



TECHNICAL
PARTNER

MicroSave
Market-led solutions for financial services

REPORT SUMMARY

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ROLE OF FINANCE WITH A SPECIAL FOCUS ON MICROFINANCE IN ENHANCING CLEAN ENERGY ACCESS



BACKGROUND

A number of initiatives have been taken by the government as well as the private sector to address the challenge of energy access in India. Renewable Energy solutions, particularly at the decentralized level, have a greater potential in actualizing access to energy. However, there are three major practical hurdles in scaling-up adoption and uptake of clean energy products at this level, especially in rural areas. These include affordability, awareness and accessibility.

With increasing outreach of market infrastructure, distribution channels and information, various institutions, to an extent, have addressed the issues of accessibility and awareness. However, the question of affordability, with profound implications on the clean energy sector, is a comparatively less researched and explored aspect of improving access to energy.

In this context, WWF-India, along with its technical partner, MicroSave conducted a study entitled, “Role of Finance, with a special focus on Microfinance, in Enhancing Clean Energy Access” to measure/assess affordability of clean energy products in India, with an added impetus on exploring financial institutions (particularly microfinance institutions) as viable last mile channels to encourage adoption of clean energy products. The study covered 51 organizations across India, including microfinance institutions, banks, funding and donor agencies, knowledge based organizations, government agencies and clean energy product suppliers.

The objectives of the study were:

1. To assess the current status of energy access in the country, including the role of renewable energy and existing clean energy finance models;
2. Understand the role of finance in enhancing access to clean energy;
3. Identify challenges and growth opportunities in financing of clean energy products, with special reference to the Indian context and learnings from international experiences.

APPROACH AND RESULTS

The study is based on comprehensive secondary research coupled with primary research with a range of stakeholders. The sample included a cross-section of stakeholders and financial institutions with geographic diversity and range of products offered. The study covers decentralised off-grid clean energy solutions for cooking, lighting and agriculture purposes. Three categories of clients-households, micro entrepreneurs and farmers use these solutions.

The study analyses barriers and opportunities for financial institutions to fund last mile clean energy solutions for the poor. It discusses the need for clean energy solutions, existing finance and distribution models and case studies connected to these models, challenges related to policy formulation and implementation, and subsequently recommends a path for harnessing the potential that the sector offers.

The study estimates that microfinance institutions can serve a clean energy finance market worth INR 4 billion. This market size is estimated based on five factors, namely, number of microfinance clients, rural population without electricity, percentage of microfinance clients with low income levels, clean energy solution needs of different segments and rate of adoption of clean energy solutions.

The study analyses five prevalent clean energy finance models in India and related case studies. These models are: Microfinance Institution Intermediation Model, Direct Bank Linkage Model, Financing Supplier Model, Supplier Intermediation Model and Government Intermediation Model.

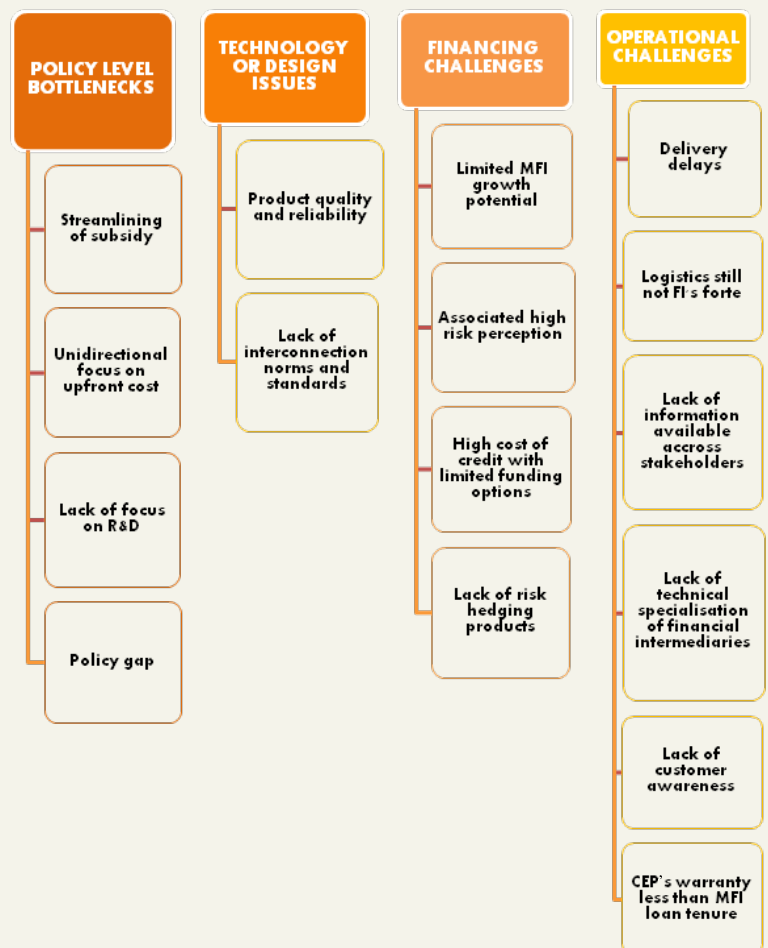
The study concludes with a list of challenges for the sector and recommends scalable finance models in the current policy scenario, as well as suggestions for long term policy formulation and implementation.

