

An Analysis of Possible Dangers During the Construction Process

Priti Pramod Patil¹ and Dr. Sirna Santosh Kumar²

Research Scholar, Department of Civil Engineering¹

Associate Professor, Department of Civil Engineering²

Sunrise University, Alwar, Rajasthan, India

Abstract: *An essential component of project management in the construction sector is risk assessment. It entails locating, locating, and minimising hazards that might compromise project goals. An overview of the several risk assessment techniques, ranging from quantitative to fuzzy approaches, used in the construction sector is given in this article. Validation techniques such Monte Carlo simulation, sensitivity analysis, critical route analysis, fault tree analysis, failure models, effects, and critical analysis are introduced in this work. These adaptable techniques are useful tools in the field since they provide a summary of the probability of their occurrence and how it will affect the project's goals. The essay also looks at the concept of turbidity as a means of grading the degree of certain dangers associated with subterranean building projects. Additionally included are legislative frameworks and instruments for evaluating problems connected to land development that provide fresh approaches to risk management in challenging circumstances. Analysis revealed that there isn't a single risk assessment technique that applies to all activities and organisations. In conclusion, risk assessment is crucial to resource allocation, risk mitigation strategy formulation, and construction decision making. The risk assessment approach will be further refined and improved by ongoing research and development in this field, which will contribute to the overall success and sustainability of construction.*

Keywords: Construction, risk, land, mitigation and management.