## REVIEW OF BARRIERS TO THE SUCCESSFUL IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT PRACTICES IN APARTMENT BUILDING CONSTRUCTION PROJECTS IN SRI LANKA

## HCH PERERA<sup>1</sup> and NDI VITHANA<sup>2</sup>

<sup>1</sup>Undergratuate, <sup>2</sup>Lecturer (Probationary)

Department of Quantity Surveying, Faculty of Built Environment and Spatial Sciences

General Sir John Kotelawala Defence University, Sri Lanka

## **ABSTRACT**

Sustainable development in construction mainly focused on achieving eco friendliness and energy efficiency to the built environment. This concept can be implemented in any type of construction sector to get the potential beneficial outcome of these practices. Over the last few years, apartment projects in Sri Lanka gained large demand while catering to a large population in urban areas. Since this is a new concept for the local construction industry, there is hindrance to the adoption of those practices in apartment construction projects.

This study primarily identifies the barriers for successful implementation of sustainable development practices, specifically in connection with Apartment Building Construction Projects. The aim of the research is to develop a 'ranked' list of barriers to the successful implementation of Sustainable Development Practices in Apartment Building construction projects in Sri Lanka.

To achieve a ranked list of barriers specific to the apartment projects, literature survey and questionnaire survey has been conducted in a comprehensive manner. Subsequently, opinions of industry professionals were analyzed using Relative Important Index (RII) to obtain the final outcome of the study. Barriers were ranked under four components which are cultural, financial, capacity, and steering barriers. Overall ranking scheme has been developed in order to emerge the most critical barriers for adoption of sustainable practice in apartment projects. Most significant barriers outlined under the financial barriers. Findings revealed that lack of government incentive schemes are the most critical barrier which is currently in force in the implementation stage. The study suggests that these drawbacks can be overcome by, providing tax reductions and attractive incentive schemes for local developers who are willing to participate in the apartment building sector. Seminars and awareness programmes can be conducted by CIDA and NAITA, in order to provide required publicity regarding sustainable apartment projects.

Key words – Sustainable construction, apartment projects, barriers, relative importance index