

# Learning Exchange Visit: MCPI, K-Coop, KDCI to SELCO Foundation – Report and Plan of action



SEPT 3 - 6, 2019

### SUMMARY OF THE VISIT



The visit was organized by MCPI as part of their Green Inclusive Finance Program to encourage the design and deployment of "Clean Energy Products under a Local Financial Institution". The partnership provides technical assistance and direct grant to KDCI and K-Coop to support the capacity building of staff and development of clean energy financing products. The project is being implemented from December 2018 to December 2019.

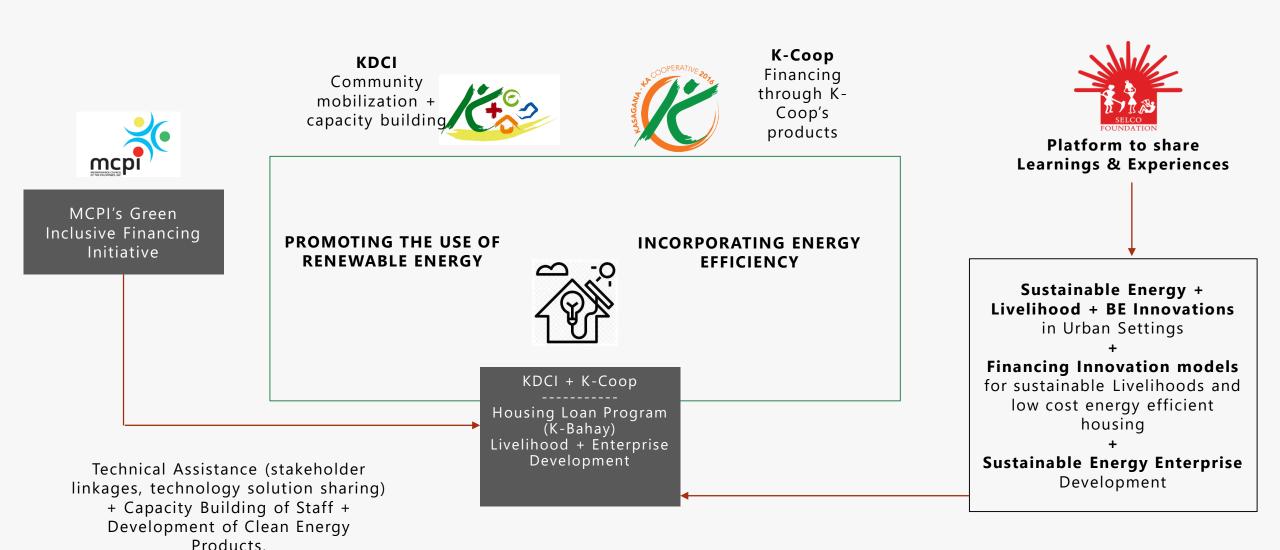
The learning exchange visit between SELCO Foundation and MCPI/ K-COOP/ KDCI is to enable and strengthen the design and implementation of such a clean energy financing portfolio around Energy Efficiency + Built Environment + Livelihood solutions for the urban poor in Philippines. The 4 day visit was comprised of interactive discussions, field visits in Bangalore, partner visits to Mahila Housing Trust (MHT) in Ahmedabad and way forward planning strategies. The discussions were held at identifying the gaps existing with the current financing ecosystem for the urban poor, and how could the partnership between MCPI, K-Coop, KDCI, with additional technical assistance support from SELCO Foundation, be structured for effective implementation.

In the partnership, **SELCO Foundation would have an advisory and technical support role** in terms of strengthening the program (capacity building, programmatic inputs, support in establishing processes, facilitating a knowledge transfer platform and technical assistance support in pilot implementations.



