

GLOBAL
SDG7
HUBS



A SELCO Foundation Initiative

AGENDA

Introduction

1. Overview of the day, agenda, housekeeping
2. Context Setting

Interactive Discussion: Review of Global Hubs Program

1. Core philosophies
2. Emerging Cross-Sectoral Thematic Tracks Across Geographies
3. Internal working of Global SDG7 Hubs program

Meeting Finalization

1. Review actions to be taken
2. Schedule next meeting

ADVISORY MEETING: 11th September 2020

Contents

1. **Core philosophies:** Global SDG 7 Hubs as a South-South Knowledge Sharing and Implementation Platform (**Overview of COVID and post COVID scenario**)

2. **Thematic tracks with progress across geographies**
 - *Enabling Conditions for **Local Decentralized Energy SMEs***
 - *Sustainable Energy and **Livelihood** nexus*
 - ***Asset Based Financing** for Decentralized Energy*
 - *Sustainable Energy and **Health** nexus*
 - *Sustainable Energy for **Displaced Settlements***

3. **Structure, current status and way forward**
 - Brief overview of the structure
 - Short-term and long-term plans

Core Philosophies



Local ownership

Is built among stakeholders
decentralization of sustainable assets
where is maximum value capture and
ownership is generated at end the
user level



Implementation based

More emphasis on on-ground implementation
driven learnings and evidence building than a
prolonged theoretical and research phases



Need based innovation (technical, financial and social)

designed and deployed keeping end-
user at centre, end users as core
owners of the problem, innovators,
partners and investors



Process Replication

scaling of processes by
contextualizing it to the needs



Systems Thinking

Creation of enabling conditions for
innovations to scale is recognizing
and building cross sectoral and
interdisciplinary stakeholders at
different levels



Cross-learning

platform for Practitioners of Global
South to exchange and share
knowledge and best practices



Relevance COVID and post COVID scenario

Relevance of a collaborative platform for sharing practitioners' knowledge for a cleaner and a resilient economy has become even more imperative and critical.



Validation of **decentralized systems** in which technological, ownership and financial models designed to create assets within communities resulted in more resilient societies.

Opportunity to demonstrate an alternate economic pathway that builds a **regenerative economy** which prioritizes community wealth and places people at the centre.

The critical **role of civil society, philanthropy, governments, researchers and others** in routing public and private investments into developing or rebuilding systems and ecosystems for the common good.

Local SMEs are the lifeblood economies and yet many are on the verge of being wiped out due to shocks to an already broken or absent ecosystem. Appropriate stimulus packages and support systems that are critical to ensure their survival.

