

ANALYZING THE RELATIVE ENVIRONMENTAL IMPORTANCE OF THE TANZANIAN GREEN BUILDING ELEMENTS

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Abstract

The environmental pollution contributed to by the building construction sub-sector in Tanzania is significantly soaring by the day, making it difficult for the country to align to the expectations of the Global Development Agenda, 2015. This article focuses on the establishment of environmental importance weightings for local green building standard elements in Tanzania, to be able to match the pace at which the global green building sector is moving. Emanating from the use of a Relative Importance Index (RII) analysis, the study found that, similar to the global practice of green building certifications, which assign more environmental weighting to energy efficiency in green buildings, the same way have the RIIs of the examined Tanzanian Green Building Assessment criteria identified energy efficiency (with the highest environmental importance weighting given by $RII = 0.78039216$) as the most important ingredient of green building. Although it is not the case in other global green building certifications, for the case of Tanzanian Green Building Standard elements, Water Efficiency and rainwater harvesting, as well as on-site waste management and environmental conservation emerged as the twin-second best elements (receiving the same environmental weighting given by $RII = 0.76470588$). On the other hand, the study revealed that Building Automation and Internet of things (in other words referred to as innovation in buildings) as the least environmentally important element with the lowest environmental weighting given by the $RII = 0.61568627$, which in some ways confirms and questions the environmental weightings allocated to 'innovation' green element by the most prominent global green building certifications such as LEED, BREEAM, Green Star Australia, Green Star SA, and Green Mark