Extension Housing in Bangalore

# COMPONENTS OF THE PROGRAM: MCPI + K-COOP + KDCI



# AGENDA

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	03 September 2019	04 September 2019	05 September 2019	06 September 2019
	BANGALORE - SELCO OFFICE	FIELD VISIT IN BANGALORE	MEETINGS + VISITS AT AHMEDABAD	MEETINGS AT AHMEDABAD
08:30 - 09:00	INTRODUCTION			
09:00 - 10:00	SELCO FOUNDATION OVERVIEW			
10:00 - 11:30	ENERGY EFFICIENCY + BUILT ENVIRONMENT + FINANCING : A deep dive into SELCO's approach to efficiency in housing and livelihoods, from BE perspective and contextualization of Energy Efficiency in BE	FROM 8:00 AM to 3:30 PM -	Presentation & Interactive discussions with Mahila Housing Trust (MHT), which is an organization aiming to organize and empower women in poor communities to improve their habitat. https://www.mahilahousingtrust.org	De-brief with MHT and discussion with Director + Core Leadership Team
	COFFEE BREAK	Field Visits in		
11:45 - 13:00	FINANCIAL ECOSYSTEM AROUND ENERGY ACCESS + EFFICIENCY + LIVELIHOODS : A deep dive into the need based financing innovation and drawing parallels with the possible framework of MCPI + K-COOP + KDCI	+ Bangalore: Efficiency in Livelihoods (Sewing Machine + Blacksmith Blower) - Murugeshpalya ew of Housing extension - Resilient housing urban slum dwellers - Mysore Road d how ogram Energy efficient		
	LUNCH BREAK		FIELD VISIT	
14:00 - 14:30	Presentation from MCPI on their current work + overview of the partnership with K-COOP and KDCI		ModRoofs sloped and latest with false	Way forward discussions with the delegation + SELCO team : A broader framework structure for the partnership
14:30 - 15:00	Presentation from KDCI on their current program + work in energy/ livelihood/ BE programs		ceiling Airlite	
1 15:00 - 15:30 1	Presentation from K-COOP on their existing portfolio and how energy efficiency + livelihood + BE been part of their program		Petty shop with Bamboo Panels	
COFFEE BREAK		housing for urban	Vikasini house	
16:00 - 17:30	Interactive discussion: Delving deeper into the the strategy between three partners & learnings from the day.	poor - Hebbal	Coolroof sites	END OF VISIT

# Day 1: Setting the context & BE + Financing + Energy Efficiency learnings



#### **INTRODUCTION Session + Context Setting:**

The day started with a round of introductions among teams, and each one's expectation from the visit along with their background. Based on the concept note and the earlier discussions, a quick context was given to the visit.

#### **SESSION 1: SELCO Foundation Overview**

Sarah Alexander provided the introduction to SELCO Foundation, its philosophy, process of technological, financial and delivery model innovation, ecosystem approach in addressing the energy access issues and how SELCO perceives energy access as a catalyst towards development that cuts across the sectors. It also discussed how sustainable energy could provide safety net to the poor by creating assets when designed optimally with the right financing and delivery models. The presentation also dealt in detail with how the solutions become more effective when designed to fit in different scenarios rather than just pushing one pre-defined solution. After discussing in detail on the livelihood + energy nexus, the process of implementation in various geographies were described. Finally, the structure of various SELCO entities was briefly explained to provide a context to the rationale of why there are different legal entities under the SELCO Umbrella today.

#### **SESSION 2: Energy Efficiency in Energy Access**

Presented by the Built Environment team of SELCO, it provided an overview of innovations in energy efficiency – in technology and built environment for improved energy access. The presentation discussed the close interconnect between the cost of energy, energy performance of technology and space, while looking at how improving energy efficiency and better access to energy itself provide improved well-being to end-users. Depending on the typology of the community, the Built Environment component looks at various effective ways of bringing energy efficiency in the living space – natural lighting, ventilation, and thermal comfort for habitation. Solutions were presented from efficient spatial design, right materials, design of fenestrations, and placing efficient appliances at the right places. Other aspects discussed included efficient housing, spatial design for entrepreneur work-place, financing models for Skylight with home lighting and other livelihood financing + built environment case studies. All this was discussed within the framework of an ecosystems approach i.e. including multiple aspects from technology design to supply chains to training to financing to policy. Thus, emphasizing that solutions need to go beyond technology so as to be cognizant of a systems based approach to truly make it sustainable.





