

THESIS

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**EVALUATION OF MANAGEMENT STRATEGY ADOPTED
FOR CONSTRUCTION OF JAGRAN-1 HYDRO POWER
PROJECT AJK (PAKISTAN).**

Submitted by:

**MUHAMMAD FAROOQ AHMAD
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**CENTRE OF EXCELLENCE IN WATER RESOURCES ENGINEERING
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ABSTRACT

The complexity, volume and involvement of different trades in today's constructions projects has necessitated for proper management of resources required to build them. Project Management so far, as a professional discipline, has been accorded the least importance in construction industry in Pakistan, but it is now widely accepted that some form of Project Management is necessary where large and complex undertakings are involved, as its effectiveness can significantly influence the cost of a project and the time taken to complete it.

Project review and evaluation is one of the tasks of project management during each phase. In considering the approach to project evaluation, one must remember that every project is dynamic and continually changing as the development proceeds. The purpose of project evaluation is to ascertain whether or not the project is deviating from its objectives, and if so, for what reason?

Over the years, the computer products developed have grown in number, functionally, sophistication and availability. The widest current application is the collection and processing of data in order to provide management with more complete information upon which it can base decisions. To handle the complex projects with large amount of activities allocated with a variety of resources, it is wise to take help from computer for successful application of construction management techniques.

The main objective of the present study was to review and evaluate the management strategy adopted for construction of a Hydropower project namely "**JAGRAN-1**". To study the project a questionnaire was prepared covering its

various phases. Key personnel concerning the project team i.e. Client, Engineer and Contractor, responsible for its planning and construction were interviewed. Conclusions based on the questionnaire were made for various phases of the project. Project Management Software, "**MS-Project**" was used to investigate the causes of delay. This was done by using the tracking feature of the Software, which is very helpful in monitoring progress, comparing the actual work done with the planned one and taking future decisions to achieve the required target date for completion. Actual data from the field obtained from Engineer was used to investigate the delays.

Using the results of study, a Management Strategy was developed for successful management of future similar Hydropower projects. The management strategy adopted for construction of Jagran-1 was quite effective in meeting the quality and the overall social objectives but could not achieve the time objective due to which cost was also affected. The conclusions drawn from the present study are quite encouraging regarding the use of computer Software in order to take right decision at the right moment and in shortest possible duration by tracking a project.

The delay in the project completion was due to the following reasons:

- ❖ Delayed land acquisition, due to which temporary and permanent works were delayed for approximately 16 month.
- ❖ Changes in layout and design of the project

Similarly other projects could be studied in the similar manner. The present study may be helpful in review of management strategy of other projects and more refinements could be made in the whole process based on the results of the study.