneurs, civil society organizations, SHG members, farmers, craftsmen and representatives from government bodies. The technology enterprises were given the opportunity to showcase their products cutting across sectors like agriculture, textile, poultry, solar lights, built environment etc to a diverse audience, build new connections, enabling lead generation and scaling the solutions in North East India.





Do get in touch with us to know more!



SELCO Foundation

info@selcofoundation.org

www.selcofoundation.org



M/S RAMESH ASHWIN & KARANTH

CHARTERED ACCOUNTANTS
Firm Reg. No : 010680S

Partners
Ramesh B N (M.No : 015170) Mob:9448468958
Ashwin B R (M.No : 214199) Mob: 9886415958
Prashanth Karanth (M.No: 214235) Mob: 9886282946

INDEPENDENT AUDITOR'S REPORT

To the Members of SELCO Foundation

Opinion

We have audited the Financial Statements of SELCO Foundation, which comprises the Balance Sheet as at 31st March 2020, and the Statement of Income and Expenditure and Receipts and Payments accounts for the year then ended, and notes to the financial statements, including a summary of significant accounting policies. In our opinion, the accompanying financial statements give a true and fair view of the financial position of the entity as at March 31, 2020, and of its financial performance for the year then ended in accordance with the Accounting Standards issued by the Institute of Chartered Accountants of India (ICAI).

Basis for Opinion

We conducted our audit in accordance with the Standards on Auditing (SAs) issued by ICAI. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the entity in accordance with the Code of Ethics issued by ICAI and we have fulfilled our other ethical responsibilities in accordance with the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation of these financial statements that give a true and fair view of the state of affairs, results of operations and cash flows of the entity in accordance with the 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 financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the entity's financial reporting process.





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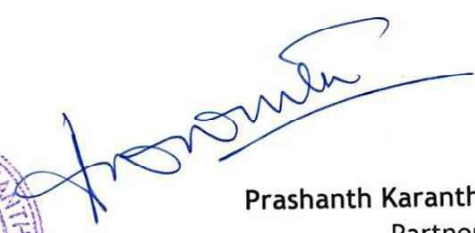
Prashanth Karanth (M.No: 214235) Mob: 9886282946

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

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




Prashanth Karanth
Partner
M No. 214235
UDIN: 20214235AAAASG7159

Place: Bangalore
Date: 21/10/2020

SELCO Foundation
690, 1st Floor, 15th Cross, 2nd Phase, JP Nagar, Bangalore 560078
BALANCE SHEET AS AT 31st MARCH 2020

[Amount in Rs.]

| PARTICULARS | Schedule No. | 31/03/2020 | 31/03/2019 |
|---|--------------|---------------------|---------------------|
| <u>FUNDS AND LIABILITIES</u> | | | |
| Non Corpus Fund | 1 | 49,09,17,582 | 40,38,16,767 |
| Total Liabilities | | 49,09,17,582 | 40,38,16,767 |
| <u>PROPERTY & ASSETS</u> | | | |
| Fixed Assets | 2 | 67,74,165 | 64,93,429 |
| Current Assets, Loans & Advances | | | |
| Cash and Bank Balances | 3 | 46,72,62,746 | 37,68,07,752 |
| Current Assets | 4 | 4,94,96,892 | 4,01,34,564 |
| Less: Current Liabilities & Provisions | 5 | 3,26,16,221 | 1,96,18,978 |
| Net Current Assets | | 48,41,43,417 | 39,73,23,338 |
| Total Assets | | 49,09,17,582 | 40,38,16,767 |

See accompanying notes to the financial statements
As per our report of even date

