A STUDY TO REVIEW THE FUNDAMENTAL PRINCIPLES OF GREEN RATED BUILDINGS IN ORDER TO DEVELOP THEM IN A COST-EFFECTIVE MANNER

BASR BALASOORIYA $^{\rm 1}$ and AARK AMARATUNGA $^{\rm 2}$

¹Undergratuate, ²Lecturer Department of Quantity Surveying, Faculty of Built Environment and Spatial Sciences General Sir John Kotelawala Defence University, Sri Lanka

ABSTRACT

Green building concept has been widely discussed nowadays because people are facing a climate changes, global warming increasing and global temperature cause to rise the sea levels change the amount of pattern of precipitation. The green building projects are different from conventional buildings projects and giving the priority for the economic, social and environmental goals. It has been found that green buildings capable to provide financial benefits by saving usage of potable water, making indoor environment quality and making better working places, energy saving, efficiency using of materials and having waste management through reduce of environment cost, operational cost and maintenance cost of the building.

There were not enough researches that shows Quantity Surveyors expanded role in green building. Not only that sufficient researches which are not carried out a researches about more water efficiency fixtures, material efficiency fixtures that installed in green buildings. Therefore this research may provide a guidance to identify failures of fixtures and materials installed in green rated buildings, substitute installations to maximize the efficiency of green rated buildings through the case studies.

The objectives were able to achieve through the Focus group discussion analysis method in qualitative approach and data collections were done literature survey and semi structural interviews. Water efficiency, material efficiency applications available in the global context and Sri Lankan green rated buildings were recognized in the literature review and failures

The findings were clearly showed that reasons that affect to reduce building rates, substitute installation practices were found professional's guidance instead previous and finally recommendations were given to develop green building in future.

Key Words – Efficiency practices, cost effective, water efficiency, material efficiency, Green rated buildings.