

COMPARISON OF SIGNIFICANT FACTORS INFLUENCING PERFORMANCE OF ROAD CONSTRUCTION INDUSTRIES IN SRI LANKA AND AUSTRALIA

S.B. Wijekoon

*Industrial Training and Career Guidance Unit, Faculty of Engineering, University of Peradeniya, Sri Lanka
sbw@pdn.ac.lk*

Road development is an important component of the economic development in any country and large amounts of funds are allocated to develop road networks in most of the countries. A number of road improvement projects in Sri Lanka have also been planned accordingly, and it is learned that the majority of these road projects do not perform as expected, especially within time, cost and quality performance due to various factors. Therefore, a study to identify the factors influencing performance of the Road Construction industry has been initiated. The study is aimed at identifying the significant factors influencing the performance of the road construction projects in Sri Lanka and compares it with the Australian industry to see whether there are any similarities between the industries in the two countries.

A well-designed questionnaire was used for data collection including 130 factors influencing the performance of the Road Construction Industry in Sri Lanka. The questionnaire was distributed among selected engineers in both the Sri Lankan and Australian Industries. Thirty engineers from the Road Construction Industry in Sri Lanka and 12 engineers from the Australian Industry were selected for the surveys. All thirty engineers from the Sri Lankan Industry and six from the Australian Industry responded. The participants were requested to allocate marks from 1-5 (1-very poor influence; 2-poor influence; 3-average influence; 4-high influence; 5-very high influence) to each factor according to their knowledge.

It was concluded that 36 factors obtained average score of 4.00 and above in the survey of the Sri Lankan Road Industry and 16 factors were common to both the Sri Lankan and Australian Industries. They are: certification of the Interim Payment Certificates (IPCs) by the Engineer within a reasonable time (2 weeks); timely issue of instructions by the Engineer; good working relationship with the Employer, Engineer and the Contractor; Construction Manager's ability to manage people at work; availability of skilled construction labour; employer's ability to provide agreed/required resources (funds, land, etc.) throughout the project duration; availability of the required number of plant and equipment; technical ability and construction knowledge of contractor's staff; discussions with the Employer, the Engineer and the Contractor on construction issues and constraints at regular intervals; condition/reliability of the construction plant and equipment; good contract administration knowledge and experience by the Engineer; previous experience of the construction team working on similar project; providing effective assistance to the construction team to take decisions as required on time; quick response by the contractor to Employer's/Engineer's requests/instructions; contractor's commitment to complete the project within the original or agreed time period and Contractor's knowledge on construction methods. It was concluded that these sixteen factors are significant common factors influencing the performance of the Road Construction Industry in Sri Lanka and Australia.