ABSTRACT

Development control forms an essential part of planning by providing the basis upon which development plans are implemented. The purpose of this study was therefore to investigate how development control is operationalized as a tool for plan implementation in Kisii Town, Kenya. It was guided by the Theory of Change, Public Interest Theory of Regulation and Systems Theory. It was further guided by concurrent triangulation design. The target population comprised 7,430 residential developments, 106 professional staff from the County Government of Kisii, 80 building contractors and 25 land surveyors. Corresponding sample size included 364 residential developments, 80 professional staff from the County Government of Kisii, and 66 building contractors. While stratified random sampling was used to select developers and County Government professional staff, simple random sampling was applied to select building contractors. Qualitative and quantitative data were collected using questionnaires, checklist, photography and remote sensing. The first objective determined if current land use development patterns conformed to the approved land use development zones in 1972 Kisii Town Physical Development Plan. It was analysed using GIS and remote sensing. Results showed that all land use patterns did not conform to the plan. Hypothesis tested using paired sample t-test further found a significant difference between the approved land use development zones in 1972 (M=43.555, SD = 34.661) and the current land use development patterns (M = 36.344, SD = 34.047), t (9) = 4.03, p = .003, thus on average, conformity declined by a mean of 7.206, suggesting inadequate development control. The second objective that established if developments were complying with recommended physical planning standards was analysed using one sample t-test; paired sample t-test; Pearson's bivariate correlation and GIS, showed that on average, all standards were not complied with, apart from Floor Area Ratio (FAR) and minimum plot size. The corresponding hypothesis, also tested using paired sample t-test, found a significant difference between the recommended planning standards (M=41.72, SD = 93.75) and observed compliance (M = 28.39, SD = 58.58), t (9) = 2.827, p = .006. In the end, compliance declined by a mean of 13.33, also an indication of inadequate development control. The third objective examined drivers of land use change that influence development control in Kisii Town. Data analysis relied on logistic regression, Chi-square test of association, Principal Component Analysis (PCA) and Structural Equation Modelling (SEM). Results showed that key drivers of land use change included extent of collaboration and co-ordination in land use planning; monitoring of building development process; authorisation of building occupation and adequacy of resources. Test of related hypothesis using linear regression showed that extent of land use change significantly predicted attainment of development control objectives, F (1, 63) = 9.069, p = .004, and R^2 = .355. Key recommendations included review of the current development plan; strict enforcement of planning standards and establishing a Spatial Planning Coordinating Committee.