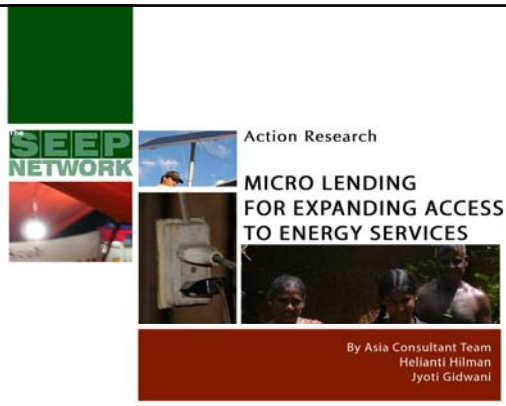

MODELS THAT BRIDGE THE GAP BETWEEN ACCESS TO ENERGY AND MICROFINANCE

HELIANTI HILMAN

KHAULA KARYA, INDONESIA

HOW TO TAKE BENEFIT FROM THIS SESSION?

FIRST, DEFINE WHAT IS YOUR POSITION OR ROLE?

** Include government institutions, sector facilitators, bilateral/multilateral agencies, donor institutions and NGOs*

SECOND, ASK YOURSELF WHAT IS YOUR AGENDA?

- Promotes environmental conservation?
- Promotes Job Creation/ Employment?
- Promoting small trades?
- Combating poverty?
- Foster rural economic development?
- Facilitating small business- holders
- Improving Health & Learning Conditions
- Combating Climate Change?
- Increasing Access to Energy & Electricity
- Expanding business/ investment portfolio

THIRD, UNDERSTAND WHY & HOW MODERN ENERGY CAN SUPPORT YOUR AGENDA ?

Biomass Gasification & Micro-Hydro: enable provision of rural electricity service and allow mechanization of rural economic activities to take place for improving productivity and quality

Photovoltaic Systems: enable provision of clean and lighting for rural households and give ways to rural communication services

Hybrid Solar Dryers & Solar Cooker: Improve the productivity and quality of crops drying (e.g. cocoa, coffee, fish)

Biogas Stove: clean & cheap cooking solution that reduce drudgery

Renewable Energy: mass scale implementation of modern energy in the form of renewable energy will contributes to environmental conservation and combat against climate change

FOURTH, UNDERSTAND WHY MICRO FINANCE IS IMPORTANT FOR DELIVERING MODERN ENERGY SOLUTIONS

1. The prospective market for modern energy services is huge including among poor and rural consumers
2. contrary to presumption that poor & rural consumers do not have capacity to pay, in reality they pay more for less
3. What the poor & rural consumers do not have is the capacity to the capital costs up-front & need credit facility to defray such cost for a certain period of time
4. In most cases, MFIs share the similar (target) market profile with modern energy services. The provision of energy lending would enable MFIs to expand its business

SEWA BANK (INDIA)

SEEDS (SRILANKA)

Energy Lending by Four MFIs in the Asia Region

NUBL (NEPAL)

AMRET, CAMBODIA

SEWA BANK, INDIA

PROGRAM PROFILE:
In partnership with SELCO India, in 2006 introduced URJA Project, an energy lending program that issue small loans for modern energy solutions such as SHS, solar lanterns, and PV battery charging units. SEWA Bank also promotes non-loan bearing energy products such as fumeless cook stoves and sarai cooker, which considered to be beneficial for their clients

**** SEWA Bank mission is to address poverty through reducing drudgery, increase of revenue and improve health***

STRENGTH:
- Adopted service-first principle, beyond microfinance activities
- URJA Project serves as one-stop energy solutions shop
- Client-driven energy products, personalized service and flexible financing
- Technologically neutral. Technology selection based on the energy need of SEWA Bank client base
- Promotes new opportunity: energy services enterprises
- Strong market awareness activities, piggyback to existing infrastructures & activities

SEEDS, SRI LANKA

PROGRAM PROFILE:
SEEDS is one of the prominent MFIs in Asia that provide loans on clean energy technologies for poor clients. Products offered include SHS, Grid Power Connection and Village-Hydro Projects (community-owned village grid). Till 2006 has served over 58,000 SHS clients, over 3,600 grid connection clients & 14 ECS. SEEDS energy loan portfolio constitute 30% of total microfinance operation.