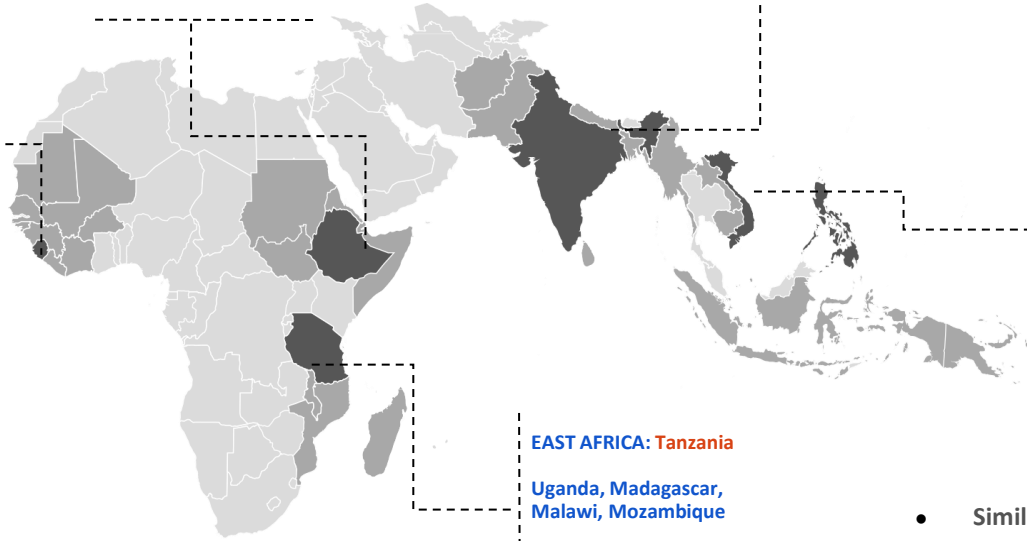
Regional Focus and Approach

HORN OF AFRICA: Ethiopia

Sudan, South Sudan,
Djibouti, Somalia, Eritrea

WEST AFRICA: Sierra Leone

Ivory Coast, Liberia, Guinea,
Mali, Burkina Faso, Guinea
Bissau, Gambia, Senegal



SOUTH ASIA : India;
R&D Hub

Afghanistan,
Pakistan, Sri Lanka,
Bangladesh, Nepal &
Myanmar

SOUTH EAST ASIA:
Philippines

Indonesia, Papua New
Guinea, Vietnam,
Cambodia, Laos

EAST AFRICA: Tanzania

Uganda, Madagascar,
Malawi, Mozambique

**Complete Ecosystem - based
approach (regional hubs)**

**Project/ Program based approach
(regional affiliated countries)**

**Knowledge/ Advisory based
approach (across countries/ needs
to loop back into regional hubs/
affiliated countries)**

- Similarities in the nature of poverty, terrains and value chains
- Timeframe of ecosystem maturity
- Diversity of end user segments
- Local champions and leadership

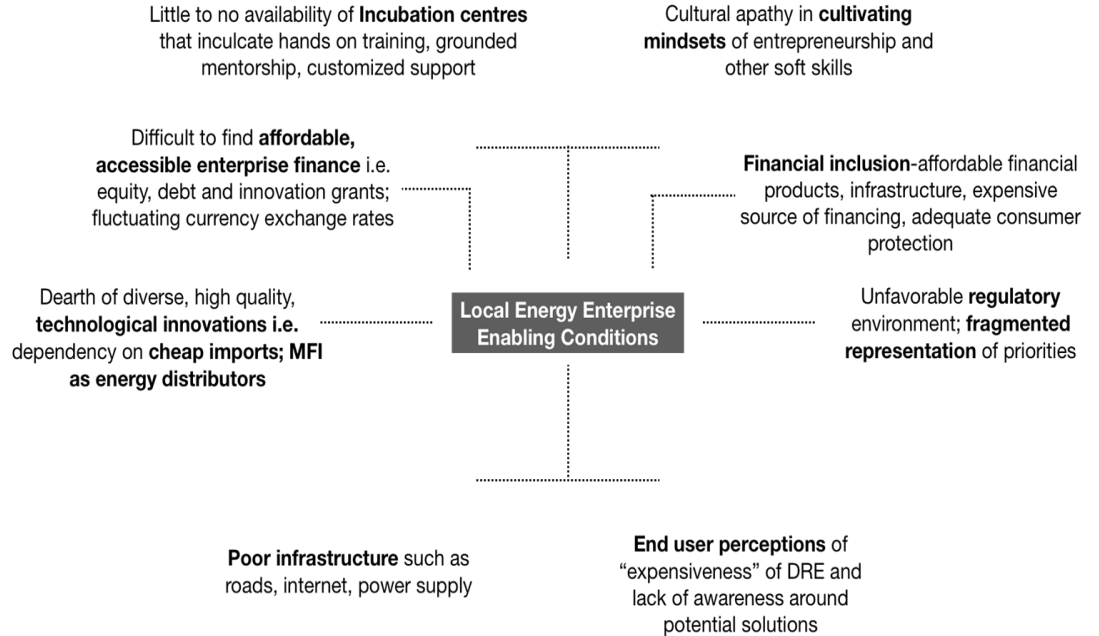
Enabling Conditions and Local Energy SMEs