Discussions at SELCO Foundation Head Office, Bangalore

# Day 1: Financial Ecosystem and Organization Summaries



#### **SESSION 3: Financial Ecosystem Around Energy Access for Livelihood + BE**

This session included the philosophy, strategies, learnings and specific case studies from SELCO's experience in designing and delivering sustainable energy access financing to the doorstep of the poor. The criticality of financing ecosystem and appropriate financing innovation provided the context – as it discussed a few aspects such as how financing results in affordability with freedom of choice while keeping the quality of the solution intact. Different elements of financing ecosystem were discussed in detail – capacity building, relevant stakeholders, financial innovation, etc. Then the importance and modalities of need based finance was discussed with specific examples of energy – livelihood solutions that SELCO has intervened, and how the loan terms were designed based on the increased incomes in the households. Several factors that affect cashflow based finance were mentioned, and it was also discussed on how several financial innovation mechanisms – from pre-financing to recollection – were designed to tackle these factors. Different de-risking tools were mentioned before concluding with the relevance of each stakeholder in the financing ecosystem.

#### **SESSION 4: Presentations from MCPI, KDCI and K-Coop**

All the three entities in the tripartite understanding provided insights into their respective work – both from a broader perspective as well as the role of each organization in the current program.

- MCPI gave brief overview of their Green Inclusive Program, and how the different MFIs involved in the program are supported by the program in order to start a new green financing product in their portfolio.
- Partnership with K-Coop and KDCI was discussed, and how the program is being conducted in two phases building awareness among the staff and clients in energy efficiency and then to have different financing products addressing BE + energy efficiency aspects. It was also discussed on the need of MFIs to be more creative and some of the factors that challenge the MFIs in being so.
- K-Coop's existing financing programs were discussed, and the Window 1 in their K-Bahay program where green inclusive finance fits in was dealt in detail. The current capabilities, challenges, and possible support needed in plugging in gaps for each organization was discussed.
- The discussion was also held on how to strengthen the current program between MCPI, KDCI, K-Coop which is described in detail in the last section of the report.

### Day 2: Field Visit to BE + Energy Efficiency + Livelihood interventions - BANGALORE





SITE 1



SITE 2

**Site 1: Location:** Koramangala.

Solar powered blacksmith blower for an urban microentrepreneur

Site 2: Location: Rustum Bagh.

Solar powered sewing machine + potential BE intervention for entrepreneur's tailoring shop +designing of cashflow based financing that suits her income.

Site 3: Location: Mysore Road

Extension housing for urban poor – above the permanent built housing with Karnataka Slum Development Board to understand the portability, modularity, adaptability & efficiency of transitionary structures to have a better living environment

Site 4: Location: Hebbal.

Efficient housing project with Hasirudala, an organization that works with waste-pickers community. Energy efficiency within the built environment and appliances + piloting it with a local champion to provide a case of financing + design innovation to the local government + community were the main focus. Fly ash load bearing walls with higher thermal lag, windows for optimum daylighting in living areas and kitchen, and efficient lighting appliances & their placing are the energy efficiency components.



