



WEATHER RISK ON CONSTRUCTION PROJECTS IN SRI LANKA

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Abstract

Almost all the activities in construction projects are outdoor, thus different weather conditions such as rain, wind and snow would directly impact on the performance of any construction project. Being a tropical country, the effect from rain would be experienced mostly in Sri Lanka. Weather risk can be defined as financial gain or loss due to a change in weather conditions over a period of time.

Models to manage the weather risk on construction projects could be developed which had already been in practice in a few countries such as US and Japan. Further, such tools have transformed into new business ventures such as insurance schemes too. In these models, if rainy weather prevails beyond a certain predetermined period, contractors can claim the losses incurred by bad weather.

Weather records of previous years could be studied, and a proper forecast on seasonal rainfall with Intensities (Precipitation) for current years could be assessed accurately. Then major and minor weather windows (WW) could be identified and the weather sensitive, high cost items which are at a risk are identified. Further, identification of Dry Spell, Rain Spell and Wet Spell are important for proper construction planning.

This research aims in developing a strategic plan for construction projects in the planning stage so that the rain risk on the project performance could be minimized. Further, through a strategic plan weather sensitive (WS) items could be identified and avoid the WW periods within the frame work of accepted construction sequence. Finally the weather risk could make an Opportunity not a Threat provided this aspect is properly managed.

Keywords: Weather Risk, Construction Industry, Precipitation, Rainfall, Strategic plan, Weather Windows