

## EDITORIAL

### Land use Planning and Construction Management

Welcome to the Eighteenth Volume Issue 2 of the Africa Habitat Review-Journal of the Faculty of Built Environment and Design. In this edition there are diverse contributions on issues relating to ICT adoption in Real Estate, projects value management, street morphology and urban crime, publishing guideline to journal articles, safety and health compliance on construction site, urban land use succession, industrial gentrification and efficiency in construction industry.

The first paper on *Forces Driving ICT Adoption in Real Estate Firms in Kenya* investigates the factors influencing ICT adoption in the Real Estate sector. The study adopted a descriptive research design that entailed collection of data from a population of 124 comprising of real estate firms comprising of 83 professional firms and 41 real estate agents operating in Nairobi. A random sample of 63 was selected for investigation of the status of ICT adoption. Data was collected using questionnaires. Data analysis was undertaken using inferential and descriptive statistics to test the relationships between the various variables. In the end of analysis, it was established that the complexity, perceived user benefits, availability of skills and availability of ICT equipment within the firms play varied significant roles influencing ICT adoption. In conclusion, it is clear from the study results that to enhance ICT adoption in Real Estate firms require a combination of efforts including enhancing user staff skills, acquisition of user friendly equipment, facilitating staff interactions between firms and staff from diverse firms. The study recommended that real estate firms be encouraged to engage ICT professionals to enhance their capacities.

The paper entitled *Developing a Framework for Enhancing Value Management Adoption in Conception of Construction Projects in Rwanda* explores the application of VM in the conception of construction projects in Rwanda. The study examined the current state of VM practices in Rwanda and highlighted factors promoting effective adoption of VM in construction projects. It also looked at the challenges associated with the VM adoption in Rwanda. Additionally, it explored the possibility of making VM use a mandatory requirement in the design of large and complex infrastructure projects in the country. The researchers aimed to develop a framework to foster adoption of VM in the construction industry of Rwanda. A questionnaire was used to collect data from professional practitioners in construction industry in Rwanda, and statistical data analysis was done. The study findings are that the respondents were aware of VM and its benefits in construction projects in Rwanda, but their application of VM in the projects was poor. Consequently, the VM-associated benefits – i.e. improved project outcomes, increased client satisfaction, and reduced project costs – which have been observed elsewhere, are not found in the industry. From the data analysis a schematic framework was formulated to promote the adoption of VM in the construction industry of Rwanda. The framework underlines VM training and awareness campaigns, institutional and legal support, and continual monitoring and evaluation of the endeavour.

*The Impact of Street Morphology on Crime in Juja Town, Kiambu County* paper aims at identifying and analyzing the street morphology of the area in relation to crime. The study employed a descriptive research design. It sampled 84 streets in Juja town, Kenya, and analyzed their character through observation methods and interviews with respondents on crime incidences. The results show a correlation between street morphology and crime. It found that street morphology explained up to 35 percent variation in crime. Further, streets characterized by single-storey and double-storey structures enclosed by physical barriers such as fences experienced mugging and theft cases. Streets characterized by high-rise structures experienced theft and break-in cases. The study recommended that urban planners employed an organic street pattern approach. Further, local authorities should encourage mixed-used developments, to promote activities on the street through different times of the day. The provision of recreational zones, within residential zones characterized by single-storey and double-storey structures, would encourage a sense of community among residents, promoting passive surveillance and alleviating the fear of crime.

*Communicating Research in the Built Environment: A Professional Guide to Publishing Journal Articles* paper documents the process of turning research data into a peer review journal article in the built environment disciplines. The paper explains how to do the write up in a professional manner. The write up is made up of three key parts: preliminaries (title, abstract, key words), main body (introduction, literature review, methods, findings, discussion, conclusion, notes, and references) and appendage. Once the write up is

complete, it guides the prospective author on dos and don'ts (or professional ethics of publishing) during the pre-submission and post-submission period. This practice would help lessen the burden on the peer review systems and facilitate the prospective author to achieve successful article publication in a peer review journal.

The paper entitled *Employees' Role in Health and Safety Committees: Weakest Link Towards Safety Compliances on Construction Sites in Kenya* was to establish the level of performance of the HSCs and the employees' involvement towards OSHA compliance on construction sites in Kenya. The target population comprised of 250 registered projects being undertaken by NCA5-NCA8 contractors. A sample size of 153 sites was established using the stratified and simple random sampling method. Data was collected via self-administered questionnaires and a response rate of 82% was achieved. The study established the level of performance of HSCs to be at 42% and participation of employees in the HSCs to be 54.2%. The data showed a strong and positive correlation of 0.708 ( $p=0.01$ ) between the level of performance of HSCs and the level of employees' involvement. The study concluded that the level of performance of HSCs in construction sites in Kenya was inadequate. The level of employee involvement in HSCs was also insufficient. The study recommended increased involvement of employees in HSCs. This could be achieved through capacity building initiatives for employees to enhance their abilities to adequately take up their roles in the HSCs.

