

Neighbourhood Sustainable assessment tools analytical overview

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Worldwide recession, rapid increase in energy cost, inefficient use of nonrenewable resources, global climatic changes and pollution are all indicators of a deteriorating built environment. Improving the living conditions in the built environment became essential. To obtain living conditions improvement there has to be balance between the triple bottom lines of sustainability i.e environmental, social & economic bases.

The aim of this paper is to determine sustainability goals and objectives that are needed to be achieved on the neighborhood scale through discussing the benchmarks set by different sustainability oriented rating systems. There is a number of rating systems in the world for sustainable buildings, but a few have dealt with neighborhood assessment. Neighborhood sustainable assessment tools measure the success in approaching sustainable goals. In this study, five tools from the Gulf region, Europe, Japan, and the United States (Estidama, GSAS, CASBEE, BREEAM and LEED) are selected and analyzed to provide insights on the current situation; highlight the strengths, weaknesses, successes, and failures; and make recommendations for future improvements for the development of local adaptable assessment tools. Using a content analysis, sustainability issues including coverage, pre-requisites, local adaptability, participation, scoring and weighting, reporting, and applicability are discussed in this paper.

The results of this study indicate that most of the tools do not cover social and economic aspects, as well as the main sustainable pillars. There are ambiguities and shortcomings in the weighting, scoring and rating. In most cases, there is no mechanism for local adaptability and participation; only those tools which are embedded within the broader planning framework are doing well with regard to applicability.

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