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Investigation of Safety Allocation for Construction Projects Using Accident

Cost Analysis

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Construction sector in Sri Lanka has tremendously grown in the recent past. Since the construction industry is based on manpower, health and safety of workers should be in higher position. However, health and safety has unsatisfactory concerns among construction companies. Moreover, accidents result heavy losses of time, cost and resources, which are considered as the most valuable assets in the industry. So, total cost for accident holds considerable portion when comparing contractors' profit margin. Hence, knowing an approximate allocation on safety at the tender preparation stage may lead to secure the contractors' profit and to minimize accidents.

Therefore the aim of this research is to make aware the contractors on accident cost by analyzing accident cost and estimating percentage amount of contract cost which should spend in order to gain accident free environment at the beginning of a project. The research was conducted through a questionnaire survey targeting C1 to C5 contractors. Data were collected related to accidents happened as the indirect cost. Direct safety allocation and the contract cost were other collected data.

The results show that there is an inversely proportional relationship between the direct safety allocation and indirect accident cost. Also, it was seen that the percentage total accident cost laid between 0.15%~2.3% from the contract cost. So if the contractor can allocated at least 0.15% on safety at the initial stage, it may be possible to maintain an accident free environment.

Keywords: accidents, safety allocation, indirect accident cost