

**IMPROVING THE METHODOLOGIES ADOPTED FOR  
ASSESSMENT OF ENVIRONMENTAL AND SOCIAL  
IMPACTS OF MINI HYDRO POWER PROJECTS**

**Eng. R.P.D.I Rohana**

**(118775C)**

**Dissertation submitted in partial fulfillment of the requirements for the Degree  
of Master of Science in Environmental Engineering and Management**



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Department of Civil Engineering



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**September 2015**


## Declaration

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Research Supervisor

Dr. J.M.A Manathunge

Department of Civil Engineering

University of Moratuwa

March 2016

## Abstract

This Research is aim to look at the environmental impacts related to Mini hydro projects in Sri Lanka and to determine the available methodologies for identification of Major Environmental Impacts and the options to mitigate the impacts or avoid impacts. It is also tried to look at the monitoring process conducted by project Monitoring Committee during the implementation of mitigations and the public participation in the IEE/EIA process.

In this research, twelve mini hydro projects were studies by collecting data from field studies and IEE reports by focusing Environmental Methodologies used and the Monitoring Process of the Projects. The collected data from the twelve Mini Hydro Power Projects are analyzed and discussed comparatively to standards and guidelines in Sri Lanka..

The research observed that the exact gap between predicted impact and the implemented impact is cannot be analysis. In addition, it was observed that the IEE report does not mentioned methods of impact identification. This is a weakness of submission IEE report as well as Term of Reference (TOR). TOR should be laid down the condition that the method of impact identification should be included in the IEE report. All the projects taken to research have neglected the monitoring process and which is an important part of IEE and EIA. The Environmental Monitoring process is not compressive and PP had violated mitigation as well as the conditions stipulated by the PAA. Hence, Monitoring process must be improved to implement of Predicted mitigations satisfactorily.

The IEE reports of Sri Lanka are not in unique order, similar to other countries like India. Sri Lanka must have proper stand guideline to be followed by Mini hydro Project

As per the studies, the Mini Hydro Projects have to face challenge such as heavy flood, blasting hazards, Landslides and soil erosion. These challenges can be overcome by proper planning and management.

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## **List of Abbreviations**

CEA – central environmental Authority

DS- Divisional Secretariat

EIA Environmental Impact Assessment

GN- Grama Niladari

IEE – Initial Environmental Examination

MHP – Mini Hydro Power Project

NEPA – National Energy Act

NGO – Non-Governmental Organizations

PAA – project Approving Agency

PP- Project Proponent

PS- Pradeshiya Sabha

TEC – Technical Evaluation Committee

TOR- Term of Reference

USAID- United State Agency for International Development



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