



Mitigation Measures for Significant Factors Instigating Cost Overrun in Highway Projects

Samiullah Sohu ^{a,b*}, Abd Halid Bin Abdullah ^a, Bashir Ahmed Memon ^b,
Sasitharan Nagapan ^a, Nadeem Ul Kareem Bhatti ^b

^a Faculty of Civil and Environmental Engineering, Universiti Tun Hussein Onn Malaysia, Parit Raja, Batu Pahat 86400, Johor, Malaysia.

^b Quaid-e-Awam University of Engineering, Science and Technology, Nawabshah, Sindh, Pakistan.

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Abstract

Construction industry has created numerous employment opportunities and playing a role model in economic growth of Pakistan. This industry is facing serious and critical problem of cost overrun especially in highway sector in country Pakistan particularly in Sindh Province. The purpose of this study is to identify mitigation measures for significant factors of cost overrun in highway projects of Sindh Province. In this study, mixed-mode research approach has been used. Quantitatively, a structured questionnaire based on 64 common factors of cost overrun from in-depth literature review was developed and distributed to 30 selected respondents among the client, contractor and consultant having more than 15 years of experience in handling highway projects in Sindh Province. The collected data was statistically analyzed using SPSS where 8 most significant factors of cost overrun were identified. Qualitatively, the identified eight most significant factors were then incorporated in open ended questionnaire and distributed to 30 selected experts for them to write possible mitigation measures for each of the significant factors. The data was then analyzed through content analysis technique to rank the mitigation measures according to their substantiality. The results of this study would be helpful for construction practitioners to be used as reference in taking up appropriate measures in controlling cost overrun in highways projects in Pakistan.

Keywords: Mitigation Measures; Cost Overrun; Highway Projects; Significant Factors; Pakistan.

1. Introduction

Worldwide construction industry is facing problem of cost management which causes cost overrun in huge amount. This problem of poor cost management leads to project cost overrun in both under developed and developed countries [1]. For example, as one of the developed country, the United Kingdom is also facing problem of cost overrun where 75% of the construction employees have claimed that construction projects were struggling with problem of cost overrun [2]. According to Flyvbjerg et al. (2004), cost overrun is a big challenge in construction projects whereby the cost of the projects can exceed more than 180% of initially approved estimated budget of the project [3]. Within the context of this paper, successful construction project can be defined as the one that is completed within its actual approved cost [4]. Whereas, construction industry is regarded as a dynamic industry which is continuously facing problem with its budget. Although different strategies and improvements have been implemented in an effort to minimize the issue, cost overrun is still a critical problem in most construction industries all over the world [5].

* Corresponding author: hf150092@siswa.uthm.edu.my

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