SITE 3



SITE 4

### Day 3: Discussions with MHT and Field Visits at Ahmedabad

#### **MHT Presentation – Discussion Points**

- Started in 1994, by SEWA, MHT mainly focuses on Habitat and Housing in urban areas. Their approach as a community based organization is to mobilize women to build collective leadership among them.
- Their mandate is to be a connecting platform between government/ schemes and the urban poor to avail those schemes – by strengthening communities and providing advocacy to the governance structures.
- They believe in developing social capital by empowering women of slum households. This is done by creating 15-25 women leaders from 150-200 households of the slum who form a Community Action Group, and then some become Vikasini – who not only represent their groups or slums but also work for the other groups, and be the connecting point between community and MHT.
- The process of facilitating connect between government and poor to deliver solutions takes time – many years. They concentrate towards water & sanitation, energy & climate change, affordable housing & land, livelihood & skill

development and democratic urban governance.

- MHT, while working between government and communities, identifies the gaps in the policies and provides feedback to the government on the same.
- Their sustainable energy work began with legal electrification, then they built an energy audit process, promoting RE and energy efficient systems (which is their recent portfolio), and reducing indoor environment.
- Primary focus of the interventions are towards making the communities less vulnerable from the implications of climate change. MHT understands the intricate connect between climate resilience and energy.
- AWAAS, the technology enterprise takes care of construction, energy interventions and project management services (for govt projects).



Discussions at MHT office, Ahmedabad



### Day 3: Discussions with MHT and Field Visits at Ahmedabad



#### **Discussion Points:**

- Process of identifying areas to generate awareness for interventions:

  From a connect with the earlier interventions, government requests for a certain community, and MHT's own local leadership staff identifies the endusers
- The demand for renewable energy and energy efficiency in already electrified areas: Despite existing grid there is still a need to think of energy efficiency with increasingly high per unit rates.
- One of the biggest problems that KDCI / K-Coop faces is **the lack of technology technology partners for energy efficiency and vetted technology solutions that can be easily accessed by end users.** The presence of Awaas was created for a similar challenge in case of MHT so the need of a parallel is in the K-Coop/ KDCI partnership is to be filled. MCPI plays some role in it, but other technology providers to be identified.
- One of the critical convincing pitches that MHT did post SELCO's intervention is to translate the learning from ENERGY AUDIT into SAVING in the energy spend for the households to perceive the benefits. The details of the MHT Coop was discussed, the respective presentation shared with the report has the details.
- MHT Microfinance had the entry point in the JLG group loans for the communities, and then once savings culture and confidence is cemented, second loans were given to the individuals.

- The loan products were discussed with detail the presentation has the respective details. The three types of loans are unsecured loans for housing, semi mortgage loans for incremental housing and secured mortgage loans.
- In terms of **source of financing for the Co-op** to provide low cost of financing to its end users at MHT- the savings in the Co-op provides the needed support while giving long term low interest loans.
- In case of K-Coop, 45% of lending money comes from savings and remaining from external lending. The external lending is at a rate of 7% from the commercial banks yet, the lending rate of almost 30% from the MFIs a gap exists. Avg market rate for the Philippines is 45-48%
- The average loan for MHT is INR 40,000 (PHP 29000) and for K-Coop is PHP 9000. It is to be explored if the interest rate could be reduced by a certain percent so as to see if the demand/ loan ticket size increases in the community.
- MCPI suggested The reduction in Rate of Interest for one MFI may not translate into increase in demand as MFIs provide other related services which people are used to with all the MFIs, and if reducing the interest rate has to be effective, then the other services should stay as well.
- Credit for energy products is given by the combination of MHT, Credit
  Cooperative and Awaas. Energy efficient product packages are mandated
  with various amounts of loan products, and then MHT to facilitate direct
  association between technical partner and FI; and finally exclusive loans for
  the end-users are provided for the energy efficient products.

### Day 3: Field Visits at Ahmedabad

SELCO FOUNDATION

• **Pilot in construction materials and technology** - The key objective of the pilot is to explore sustainable alternative building material and construction technology. Compressed bamboo mat sheets have been used for walling and Bamboo corrugated sheets for the roofing.

