## **THESIS**

## EVALUATION AND IMPROVEMENTS IN CONSTRUCTION PLANNING AND MANAGEMENT OF POWER CHANNEL OF GHAZI BAROTHA HYDROPOWER PROJECT

Submitted by:

Zakir Ateeq (95-PG-WRE-20)

For the Degree of

Master of Science

in

WATER RESOURCES ENGINEERING

CENTRE OF EXCELLENCE IN WATER RESOURCES ENGINEERING
UNIVERSITY OF ENGINEERING AND TECHNOLOGY,

LAHORE, PAKISTAN

February 06, 1999

## ABSTRACT

## EVALUATION AND IMPROVEMENT IN CONSTRUCTION PLANNING AND MANAGEMENT OF POWER CHANNEL OF GHAZI BAROTHA HYDROPOWER PROJECT

The management of bigger projects is becoming more and more complex now a days due to the availability of scarce resources. In a country like Pakistan the nature of demand of water by different users and scarce financial resources make the management of water resource projects more complex and they reflect remarkably the lack of coordination and cooperation among various agencies involved in planning and execution of project.

It is now widely accepted implicitly or explicitly, that some form of project management is necessary where large and complex undertaking are involved as its effectiveness can significantly influence the cost of a project and time taken to complete a project.

Ghazi Barotha Hydropower Project is the largest ongoing water resources project in the country and its construction supervision and management of contract works have been entrusted to consultants. The Power channel component of Ghazi Barotha Hydropower Project has been selected for this study as the completion of the project has been delayed significantly due to the problems in implementation of project and further delays are expected due to continuation of problems. The data for this study has been collected mainly from the consultants and reviewed in the light of objectives of the study.

The main objectives of the study have been framed as to assess the progress of the project, to identify the reasons of delay, to highlight the problems faced during implementation both by the Client and the Contractors and to propose measures to improve the project management aspects of the project.

The dispute resolution mechanism through Dispute Review Board (DRB) introduced first time in Pakistan on this project has also been studied and found to be an effective, acceptable and time saving mechanism during the implementation phase, which can also be considered for use on other projects for speedy and continuous implementation.

The conclusion drawn from the present study is that the Project is suffering badly due to inefficient project management exercised by the Client and continued lack of cooperation and coordination among various agencies involved in project implementation. Project has experienced a significant delay even in the early period of its development because inputs required for project have not been provided timely. Further delays are being expected due to continuous lack of cooperation and coordination between different agencies involved. The need is felt for decision making and realistic behavior both by the Client and the Contractor to complete the project within stipulated period so that heavy cost overruns are avoided.

Engr. Zakir Ateeq