Importance of “Local” Energy Enterprises

- Harness, cultivate and empower local entrepreneurs leads to **local ownership of problem**
- Immersion with local communities breeds **need based vs consumer/company centric solutions**
- Develops and support **local economies** via job creation, local procurement, shorter supply chains
- Sustainable energy security** via decentralized solutions

Too Valuable To Fail

- Increase in cost of essential services
- Expensive to rebuild the ecosystem
- Expensive disbanding of like minded stakeholders



Emerging Program Designs: Enabling Conditions and Local Energy SMEs



Incubation vs Training

Modality: hands on mentorship, regional support systems, ecosystem approach via connect to innovation, end user financing, capital support

Key Activities: Module development, exposure visits for incubation team, ToT, program design, selection process

Challenge: International company competition, import driven markets, fluctuating currencies, short term aid driven programs

Ecosystem Approach in Deploying Solutions

Modality: Pilots across different end user segments that combine community-based organizations, financiers, technical partners and policymakers.

Key Activities: Ecosystem design workshops, mentorship & on-site knowledge transfer, stakeholder convenings

Challenge: Archipelago, expensive grid connections, climate vulnerability



Beyond “Market Driven” Approaches

Modality: Ecosystem gap analysis, potential deployment models, priority areas, end user segmentation.

Key Activities: Research and landscaping studies

Challenge: Migratory, tourism, earthquake vulnerability, mountain topography

Sustainable Energy and Livelihoods

Basic Concept: Combination of energy efficient appliances, decentralized renewable energy and sustainable built environments can lead to decentralized, sustainable and resilient models for livelihood generation. If implemented through appropriate finance, training, linages and policy environment - sustainable energy driven innovations have the potential to spur improved aspirational livelihoods, increased incomes and drudgery reduction for under-served existing and new businesses.



Sustainable Energy and Livelihood nexus

Linkages

Backward and forward linkages as well as market linkages for carrying out livelihood activities.

Access to services provided under other enabling ecosystem pillars - Technology, Infrastructure, Financing & Policies.

Technologies

Energy efficient technologies with reliable energy for productive and less laborious work

Infrastructure

Energy efficient and climate responsive built environments for carrying out business activities effectively - for housing of machines, storage, etc.

Needs of Entrepreneurs & Enabling Ecosystems

Financing

For purchase of assets, working capital, growth & expansion along with appropriate supporting policies

Policy

Supporting policies for issuance of financing or sales of end products, expansion and linkages

Training and Capacity Building

For business plan development, operational efficiency, asset management, financing, marketing, growth, etc.

Focus areas and value chains



Agriculture and Animal Husbandry



Starting new seasons/ projects for farming or animal rearing



Providing agricultural technical support services - like installation and upkeep of irrigation systems.



Manufacturing and providing essential inputs for agriculture and animal husbandry - like animal feed manufacturing, fertiliser manufacturing, agri-machine rental services



Agriculture & Food Processing and Marketing



Providing aggregation and linkages to forward linkages like local processing facilities, or cold storage facilities or markets



Providing agricultural processing services for locally grown produce for self consumption, linkage to markets or government distribution systems.



Providing cold storage, carrying and forwarding and marketing services to local farmer groups



Creating food processing enterprises, for adding greater value to locally available resources for easier or better consumption



