

An Investigation of the Resource Finding Issues in Highway Construction Projects in Sri Lanka with Covid-19 Pandemic Situation

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The construction resources are essential for the functioning of construction projects consistently up to their finishing stage. In this regard, construction resource planning and management are compulsory to realise project goals on time and to accomplish them within the budget. The whole construction industry of Sri Lanka was affected by the COVID-19 pandemic outbreak and most construction projects had to face difficulties in effective resource management. The research approach is to investigate resource finding issues that arose with the COVID-19 pandemic with reference to four highway construction projects in Sri Lanka. The study also focused on identifying the effects on project completion on time, cost and quality. Through the literature review, seventeen resource finding issues and related factors were identified under three categories, which are human, material and financial. Then, the importance level of identified factors were justified to this particular study through the responses gathered using a questionnaire survey. The responses were taken from construction professionals (project managers, planning engineers, construction managers, QA/QC engineers, quantity surveyors and site engineers) who were selected according to the researcher's judgement from four contractor firms. Then factors were analysed and ranked using Relative Importance Index (RII) and descriptive statistics, utilising Excel and SPSS software. The results presented that all factors significantly affected resource finding issues and showed their effects on project delays, cost and quality. Finally, the research concluded with identified effective solutions for continuing highway construction projects during COVID-19 pandemic period.

Keywords: resources, project objectives, highway innovation, Covid-19