## MSc Degree in Environmental Science

A REVIEW OF THE ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) OF CONSTRUCTION PROJECT IN SRI LANKA WITH SPECIAL REFERENCE TO THE RURAL ROAD REHABILITATION PROJECT IN WELLAWAYA.

A dissertation submitted

by

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## ABSTRACT

Environmental Management Systems (EMS) are considered as very effective tools in handling negative impacts of construction projects on physical and social environment. Yet it is observed that there are many issues encountered with the ESM process in construction industry especially in the implementation.

The ultimate purpose of this research is to examine the EMS process followed in the construction projects in the Island and to figure out the implementation barriers of this tool in order to find out the corrective actions to overcome the issues. The research was done with special reference to the MO06 rural road rehabilitation project of iRoad 2 programme executed in Wellwaya D.S. division of Moneragala district.

The methodology followed was literature review to obtain a broader understanding of the EMS, while primary data was collected from site inspection and interviewing of key persons of the rural rehabilitation project.

The thesis is organized into five chapters. Chapter 01 is on the introduction of the research project and described the background, objectives, study area, EMS process, and the referred construction project. Chapter 02 includes the literature review where previous researches, and other publications were reviewed. Mandatory influence of EMS in construction project in Sri Lanka and key instrument of EMS of reference construction project were discussed under this chapter.

Research methodology was discussed in Chapter 03. The method and technics utilized to gather data and mechanism of data analysis were discussed in this chapter. Result and discussion were described in Chapter 04. Chapter number 05 of the research the conclusion and recommendations were made according to the research objectives. Cause and effects of implementation barriers of EMS and recommendations for the improvement of better implementation of EMS was discussed in this chapter.

According to the findings and the results of the research, this study was able to 1. Figure out the mandatory influence of EMS in construction project, 2. Examine the key instruments of EMS in construction projects, 3. Examine the cause and effects of implementation barriers in EMS in construction projects and 4. Figure out mitigation measures to avoid implementation barrier in EMS in construction projects yet to be executed.