National Institute of Technology Rourkela

Departmental Seminar

Seminar Title : Exploring the Influence of Resource Availability on Safety Management in the Nepalese Construction Industry: A

Scenario-Based Study

Speaker : Dr. Kishor Bhagwat

Supervisor : Dr. M. Gattu

Venue : CE Seminar Hall

Date and Time : 09 Sep 2025 (05:20 PM)

Abstract : Safety management is a paramount task in the Nepalese constr

: Safety management is a paramount task in the Nepalese construction industry, constituting a key aspect for measuring project success alongside factors such as time, cost, and quality performance. It encompasses various initiatives, processes, and regulatory compliances set by different governmental bodies. Often, the efficacy of safety management efforts is contingent upon resource availability. However, the influence of resource availability on safety management strategies (SMS) within the Nepalese construction industry remains underexplored. Hence, this study aims to address this research gap by investigating three scenarios: the highest, medium, and lowest level of resource availability. Employing a questionnaire survey approach, the study collected responses from construction professionals and conducted various statistical tests. Data analysis was carried out using the Statistical Package for the Social Sciences (SPSS). The findings indicate that under the highest level of resource availability, nearly all SMS are easily implemented on construction projects, potentially maximizing the impact on construction safety management. Moreover, with limited resource availability, SMS such as 'Reporting and Documentation,' 'Incentives,' and 'Safety Audit' can still be feasibly implemented. Particularly, in scenarios of very limited resource availability, the implementation of 'Personal Protective Equipment (PPE) and Safety Equipment/Material' emerges as the easiest safety indicator. This underscores the crucial role of the last line of defense in the Nepalese construction industry. The findings of the study provide valuable insights for construction professionals in Nepal, especially in prioritizing key SMS when research resources are limited.