STRENGTH:
- Wide geographical presence throughout Sri Lanka
- Strong internal technical knowledge on energy
- MOUs with participating energy suppliers, defining the standard of products and service to be fulfilled
- Use internal credit risks insurance for SHS clients

NUBL, NEPAL

PROGRAM PROFILE:
NUBL offers a loan product line for the construction of domestic biogas digesters. In 2006, NBUL distributed this loan to over 65 borrowers. NUBL plans to expand their energy Loan program to include solar PV. NUBL biogas loan benefited from the strong government support program on biogas implementation that impose high standard of biogas company and their products & services, which standards are being interlink with the provision of price subsidy to the accredited companies.

STRENGTH:
- Wide geographical presence in rural Nepal
- Huge client-base that can become potential market for biogas system. (50% of borrowers have loans on cattle)
- Allow parallel/simultaneous loan to take place, so that clients can take the package of cattle loan, biogas loan and sanitation loan (connected to biogas). Thus, provide integrated solution to clients with lack of cattle to meet the biogas need.

AMRET, CAMBODIA

PROGRAM PROFILE:
provides loans for purchasing electricity investment and battery charger services, through its business loan product. As of May 2006, 2% of AMRET' total loan portfolio was currently distributed for such energy uses. Total clients that uses their loans for purchasing energy equipments are 707.

STRENGTH:
- Wide geographical presence across Cambodia
- Strong client assessment prior to the loan sanctioning
- Very good mechanism for enforcing good credit discipline
- Very good repayment rate

WHAT CAN WE LEARN?

1 UNDERSTANDING THE POTENTIAL TARGET MARKET AND THEIR CHARACTERISTIC

- Gender
- Age
- Occupation
- Income Level and Pattern
- Household expenditure
- Baseline of energy expenditure
- Energy uses profile

This is directly relevant for selecting the right energy products/technology that meet the need of the target consumers

2 SELECTING THE RIGHT ENERGY PRODUCT/ TECHNOLOGY TO BE OFFERED WITH LENDING?*

- Productive use or consumptive use?
- Increasing revenue or reducing Costs?
- Delivered as Product or as Service?
- Supply-push or demand-pull?
- Donor-driven or market driven?
- Generic or customized product?
- Who should do the selection? MFIs or Suppliers or both?
- Competitiveness factor: cleaner? least-cost? durable? easier?

This is directly relevant to defining the target market and mitigation of technical risks

3 DEVELOPMENT OF ENERGY-LENDING

- Motivation: internal or external factors?
- Internal Factors: need to expand business portfolio or based on client's demand/need?
- Should it be related to a designated energy product or not?
- Should it be a separate lending product or included under existing loan products?
- Business planning: is it segregated from or together with others?
- Cost structure: need to carefully assess the costs, including for assessment, disbursement, collection as well as marketing promotion and product innovation

4 ENERGY SUPPLIERS: MATURITY AND RELATIONS WITH MFIs

- How mature is the energy suppliers in the country? How strong is their sales and service network? What business approach do they take, project based or retail based?
- Do MFIs need to screen, select and have MOUs with the participating energy suppliers of its energy lending program?
- Should the relations with suppliers be exclusive or non-exclusive basis? What justify the exclusivity?
- What are the distribution of role and responsibilities between MFIs and its participating energy suppliers?
- How the quality control towards suppliers products and services can be imposed? Who should do the quality control?

The nature of relations between MFIs and Energy Suppliers is relevant to the mitigation of potential technical risks and market development

5 LOAN PRODUCT FOR ENERGY LENDING
Similar or Different from Conventional Loan?

- Loan purpose: consumptive loan or productive/business loan
- Loan Amount: minimum or maximum plafond
- Interest rate: similar or differ from existing/conventional loan
- Loan tenure: similar or differ from existing/conventional loan
- Installment Scheme: flexible or fixed? generic or tailored?
- Energy products: designated or not designated?
- Other Requirements: equity? (additional) collateral?
- Grace Period: for what condition? to what extend?

The design of loan product will influence the access level of energy consumers towards the loan. The challenges is to meet the need of MFIs to sustain (through good profitability) without creating unnecessary barrier.

6 LOAN CHARACTERISTIC/METHODOLOGY

- Model: individual banking or group-based/grameen model
- Target group: existing or new clients? eligibility criteria?
- Loan Appraisal: by loan officers at which level, headquarter or branch?
- Loan Approval: at what level, headquarter or branch/district level?
- Loan Disbursement: to client or energy supplier or combination?
- Loan Collection: direct deposit or collected? Collected by field staff, commissioned agent or through group representatives?
- Training: by who? what are the materials being trained? when?
- After-sales service: warranty? regular visits during warranty? scope?
- Other unique feature: energy-related pre-assessment

The design of loan characteristic will influence the access level of energy consumers towards the loan. The challenges is to meet the need of MFIs to anticipate and mitigate risks without creating unnecessary barrier, bureaucracy and delays

7 MARKET DEVELOPMENT

- Focus on catering energy solutions for existing client base or going beyond the client base?
- Energy solutions for productive use, income generation or consumptive use?
- Piggyback to existing marketing and promotion infrastructure or develop new?
- Who should do the market development? MFIs, energy suppliers, agent or sector facilitators?

