SEPS
Sustainable Energy Project Support

PREP
Promotion of Resource Efficiency Projects

Microfinance and renewable energy

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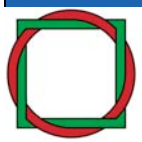


Wuppertal Institute
for Climate, Environment
and Energy

Overview

- Introduction of the **WISIONS** initiative
- Linking renewable energy and microfinance
- Case studies of **PREP** brochure No. 5: “Microfinance and Renewable Energy - Investing in a Sustainable Future”

Background and objectives of WISIONS

- **Background**
  - WISIONS is an initiative of the Wuppertal Institute for Climate, Environment and Energy, organised with the support of the Swiss-based foundation ProEvolution, to foster practical sustainable energy projects

- **Objectives**
  - Overcoming barriers to a widespread implementation of renewable energies, energy efficiency and resource efficiency
  - Supporting and Promoting good practice projects that might work as useful models for other stakeholders

Two fields of action: SEPS and PREP

- **SEPS** - Sustainable Energy Project Support

  Provides consulting and support of promising concepts and visions of renewable energy and energy efficiency
  - Searching for strategically important project-ideas that have not been implemented due to barriers
  - Support via expert-advice, know-how, support for obtaining additional funding, potential funding of incremental costs

Two fields of action: SEPS and PREP

- **PREP** - Promotion of Resource Efficiency Projects

  People around the world are asked to present their good practice examples

  - The topic and the target groups vary regularly with the objective of addressing a wide range of issues and stakeholders
  - The most convincing projects will be published in **WISIONS** brochures and promoted to multipliers, political decision-makers, scientists and activists
  - By doing this, the projects will get the publicity they deserve and provide certain ideas worldwide to improve the efficient use of resources

How to participate - PREP in 6 steps

1. Send in a brief description of your project to info@wisions.net.
2. **WISIONS** gives you feedback of the project's qualification for application.
3. In case of positive response fill in the application form and send it back to **WISIONS**.
4. Your project will be published in a PREP brochure and/or on the **WISIONS** homepage.
5. Has your project been decided for being published in the PREP brochure, you will additionally receive a grant of 500 Euros.
6. All PREP brochures will be available in hardcopy and online. They will be distributed among networks, politicians, scientists and other relevant multipliers.

The renewable energy point of view

- Present energy systems are not sustainable and have problems to handle current and coming energy-related problems like energy security, gender and social issues.
- Decentralised sustainable energy use can support reducing environmental problems, the provision of basic needs and productive activities.
- Although energy is not addressed directly in the eight MDGs, it is widely accepted that access to clean and affordable energy is a prerequisite to achieving sustainable development and reducing poverty.

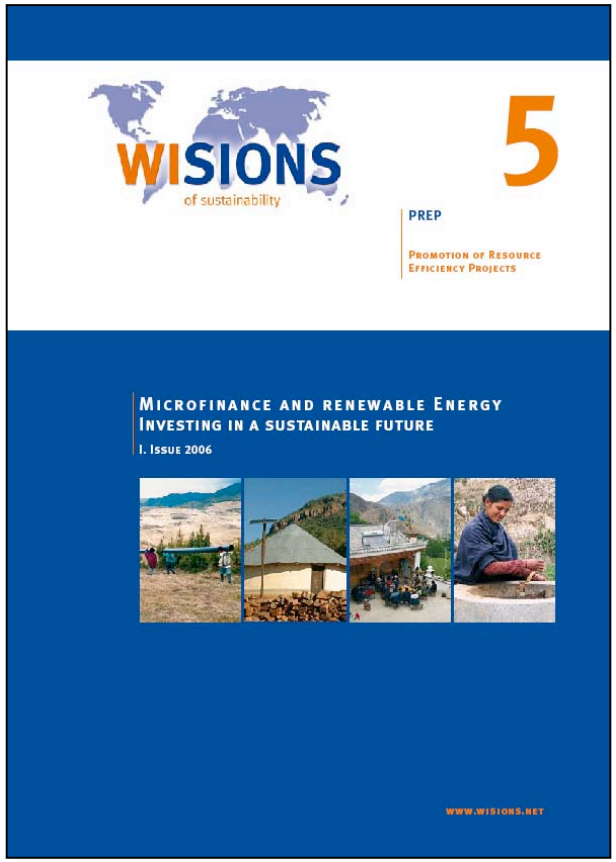
The microfinance point of view

- 4 billion people live on less than 1,400 USD/a, only few have access to basic financial services.
- Basic microfinance focuses on the provision of very small loans to very poor families to help them undertake productive activities or grow small businesses.
- Many existing microfinance methodologies are based on village or group lending
- MFIs can can be profitable, sometimes even more than commercial banks
- Availability of microfinance for poor households contributes significantly to the achievement of the MDGs.

Linking renewable energy and microfinance

- Both approaches play significant roles for achieving MDGs. Linking to combine the benefits that can be reached with both.
- Linking can benefit both client and supplier.
- Combining the provision of access to energy services for the poor and the generation of economic growth does not only have great influence on the local population but could also influence the regional or national energy strategy.

PREP No. 5: "Microfinance and Renewable Energy - Investing in a Sustainable Future"



- focus on the microfinance of renewable energy systems

- improved energy services have many quality of life benefits, the productive use of electricity can also help reduce poverty leading to increased profitability and productivity for micro, small and medium sized enterprises, and cottage industries.

