MANAGING THE SOCIO-ECONOMIC IMPACTS DUE TO COMPACTION OPERATIONS DURING CONSTRUCTION OF SOUTHERN EXPRESSWAY

MASTER OF BUSINESS ADMINISTRATION IN PROJECT MANAGEMENT

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DECLARATION

I hereby certify that this dissertation does not incorporate, without acknowledgement, any material previously submitted for a Degree or Diploma in any University and to the best of my knowledge and belief, it does not contain any material previously published or written by another person or myself except where due reference is made in the text. I also hereby give consent for my dissertation, if accepted, to be made available for photocopying and for interlibrary loans, and for the title and summary to be made available to outside organizations.

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Abstract

Southern expressway is the first expressway project started in Sri Lanka. It is expected to help reduce poverty in Southern region, integrate Southern region into the Country’s economic mainstreams, and promote regional development as well as reduce the travel time between the capital city and southern region.

The main purpose of this study is to identify the socio-economic impacts during compaction activities while construction of the southern expressway in Sri Lanka, highlight its impact on the people’s lives who live near the highway trace and to forward recommendations for minimization of such disturbances. A questionnaire survey was carried out among the professionals engaged in the project and also nearby households along the trace to identify the influence and the effects of compaction. Altogether 1,547 houses were inspected. In addition, persons who are holding the key positions of the project were interviewed. A crack survey was carried out before the compaction activities on the expressway trace as well as after the compaction activities. After that comparison of a pre- and post-crack survey was done to determine the actual damage to the houses located near the trace due to compaction activities.

After analyzing all the data it is clear that houses which are located close to the expressway trace are considerably damaged due to the construction activities. Vibration levels were monitored by the government institutes regularly at nearby houses. Contractor is responsible for the damage due to higher vibration. Some houses have not been built to the proper standards and some are much old to withstand higher vibration levels. Prior to construction activities of the southern expressway an Environmental impact assessment (EIA) was done by University of Moratuwa in 1999. Mitigation proposed in the EIA has not satisfactorily been implemented as regards to the impact of vibration due to compaction operations and any sufficient attention had not been paid regarding the ground vibrations. Those are the major shortcomings which were identified in this research. Some of the unrealistic designs of the projects were proposed that led to most of the project delays and more of the cost over-runs.
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