CHALLENGES

The study identifies challenges at four levels: policy, technology, finance and operation. The apparent challenges at the operational level include coordination between the financial institution and suppliers, product certification, supply chain and line of credit. The challenges at the apex level include issues related to policies that shape the external environment for the clean energy finance sector. These include government policies, prospective scope of risk hedging of energy portfolio, need for a dedicated risk fund for energy portfolio and cheaper sources of financing for clean energy loans by financial institutions.

Following table is a summary of cost of different clean energy products:

Products	Price Range
Solar Lanterns	Rs. 500 to Rs. 3,000
Solar Home Systems	Rs.10,000 to Rs.25,000
Solar water pumping solutions	Rs. 100,000 and above
Improved cook stoves	Rs. 2,000 to Rs. 4,000



RECOMMENDATIONS

The section on recommendations is divided into two parts. The first part details two potential, replicable business models within the current policy, regulatory and external environment. The second part lists long-term recommendations at the policy and implementation levels.

Potential Business Models

The study recommends two models based on an ideal ecosystem configuration considering the existing regulations, external environment, strengths and weaknesses of different stakeholders in the sector.

» Microfinance Institutions as Business Correspondents

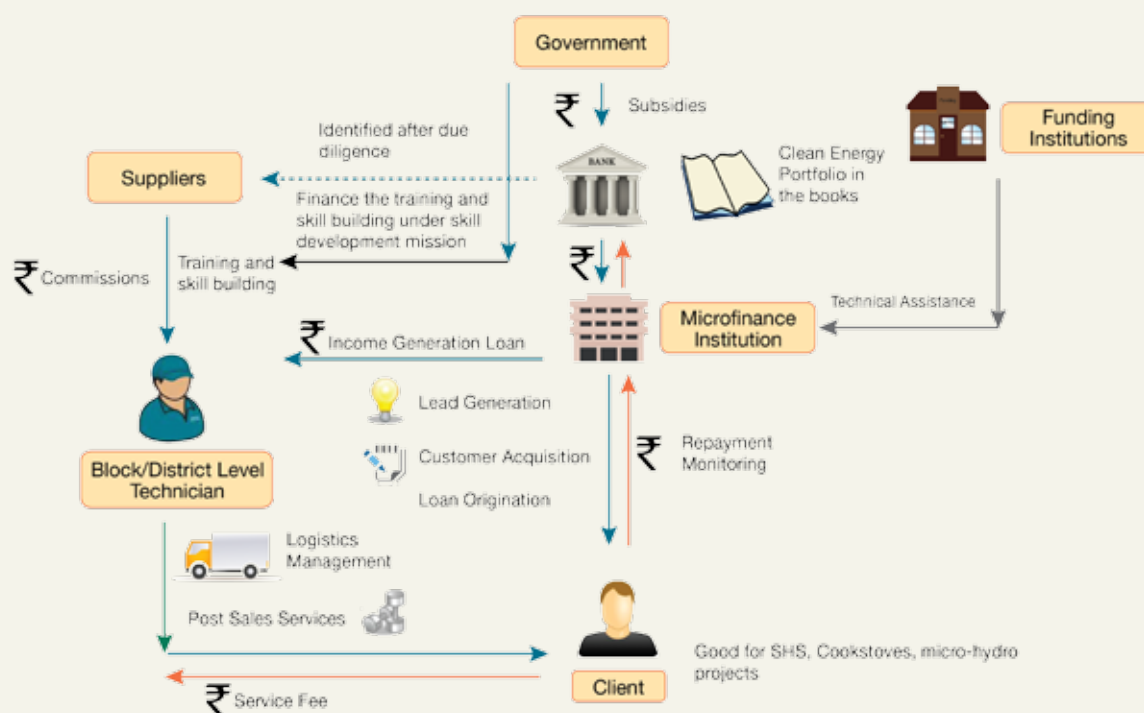
The business correspondent model proposes microfinance institutions to act as bank's agents and extend bank's energy loans to its clients. This model is less risky for the microfinance institutions as the loans are held in the bank's books with the microfinance institutions earning a fee or a commission on the loans. The model also presupposes financial institutions to act as technical service providers and advocates for clean energy finance.

