Strategies for a Sustainable Neighbourhood in a Smart City: A Case of Pattoor, Thiruvananthapuram

Authors : Vijaya Nhaloor, Suja Kumari Leela, Jose Devadasan

Abstract : Planning of neighbourhood development strategies in Tier 2 Indian city is highly significant when it has also been selected as a Smart city by the Ministry of Urban Development in India. Smart city mission of India proposes the development of infrastructure in a city in an inclusive way. Thiruvananthapuram, the capital city of Kerala state, India, has been selected as the city to conduct the research. The master plan for the city of Thiruvananthapuram envisions it as a Compact city and proposes densification as a tool for development. Densification may adversely affect the quality of life after a tipping point. This may lead to urban decay which in turn directly or indirectly affects the surrounding neighbourhoods also, thus spreading blight areas in the city. The author thinks that density in urban planning is not a well detailed subject in India, with respect to its varied links on infrastructure, quality of life, transportation, scope of vertical planning, affordability etc. Neighbourhoods are vital tissues of an urban area, and their development directly affects the development of the region. The methodology would involve skimming of proactive neighbourhood planning principles compatible with the Smart city mission in India. United Nations proposes sustainability as a way of planning development of a neighbourhood. After defining various terminologies involved, a framework shall be developed to analyse an existing neighbourhood and prepare planning guidelines in a sustainable manner. The framework shall comply with international and national policy guidelines. The research shall explore and identify a neighbourhood with the potential to meet the housing demand from the investment regions nearby and analyse its potential and weakness as per this framework. Later, a set of indicators shall be enlisted to guide the development of the neighbourhood, leading to recommendations that shall serve as a replicable model for the other neighbourhoods in the Smart city.

Keywords : key indicators, neighbourhood planning, sustainability, smart city

Conference Title : ICACE 2019 : International Conference on Architecture and Civil Engineering

Conference Location : Rome, Italy

Conference Dates : January 17-18, 2019

1