Textiles and Crafts

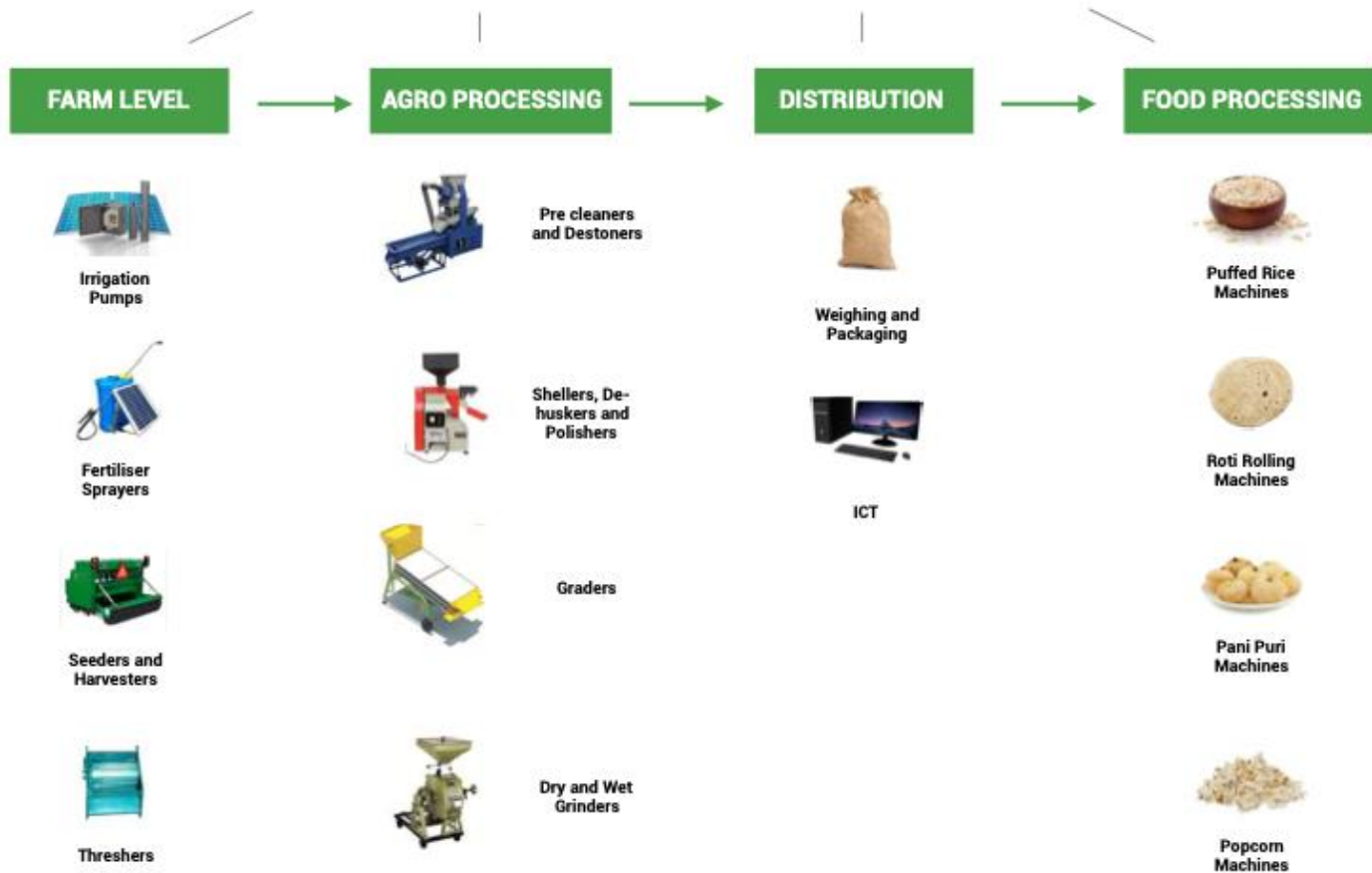


Carrying out textile or craft manufacturing or value addition of such products for intended sales or for augmenting other local products or by-products.



Providing storage, aggregation and linkages between different nodes of the craft/textile manufacturing processes or between producers and markets.

SOLAR ENERGY+TECHNOLOGY INPUTS IN CEREAL VALUE CHAINS (Rice, Millet, Wheat and Maize)



Sustainable Energy and Livelihood Nexus

Project/ Program based approach (hubs/regional affiliated countries)

Key Partner/s

Milestone Programs

Knowledge/ Advisory based approach (across countries/ needs to loop back into regional hubs/ affiliated countries)



Co-designed implementation program in Ethiopia for poultry, dairy, silk, cold storage, processing and cold storage value chains with 4 partners (2 out of 4 in next phases of implementation)

- SE4ALL Joint concept note on SDG 7 for SDG 8

- IRENA + ICIMOD Mountain region value chains and energy + livelihoods

- Cooling - Agri Cold Storage Knowledge Session and Publication

- UNHCR-GPA - Advisory on Energy + Livelihood related proposals

- Nigeria - Rice value chain alliances for mini grids and stand alone rice cooperatives - CESEL

- Kenya - Turkana Basin Institute - Agri and micro businesses knowledge partnership



On going implementation with Tanzania local partners on Rice, Maize, Cold storage, refrigeration and Dairy value chains.



