
Role of a regional program for promotion of photovoltaic based rural electrification in Asia

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Abstract: Photovoltaic (PV) technology has recently evolved as an attractive option for rural electrification worldwide, particularly in the developing countries. However, a number of barriers need to be addressed for its widespread introduction. Capacity enhancement of institutions and individuals is crucial for its long-term sustainability as their efforts to develop innovative approaches and models suitable to the local conditions would be key to successful dissemination. This paper describes the capacity development in photovoltaic systems technology carried out in Bangladesh, Cambodia, Lao PDR, Nepal and Vietnam under the aegis of a regional research and dissemination program 'Renewable Energy Technologies in Asia'. A number of approaches were employed for capacity development. The relevance of capacity enhancement to promote PV deployment, and details of how this regional program assisted in developing capacity leading to promotion of PV development in these countries are presented. Specific examples related to research needs, development of accessories, awareness, and development of infrastructure in the participating countries and institutions have been described in detail. Regional networking has proved to be very effective in promoting such renewable energy technologies in the Asian context.

Keywords: capacity development; photovoltaics; regional cooperation.