

## Risk Occurrence and Stakeholder Responsibility in Government-Led Vertical Housing Projects: Evidence from Indonesia

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### Abstract

Vertical housing construction projects are inherently complex due to the involvement of multiple stakeholders, dense urban environments, and strict performance requirements related to cost, schedule, and quality. In government-led housing programs, these complexities increase project exposure to various construction risks that may undermine project outcomes if not properly managed. This study investigates the occurrence of construction risks and the distribution of stakeholder responsibility in government-led vertical housing projects in Indonesia. The study is based on a structured questionnaire administered to eight purposively selected key informants with direct experience in five public vertical housing projects, namely Kemayoran Athletes' Vertical Housing, Pasar Rumput Vertical Housing, Vertical Housing Project in the New Capital City (IKN), Kedaung Baru Vertical Housing, and Muhammadiyah University Vertical Housing. Data were analyzed using a descriptive approach to identify dominant risk categories and stakeholder involvement patterns. The results indicate that scope-related risks, schedule delays, and cost overruns are the most frequently occurring risks, with responsibility predominantly associated with project owners, contractors, and supervisory entities. The findings also reveal that unclear role delineation and fragmented coordination contribute to the persistence of these risks across project stages. In conclusion, construction risks in vertical housing projects are closely linked to stakeholder responsibility structures and coordination practices. The study recommends strengthening risk-based coordination mechanisms and improving structured communication among key stakeholders to support more effective risk mitigation and enhance project performance in government-led vertical housing development.

### Keywords

Construction risk, stakeholder responsibility, vertical housing projects, project communication.

