Study on Socio Economic Impacts of a Minihydro Power Project on the Huluganga Basin and Adequacy of the Environmental Assessment as an Environmental Management Tool

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ABSTRACT

Sri Lanka is experienencing a high rate of increase in electricity demand.Reliable supply of energy is a crucial factor for development. At present more than 60 % of the energy, demand is supplied by large hydropower sources. However, the current multipurpose hydropower capacity is not sufficient to fulfill the ever-growing electricity demand of the country.Enhancing hydro capacity by using mini hydro power plants is not only an alternative device but also also the best solution for the insufficient water for multipurpose mega plants and the public protest against severe negative environmental impacts of large power projects.

Although mini hydropower was considerd as the effective and environmental friendy energy source with the least impact on the environment, there have been public protests against many minihydro projects currently operating in the country. Issues concerning loss of bathing points, public nuisance due to rock blasting, deforestration and had hidden agendas with strong political back up were evident in this protest.

Therefore, this case study was conducted in a an environmentally sensitive area with the objective of find out socio economic impacts of a mini hydropower project on HuluGanga basin of Sri Lanka and to examine the adequacy of the present environmental assesment process as an environmental management tool.

This study mainly focused on Primary data that collected through a structured questionnaire survey. A computer programme of Regression Analysis with robust standard errors and logit model output for test the socio economic factors affecting different stakeholders' perception of a MHPP.

The results reveal that monetary value of the beneficiaries is the most important variable inoder to restore the socio economic impacts and further social impacts can be mitigated by implementation of reasonable compensation packages.

The conclusion arrived at this case study is that no significant negative environmental impacts or extremely low negative impacts compared to the value of the positive impacts of the mini hydro electricity projects. The study also demonstrate application of present environmental assessment process as an environmental management tool(EIA/IEE) and it's importance of monitoring after completion of the poject inorder to safeguard the environment .