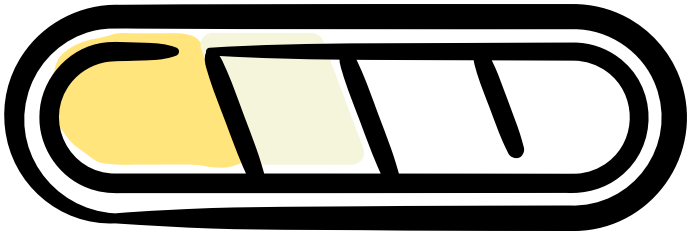
SELCO Foundation

ENERGY FOR HEALTH

Quarterly Milestones & Updates



JANUARY - MARCH 2026

Partnerships & Progress

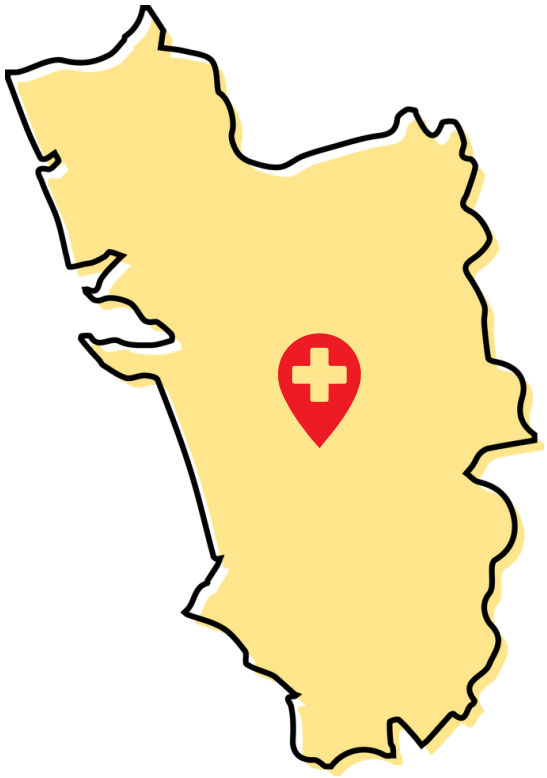
Advancing climate-resilient public health systems in **Tamil Nadu**!

The Tamil Nadu National Health Mission (NHM) engaged with SELCO Foundation (SF) to explore collaboration opportunities for strengthening decentralised renewable energy (DRE) systems across the state. NHM has identified five key areas where SF's support is sought.

Under the first initiative of technical assistance for the development of the new DRE systems tender and vendor selection process, SF has begun its advisory role and submitted comprehensive technical specifications for inclusion in the upcoming tender.

Additionally, NHM has requested SF's support in conducting assessments of 189 solar-powered health facilities under the Technical and Knowledge Advisory portfolio. Tele-assessments are currently underway, and the Technical Team has planned an on-site visit to Krishnagiri district to advance the next phase of evaluation. The NHM has also approved the implementation of 10 Model Health Centres, with project activities scheduled to commence in April 2026.

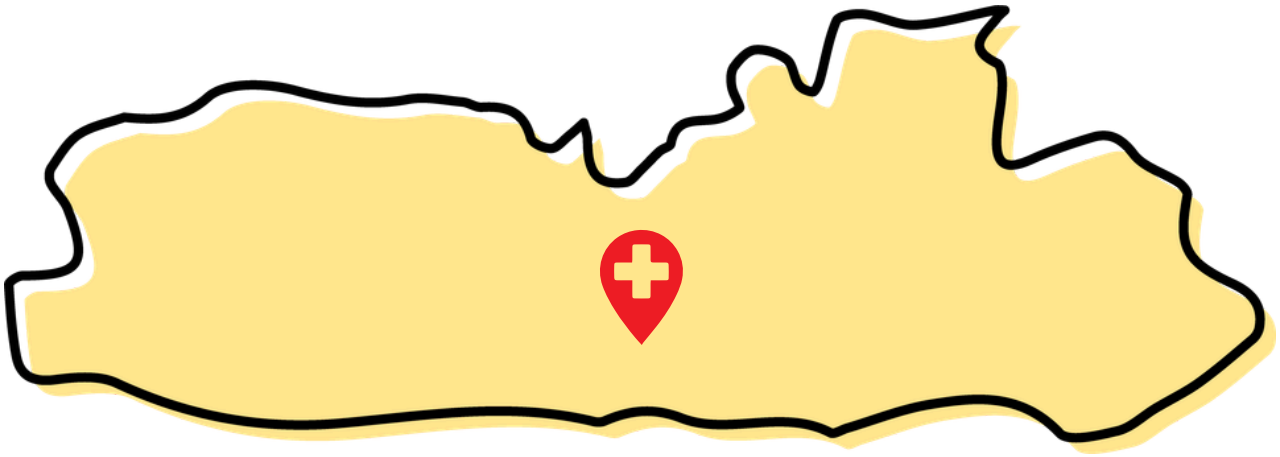
Driving climate-smart planning for primary healthcare in **Goa**!