Djibouti detailed assessment on energy+livelihood for refugee settlements with FAO and UNITAR

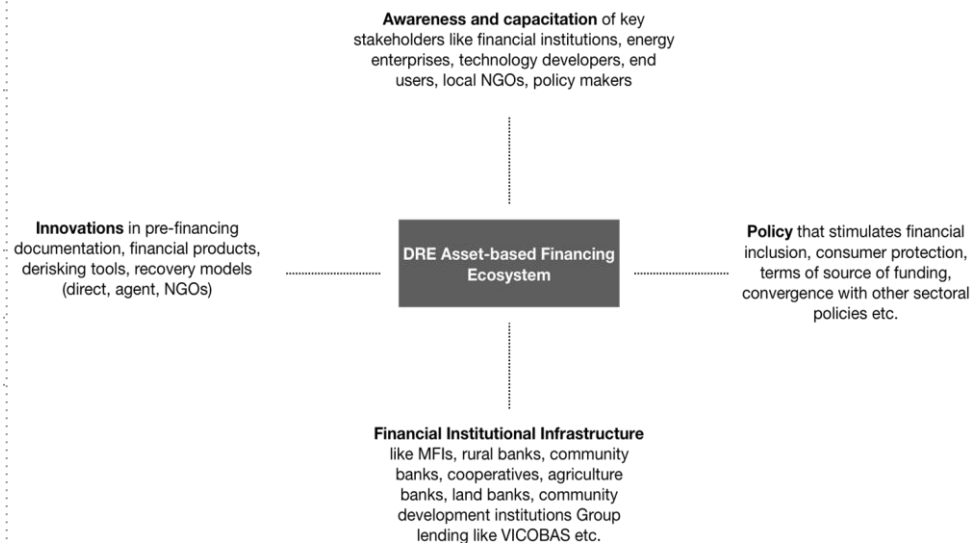


Ongoing assessment with PEF on energy+livelihood ecosystem building for mindanao, Philippines

Asset-Based Financing for Decentralized Energy Systems

Asset based finance refers to inclusive financial products that are designed to allow borrowers to benefit through lending at better terms that reflect the cash flow patterns across a value chain of production, processing and/or trading. It intended to regionalise and localise financial flows and keeping money in communities.

Parameters	Status Quo	Future
Financial products	<1-1.5 years, high interest rates, individual or group, pay and use	3-10 years, <16% interest rates Lease to own, individual, group, cooperative, pay and use
Financing for whom	Products designed based on FI	Products designed based on cash flows of seasonal small holder farmers, smaller more frequent payments for urban poor, small businesses
Type of loans	Retail	Asset, shared ownership
Source of funding	Short term, expensive	Flexible, patient capital
Technical products	Consumptive products like pico systems	Cold storage, agri-technology machinery for production or processing or transport, allied machinery like power hammers for blacksmiths, blungers for potters, milking machines for dairy farmers
Financial Institution	MFI	Rural banks, community banks, agriculture banks, VICOBAS, cooperatives



Program Designs: Asset-Based Financing for Decentralized Energy Systems



Processing Units-Capital Subsidy

Typology: Remote forests, tribal communities, small holder farmers- *black jeera* rice and horticulture produce

Production: Each house produced 15 to 20 bags of paddy per season (10 quintals)

Current facility: Centralized rice hulling 10kms away to

Asset financing: Capital subsidy by local government scheme towards a women SHG, service model for villagers, hire traders to sell surplus in local markets

Advantages: Reduced hulling cost, use of by-product, travel time saving, better market rates



Processing Units- 5 year loan

Typology: Single woman entrepreneur

Production: Condiment shops selling snacks, meals

Current facility: Combo of manual and grid based machine pounding of flour employing 1 person for whole day

Asset financing: Loan, 5 years, 16% interest for machine and expanding shop construction, weekly repayment

Advantages: reduced dependency on erratic power and labour shortage, profit increase, time saving, increased purchasing power to solar powered roti rolling machine



Programs: Asset-Based Financing for Decentralized Energy Systems



Program: Capacitation of financial officers to build sustainable energy portfolios for the poor; design and deployment of productive use assets for the poor via suitable technology and financial models.

