

Socioeconomic Impacts of Innovative Housing Construction Technologies in Slum Upgrading: Case of Mathare Valley Nairobi, Kenya

Authors : Edmund M. Muthigani

Abstract : Background: Adequate, decent housing is a universal human right integral component. Resources' costs and intensified rural-urban migration have increased the demand for affordable housing in urban areas. Modern knowledge-based economy uses innovation. The construction industry uses product and process innovation to provide adequate and decent low-cost housing. Kenya adopted innovation practices in slum upgrading that used cost-effectively locally available building materials. This study objectively looked at the outcomes, social and economic impacts of innovative housing technologies construction in the Mathare valley slums upgrading project. Methods: This post-occupancy study used an exploratory-descriptive research design. Random sampling was used to sample 384 users of low-cost housing projects in Mathare Valley, Nairobi County. Research instruments included semi-structured questionnaires and interview guides. Pilot study, validity and reliability tests ensured the quality of a study. Ethical considerations included university approval and consent. Statistical package for social sciences (SPSS) software version 21 was applied to compute the descriptive and inferential statistics. Findings: Slum-upgrading had a significant-positive outcome on improved houses and community. Social impacts included communal facilities, assurance of security of tenure, and retained frameworks of establishments. Economic impacts included employment; affordable and durable units (p values <0.05). The upgrading process didn't influence rent fees, was corrupt and led to the displacement of residents. Conclusion: Slum upgrading process impacted positively. Similar projects should consider residents in decision-making.

Keywords : innovation, technologies, slum upgrading, Mathare valley slum, social impact, economic impact

Conference Title : ICIBMES 2022 : International Conference on Innovative Building Materials, Environment and Sustainability

Conference Location : Tokyo, Japan

Conference Dates : January 07-08, 2022