**Beneficiary:** LAKSHMI BEN

**Livelihood:** home based grocery store

Area: Rajivnager, Ahmedabad

• Housing Loan from the Credit Corporative for reconstruction of the existing house. Mortgage Loan of size Rs 3,50,000, (USD 5000 or PHP 250,000) tenure of 5 years and an interest rate of 13%. She pays an EMI of Rs 8000.

Beneficiary: BHANU BEN – Vikasini\* at MHT

Area: Rajivnagar, Ahmedabad

Installation of MOD roof with Airlite technology\*\*

Beneficiary: GULABNABI BHAI

**Livelihood:** Kite making

Area: Behrampura, Ahmedabad

\* **Vikasini**: MHT facilitates formation of Community Based Organizations (CBO) and Community Action Groups (CAG) at slum level. The CBOs coalesce under a umbrella body called Vikasini, a city level federation of slum dwellers

\*\* **Mod Roof**: The modular roofing system (Mod Roof) is a waterproof roofing, made of paper waste & coconut husk. It is an environment-friendly alternative to the RCC roofing system. It is also easily dismantable, and could be reinstalled after adding additional floors, or taken to new locations.



Above: Mod Roof Below: Mod roof with Airlite



### Day 3: Field Visits at Ahmedabad

SELCO FOUNDATION

• Installation of MOD roof. Modification of roof from a sloped Mod roof to the latest version.

Previously they had a roof made of corrugated tin sheet. Earlier it did not get this hot. But since these last years, the heat is intolerable. The second problem is that when it rains, roof used to leak. Every monsoon season, she had to repair the roof. Now for this solution, not only she could also take a loan and pay in instalments, they also don't suffer from heat anymore. The company assured us that they can add a floor in the future."

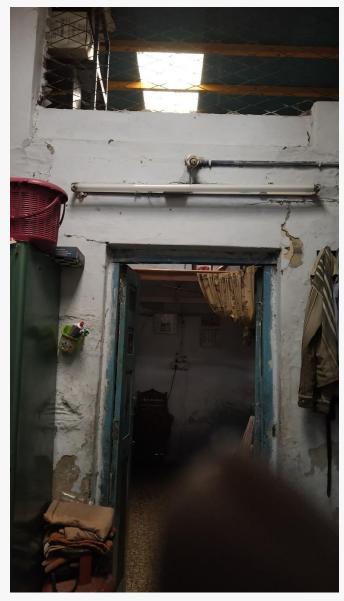
Beneficiary: MINABEN - heads an Anganwadi, Vikasini at MHT

Area: Odhav, Ahmedabad

• Meenaben has been living in a house covered with an asbestos roof. It was difficult for her to live and work indoors during harsh summers. She has opted to get her roof painted with Solar Reflective White Paint which is one of the most affordable solutions to increase thermal comfort indoors.

**Beneficiary:** MEENABEN **Livelihood:** Tailoring

Area: Rameshdutt Colony, Ahmedabad

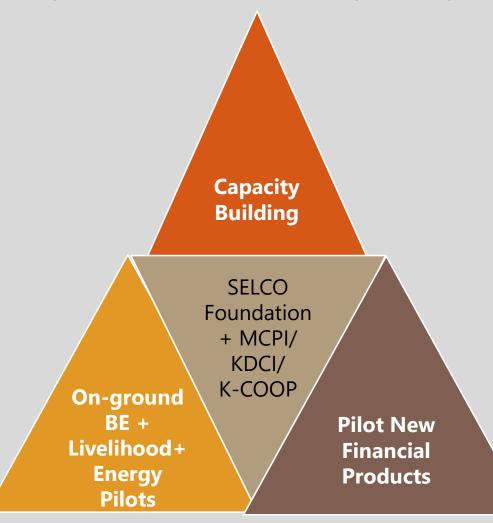


Airlite installation, Ahmedabad

### Day 4: Way Forward + Plan of Actions - SELCO PARTNERSHIP PARTS



The discussions were held around strategizing the plan to co-develop new program proposals with MCPI, K-COOP and KDCI and strengthening the existing MCPI's Green Inclusive Finance program through programmatic inputs and support from SELCO Foundation.



