Expert Meeting on Rural Electrification & Solar Energy

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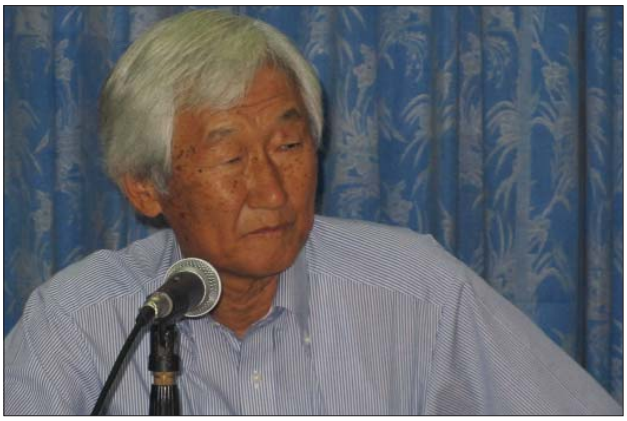
An expert meeting on Rural Electrification and Solar Energy in Bangladesh was held on 28th September, 2010 at Bangladesh Institute of Administration and Management (BIAM) Foundation. The meeting was an initiative of Hiroshima University to facilitate further developments of rural electrification and to promote solar usage as a means of sustainable development in Bangladesh. The meeting's agenda was to broadly collect up-to-date information on rural electrification for both grid electrification and renewable energy electrification in Bangladesh. It further stretched to share the views on achievements and future challenges and strategies of further electrification of the country among key players of electrification. This project was supported by Grant-in-Aid for Scientific Research of Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan. Amongst the invitee there were members from IDCOL, REB, Grameen Shakti, GTZ, and Dhaka University. Prof. Shinji Kaneko from Hiroshima University initiated the seminar schedule with a brief welcome speech to the participants. He also focused brief research activities on electricity issue of Bangladesh since 2006.

A twenty minutes power-point presentation was delivered by Mr. Abser Kamal, acting Managing Director, Grameen Shakti. Grameen Shakti is one of the partner organizations of IDCOL and has over 1114 total offices all over Bangladesh. So far, Grameen Shakti has installed over 445,000 Solar Home Systems which are illuminating rural homes and businesses with around 4 million beneficiaries. Mr. Kamal emphasized on the prevailing condition of electrification in rural Bangladesh. While describing the current scenario, he mentioned about Grameen Shakti's contribution and penetration in rural areas of Bangladesh. He talked about successful market-based approaches practiced by Grameen Shakti for bringing renewable energy sources to the rural population. Mr. Kamal also highlighted the fact that creating rapport with the community is another key to success. Moreover, during his presentation he mentioned about different credit schemes directed at consumers. He also discussed about the future challenges and urged for international cooperation for further development in this sector.

The Chairman of Rural Electrification Board of Bangladesh, Mr. Bhuiyan Shafiqul Islam talked about the achievements and future plan of Rural Electrification in Bangladesh. Mentioning as a constitutional obligation, Mr. Islam briefly discussed about article no. 16 of the Constitution of 1972, with the intention to remove disparity in the standard of living between the urban and rural areas. While talking about the achievements of REB, the speaker stated about meeting the peak time demand, reducing system loss, increase in the customer base etc. During the discussion Hiroshima University team pointed out perspective to attain the goals of the vision 2020 (provide 100% electricity). Concerns issues like reservation of natural gas and its implications to long term power sector development strategies were pointed out.



Prof. Shinji Kaneko from Hiroshima University

Dr. Saiful Huque from Dhaka University talked about the prospects of solar products in Bangladesh. He proposed different adaptation strategies and a possible roadmap to renewable energy based economy. Moreover, Dr. Huque described different activities (i.e. solar water pumping, using wind turbine, solar cooker, solar street light etc.) for scaling up renewable energy applications in Bangladesh. He also proposed various promotional activities to make the solar products more acceptable for the consumers. In addition to that, he further focused on prospect of other renewable like wind energy. Research on feasibility and potential assessment on wind energy would be another issue that also can be considered.

Dr. Shoji Kaneko from SPD laboratory Inc. presented a dynamic innovative idea on "Next Generation Dye-sensitized Solar Cell (DSC)" and during his presentation he also demonstrated the recent products. He described that the DSC is the most promising solar technology from the viewpoint of cost-effectiveness compared to the conventional silicon solar cell. Regarding the development of DSC panel, Dr. Kaneko further stated that SPD lab will be stared designing of mass production system by April

2011 with a 3 years end plan to mass level sale of 3kW power plant.

It was indeed a knowledge enhancing presentation by Mr. Islam Sharif, CEO of IDCOL. He started his presentation discussing IDCOL's background, its objectives and the investment portfolio. Mr. Sharif also talked about IDCOL's responsibilities and about the different committees that are formed to carry out the operations successfully. Nonetheless, he mentioned the development impact of IDCOL's activities. He stressed the significance of IDCOL as an innovative and unique institution to promote SHS in rural Bangladesh as well as good collaborative relations with executing entities like Grameen Shakti and other partner organizations for upholding the solar diffusion.

Dr. Khaleq-Uz-Zaman from GTZ Bangladesh, discussed about the current activities, future perspectives and challenges of GTZ during his presentation. He mentioned that GTZ is supporting the government in setting up of 'Sustainable Energy Development Authority', which wills co-ordinate all renewable energy and energy efficiency activities of the country. Dr. Zaman also stated the main objectives of GTZ which is to enhance the skills (technical & managerial) of the partner organizations. According to the presenter, to reach poor people still remains the main concern of GTZ. He shed light on the fact that despite all the credit schemes and other subsidies, reaching the bottom of the pyramid (BOP) still is a big challenge. GTZ has clear target the poor people and initiated small solar home system (10-21Wp) and pico solar home system (3-6Wp) as low cost lighting solution.

For the project purpose, a team of Hiroshima University visited Bangladesh at the initial phase of the project in September 2010. This team visited rural areas of Savar, Manikganj and Kishoreganj to observe and get a real idea on solar home system and solar irrigation and its practical usages Prof. Shinji Kaneko of Hiroshima University is the team leader and other 4 members from Hiroshima University (Prof. Ichihashi, Associate Prof. Higashi and Assistant Prof. Komatsu) and Dr. Tomoyo Toyota from JICA Research Institute also includes the team. Partha Pratim Ghosh, alumni of Hiroshima University, coordinates the Hiroshima University team in Bangladesh part specially for organizing the seminar and research facilitation.

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Shinji Kaneko

Professor at Hiroshima University Japan. His current research interests are placed around environmental analyses of energy and resources related issues including global warming, urban air pollution, and water resource management, mainly in Asian region. Recently, his research approach and focus has been gradually shifting from engineering oriented to environmental economics or development economics. In addition, he is recently involved some international cooperation projects in the field of environment.

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