# Arguments and Strategies

Section Three

Because Bangladesh is largely rural, it has been a long-standing goal of the Government to provide electricity to the entire country. The Global Action on Renewable Energy (GEF) is undertaking an ambitious effort with the Government of Bangladesh, the World Bank, and Bangladesh's Infrastructure Development Company Limited (IDCOL) to increase the spread of off-grid, renewable energy technologies, such as solar home systems.

#### **Solar Panel Project**

- The project works by combining a GEF grant with a line of credit to microfinance institutions and NGOs to purchase solar home systems.
- Those organizations, in turn, provide small loans to individual consumers and village cooperatives interested in purchasing such systems.
- By shifting a portion of their monthly energy budget away from kerosene and batteries, families can afford modest investments in more reliable 20–40 watt solar home systems.
- This is enough energy to provide lighting at night, help pump clean water, or keep critical medicines cold.
- Payback periods on the loans vary from one to three years, with past experience showing that even the poorest households make very reliable partners.

#### **Solar Panel Project (continued)**

- The project also works to remove the barriers to more widespread use of renewable systems and builds the skills of its partner organizations.
- The project provides a package of interventions to support Bangladeshi institutions in overcoming major market barriers.
- These institutions include rural electricity cooperatives, community-based organizations, NGOs, microfinance institutions, and private-sector groups.
- On a global scale, this project is expected to displace nearly 260,000 tons of carbon dioxide over the next 15 years.
- The most critical impacts will take place at the local level, in the form of improved health, more reliable water supplies, and greater opportunities to improve livelihoods and promote truly sustainable development.

Bangladesh has also attempted to curb GHG emissions in the transportation sector by switching to natural gas use for rickshaws around the country.

### Financing of Renewables

- The Grameen Bank in Bangladesh has an international reputation for assisting small rural enterprises not normally seen in conventional banking practice.
- It provides credit to the Bangladeshi rural poor without any collateral and uses it as a cost-effective weapon to fight poverty.
- It also serves as a catalyst in the overall development of socio-economic conditions of the poorest of the poor who have been so far kept outside the banking orbit on the ground that they are poor and therefore not eligible for banking.

# Financing for Renewables

- One of Grameen Bank's special areas is the commercialization of renewable energy in rural Bangladesh.
- Grameen Shakti' has been established under the Grameen Bank umbrella with the purpose of supplying renewable energy to unelectrified villages in Bangladesh.

□ Grameen Shakti's goal is to:

 supply, market, sell and develop renewable energy systems in thousands of poor rural villages of Bangladesh, with the ultimate goal of alleviating or minimizing poverty by creating employment and income generation opportunities.

# **Financing Renewables**

- Grameen Shakti has established a number of specific programs to implement its goals in renewable energy. These consist of:
  - Solar Home Systems (SHS) Program
    - Homes are provided with photovoltaic roof collectors for a small amount of electricity, mostly for lighting.
  - Wind Power Program
    - Larger scale systems are being trialed on some coastal locations.
  - Hydro Program
    - Mini and micro hydro systems are being investigated in some hilly areas.
  - Biodigester Program
    - Households are financed to build small digesters to produce gas for cooking as well as a fertilizer by product.
  - R&D and Technology Transfer Program
    - Innovation is being assisted to ensure Bangladesh makes the most out of this energy transition.
  - Training Program
    - Used to assist the improvement of technical and managerial skills of Grameen Shakti's staff and to educate and popularize renewables among rural people in general.

Within the agreement, there are several sectors that need to have definite targets and timelines.
Bangladesh supports sectoral targets for:

Transportation
Consumption/Affluence
Monetary/Finance Policy
Energy

- Transportation targets should be based on population and the number of private transportation vehicles present in a country.
  - Although this target is generally not feasible, it would ideal to have a 10-20% reduction in transportation emissions by 2050.
- Consumption/Affluence targets should be considered within this agreement since affluence is often the facilitator of GHG producing activities.
  - I am not positive on how to target affluence, but think it is something that needs to be discussed and incorporated in agreement negotiations.

- Monetary and Financial Policy targets should be an essential component of agreement negotiations.
- Funding will dictate the future of many countries, so binding targets need to be put in place to ensure required countries' participation in adequate contributions to ODA, LDCF, SCCF, and other appropriate funds.

- Energy targets are also very important to agreement negotiations.
- Energy composition targets for each Annex need to be established with meeting a specific goal of renewable energies composition by a certain year (maybe 20% of total energy composition has to be renewable by 2050 for each Annex?)