

## **A Case Study on the Delay in the Construction of Flyover Corridor from Jehangir Chowk to Rambagh Natipora Srinagar (CFJRS) and Quantifying its Impacts on the Society**

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**ABSTRACT**—One of the northern state of India is Jammu and Kashmir of which Kashmir is referred to as summer capital of the state Jammu and Kashmir. Kashmir was entitled as “Paradise” by famous 2 Mughal emperor Jahangir. However, in the Kashmiri language, the paradise is referred as “Kasheer”. In the past decades, the construction industry of Kashmir was not at all active. A major part of the construction industry was the construction of roads and a few hospitals. Construction of residential buildings was not at a pace. However, with the increase in the population the construction industry of Kashmir has boosted up and construction of residential as well as non-residential buildings say construction of railway lines, flyovers etc. is picking up its momentum. Because of the unique climatic, political conditions and less competence with the technology of the valley we can comprehend that the construction projects of the valley are different moreover their accomplishment is difficult. The core purpose of this study is to find the cause of delay in the construction industry of Srinagar (Kashmir), where one of the biggest project of the valley was chosen and the causes of delay therein were found with the help of a case study.

**Keywords**—summer capital, paradise, construction industry, residential, non-residential, momentum, technology, case study.

### **1. INTRODUCTION**

One of the major developmental projects of Srinagar was the construction of four-lane flyover corridor from Jehangir Chowk to Rambagh-Natipora. Minister in responsibility of Public Works Roads and buildings department Abdul Majeed presented the estimated cost of the project as 351.17 crore and that the project will be completed in 3 years[1].The construction was started in June 2013 and was expected to get completed in October 2015 that is in the span of 2 years. With the exception of the delays the administration of the state was forced to take up the issue with the Asian Development Bank Authorities (ADB) and then they extended the deadline for the completion of the project to 31st March 2017. Because of the fact that the project was delayed by 2 years the project execution company ERA went under the loss and subsequently the project was financed by Simplex Infra Limited [2]. Still the project is under construction. This project was initiated because of the following purposes: -

- i. To improve the infrastructure of the Srinagar city.
- ii. To reduce the time span of destination from Barzulla to Srinagar air-port.
- iii. To reduce the traffic congestion over the existing road.
- iv. To increase the carriageway width also
- v. To divert the Jahangir Chowk to Rambagh.
- vi. To reduce the load on the existing road bridge of Rambagh
- vii. For the collection of storm water and pedestrian movement

### **II. PAST RESEARCH STUDIES**

Saad Hegazy (2012), [3] stated that both parties that are contractor and employer want to impose claims of delays on each other to get the maximum benefit. In UAE, the management for the claim handling is not compactable with the international standards because professionals have limited knowledge in this area. The contractor is submitting claims earlier to avoid penalties from the employer and employer enforces penalty first in order to avoid the claims of the contractor. In this literature, we also understand about the major dispute factor between employer and contractor that is **float ownership**.

- Contractor is answerable for scheduling so that he gets the favorable use to the flexibility or float to accomplish the project.
- Client: Given that client or employer wage for the project, he/she should expenditure the float to perform the project.
- Project: - which means whosoever gets the float first will use it for his benefit which is common in UAE construction industry. Also, all recent studies support it.

Sadi.A.Assif et al (1995), [4] stated that Saudi Arabia has been utilizing all the professionals related to construction industry from all over the world. But then again due to the depression of the oil net sales, both government and private sector have to become competent regarding the techniques they use in construction. This paper recapitulates the chief causes of delays in large infrastructure projects by surveying 24 contractors, 9 clients and 15 engineers in Saudi Arabia. From this survey, we could highlight that there were 56 elements that were responsible for delays in the country and they were able to organize them into 9 categories ranging from material supply to controlling techniques.

- According to all the parties of contractors, owners and engineers, the finance group responsible for delay factor was ranked highest and environmental factors were rated as lowest.
- However, as per the few contractors, the essential delay factor was the development of drawings, payment by the client and design change by the owner.
- This paper recapitulates the chief causes of delays in large infrastructure projects by surveying 24 contractors, 9 clients and 15 engineers in Saudi Arabia.
- From this survey, we could highlight that there were 56 elements that were responsible for delays in the country and they were able to organize them into 9 categories ranging from material supply to controlling techniques.

Abdullah Al-Sehaimi et al (2013), [5] in his study reveals that the difficulties in the construction could be lessened through different research approaches rather than sticking to the same traditional approaches. In this way we will be able to add up our particle operation and will also be able to contribute to enlighten the existing knowledge of construction management. This paper has focused that poor project management is one of the main cause for the delays in construction for developing countries and as a consequence there is a need to develop and implement the ways that could take a hold of management problems in construction and consequently delays. The paper also highlights that

- 87 % of delays are due to ineffective planning and controlling
- 56 % of delays are the result of poor site management and
- 69 % due to the problems of supply and procurement

This paper has also criticized the contribution of earlier studies is limited in solving problems. This paper fulfils 3 major objectives which are enlisted below: -

- a. Examining the earlier studies related to construction delays in developing countries and investigating their causes as well as the solutions if they had practiced any.
- b. Solving the problems that have been identified.
- c. Recommended use of non-traditional paths to solve problems

### **III. HOW THE DATA WAS COLLECTED**

Intended for the study of CFJRS the information was collected by telephonic as well as confrontational interviews where a few questions were formulated in the form of a questionnaire. Some documents from the student trainees we also collected. Also, the data was collected by taking the help of authentic local as well as national newspapers. The document diary prepared by ADB regarding the project as well proved to be helpful in the data collection.

