



INAFI Bangladesh Workshop On

Exploring Renewable Energy Sector in Bangladesh: Opportunities and Challenges for Microfinance



Key Note Paper

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1.0 INTRODUCTION

- Access to energy has been considered as an important element for economic development of a country
- 1.4 billion people do not have access to electricity ~ 2.7 billion people dependent on traditional biomass for cooking
- In Bangladesh, 60% of the total population have access to electricity
- 1.5 million households have access to natural gas
- The share of renewable energy in 2009 was only 0.5% of total power generation
- The energy policy 2008 envisions 5% and 10% renewable energy power generation by 2015 and 2020 respectively
- The vision of the government is to provide access to affordable and reliable electricity to all by 2021
- The government has been implementing different renewable energy projects through IDCOL
- Microfinance has played an important role in enhancing the economic opportunities available to poor people

1.0 INTRODUCTION..CONTD..

- The financial product for renewable energy is limited
- MFIs are well placed to supply renewable energy financial products
- Bangladesh have entered into the renewable energy market in late 1990s and early 2000
- Grameen Shakti ~ pioneer in renewable energy market in Bangladesh~ established in 1996
- Up to May, 2013 Grameen Shakti has installed 1,150,587 Solar Home System (SHS) and 25,619 Biogas plants
- BRAC has launched its Solar Energy programme in 1998
- The other medium and small sized MFIs in Bangladesh have entered in the renewable energy market from 2005 with the financial and technical support from IDCOL
- Up to January 2013, total 46 Partner Organisations (POs) of IDCOL have installed a total of 1,938,957 SHSs
- Among the 46 POs of IDCOL 19 are large, medium and small sized MFIs or sister organisations of MFIs

2.0 AN OVERVIEW OF RENEWABLE SECTOR OF BANGLADESH

- **Market coverage:** up to May, 2013 a total 2.4 million SHSs have been installed by different organisations including MFIs~ MFIs have installed approximately 1.5 million SHSs
- **Key players:** Grameen Shakti, Rural Service Foundation (RSF), BRAC Solar, Srizony Bangladesh, Hilful Fuzul Samaj Kalyan Sangstha (HFSKS), Integrated Development Foundation (IDF), Thengamara Mahila Shabuj Shangha (TMSS), Palli Daridra Bimochan Foundation (PDBF), DESHA, Resource Development Foundation (RDF), and COAST Trust
- Up to May, 2013 Grameen Shakti has installed 1,150,587 SHSs and up to April, 2013 RSF Foundation has installed 3,34,195 SHSs~ Srizony Bangladesh has installed 58,297 SHSs up to April, 2012
- **Available products:** Solar Home System (SHS), commercial solar panel for irrigation, commercial solar panel for electricity distribution, and Biogas for electricity generation and cooking

2.0 AN OVERVIEW OF RENEWABLE SECTOR OF BANGLADESH..CONTD..

- **Target clients** : people who are living in the remote rural areas where there is no electricity ~ target clients of MFIs are Microfinance borrowers
- **Marketing and Distribution Method** : MFIs use its Microfinance branches as marketing and distribution centre
 - Grameen Shakti and BRAC Solar have its own marketing and distribution offices
 - Grameen Shakti has total 1529 offices and RSF Foundation has total 486 unit offices
- **Price:** The price of SHS depends on its capacity
 - the price of 20 Wp (Watts peak) capacity SHS is US\$ 170, 50 Wp US\$380, 85 Wp US\$ 580 and 130 Wp is US\$ 940
- **Renewable energy financing mechanisms:**
 - POs of IDCOL charge 15% down payment of the price of SHS and provide loan for the rest of the 85% price~ loan is provided for 3 years~ repayable through monthly instalments and the interest rate is 12% flat per annum

2.0 AN OVERVIEW OF RENEWABLE SECTOR OF BANGLADESH..CONTD..

- Grameen Shakti has flexible financing mechanisms~ If the client pays 15% of the total price as down payment~36 months repayment period~ with 6% flat rate service charge
- ~ If the customer pays 25% of the total price as down payment~ 24 months repayment period ~ with 4% flat rate service charge
- **Sources of fund for renewable energy programme:** organisations own fund, refinancing and grant from IDCOL, loan from banks and other donor's fund
- IDCOL refinances 80% and provides 10% as institutional development grant of the price of SHS ~ loan tenure is 7 years with 2 years grace period~ interest rate is 6% per annum

3.0 OPPORTUNITIES AND CHALLENGES FOR MICROFINANCE

Opportunities:

- **Market potential for renewable energy products:** 40% or 13.61 million households of Bangladesh do not have access to electricity ~ among them approximately 2.9 million households are above the poverty line
~It is estimated that the market size for SHSs in Bangladesh is approximately 5 million including 2.1 million poor households
- **Microfinance borrowers as target clients:** The total clients of MRA licensed MFIs in Bangladesh are 26.6 million~ MFIs have covered only 1.5 million households through renewable energy products~ huge untapped clients~ easy access for MFIs
- **Branch networks in the rural areas**
- **Low marketing and distribution cost**
- **Access to low cost finance:** IDCOL, PKSIF etc.
- **Increase loan portfolio and revenue**
- **Technical assistance facilities:** from IDCOL, UNCDF, UNEP etc.

3.0 OPPORTUNITIES AND CHALLENGES FOR MICROFINANCE

- *Availability of products in competitive price*
- *Access to more donor funded programmes in future*

Challenges:

- *Lack of diversified renewable energy loan products*
- *Liquidity constraint*
- *Lack of access to low cost fund*
- *Lack of expert and efficient human resources*
- *Lack of awareness and interest among the target clients*
- *Substandard products*
- *Low repayment rate and high portfolio at risk*
- *Propensity to adjust renewable energy loan with savings*
- *Difficult to become sustainable without low cost refinancing*

4.0 TOWARDS SUSTAINABLE RENEWABLE ENERGY FINANCE

- *Partnership with high quality product suppliers*
- *Develop Diversified financial products*
- *Capacity building of staffs and aware the target clients*
- *Utilisation of renewable energy products for economic activities of the clients*
- *Strong field level monitoring to mitigate the portfolio at risk*
- *Role of government*
- *Role of Donors*

5.0 CONCLUSION

- Renewable energy products as a key component of climate change adaptation
- Bangladesh has made a significant progress in renewable energy sector over the last one decade
- A few empirical studies on the impact of renewable energy finance on the rural poor
- Empirical study on the impact of renewable energy on the livelihood of the rural poor would assist to the policy makers to adopt new policies and undertake future programmatic interventions



6.0 KEY QUESTIONS FOR DISCUSSION

- 1. To what extent there is market potential for renewable energy sector in Bangladesh?**
- 2. What are the opportunities and challenges for Microfinance sector?**
- 3. What role the government should play for sustainable renewable energy sector in Bangladesh?**
- 4. What could be the role the donors to promote renewable energy sector?**
- 5. How to make renewable energy sector sustainable?**



Thank you