Employment Creation Model in Bangladesh

Promoting Green Jobs in Renewable Energy: Women Solar Technicians and Entrepreneurs

Background and Justification

Bangladesh is a populous yet low energy-consuming and energy-starved country. About 60% of the population is not connected to the national grid. Those that do have access to electricity live in urban areas. Unemployment levels are particularly high amongst youth and women. Under-employment remains pervasive. The informal economy is estimated to account for 80% of the country's labour force and absorbs most of the underemployed and unemployed. The Gender Empowerment Measure ranking of 76 reflects continued low levels of female ownership of economic assets.

Due to acute shortage of energy, particularly electricity, and heavy reliance on imported raw material like fossil fuel, the Government of Bangladesh has accorded high priority to alternative energy sources, such as solar energy. There has been a very sharp increase in demand for solar home systems creating opportunities for the promotion of green jobs in the renewable energy sector, particularly in rural areas. Such green jobs can be promoted by training solar technicians and developing solar entrepreneurs in off-grid areas, resulting in a win-win situation. The installation and maintenance of solar home systems (SHSs) not only creates employment opportunities for women in particular but also improves the living standards generally of poorer people in rural areas.

National Frameworks

The Government of Bangladesh has in place a Decent Work Country Programme to improve livelihoods and opportunities for its people. The government has also accorded high priority to the promotion of renewable energy as a means of addressing the current energy crisis. In the Bangladesh Climate Change Strategy and Action Plan 2009, the government emphasized a low carbon development path which refers to renewable energy development, particularly solar home systems. Under its Renewable Energy Policy of 2008, the government has planned to develop green energy resources to meet ten per cent of the national demand for power by 2020. It calls for 1.5 million new solar home systems by end of 2012 (in addition to the current total of one million SHS by all partners), which means an expansion of about 100,000 systems per month. This has created a great demand for solar technicians & entrepreneurs.

Renewable Energy Employment Model

While new jobs in the renewable energy sector are on the rise in Bangladesh, efforts must be made to ensure that these jobs provide pathways to sustainable employment through productive and decent work. The employment model for green jobs in Bangladesh tackles these issues through the formation of innovative partnerships, development of curricula and competency standards, and skills training courses on the installation and maintenance of solar home systems. The target beneficiaries are unemployed women and men in 10 rural districts.

Pilot Skills Development and Access to Finance

The project is institutionalizing skills training for SHS (assembling, installation, trouble shooting and maintenance) with the development of manuals and a standardized curriculum. The curriculum includes modules on Occupational Safety and Health (OSH) and Labour Standards. The Bureau of Manpower Employment and Training (BMET), Grameen Shakti and other service providers have conducted training for 100 Master trainers.

The employment model also involves recommendations and an assessment of access to available finance for entrepreneurs. In addition to offering training and mentoring on entrepreneurship, BMET also provides information to trainees on developing viable business plans.

Roll out

In order to scale up green job opportunities for the rural population, skills training and linkages with SHS providers for job placement (for solar technicians) are required, as suppliers of SHS are under contract for the installation and after sale service/maintenance (for solar entrepreneurs). The access to finance study assesses options for microfinance start-ups and growth capital. Roll-out of the training is conducted in 10 BMET Technical Training Centres (Faridpur, Bogra, Khulna, Rangamati, Sylhet, Barisal, Laksmipur, Rangpur, Dinajpur, and Sylhet). Approximately 1,500 beneficiaries are currently being trained (with a focus on women).

Public Private Partnership

A Public-Private Partnership has been set up to implement the project with Grameen Shakti and the Bureau of Manpower Education and Training.

The private partner, Grameen Shakti, is the largest service provider of rural-based renewable energy that promotes solar home systems to low-income rural households. It covers 60% of the SHS market, producing 14 MW of solar power, covering all 64 districts and provides electricity to 650,000 rural households. Given its successful business model and technical know-how, and with current demand for 20,000 SHS per month, Grameen Shakti has expressed a need for increased training of personnel. Approximately 50% of the students that pass through the Green Jobs in Asia training are absorbed into the labour market by Grameen Shakti. BMET, Bangladesh's public sector training provider, has Technical Training Centres operating throughout Bangladesh. BMET is working to ensure the institutionalization of the training curriculum with ILO and its partners whilst scaling up SHS training throughout the country to meet the ever-increasing demand for solar technicians and entrepreneurs.

In order to develop the SHS market, the project has collaborated with the major partners of the Infrastructure Development Company Limited (IDCOL), a key public partner, through which the project supplies the technical know-how and builds capacity by training master trainers and providing service providers with skilled solar technicians and entrepreneurs.

Linking trainees with renewable energy service providers expands productive employment opportunities, reducing poverty and vulnerability in rural areas. The aim is to develop the SHS market to ensure it is competitive and efficient, providing increasing numbers of jobs and greater outreach of SHS provision and services. With ILO technical inputs and support, post training follow up will be done by skill training provider (BMET) and the principal of the training centers.