Target: Local financial institutions, livelihoods (agri and non-agri)

Partner: The Association of Microfinance Institutions (TAMFI), KAKUTE



Program: Pilot financial products that enable ownership of agricultural machinery for production or processing

Target: Small holder farmers

Partner: Precise, Agricultural Transformation Agency



Program: Influencing local and national policy around uptake of decentralized energy solutions. This also encompasses advocating for a conducive financial inclusive ecosystem that enables affordable financial products for insurgency and climate vulnerable geographies.

Target: Insurgency affected coastal area, Mindanao

Partner: Peace and Equity Foundation, Ramon Magsaysay Foundation

Sustainable Energy and Health Nexus

Health Sector

- ✗ Lack of awareness of sustainable energy solutions for health care.
- ✗ Limited capacity to implement sustainable energy solutions.
- ✗ Limited awareness of the use of energy efficient devices/technologies/ green building guidelines with relation to health.

Final goal - Universal access to Healthcare

Health-Energy Nexus

- ✓ Critically understanding the health care access gaps and energy needs that hamper the delivery of health care.
- ✓ Conduct joint audits and optimize energy solutions parallel to health gaps which will help the improve quantity as well as quality of health services offered.
- ✓ **Final goal - Sustainable Delivery of Health**

Energy Sector

- ✗ Lack of awareness and understanding of how to develop customized, optimized and efficient sustainable energy solutions for health care settings.
- ✗ Lack of prioritization of energy projects in the health sector as well as lack of active collaboration with health care centric organizations & bodies.

Final goal - Access to Sustainable Energy

Infrastructure & technology play a critical role in enabling safe child birth

1. A well lit, ventilated and well designed physical space where mothers feel comfortable



Eg. The KEBA Sub Center Building in Arunachal Pradesh

2. Necessary medical equipment which are robust, reliable, appropriately designed and energy efficient



Eg. Efficient Baby Warmer by GE at Kannur PHC, Karnataka

3. Availability of a reliable, decentralized, clean electricity source to run the equipments when needed



Eg. Solar System Design at Tribal Hospital, Tamil Nadu

Sustainable energy can thus catalyze better mother and child-care at different levels



