

SOLAR COOKERS: BANGLADESH PERSPECTIVE



Twenty years later, after the designing of first Solar Cooker, tens of thousands of solar cookers are dotted over every continent! But to what extent solar cookers are making headway here, in Bangladesh, is a question unknown. Traditionally solar thermal energy has been utilized in different household and industrial activities in Bangladesh. These utilization are mainly open air drying of agricultural products, production of salt from sea water, drying of cloths, fish etc.

used as the source of energy. During bright sunshine hours the cooker is operated by solar and during the periods of low intensity of illumination electricity of few watts

Few activities on Solar Energy in Bangladesh

Solar Cooker: Low cost solar cooker employing a parabolic reflector has been developed in the Institute of Fuel Research & Development (IFRD). The cooker has been successfully field-tested and can quickly raise water to boiling point under clear sunny days

Solar Dryer : Different models of solar food dryer have been fabricated using cheap and locally available raw materials. The Institute of Food Science & Technology (IFST), BCSIR has developed low cost cabinet type solar dryer. Few other organizations have been pursuing research work on solar dryers.

Solar Water Heating : Solar water heating systems, which can provide 60°C water at reasonable thermal efficiency, have also been developed for potential use in hospitals, hotel & industries.

Other Solar Technologies: Collection of solar insulation data has been in progress since 1985 using a pyranometer at the roof of IFRD. An autocalibration system for the pyranometer has been developed so that the calibration may be checked and adjusted as and when needed. A solar house has been designed and built in the BCSIR campus, the purpose being to keep the house warm in winter and cool in summer. Both active and passive systems are included in the design. Electricity will be provided to the house using photovoltaic systems. The workability of the systems is being investigated. In Bangladesh capital Dhaka, about 500 ml. of fresh water per sq. m. area basin is obtained by the solar stills per hour. These solar stills will find application in places where there is scarcity of drinking water.

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