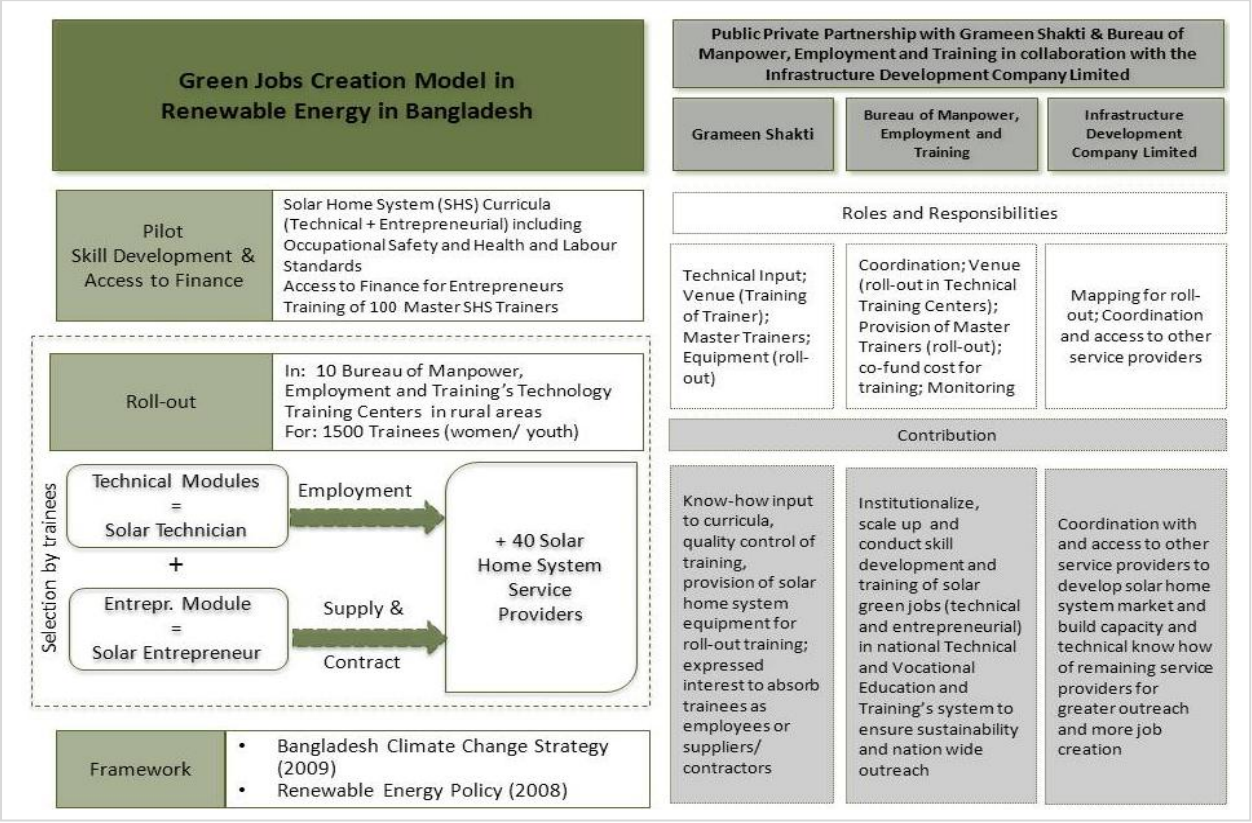
Institutional arrangements at local level are being designed to strengthen the linkage between the training providers and potential employers (Grameen Shakti, RSF, SRIZONY and TMSS, among others). Initial support in this process has been provided by the project.

Partners and Structures

The project is implemented in partnership with ILO's tripartite constituents and national partners, the Ministry of Labour and Employment, Bangladesh Employers Federation and the National Coordination Committee on Workers Education, as well as Grameen Shakti and BMET, in collaboration with the Infrastructure Development Company Limited. Grameen Shakti provides technical input to the development of the curriculum, with the Training of Trainers being held in the Grameen Shakti Training Centres, along with quality control of the training and the provision of equipment for the roll out training. BMET is responsible for the mainstreaming of curricula and implementation of training. IDCOL is the public agency that promotes, *inter alia*, renewable energy through its countrywide partners of 28 service providers.

Way forward

Efforts to institutionalize SHS curricula, competency standards and occupational profiles into the country's National Technical and Vocational Qualification Framework (NTVQF) are underway. Once integrated into NTVQF, the trainees will have an opportunity to have their skills and competencies assessed and obtain a national certificate under the Framework. A value chain development approach is also being explored to identify the employment potential of addressing environmental issues associated with waste disposal & recycling of SHS batteries This systematic approach provides a strategic entry point for the greening of additional sectors, including buildings and construction, where the Government of Bangladesh has set ambitious targets for the use of renewable energy.



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