Identifying causes of construction waste - case of central region of Peninsular Malaysia

Abstract:

Construction waste becomes a global issue facing by practitioners and researchers around the world. Waste can affects success of construction project significantly. More specifically, it has major impact on construction cost, construction time, productivity and sustainability aspects. This paper aims to identify various factors causing construction waste in Malaysia. Study was carried out through structured questionnaire focusing three major parties (i.e. clients, consultants and contractors) involved in construction project. Data was analyzed with Statistical Software Package SPSS. Reliability of data was found as 0.917 which showed that data collected was highly reliable. The calculation of Mean Rank of the construction waste causes found that the 5 key causes are Poor site management and supervision, Lack of experience, inadequate planning and scheduling, Mistakes and errors in design and finally Mistakes during construction. Spearman correlation analysis showed that Mistakes during construction was highly correlated with Rework (with 0.829 correlation value) and Slow information flow between parties (with a value of 0.60) and vice versa. Through identifying the causes and its correlation of the construction waste it gives better understanding to the construction community for future construction projects which benefit not only in term of economy but also the environment.