

ABSTRACT

The affordable housing market in the Kolkata Metropolitan Area (KMA) shows a distinct contrast: government housing projects are fully sold, while many privately developed units remain unsold despite an overall housing deficit. Surprisingly, unit price, price per square foot, and unit size showed no significant relationship with the percentage of unsold units across developments. This study, therefore, examined which buyer preferences significantly influence sales performance in privately developed affordable housing, using data from 32 housing complexes in KMA. The research followed three sequential objectives. For Objective 1, a multi-level Utility Score was developed by integrating buyers' perceived priority and satisfaction for various housing attributes identified through a systematic literature review. These scores served as independent variables in a regression model, with the percentage of unsold units as the dependent variable. Results indicated that building-level, neighbourhood-level, and miscellaneous features significantly affected unsold inventory, whereas housing-complex-level and city-level features showed no statistical impact. These significant features were carried forward for deeper analysis. For Objective 2, a consensus-filtered Kano analysis was applied to classify buyers' expectations regarding the significant variables from Objective 1. Ten features were identified as performance, and one as attractive. The categorisation indicated strategic directions for private developers. For Objective 3, Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM) were used to determine the indicators reflecting homebuyers' satisfaction in KMA. Eight significant indicators emerged, which may be recommended as priority areas for future projects. Among these, 'natural ventilation' was a strong indicator with associated variables that could be objectively measured, and that developers can directly control. Detailed analysis of this suggested optimal window-to-wall ratios suitable for future affordable housing design. Methodologically, the study contributes by proposing a Housing Utility Score which explains the variations in market performance of affordable housing units, and by using the consensus-driven Kano approach for more reliable feature classification. Contextually, it establishes that carpet area, cost, and rate do not drive sales performance in privately developed affordable housing in KMA, and it identifies the specific parameters that actually shape buyer decisions.

Keywords: *Privately developed affordable housing, Buyer preferences, Housing utility score, Consensus-filtered Kano model, Homebuyer satisfaction, Kolkata affordable housing market*