Following the signing of the Goa MoU, the first review meeting with the Director, NHM, was held on 19–20 January 2026. As an initial step, SELCO Foundation (SF) will conduct assessments of selected health centres to establish two State Health Art Galleries—one at Valpoi CHC and another at a designated PHC in North Goa.

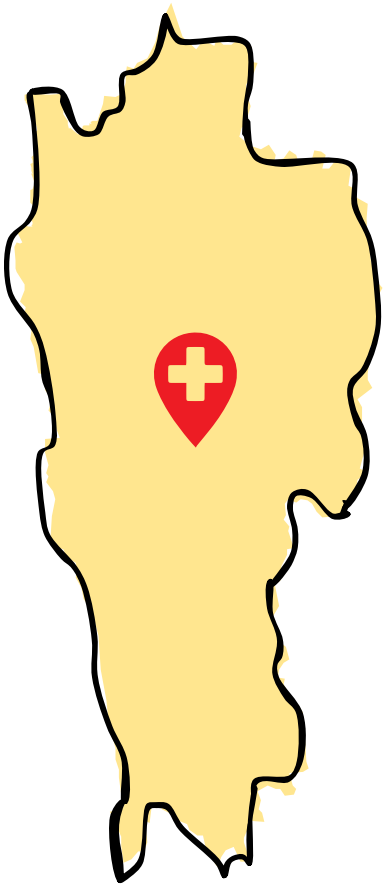
SF also plans to engage with the Goa Energy Development Agency (GEDA) and the Department of New and Renewable Energy (DNRE), Goa. As part of this support, SF has shared the MNRE proposal submitted by DNRE seeking funding for solarizing 16 PHCs across the state.

Strengthening government ownership for E4H in **Meghalaya**!



The process of transferring ownership for the operations and maintenance of existing solar systems to the Meghalayan Medical Drugs & Services Limited (MMDSL) has been initiated. Discussions and documentation are underway to ensure a smooth transition and establish long-term accountability for system sustainability

Enabling climate-smart Anganwadis as the first point of care in **Mizoram**!



The Mizoram Anganwadi Centres project has been initiated with the objective of deploying 300 new DRE systems to support the transformation of Anganwadi Centres into Saksham Anganwadi Centres. The tendering process is currently underway, and installations are scheduled to commence in April 2026.

Case Highlight:

Reliable electricity is essential for ensuring quality healthcare delivery, particularly in remote regions. To address persistent power gaps in Mizoram, decentralised solar energy systems have been deployed across health facilities, enabling reliable lighting, vaccine storage, laboratory operations, and emergency care services.

At the Bairabi Primary Health Centre (PHC) in Kolasib District, a solar power system installed by SELCO Foundation has been providing critical backup power. The system comprised eight inverter batteries (12V, 200Ah) to ensure uninterrupted supply during grid outages.

On 12 August 2025, the PHC experienced a serious disruption when six batteries were stolen, and the remaining two were damaged during a burglary. This rendered the solar system non-functional, impacting the facility's ability to maintain continuous healthcare services, as the solar installation served as its primary backup power source.

Recognising the importance of the system in delivering uninterrupted services, the Medical Officer of Bairabi PHC promptly reported the theft and requested system restoration support, with fund allocation through the Comprehensive Primary Health Care (CPHC) programme to have the batteries replaced.

It is important to note that all solar installations across Mizoram's health facilities are owned by the State Government, ensuring integration into public health operations. Since the state-wide solarization initiative began in 2023, this case represents only the second reported theft among approximately 530 solar-powered health centres, demonstrating strong community acceptance and generally robust system security.

This incident underscores the need for continued collaboration between the state government, health institutions, and local communities to safeguard public infrastructure. It also displays the government's proactiveness, which will lead to sustainability of the program. Enhancing local ownership, strengthening asset protection protocols, and ensuring timely maintenance responses will be crucial to maintaining the resilience of decentralized renewable energy systems that support healthcare delivery.

Delivering climate-smart healthcare in remote regions of **Arunachal Pradesh**!