CASE STUDY ON SEWA BANK' BATTERY-CHARGING ENTERPRISE

Capital Expenditure:
± Rs5,000 per battery unit (for a solar light that operates 6-8 hours/day)

Clients: hawkers (fruit vendors, vegetable vendors etc).

Revenue:
Daily rental fee for battery is between Rs20 to 25 (clients save Rs10-15 from using kerosene light). Annual revenue is: Rs 20 x 340 days = Rs6,800.

Loan Repayment:
For 2 years loan (interest rate of 17% p.a. declining), the client will pay Rs5,885 to SEWA Bank. 1st year, the amount paid would be Rs3,155 and second year Rs2,730.

Profits
After deducted with transportation to clients and loan repayment (first and second year), the business owner enjoys –

- Rs3,105 of revenue on first year
- Rs3,530 on the second year. -
- Rs6,260 per year/unit system, upon the completion of loan assuming that petrol price for transportation and rental fee remain the same

8 RISK MITIGATION

- Technical Risks: what are the possible risks? who should bear it? What are ways to mitigate the risks? Product trial, user training, warranty throughout loan tenure, and/or good after sales service?
- Credit Risks: what are the possible risks? Who should bear it? What are ways to mitigate the risks? Internal Insurance and/or buy-back guarantee?

9 MANAGEMENT CAPACITY

- Administration and Management: Should there be separate energy division and energy field staff for energy lending? What justify such need?
- Account and MIS: can the energy portfolio quality to be analyzed separately?
- Portfolio management: how is the credit discipline is exercised at the clients level and officer level?
- Business planning: does separate planning is made for energy loan?
- Internal Audit: does it limited to office level or including field level? How effective is the control mechanisms in mitigating possible frauds? Is the audit department sufficiently staffed?

10 FINANCIAL CAPACITY

- Portfolio Quality: what is the repayment rate? What is the Portfolio at Risks, PAR>60days?
- Profitability and Sustainability: what is the margins? yield?

11 FUNDING

- Exclusive Energy Funds?
- Exclusive Funds for Energy? What is the source, grants or loan funds or combination?
- For loan funds, what are the terms and conditions? When and how the repayment is made?
- Other microfinance funds: grants? Loan funds? Savings? Equity?

The fund availability and conditions influence the interest rate, loan amount and loan tenure. The challenges is to have a sustainable source of fund for energy loans.

12 IMPACT
What kind of impact and how to evaluate?

- Why evaluating the impact is instrumental?
- What impacts that is instrumental to be evaluated? Economy, health, social?
- What are the methodology to evaluate?
- How to integrate such evaluation in the process without creating unnecessary burden?

POSSIBLE REPLICATIONS

- There is no one-fit-all model that can be replicated 100%. Country specific context need to also be taken into consideration in designing the model
- The best way is to mosaic the best feature out of each MFIs and tailor it according to country context
- Initiatives to promote energy lending by MFIs can be championed by any stakeholders, such as NGOs (i.e. Nepal), MFIs (i.e. Sewa Bank), Government/ Donor program (i.e. Sri Lanka), or private sector (i.e. India, Indonesia)

SUCCESS FACTOR OF ENERGY LENDING BY MFIs

The success of energy lending by MFIs depends on management capability, which are:

1. To design, customize & service varied needs of the clients
2. To collaborate with external agencies to enhance strategic strengths, minimize risks and widen service base;
3. To adopt professional management systems to enhance transparency and accountability;
4. Ability to undertake risk, experiment and adopt change
5. Ability to balance commercial and social objective of the organization (designing the cost structure, increasing the efficiency of its operation, and scaling up the market to achieve a critical mass)

Associated Factors:

- Subsidy
- Proficiency of Energy Technology

CONCLUSION

It takes an ecosystem build a solid mass-scale delivery of modern energy solutions that uses microfinance.

If there is any absence on certain gunction within the ecosystem, then it means somebody has to do more to fill in the gap

ECOSYSTEM FOR MODERN ENERGY SOLUTIONS DELIVERY