Government–Banks: The government will provide capital subsidy to banks to further lend it to the end client to purchase clean energy solutions. Banks, in line with current system, will identify product needs of the regions in which the bank is serving.

Banks–Microfinance Institutions: Banks on-board microfinance institutions as business correspondents. The microfinance institutions can then offer bank’s clean energy finance products to its clients and the portfolio is recorded on banks’ books. The microfinance institution’s role would be that of awareness generation, lead generation and client acquisition. The banks will be responsible for loan origination and hosting credit on its core banking solution and books. The microfinance institution is then responsible for monitoring repayments. In turn, the microfinance institution will earn a fee on each successful acquisition as well get a certain percentage as commission for recovery of bad loans.

Government-Suppliers-Block Level Technicians: The supplier is responsible for providing the solution to the client through efficient logistic management. Thus, the supplier will induct Block Level Technicians (BLT) who will then be responsible for logistics management, inventory management, supply to end customer and most importantly post-sales services. Each of these BLTs works in coordination with banks and microfinance institutions that provide

Model 1: Microfinance Institutions as Business Correspondent Model



them with sales leads. The BLT will generate income through sales commission from suppliers as well as service fee income from clients for post-sales service. The government can support the supplier in training and skill building of the BLT under its skill building programmes or by providing grants for the same.

Funding Agencies-Banks/Microfinance Institutions: Funding agency’s role is critical in providing technical assistance to the microfinance institutions and banks for product development, channel innovation and process improvements.

» Supplier-Bank-Microfinance Institution Model

The Supplier-Bank-Microfinance Institution Model is a wholesale finance model that rides on existing banks’ wholesale finance products. It proposes that banks should further extend this finance to microfinance institutions at a lower rate as compared to traditional microfinance lending, to further the cause of clean energy finance.

Government-Suppliers: The government will provide subsidy to the approved suppliers to offer clean energy solutions to the clients on discounted prices.

Banks-Suppliers: Banks will provide bridge fund as working capital finance to these suppliers under its MSME finance portfolio.

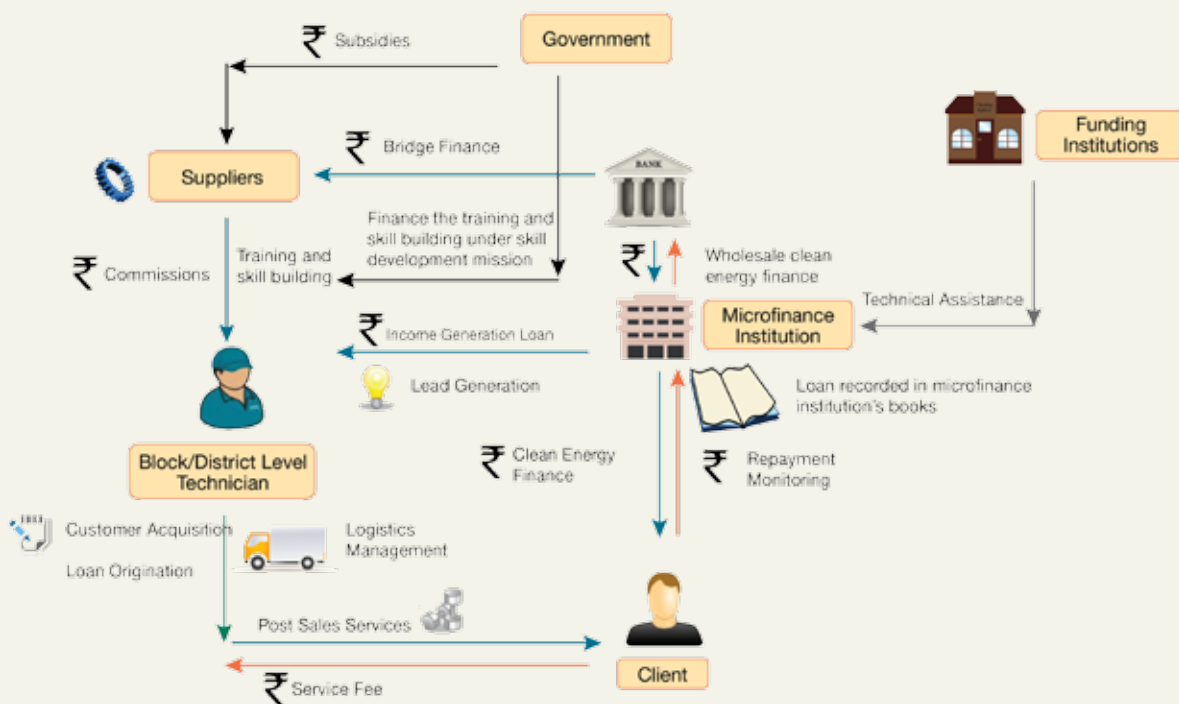
Supplier-Microfinance Institutions: Supplier partners with microfinance institutions that will offer clean energy finance products to its clients, and the portfolio will be recorded on the microfinance institution’s books. The