For SELCO FOUNDATION

[Signature]
Trustee

[Signature]
Trustee

[Signature]
Chief Executive Officer

[Signature]
Chief Financial Officer

For M/s Ramesh Ashwin & Karanth
Chartered Accountants,
F.R.No. 010680S

[Signature]
Prashanth Karanth
Partner
M No. 214235



Place : Bangalore
Date : 21/10/2020

SELCO Foundation
690, 1st Floor, 15th Cross, 2nd Phase, JP Nagar, Bangalore 560078
INCOME & EXPENDITURE ACCOUNT FOR THE PERIOD ENDED 31ST MARCH 2020

[Amount in Rs.]

| PARTICULARS | Schedule No. | 31-03-2020 | 31-03-2019 |
|---|--------------|---------------------|---------------------|
| INCOME | | | |
| Grant Received - Foreign | 6 | 44,33,67,904 | 29,62,68,276 |
| Donations - Local | 7 | 6,59,66,421 | 4,10,23,769 |
| Interest from Banks & Income Tax Refunds | | 2,75,88,798 | 2,38,45,562 |
| Grant Received in Kind - Foreign | | - | 4,50,000 |
| Interest received - other sources | | 1,614 | 14,243 |
| Professional income/ other income | | - | 90,340 |
| Total Income | | 53,69,24,738 | 36,16,92,190 |
| EXPENDITURE | | | |
| Project Costs | 8 | 40,58,25,920 | 24,92,61,561 |
| Research & Development Costs | | 48,23,511 | 21,86,160 |
| Administration Costs | 9 | 3,73,59,336 | 2,86,11,349 |
| Depreciation | 2 | 18,15,156 | 18,36,286 |
| Total Expenditure | | 44,98,23,923 | 28,18,95,356 |
| Surplus | | 8,71,00,815 | 7,97,96,834 |
| Provision for Taxation | | - | - |
| Surplus (Carried to Balance Sheet) | | 8,71,00,815 | 7,97,96,834 |
| Significant Accounting Policies & Notes to Accounts | 10 | | |

See accompanying notes to the financial statements
As per our report of even date

For SELCO FOUNDATION

[Signature]

Trustee

[Signature]

Chief Executive Officer

[Signature]

Trustee

[Signature]

Chief Financial Officer

For M/s Ramesh Ashwin & Karanth
Chartered Accountants,

F.R.No. 010680S

[Signature]

Prashanth Karanth
Partner

M No. 214235



Place : Bangalore
Date : 21/10/2020

SELCO Foundation
690, 1st Floor, 15th Cross, 2nd Phase, JP Nagar, Bangalore 560078
Receipts and Payments account for the year ended 31.03.2020

| Particulars | Amount (Rs) | Amount (Rs) |
|---|--------------|---------------------|
| Opening Balance | | |
| Cash | | 16,905 |
| Bank | | 1,18,64,116 |
| Fixed Deposit | | 36,49,26,732 |
| Receipts during the year | | |
| Grants received | 44,33,67,904 | |
| Donations received | 6,59,66,421 | |
| Interest from Banks & Income Tax Refunds | 2,57,64,428 | |
| Interest received - other sources | 1,614 | |
| Net Receipts | | 53,51,00,367 |
| TOTAL | | 91,19,08,120 |
| Payments during the year | | |
| Project Costs/Research and development cost | 40,64,28,355 | |
| Administrative Costs | 3,34,49,626 | |
| Fixed Assets purchased | 20,95,892 | |
| TDS FY 2019-20 | 26,71,503 | |
| Net Payments | | 44,46,45,375 |
| Closing Balance | | |
| Cash | | 7,102 |
| Bank | | 2,36,63,129 |
| Fixed Deposit | | 44,35,92,514 |
| TOTAL | | 91,19,08,120 |

As per our report of even date

For SELCO FOUNDATION

[Signature]
x

Trustee

[Signature]

Chief Executive Officer

Place : Bangalore
Date : 21/10/2020

[Signature]
x

Trustee

[Signature]
Chief Financial Officer

For M/s Ramesh Ashwin & Karanth

Chartered Accountants

F.R No. 010680S

[Signature]

Prashanth Karanth

Partner

M No. 214235