### **IV. DATA INTERPRETATION FOR THE CASE STUDY OF THE CONSTRUCTION OF FLYOVER CORRIDOR FROM JAHANGIR CHOWK TO RAMBAGH NATIPORA SRINAGAR (CFJRS)**

From the case study of the project the reasons why the construction moved at the pace of tortoise can be easily explored. The reasons are mentioned below as:-

REASON 1: - Fights between JK-ERA and Simplex infra limited.

In the year 2014, the natural calamity in the form of floods occurred in Srinagar city of Kashmir. During that point of time as no work was done therefore, simplex infra limited was asking for the settlement money from JK-ERA to compensate the losses that have occurred to due idleness of machinery and workers. This information was obtained from the engineer of the company.

REASON 2: -Disturbance in the valley during year 2016

It started with the killing of Burhan Wani who belonged to a militant organization Hizbul Mujahideen which led to protests and for the security reasons the construction project was shut-down. [6] REASON 3: -Lack of support by the government

One of the engineer from the related project said that they always want to complete the projects before or on the deadline as this would add up to their profile but the government's unsupportive nature in terms of handling the employees as well as to local neighborhood grievances is slowing down the progress. REASON 4: - Lack of correct attitude in meeting deadline

Although, one of the engineer claimed that they wanted to complete the project on time, but the overall team was very casual about the completion of the project on time.it was mentioned in a sarcastic way that it has been a routine for us to change deadlines and now we fear that again

REASON 5: - The delays in the releasing of the funds

As the company was missing the deadlines it was becoming difficult for stakeholders to trust the company and release the funds which sometimes postponed the work and caused further delays. [7]

## **V. IMPACTS OF THE DELAY**

Whenever any construction site faces delays, it never comes alone but brings with it number of negatively influencing factors which affects not only the works related to construction but the other associated parameters. From the case study of CFJRS the impacts of the delays will be quantified into 2 ways.

1. Impacts of delays on the construction and
2. Impacts of delays on the society.

### ***V.I. Impacts of Delays on the Construction***

The impacts of the construction itself are enlisted below as:-

- Behind the Deadlines
- Increment in the Final Cost of the Project
- No Reliability while Releasing the Capital
- Wastage of Resources
- Under Utilization of Resources
- Less Profit
- Blaming other Parties
- Disputes within

### ***V.II. Impacts of delays on the society***

Coming to public projects it brings with it huge effects on the other sects of society. These impacts were derived from the report prepared by the ADB. They are mentioned below as: -

*Traffic impacts:-* Apart from the health challenges the people in the vicinity of the delayed construction project face the challenges in the movement of the traffic. During the construction of flyover due to frequent political disturbance the delayed project caused the movement of traffic in one direction for a road which was supposed to be a 4 lane road

- As a consequences of this people wasted lot of time in the traffic jams.
- In addition to this the hospital was also in the vicinity which created the trouble for the patients.

To this day due to the media pressure and local residents only the one direction of traffic is open to the locals that go to the airport while rest of traffic goes below the fly over which causes traffic chaos.

*Business Impacts:-* The delayed project affected the total of 285 marketable infrastructures of which included

- 126 both government and private shops
- 56 godwons
- 4 office places and
- 99 cheap fares or what is known as kabbads

Which had the direct impact on the income of the owners or the individuals associated with those businesses, however they were later on compensated as per the policies of resettlement which involved rising the standards of the people under the vulnerable conditions.

*Religious Structures:-* The project had no impact on the religious structures.

*Cost On Resettlement:-* According to the census the total cost that involved resettlement summed up to the cost of 8,430 lakhs.

## **VI. RESULT AND DISCUSSION**

From the above study we understood following points:-

- The delays not only impact construction sector but the society in the vicinity as well
- The construction delays of the valley are having a much higher impact on quality and cost than any other state of Indian republic
- Give the float to the project rather than the parties itself which can be done by better understanding and agreements between the parties to avoid delays
- Try to make better contingency plans as state is have disturbance so what the company can do is perform efficient with the help of contingency plans like instead of using cast-insitu piles use precast piles, perform the steel works under different locations to ensure the smooth project construction.
- Making the personals related to the construction happier that is pay salaries timely and to the neighborhood for resettlement timely.
- Make a supervision team where the concerned employees are given incentives for efficient work and demotion if the performance is not up to the set standards to get the construction work done on time.
- To avoid delays in construction ensure the development the realistic plans for the project so that there are no trust issues in releasing the funds.

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