Revolving Fund for the Implementation of Small Hydro Schemes in Peru

Peru, Soluciones Prácticas

Objective

- improve the living standards of rural population in Peru

Beneficiaries

- farmers, business, communities, municipalities

Revolving Fund for the Implementation of Small Hydro Schemes in Peru

Overview

- Revolving fund of USD 600,000

Financial model

- Combines a soft loan including technical assistance. A loan of up to USD 50,000 can be obtained for the construction of a SHS at a 10% interest rate, repayable over a period of up to five years.

Management model

- Based on the efficient management of the service and active participation of local population. Model consists of the owner of the SHS handing it over to a private local enterprise.

Revolving Fund for the Implementation of Small Hydro Schemes in Peru

Strengths

- Strong participatory approach: operators and administrators of SHS have an active participation during the construction phase; afterwards same staff receives specific training on operation and maintenance on site.
- Domestic manufacture of turbines, generators and electronic load regulators are a combination of domestic manufacture and imports > as a result more than 200 new small businesses were created.
- Outreach: 21 towns receive electricity from small hydro, more than 2,000 rural families benefited. Four schemes run successfully since 1998

Revolving Fund for the Implementation of Small Hydro Schemes in Peru

Main barriers

- Limited payment capacity
- Loan guarantee restrictions
- Lack of adequate legal framework

Switch On - Demonstration of Rural Housing Energisation in South Africa

Objective

- Establish sustainable energy in rural communities

Beneficiaries

- Households

KwaZulu Natal, South Africa, Parallax - Sustainable Development Solutions

Switch On - Demonstration of Rural Housing Energisation in South Africa

Overview

- Commercial private sector model
- Each energy package offered consists of a 55W solar home system, 4 CFLs, an alarm for the solar system, a 2-plate gas stove, a 6kg LPG cylinder and 36 monthly LPG refills.
- Residents who accepted the offer effectively became the owners of these energy packages by means of a special finance agreement, which involved the repayment of an agreed monthly sum over a three-year period.
- So far about 90 customers, repaying about USD 800 per system (about USD 22 per month).

Switch On - Demonstration of Rural Housing Energisation in South Africa

Strengths

- Four members of the targeted community were trained to run the business
- High repayment rates of over 90%
- Ongoing after initial financing

Switch On - Demonstration of Rural Housing Energisation in South Africa

Main barriers

- Rural community members are still obliged to transact in cash as banks are either too far away or the cost of having a bank account is too great.
- No commercial bank was willing to provide initial capital to SwitchOn > had to use donor funds.
- Expanding the customer base is necessary to run SwitchOn economically in the long-term > capital input is needed for providing SHS.

GreenVillage Credit - A Project of the CREED Initiative in China

Yunnan Province, China, UNEP and The Nature Conservancy (TNC)

Objective

- Encourage the use of sustainable energy

Beneficiaries

- Households and communities

GreenVillage Credit - A Project of the CREED Initiative in China

Overview

- Revolving fund of USD 400,000
- Project entrusts loan capital to local rural credit cooperatives that serve as a platform for financial operations.
- Household credit plus loan for activities that can generate income by using the new and improved energy services.
- Most loans are under CNY 10,000, some up to CNY 15,000. Average is about CNY 6,000. Interest rate of 4.8% per year plus loan guarantee fee of 5%.
- More than 280 households have completed installation.

GreenVillage Credit - A Project of the CREED Initiative in China

Strengths

- As a means of securing loan repayment to the revolving fund, the consumer credit to buy sustainable energy systems is combined with loans for income generation activities.
- Borrowers have to pay a loan guarantee fee of 5%, which is returned to them if and when everyone in their group has fully repaid.

GreenVillage Credit - A Project of the CREED Initiative in China

Main barriers

- To encourage individual villagers to change from traditional practices and adopt alternative energy technologies.
- Poor affordability for and accessibility to modern services.

Capacity Building for Micro Financing of Renewable Energy Technologies in Nepal

Objective

- Stimulate and facilitate micro financing of biogas plants

Beneficiaries

- Local communities

Nepal, Winrock International

Capacity Building for Micro Financing of Renewable Energy Technologies in Nepal

Overview

- Revolving fund of 2.5 million EUR in wholesale loans to MFIs in order that they can then provide credits to farmers for biogas installation.
- Once the project can provide support to a critical mass of about 300 MFIs, biogas micro financing is expected to take off by itself.

Capacity Building for Micro Financing of Renewable Energy Technologies in Nepal

Strengths

- Strengthen both the demand and supply aspects of financing biogas; e.g. convincing MFIs to offer actively microfinance for biogas plants.
- Dairy cooperatives and forest user groups promote biogas plants to their members.
- Already many MFIs have adopted biogas as a suitable loan product > more than 1,500 biogas plants were sold through this project.

Capacity Building for Micro Financing of Renewable Energy Technologies in Nepal

Main barriers

- Lack of awareness about RET micro financing among MFIs
- Limited sources of wholesale financing
- Inadequate functional linkage between MFIs and the energy companies

Conclusions

- Sustainable energy and microfinance play significant roles in reaching the MDGs
- Link between both approaches has to improve
- Barriers have to overcome (lacking awareness, limited sources, functional linkage between MFIs and energy companies, lack of adequate legal frameworks, etc)
- Support the empowerment of local population as well as the dissemination of sustainable energy technologies and services

Thank you for your attention!

WISIONS
of sustainability

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Please visit us at www.wisions.net