



**ASSESSMENT OF BARRIERS
TO ACCELARATE SMALL HYDRO POWER
DEVELOPMENT IN SRI LANKA**

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Abstract

As Sri Lanka is non fossil fuel producing country, large amount of national income has to be spent for fossil fuel in producing electricity from thermal power generation. For example, CEB has spent 78.61 billion rupees for purchasing of thermal power from private sector through standard power purchase agreement in the year of 2008. Furthermore, expenditure on fossil fuel for electricity generation of CEB's own power plant has been 34.46 billion rupees in the same year. The volume of fossil fuel used by CEB alone for generating electricity was about 517 million liters in 2008. In this context, study on indigenous renewable energy sources looks very important.

In this research, attempt was made explore the importance of small hydro power (SHP) industry and identify the factors, which retard development of SHP projects. The study reveals that land related issues, environmental issues, social issues and financial issues are main factor that causes 70% of effect for delay in SHP projects. Further it was revealed in this research that the total capacity of SHP project commissioned is 167 MW as at September 2009 and at least another 300MW of small hydro power capacity is available in the country.

This study attempted to abstract the individual idea of the experts in the SHP industry for enhancement of the prevailing process. Further they believe that SHP projects need be developed as a solution for resistance to mega hydro power projects and high electricity cost. Literature reveals that. government of Sri Lanka has recognized the importance of non conventional renewable energy sources (NCRE) where SHP plays the major role. Government has set the target of 10% electricity generation from NCRE by 2015, which need 650 MW installed capacity and prevailing capacity is 179 MW as at September 2009.

This research is exploratory research and effort was made to introduce guide line for smooth small hydro power implementation process catering the influencing factor identified in the survey carried out among the experts.