*Strategies to Streamline Urban Land Use Succession: Case Study of Upper Hill, Nairobi, Kenya* paper aims identifying the determinants of ULUS and establish the influence of global capital and spatial policy on ULUS. A case study research design was used. The data was obtained from a survey of 68 properties in Upper Hill. Systematic sampling was applied to select 68 plots out of a population of 516 plots. Primary data was collected using interviews and observations. Descriptive and T-student tests were used to analyze the data, including testing of hypotheses. Photographs and descriptions were used to present the data analysis. The study recommends that the redevelopment in the Upper Hill area should consider a comprehensive plan that is part of the organic city of Nairobi. The different approving and enforcement agents in the planning sector need to be better integrated and coordinated for the proper implementation of the County Physical and Land Use Development Plan. Public land, just as private land, should be redeveloped to create a consistent urbanscape. Development of Upper Hill should also consider providing community and upgrading sewer facilities for better social and environmental conditions for residents.

The paper on *Dynamics of Industrial Gentrification: A review of Literature* addresses the industrial gentrification from the point of less attention being given to social and spatial aspects of transition from an industrial economy to post-industrial economy. This gap is examined through industrial gentrification in four cities: Chicago in the United States, Williamsburg-Brooklyn in New York, Glasgow in the United Kingdom, and Haifa City in Israel. The study adopts a case study approach to do a comparative analysis and gain an in-depth understanding of the drivers, effects, and interventions of industrial gentrification in these cities. This methodology was chosen due to its ability to provide rich and context-specific insights into the complex process of industrial gentrification, taking into account the unique social, economic, and historical factors at play in each city. Four (4) models of industrial gentrification emerge namely Policy Intervention Model; Decline/Dwindling Opportunities Model; Relocation/Space Restriction Model; and Complimentary Needs Model. These models are re-examined to draw lessons that may be useful in shaping sustainable urban transformation. The study recommends adoption of inclusive zoning and mixed-use development, implementation of strategic land use plans, creation and enforcement of displacement policies, and community participation in the planning process.

This paper *Determinants of Efficiency in the Construction Industry in Kigali City, Rwanda* highlights the main factors affecting efficiency in the construction industry in Kigali, Rwanda. This is because the contribution of the construction industry in growth and development is widely recognized. This paper uses selected high rise building projects in Kigali city explain the main forces influencing efficiency in a country like Rwanda. The study adopted a descriptive method that involved administration of questionnaires, observations and document reviews. The study concluded that five factors explain construction projects time overruns and thus inefficiency. The factors were identified in order of significance as follows: i) variations and design changes during project execution period, ii) late payment to the contractor; iii) slow decision making, iv) delays in delivery of building materials; and financial challenges by the building contractors. The study recommended among others that efficiency in the construction industry would require adequate preparation including risk analysis, understanding the local conditions and that for more generalization of the results there would be need for similar studies covering other parts of Rwanda.

*Developers' Influence in Health and Safety Committees: A Missing Link on Construction Sites in Kenya* paper aims at establishing an effective strategy for the enhancement of HSCs' performance in construction sites in Kenya. A sample of 153 sites were selected using simple random sampling. A response rate of 82% was achieved. Data were collected via self-administered questionnaires. The findings indicated that the level of performance of HSCs registered a paltry 42% against the expected 100%. Further, 100% of the respondents recommended inclusion of developers in the HSCs as the best approach towards enhanced compliance with OSHA 2007. The most significant developer-related factors were identified as selection of contractors with good record towards health and safety (mean=4.12) and sensitization of stakeholders on best workplace health and safety practices (mean=4.08). The study revealed a significant strong positive relationship (0.639) between the performance of HSCs and the developer-related factors. The study concluded that the developers' influence in the HSCs is indeed a missing link in OSHA 2007 compliance. It recommended amendment of the OSHA 2007 to onboard developers in HSCs to enhance their effective performance on the SME construction sites in Kenya.

The paper entitled, *Role of Existing Masonry Work Management of Musculoskeletal Disorders in Building and Construction Workplaces in Nairobi County, Kenya*, addresses the exposure of masonry workers work-related risks resulting to development of musculoskeletal disorder and associated diseases affecting their body's movements. Multiple-case study methods were employed to undertake the inquiry. The study was guided by the General Systems Theory. A review of the existing literature in the field of the study was carried, and the knowledge gap for the study identified. The field data was collected using questionnaires and interview guides. Paired null and alternative hypotheses for the study were defined. The data collected was subjected to descriptive and inferential analysis for logical patterns, relationships and level of statistical significance. The key findings of the study showed involvement of masonry workers in risk management decision-making, work performance, process audits and reviews. The Pearson correlation results ( $P \leq 0.05$ ) showed that the Role of existing masonry work management of Musculoskeletal Disorders in building and Construction Workplaces was positively related to workers musculoskeletal disorder of masonry workers. The regression model summary results of the study indicated that  $R = .541$ , implying that the Role of existing masonry work management correlated at .541. The study results for the coefficient for simple-regression determination ( $R^2$ ) was .331, implying that the changes in independent variables influenced changes in the dependent variable by 33.1%. Other factors beyond the scope of this study explained the remainder 66.9% out of 100% of the changes. However, the figure does not reveal information about the relationship between the independent and dependent variables cause and effect of the regression model.

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