Crisis Management of Embankment Dam in Terms of Construction Delay Reduction

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Abstract

Delay is considered as a main problem in civil projects of Iran. Ending the construction of dam in determined time is of high importance in terms of huge capitals invested in dam building projects. The present study has attempted to manage crisis of embankment dams in terms of construction delay reduction. To this end, a questionnaire has been distributed among 50 employers, consultants and contractors of embankment dams' construction projects. The obtain data has been processed in SPSS software. As the research findings reveals, accelerating the trend of privatizing embankment dams' construction projects, prioritizing technical and financial capabilities compared to the prices suggested by contractors and supplying required credit to pay lands losses lead to the decrease of construction delay of embankment dams.

Key words: management, crisis, embankment dam, construction delay

Introduction

The term of "crisis" has been emerged in Latin language for almost five centuries. During the two last centuries, "crisis" has been widely used in English and French languages. The phrase of "crisis management" in its currently used form was proposed by Robert McFarow for the first time when the possibility of missile war between America and Cuba was discussed. He stated that "there is nothing as strategy and crisis management should be acted on". Thus, major activities were manifested regarding crisis management from the last of the 1970s (Savadkouhi, 2007). Generally, the objectives of crisis management entail removing the crisis and emergency conditions in project, returning the project to the early status, decreasing the effects of crisis in the project, coping with it through spending the lowest cost, preparing to cope with the crisis, decreasing the damages due to the crisis in the project, and reconstructing critical regions (Salahshour & Farouji, 2011).

Considering the fact that delay in construction leads to national capital losses and additional costs for executive institutions, recognizing delay is of importance as a factor preventing from similar problems in the next projects (Aghabi Dibaii, 2005). Generally, the importance of discussing embankment dams can be explained as follow:

- Due to the vital importance of water resources, recognizing delays causes to use this natural capital optimally and avoid its waste.
- Dam building projects are the main and infrastructural projects in Iran, so accurate recognition of delay and proper planning to remove and decrease them can solve main problems of timely exploitation of projects.
- In some highly important projects, delays prolongation in dam building projects decreases their efficiency (Sabze Pour, 2006).
- In Iran, large dams are the main elements of supplying the needed electricity power so that they supply 30% of required electricity power currently. With respect to the advantages of using hydroelectricity relative to thermal power plants, most of countries seek to develop hydroelectricity.

The Research Hypotheses

1) Accelerating the trend of privatizing and increasing the principle of competition in embankment dam construction projects decrease construction delay.
2) Prioritizing technical and financial capabilities compared to the prices suggested by contractors decrease the construction time of embankment dams.