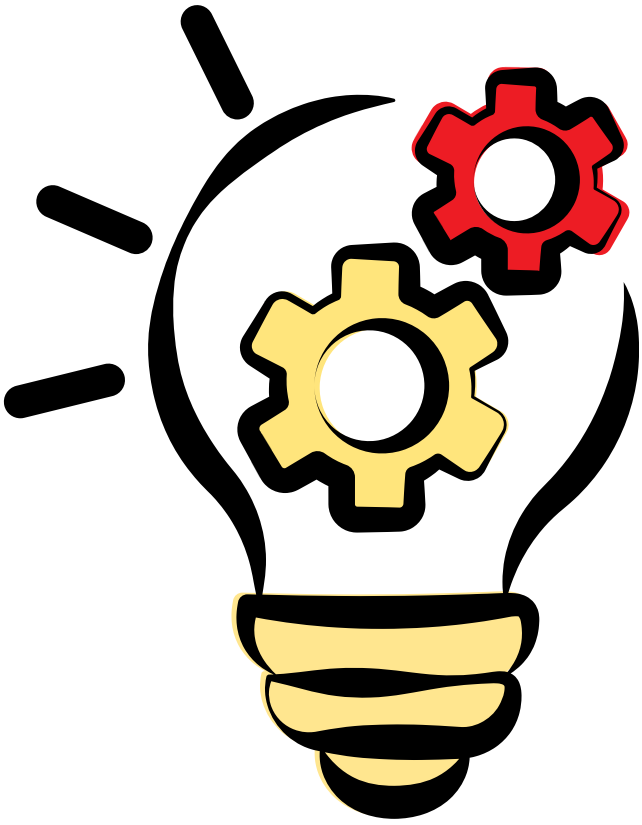
Case Highlight:

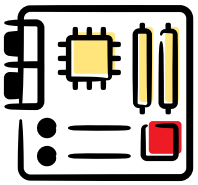
Under the E4H Programme in Arunachal Pradesh, SF completed the installation of a 6 kWp solar system at PHC Vijaynagar, one of the state's most remote villages under Miao Block, Changlang District. The PHC serves around 4,100 people, handles about 300 OPD cases monthly, and conducts 4–5 deliveries. With no grid electricity, the facility previously relied on a generator consuming ~30 litres of petrol monthly, costing ₹150–₹300 per litre depending on road accessibility. A small solar setup powered only a few rooms, while most loads depended on the generator.

The installation team travelled 140 km from Miao, taking 10 hours to reach Vijaynagar on 24 February 2026, and returned on 1 March after a 12-hour journey, including delays due to rain-affected roads.

RMS connectivity was tested at an internet café 500 meters from the PHC. Despite low speed and intermittent connectivity, the RMS device worked, and community members expressed hope for future network improvements and therefore RMS was installed at the facility to remote monitor the performance of the system. The new 6 kWp solar system now powers the PHC and three staff quarters, improving energy reliability, reducing fuel dependency, and ensuring more consistent healthcare services in this remote location.

Key Learnings from O&M





Remote Monitoring System

Remote Monitoring System (RMS) is a device which helps in remotely monitoring the functioning and status of solar systems installed in health care facilities under the E4H programme. The device captures electrical parameters associated with the solar system and shares it to an online server in real-time. The data helps the user to keep a track of real-time status and operation of the solar system.

Learning on Inverters through RMS data

The inverter is the key part of a solar power system. It helps solar energy run lights and equipment and decides when to use power from solar panels, batteries, or the electricity grid. If the inverter is not configured correctly during commissioning, health facilities may rely more on grid power, batteries may degrade faster, and electricity costs can increase.

When a solar system is installed, the inverter needs to be properly set up. These settings decide things like when to use solar power, when and from which source to charge batteries, and when to switch to grid power. Most inverters come with factory settings that do not align with actual needs of the site. If these settings are ignored or set incorrectly, it can lead to high grid usage and poor battery performance.

Earlier, it was difficult to identify these problems. With Remote Monitoring Systems (RMS), it is now possible to see how power is being used, check whether batteries are charging from solar or grid, and fix issues quickly—even while technicians are still on site.

To avoid problems, it is important to:

- Properly train installation technicians on inverter settings or prefer the inverter commissioning through inverter manufacturer service technicians
- Record all key settings in the installation and commissioning report, supported by geo-tagged photos, to ensure the system is set up as per design.

Updates on Saura-eMitra

The E4H Digital Platform: Transforming Health Programme Processes - The E4H initiative is digitising key processes such as assessments, installations, quality checks, and maintenance, moving from pen-and-paper methods to a fully digital platform. Some processes are already operational, while others are in development or testing. All technology and product documentation for each module is publicly available, aiming to ensure global applicability for public asset management.

O&M Digitalization

The Operations and Maintenance (O&M) processes have now been fully moved to digital systems. All communication and documentation are handled online, making it easier to track issues such as system breakdowns, non-working components, and out-of-warranty cases. A shared digital dashboard is available for the E4H team, M&E team, and Government stakeholders, showing real-time updates. This helps everyone clearly see the status and take quick action when needed. In addition, the system is integrated with RMS, which automatically creates service tickets, improving accuracy and reducing manual effort.

Further improvements are planned for the coming year. The Annual Maintenance Contract (AMC) process has been converted into a mobile app, which has already been developed and tested. A pilot will begin in April, and by June, the entire AMC process will be tracked through this app. Installation activities have also been digitized using a mobile app that is ready for rollout, with all new installations to be tracked digitally starting in April. A security audit is planned to ensure the system meets Government data privacy and security standards with no vulnerabilities. Finally, the transition of the digital platform to Government ownership is underway for O&M handover. Karnataka and Meghalaya have already started this process, and Sikkim, Mizoram, Manipur, and Nagaland are scheduled to begin within the year.