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

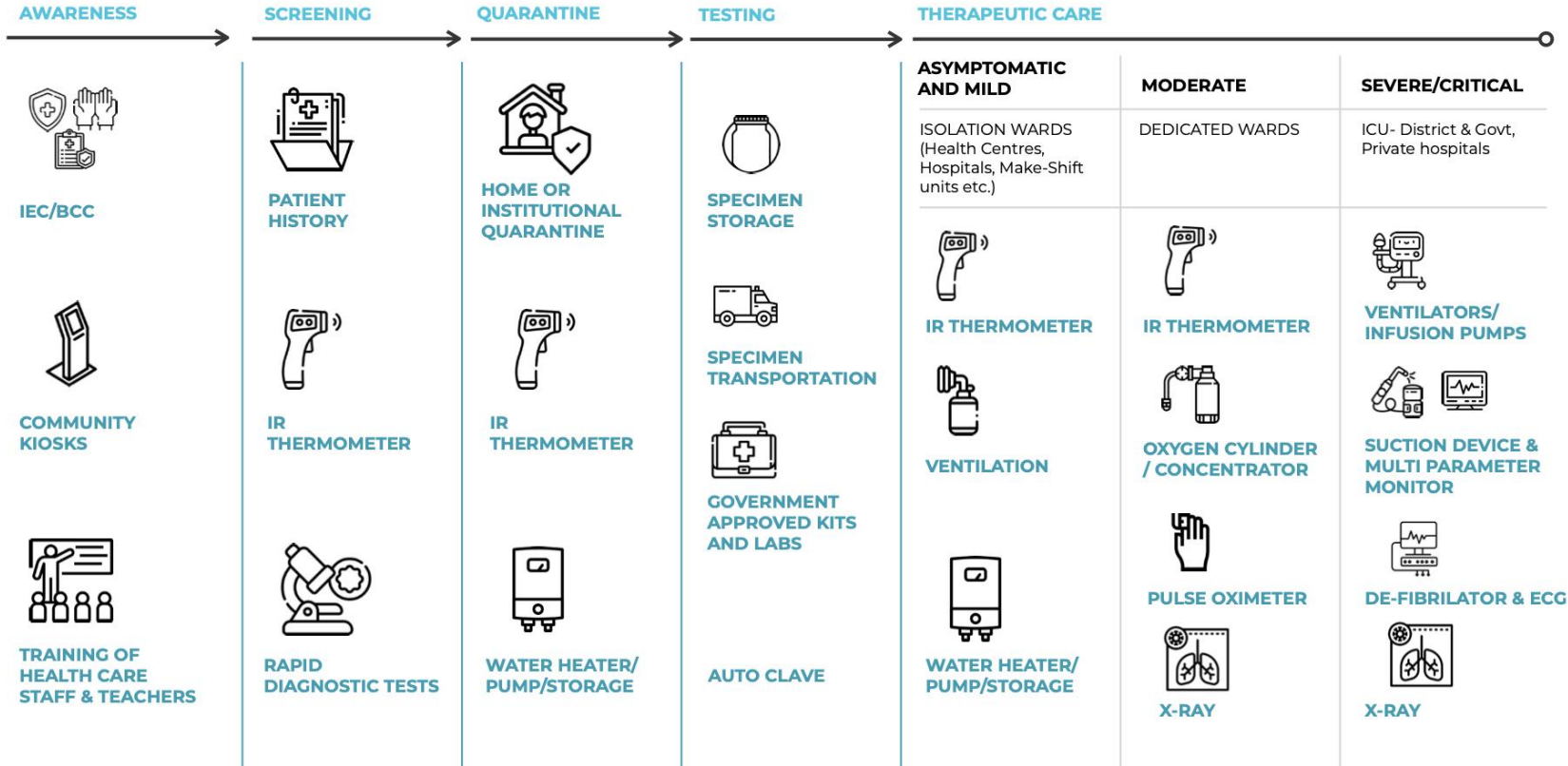


Neo-Natal Care

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

COVID 19 - PATHWAY TO RECOVERY

Sustainable Energy, Infrastructure and Technology Input Requirements



COVID 19 - PATHWAY TO RECOVERY

Sustainable Energy, Infrastructure and Technology Input Requirements



CASE STUDY: COVID CARE HOSPITAL, VISTEX, Bihar

System	Efficient appliances with Green Building Design	In-Efficient appliances with Green Building Design	In-Efficient appliances with standard typical building designs
Total Load Connected	4290 W	5749 W	5749 W
Total Units Required	21.8 Units	30.63 Units	52.34 Units
Solar Panel Capacity	12 kWp	16.2 kWp	26 kWp

% of Savings
(Energy)

28.82%
(solution without energy efficient appliances and with green building design)

58.34%
(savings with both- energy efficiency and green building design)



Sustainable Energy and Health Nexus

Project/ Program based approach (hubs/regional affiliated countries)

Knowledge/ Advisory based approach (across countries/ needs to loop back into regional hubs/ affiliated countries)

- **WHO - Energy for COVID care** guidelines (Review and Feedback)
- Webinar and Publication on energy and **healthcare gaps in SL**
- Asia Infrastructure Development Bank - Economic **Opportunity Analysis for powering health**
- **UNHCR-GPA - Advisory on Energy + Health related proposals** (Tanzania, Columbia)

Key Partner/s



Milestone Programs

Assessment and Design of Appropriate, Need-based Renewable Energy Systems for Enhancing Healthcare in Burkina Faso

The Global Green and Healthy Hospitals community has over 1,350 members in 72 countries who represent the interests of more than 43,000 hospitals : Training and capacity building of

Conceptualize value chain - design and pilot of the sustainable COVID value chain.