### CAPACITY BUILDING

#### **MCPI**

- Capacity Building for MCPI staff to design RE + Energy Efficiency +BE portfolios
- Strengthening technical partners for MCPI to support MFIs in terms of technical due diligence, need assessments
- Capacity building for local stakeholders NGOs, CEEs, MFIs, and other partners

### **KDCI/ KCOOP**

Energy + BE financing innovation workshop with the involvement of partners in India

#### PILOT NEW FINANCIAL PRODUCTS

#### **MCPI**

Supporting MCPI in co-developing the proposal renewal for Green Inclusive Finance program to create a proposal for Green Inclusive Innovation Financing Fund –
Phase to begin post December 2019

#### **ON-GROUND IMPLEMENTATION PRE-PILOTS**

#### **KDCI/ KCOOP**

 From energy assessments to implementation to post-implementation evaluation support from SELCO Foundation, and KDCI to chalk out funding to cover the pilots.

# Day 4: Way Forward-Key Discussion Points



### MCPI + KDCI + KCOOP Inputs:

- MCPI, K-COOP, KDCI are looking at building on this partnership with SELCO Foundation in terms of capacity building support, programmatic inputs for developing proposals, processes in addressing energy efficiency in energy access from beyond lighting perspective.
- K-COOP has the energy efficiency portfolio for housing now, but it doesn't encompass livelihood + other critical things that they witnessed here.
- Example of MCPI's learning sessions for K-COOP staff (especially the loan officers) with the involvement of Solar Solutions (local energy enterprise) and architects to develop understanding of solutions.
- MCPI chooses the pool of trainers from the community to do the capacity building at the ground level.
- The gap existing in the local enterprise ecosystem is an area to be addressed when it comes to implementation. MCPI currently provides that platform for its member organizations to connect with the tech partners for whom it serves as a way to expand their business.
- The loans for the staff is easier as the repayment could be taken from the salary but for the community, it isn't easy.
- MCPI has identified 3 MFIs for the green inclusive financing program
   covering other parts of Manila as well.
- KDCI to explore utilizing its fund at Piloting solutions on the

ground. - follow up needed.

### **MHT & SELCO Inputs:**

- The inputs on selection of site the accessibility and the willingness of the end-user to be open for others to visit and understand the implementation.
- The staff capacity building not only requires the technical capacity building but also should include sales angle to enable them effectively market.
- If the loan officers go to the site to discuss the solution with the end users to do the tech due-diligence, often the solutions tend to fit the financial products rather than the financial product being designed for the solution. Hence it is necessary to have that interface between the community and the financing entity.
- The clarity of role for an MFI and an implement/ development organization SKDRDP and SELCO India example was discussed.
- SELCO suggested its potential role in the partnership with MCPI in terms of providing programmatic inputs to tweak existing program and support in developing the next proposal for green inclusive finance.
- SELCO suggested two ways of Financial Innovations while piloting financing products that could be effective – creating new loan portfolios through high risk innovation funds and innovative ways in managing expenses within the organization

