

## **SMALL ENERGY TECHNOLOGY FOR EMPOWERING RURAL POOR: BANGLADESH CONTEXT**

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### **ABSTRACT**

About half of the population of Bangladesh lives within poverty level. The Millennium Development Goal (MDG) of UNO requires to reduce poverty by one half by 2015, and Copenhagen Declaration demands environmental protection. About 80% of the population lives in rural area and use poor cooking fuel which creates pollution. Most of them are landless and day labor. They have insufficient income to provide for their basic needs. A business model has been designed which the people may use for sustainable rural development in Bangladesh. Sustainable development comprises types of economic and social development that protect and enhance natural environment and social equity. The scanty energy resources of rural area shall be used to attain development to provide basic needs for the poor and to meet MDG target. This paper explores possibilities of attaining rural development through fostering rural power companies based on Renewable Energy Technologies (SET). This will create village businesses for selling power generated from renewable energy technologies. An integrated ecological, economic and social model is proposed to assist sustainable rural development. People of all classes will be a party to share business under this model. The renewable energy technologies (RET) create income generating activities for landless and marginal farmers and for women from such households. The use of renewable technology will reduce deforestation, health hazards and indoor air pollution for cooking with poor quality fuels. The capital cost of Renewable Energy Technology (RET) is little high. This model proposes an extension of well-known micro-credit approach developed by Grameen Bank or BRAC. The target group of village people would form a village organization (VO) like cooperative with the

assistance of an external agency composed of NGO, business group and government representatives. The village organization may borrow money from a bank or a large NGO and purchase a RET. The RET may be based on biogas, solar or wind depending upon available sources and locations. The village organization shall sell power to weather members of the society and would repay the loans. Thus they will gain direct ownership and control of the technology and its applications. Here the model is proposed with biogas plant. This will be used to generate power and cooking gas. This is one of the best uses of rural technology to empower the rural poor investing their indigenous skills and resources. Probably the model of this kind can establish gender equity and alleviates poverty to empower the landless poor and protects environment. This model now needs field testing as pilot project.

**Keywords:** Small Energy Technology, Renewable Energy Technology, Poverty Alleviation.