microfinance institution's role would be that of awareness generation, lead generation, client acquisition, loan origination and repayment monitoring. The banks are responsible for providing wholesale clean energy finance to microfinance institutions for clean energy solution. Microfinance institution is then responsible for ensuring repayments.

Suppliers–Clients: The supplier is responsible for providing the solution to the client through efficient logistics management. Thus, the supplier will induct block level technicians who are responsible for logistics management, inventory management, supply to end customer and most importantly post-sales services.

Each of these BLTs works in coordination with banks and microfinance institutions that provide the lead for sales of clean energy solutions to the technicians. The BLT generates income through sales commission from suppliers as well service fee income from clients for post-sales services. The government can support the supplier in training and skill building of the BLT under its skill building programmes or grants.

Model 2: Supplier-Bank-Microfinance Institution Model



Recommendations for Long-term Changes in the Sector

» Policy-level Recommendations

With the emergence of financial inclusion as a high-priority mission for the government, as well as simultaneous growth of the microfinance sector, it is critical to review and update the policies around funds and subsidies for clean energy finance. These two factors are critical incentives for microfinance institutions to enter, sustain and grow energy finance portfolio. Following are the key policy-level recommendations:

Government

Microfinance institutions should also be brought within the ambit of government subsidy considering their outreach and role in financial inclusion.

The scope for convergence between renewable energy mission and Prime Minister's Jan DhanYojna should be explored

THERE IS A NEED FOR GOVERNMENT AGENCIES TO RECOGNISE MICROFINANCE INSTITUTION'S STRENGTH TO ENSURE LAST MILE OUTREACH, QUALITY PORTFOLIO AND POST-SALES SERVICES. IT IS IMPERATIVE THAT THEY ALSO GET EQUITABLE TREATMENT AS COMMERCIAL BANKS AND REGIONAL RURAL BANKS (RRBS) WHEN IT COMES TO OFF-GRID CLEAN ENERGY FINANCE.

The processes for subsidy disbursement to financial institution should be streamlined to ensure shorter turnaround time.

Government should allow banks to participate in commodity exchanges and derivative markets to hedge their energy portfolio risk.

Government, in consultation with knowledge based organizations, funding agencies and suppliers, should prescribe uniform standards for quality assurance for small clean energy solutions.

It is also important that corporate social responsibility is leveraged to bring a substantial change in the sector. The corporate sector can provide grants or credit for clean energy finance under the social responsibility initiative.

Funding Agencies

Cost of credit for microfinance institutions is comparatively high due to shortage of financial resources in India. MFIs tend to focus on products that provide more returns due to the limited capital at their disposal. In order to push these institutions to focus on energy finance, a cheaper source of fund can be considered to reduce capital cost and in turn enhance microfinance institution's profitability.

Development financial institutions like NABARD and SIDBI may design a fund that could bridge the funding gap for MFIs.

» Implementation-level Recommendations

When it comes to implementation, the models are stable and working efficiently. However, the major issues that arise in these models are regarding logistics, coordination between suppliers and financial institutions, and research and dissemination. In this context, following are the implementation level recommendations:

Microfinance Institutions & Banks

Rather than tying up with multiple suppliers, microfinance institutions need to focus on collaborating with few suppliers to provide them with a consolidated larger market to justify a regional hub.

Microfinance institutions, suppliers as well as funding agencies must conduct a social cost benefit analysis of clean energy investment and share it with a larger audience.

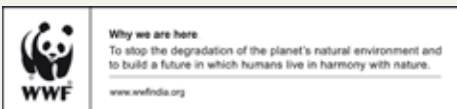
Microfinance institutions and banks should explore different innovative leasing models for high-value renewable energy solutions especially hydro and biomass solutions.

Suppliers

Suppliers should explore developing integrated supply chain solutions that include inventory management and logistics for microfinance institutions. This will enable them to focus on sales and service aspects.

Access the full report here-

<http://www.wvfindia.org/?13961/Role-of-Finance-with-a-special-focus-on-Microfinance-in-Enhancing-Clean-Energy-Access>



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