Day 4: Action Plan

Organization	Suggested Support Next Steps		Timeline
	Propose a "scale up" aspect to grant renewal in December 2019, by way of structuring an innovation fund concept to assist selected MFIs and the relevant stakeholders in experimenting with new technologies, building appropriate ecosystem (tech developers, tech assessment, capacity building etc.) and financial products with various loan terms suited to end user needs for energy efficiency in habitat and livelihoods	SELCO can play an advisory role to assist in structuring the innovation fund, sit on a review board in possibly selecting the MFIs and to co-strategize direction of how funds can be used for each MFI once funds received etc.  Convene a preliminary call to strategize how such a fund could support ongoing activities. Plan for an in-person meeting to flesh out operational/conceptual aspects of proposal  Draft MoU (to be shared before the MCPI board meeting) between SELCO Foundation and MCPI to outline all the roles, timelines and outputs associated with these support areas. Draft to be sent by SF for review with partners.	Completion November 30 <sup>th</sup> . 2019  October-November 2019  By September 20 <sup>th</sup>
MCPI	Input to Green Inclusive Finance Program that can elevate MCPI's ongoing efforts. This could includetools to conduct energy audits/assessments, design of energy financing portfolios, input to design capacity building programs for different critical stakeholders such as enterprises, end users, implementing partners (financial institution and community organization)	SELCO can play an advisory role and training partner role. SELCO can cover costs (HR + travel) of its own staff.  Conduct training workshops for MCPI in November 2019	November 30 <sup>th</sup> 2019
	Targeted workshop at designing sustainable energy-finance products for either just KCoop or selected MFIs including sessions with other regulatory/policy influencing organizations. This can also serve as inputs to the design for the Innovation Fund proposal.	SELCO can bring in expert speakers and trainers for this plus cover costs (HR + travel) of its own staff.  Conduct in-person workshop in Nov 2019 (on the sidelines of SKDRDP SHG conference also? Between Oct 31st to Nov 2nd?)	November 30 <sup>th</sup> 2019

	Organization	Suggested Support	Next Steps	Timeline
KCOOP + KDCI		Propose a "Pilot" proposal for an innovation fund concept to assist KCoop + KDCI in experimenting with new technologies, building appropriate ecosystem (tech developers, tech assessment, capacity building etc.) and financial products with various loan terms suited to end user needs for energy efficiency in habitat and livelihoods. This can be pitched to existing funders of KDCI or create proposal for new funders.	SELCO can play an advisory role to assist in structuring the innovation fund, sit on a review board to co-strategize direction of how funds can be used for each MFI once funds received etc.  Convene a preliminary call to strategize how such a fund could support ongoing activities. Plan for an in-person meeting to flesh out operational/conceptual aspects of proposal	Completion November 30 <sup>th</sup> 2019 October-November 2019
		<ul> <li>Pre-Pilot of 3-5 energy interventions to test technology availability, acceptance, affordability, feasibility of loan design</li> <li>Identify the potential sites with certain selection criteria (KDCI/KCOOP)</li> <li>Jointly conduct energy assessment surveys for ideal site selection for community demanded, need based sustainable energy interventions</li> <li>Market research to identify suppliers or vendors of energy efficient materials from local suppliers</li> </ul>	SELCO can provide advisory support and hands on support in all the areas listed.  KDCI to explore possible funding to facilitate these pre-pilot interventions post their discussion with their board members. The approximate budget for this to be decided.	November 30 <sup>th</sup> 2019  By September 30 <sup>th</sup> 2019
		<ul> <li>Provide overall technological know-how support to select suitable interventions. Procure technologies locally (KDCI?).</li> <li>Support with pre, during, post intervention documentation templates, that would help in need assessments, implementation process management and the monitoring &amp; evaluation process all through the intervention period.</li> <li>Provide training and capacity building support around the mentioned interventions to the personnel involved in various capacities.</li> <li>Provide support in co-developing potential templates of technology, finance, business models from the learnings.</li> </ul>	Jointly have a con-call to structure the pre- pilots to be implemented within 6 months with outputs, clear division of roles and timelines.  Draft MoU between SELCO Foundation and KDCI+Kcoop. Draft to be sent by SF for review with partners.	By September 30 <sup>th</sup> 2019

# LINKS TO DOCUMENTS



### **SELCO FOUNDATION DOCUMENTS**

Introductory Presentations
Finance + BE + Livelihood Presentations
Reference Documents
Field Visit Document

### MHT DOCUMENTS

Presentations
Pilot Documentations
Reports

### **PHILIPPINES DOCUMENTS**

Concept Note
Presentations from MCPI, KDCI, K-Coop



**Energy Efficient House, Bangalore**