

Exploring the Richness of Content of GREENSL Rating in Sri Lanka with Respect to Green Rating Systems in Japan, Singapore and Malaysia

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Green building construction is a concept under sustainable development, which has been introduced in many countries. GREENSL is the green rating tool which was introduced to Sri Lanka by the Green Building Council Sri Lanka and its contribution to the expansion of Sri Lankan green construction, has been very slow over the past decade according to the certified no of buildings. The main objective of this study was to assess the essence of Sri Lankan green evaluation content with internationally recognized CASBEE, BCA-GM and GBI ratings in the Asian region. Desk study including qualitative analysis was done to achieve the main objective of the study. Residential new construction manuals of CASBEE 2014 edition (Japan), BCA Green 2016 revision (Singapore), GBI 2013 version 3.0 (Malaysia) and GREENSL 2018 version 2.0 (Sri Lanka) were studied to gather data. Comparative analysis was done using check lists prepared with issues under each criterion. Categories under the content i.e. sustainable site, energy, material, water and indoor environment which are common to all tools were studied. According to the results, it was revealed that, GREENSL has paid its highest attention to all the selected criteria and some specific issues also have been addressed than other rating tools such as water efficiency in air conditioning, innovative wastewater technologies and constructed wetland. Specifically, GREENSL has considered construction waste management, hazardous waste management and operation solid waste management while other tools have considered about only one or two from them. When comparing to other green rating tools selected, GREENSL shows paramount importance since it can be used for all categories of buildings unlike in other rating tools which have separate guidelines such as for residential, non-residential, new and existing buildings. Therefore, it can be concluded that the GREENSL rating tool can be used as an international rating tool such as CASBEE, BCA GM and GBI and its content is far ahead of the other tools. It was suggested to address building security directly through the tool and to mention the cost-effective construction methods to motivate towards more green buildings in Sri Lanka.

Keywords: BCA GM; CASBEE; GBI; Green rating tool; GREENSL