

The Potential of 'Comprehensive Assessment System for Built Environment Efficiency for Cities' in Developing Country: Evidence of Myanmar

Authors : Theingi Shwe, Riken Homma, Kazuhisa Iki, Juko Ito

Abstract : The growing cities of the developing country are characterized by rapid growth and poor infrastructure management inviting and accelerating relative environmental problems. Even though the movements of the sustainability had already been developed around the world, it is still increasing in the developing countries to plant sustainable practices. Aligned with the sustainable development actions, many sustainable assessment tools are also developed to rate and evaluate the sustainability performances through the building to community level. Among them, CASBEE is developed by Japanese organizations and is recognized as one of the international well-known assessment tools. The main purpose of the study is to find out the potential of CASBEE tool reflecting sustainability city level performances in developing countries. The research framework was designed with three major phases: Quantitative Approach, Qualitative Approach and Evaluation Reflection. The first two approaches were based on the investigation of tool's contents and indicators by means of three sustainable dimensions and sustainability categories. To know the reality and reflection on developing country, Patheingyi City from Myanmar was selected and evaluated by 2012 version of CASBEE for Cities. The evaluation practices went through assigned indicators and the evaluation outcome presents the performances of Patheingyi city's environmental efficiency as a very good in current conditions. The results of this study indicate that the indicators of this tool have balance coverage among three dimensions of sustainability but it has not yet counted enough for some indicators like location, infrastructure and institution which are relative to society dimension. In the developing countries' cities, the most critical issues on development such as affordable housing and heritage preservation which are already planted in Patheingyi City but the tool does not account for those issues. Moreover, in some of the indicators, the benchmark and the weighting coefficient are strongly linked to the system birth region. By means of this study, it can be stated that CASBEE for Cities would be potential for delivering sustainable city level development in developing country especially in Myanmar along with further inclusion of the indicators.

Keywords : assessment tool, CASBEE, developing country, Myanmar, Patheingyi city, sustainable development

Conference Title : ICSAUD 2016 : International Conference on Sustainable Architecture and Urban Design

Conference Location : Boston, United States

Conference Dates : April 24-25, 2017