Current priorities : Programs in Energy and decentralized healthcare delivery ecosystem interventions in the chosen districts of Sierra Leone.

Energy and Displaced Communities

- Temporary nature leading to short term interventions
- Generations are missing out on opportunities.
- Energy models have always been stop-gap solutions : Need to be looked at from long-term perspective
- Criticality in developing models and programs that integrate refugee and host communities - learnings from Columbia and Tanzania conversations
- UNHCR recognizing the importance of community participation
- Thematic areas include:
 - Basic household energy and housing infrastructure
 - Resilient built environment and energy for lighting, cooling, cooking and heating.
 - Creating local livelihoods ecosystem and leveraging existing infrastructure
 - Learnings from Djibouti on opportunities for energy solutions within local economies; integrating with mini-grids for PUE
 - Decentralized healthcare solutions and resilience
 - Quickly deployable set ups, local community involvement



Ecosystems around these need to be built

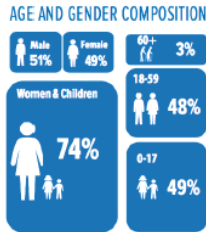
- **Energy for households**
(electricity, cooking, heating and cooling)
- **Energy for livelihoods + enterprises**
(Lighting for livelihoods, Information & communication, local agriculture/food, water pumping, refrigeration, etc)
- **Energy for community facilities**
(Public/street lighting, health facilities, education, public spaces, water pump)
- **Humanitarian facilities & operations**

Programs: Energy and Displaced Communities



- Sustainable energy - livelihood assessment of refugee camps in Djibouti with the partnership of UNITAR.
- The overall ecosystems around creating local economies were evaluated to develop and recommend strategies for implementations in sustainable energy - livelihood nexus in Djibouti.


29,214
REFUGEES AND
ASYLUM-SEEKERS



3 Main streams emerged from the assessment - feeding into the implementation programs:

- **Energy+Livelihood Innovations:** Animal husbandry, agriculture, fishing, food processing, textile and services.
- **Financial inclusion and deploying risk funds for the local businesses**
- **Setting up of an skill development & incubation programs for identification, mentoring and growth of local energy initiatives**



Partnership with Global Plan of Action for developing programs in Humanitarian Settings

The partnership objective is to **facilitate effective cross-learning interaction with implementation organizations in different humanitarian settings.** SELCO and CEC Secretariat (**GPA+UNHCR**) to strategize on a more systematic process for developing the marketplace project pipeline

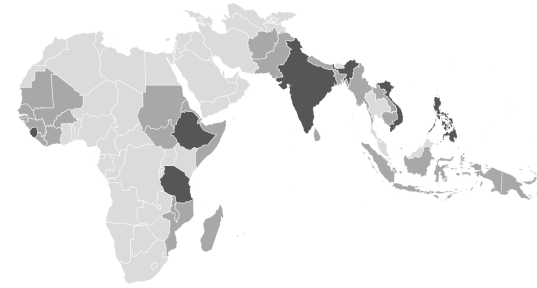




Central Hub

Central Hub is the proposed anchor body that champions the thought process of the ecosystem driven approach and its applicability to south-south learning exchange on furthering the sustainable energy & development nexus

- Facilitates knowledge, support and connections between different regional hubs
- Is responsible for core RnD and training in partnership with SELCO Foundation
- Building network of effective global partners such as IRENA, SE4All, UNIDO, UNDESA, WB, ADB, etc.



Regional Hubs

Anchoring countries/ partners in each region who help in building models and templates of sustainable energy + development for the other countries in the region.

- Development of contextualized solutions for the respective regional countries
- Direct engagement with regional ecosystem stakeholders in the region to implement energy + development programs