

## Managerial Effects of Delay in Sport and Recreational Projects

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**Abstract.** In this article, the reasons of delay in completion of sport and recreational projects in Fars Province, Iran as a case study are assessed; with a brief review on the background of increasing projects implementation time in some other countries. The results of this research can give us great ideas about alteration in implementation of structures and modification of management practices in similar projects. This research has been surveyed based on opinions of managers, experts, consultants and contractors of the projects. In order to achieve this goal, a questionnaire was prepared with subjects including executive management, estimations, planning, training, and regulations and filled out by practitioners of projects to acquire an exact statistical result. The results showed that the most important factors which lead to delay in sport and recreational projects in Fars Province were financial issues, inflation and insufficient budget. Their effects on different postpones in projects will be investigated and the results will be presented in this article.

**Keywords:** sport and recreational projects, management, delay, financial issues, inflation

### 1. Introduction

Delay, in definition, means the set of actions or events that cause a project's schedule to be prolonged and; is one of the most important and common phenomena in construction of projects. Because of the general subject of delay and its importance, many researchers have studied the contributing factors of delay and the creating mechanisms.

For example, Frimpong et al. (2003) stated that the most important causes of delay in the construction of projects in Ghana were designing and financial problems, the structure and the rules, lack of manpower and materials and equipment [5]. Al-Momani (2000) stated that poor design, employers, design changes, economic status, increase in quantity of work and lack of proper planning are the main reasons of project delays in Jordan [1]. Mezher and Tawil (1998), noted that the most important causes of delay in the construction industry in Lebanon were materials, manpower, equipment, financing, design changes, dependence on government, issues related to project management, factory conditions, environmental issues, contracts and contractual relations [6].

According to Chan and Kumaraswamy (2002), results show that the average delay in the construction of projects in US is about 2.5 weeks and in UK is about one month [3]. However, according to Noori and Faraji (2007) the weighted average of predicted time for completing the entire project in Iran is 8.9 years; and the average delay for projects is equivalent to 11.1 years [7]. Amidi (1994), in her thesis, presented some causes for delay in projects in Iran, which have been divided into direct and indirect causes. Contractor's problems and financial issues are in the class of direct ones; and study issues, design problems, employer's issues, inflation, structure and rules are in the class of indirect ones [2]. Fahimiazad (2002) has reported that the most important factors for the project delay were project management, contractor, resource allocation,

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financial problems and increasing amounts [5]. In 2007, the Plan and Budget Organization of Iran published a report on understanding the causes of delays in governmental projects in Iran in the last three decades [8].

This article investigates the delay causes in sport and recreational projects of Fars Province in Iran from the perspective of managers, experts, consulting engineers and contractors of the projects.

## 2. Methodology

The participants in our survey were divided into two groups: managers and experts (M&E) and contractors and consultants (C&C). It included 34 five-choice questions that evaluated the effectiveness of subjects such as feasibility studies, economic justification, training, rules, scheduling, implementation and quality improvement, funding, management, control and database with all related subsections of the perspective of the research samples. The practitioners' answer to each question could range from very high, meaning complete agreement with the question idea, to very low, meaning complete disagreement with the question idea. The number of practitioners in the M&E group was 15; and the number of practitioners in the C&C group was 20. The percentages of responses of the practitioners in the M&E and the C&C groups to the questions are calculated and presented in Tables 1.

Table 1- The percentage of responses to the questions

Concept of Question (Indicator Title)	The M&E group					The C&C group				
	Very high	High	Medium	Low	Very low	Very high	High	Medium	Low	Very low
Being a comprehensive feasibility study	0	17	58	17	8	0	9	45	36	9
Adequate economic justification and practical	0	33	50	17	0	0	36	55	9	0
Assigning projects to outside consultants	0	0	25	58	17	0	0	9	64	27
Adequate training of personnel	0	33	50	8	8	0	55	36	9	0
Regulation in selecting personnel	0	25	42	17	17	0	27	45	18	9
Legal problems and issues	8	0	50	42	0	0	9	55	36	0
Good communication between executive personnel	0	17	50	33	0	0	9	45	45	0
Coordination between relevant organizations	0	25	33	25	17	0	9	36	45	9
Regulation in selecting the C&C	0	25	42	25	8	0	27	18	45	9
Influence of administrative bureaucracy	8	25	58	8	0	0	18	55	27	0
Flexibility of rules to solve executive problems	0	17	42	25	17	0	0	27	55	18
Balance between responsibilities & power	0	25	42	25	8	0	9	27	45	18
Correct time estimation in feasibility study	0	0	33	58	8	0	0	27	56	18
Comparison of time progress with the schedule	25	42	25	8	0	0	45	36	18	0
Flexibility of scheduling for unforeseen affairs	0	0	42	42	17	0	0	18	45	36
Good performance of the executive team	0	50	25	17	8	18	55	27	0	0
Satisfaction of project progression	0	25	42	25	8	0	9	27	45	18
Quickness and good quality over the progress	0	17	58	17	8	0	45	36	18	0
Influence of sub C&C opinion in the project	0	17	42	33	8	0	36	36	27	0
Intercommunity of consultants during the run	0	42	25	17	17	0	27	45	27	0
Influence of types in construction speed	0	50	46	4	0	4	48	48	0	0
Attention to allocation of budget and cost	0	25	17	50	8	0	9	27	55	9
Prediction of supplying the fund in feasibility studies	8	8	50	33	0	0	18	45	36	0
Allocation of credits and budgets	0	17	42	42	0	0	27	36	36	0
Lack of financial resources in projects progress	58	33	8	0	0	36	45	18	0	0
Effect of inflation over costs	50	25	17	8	0	73	18	9	0	0
Use of scientific methods in projects control	0	8	42	17	33	0	27	36	18	18
Continuous supervision over the progress	8	17	58	8	8	0	45	36	18	0
Adequate expertise of managers	0	25	58	17	0	0	45	36	18	0
Using experienced managers and executive team	0	33	33	25	8	0	36	45	9	9
Having database of previous projects for using	8	0	25	50	17	0	9	36	45	9
Using the database of previous project	8	8	33	25	25	0	9	36	36	18
Adequate equipment and machinery	0	25	67	8	0	9	45	36	9	0
Trying to get the ISO standards	0	3	3	88	6	0	6	4	80	10

## 2.1. Prioritizing the causes

In order to achieve an enhanced result the causes of delay were prioritized based on their degree of importance. In this regard, each question was classified based to the ratio between the participants' negative comments compared to their positive comments. In fact, the ratio partly could represent the degree of importance of the cause of prolongation. Indeed, larger ratio indicates more severe cause.

## 2.2. Calculating indicator value

In order to make the results more general, we compared the opinions of each group separately and we calculated an indicator value for each cause subsequently. The percentage of *normal* responses was ignored in each question. Afterwards, the percentages of *very high* and *very low* responses were multiplied by two and the percentages of *high* and *low* response were multiplied by one and the positive and negative results were summed up separately.

## 3. Results

Considering the nature of each question, the ratio of negative responses to the positive responses was calculated for each question. As a result, an indicator value was obtained for each question. The results of the ratios obtained from the questions based on the opinions of the M&E and the C&C groups are shown in Chart 1.

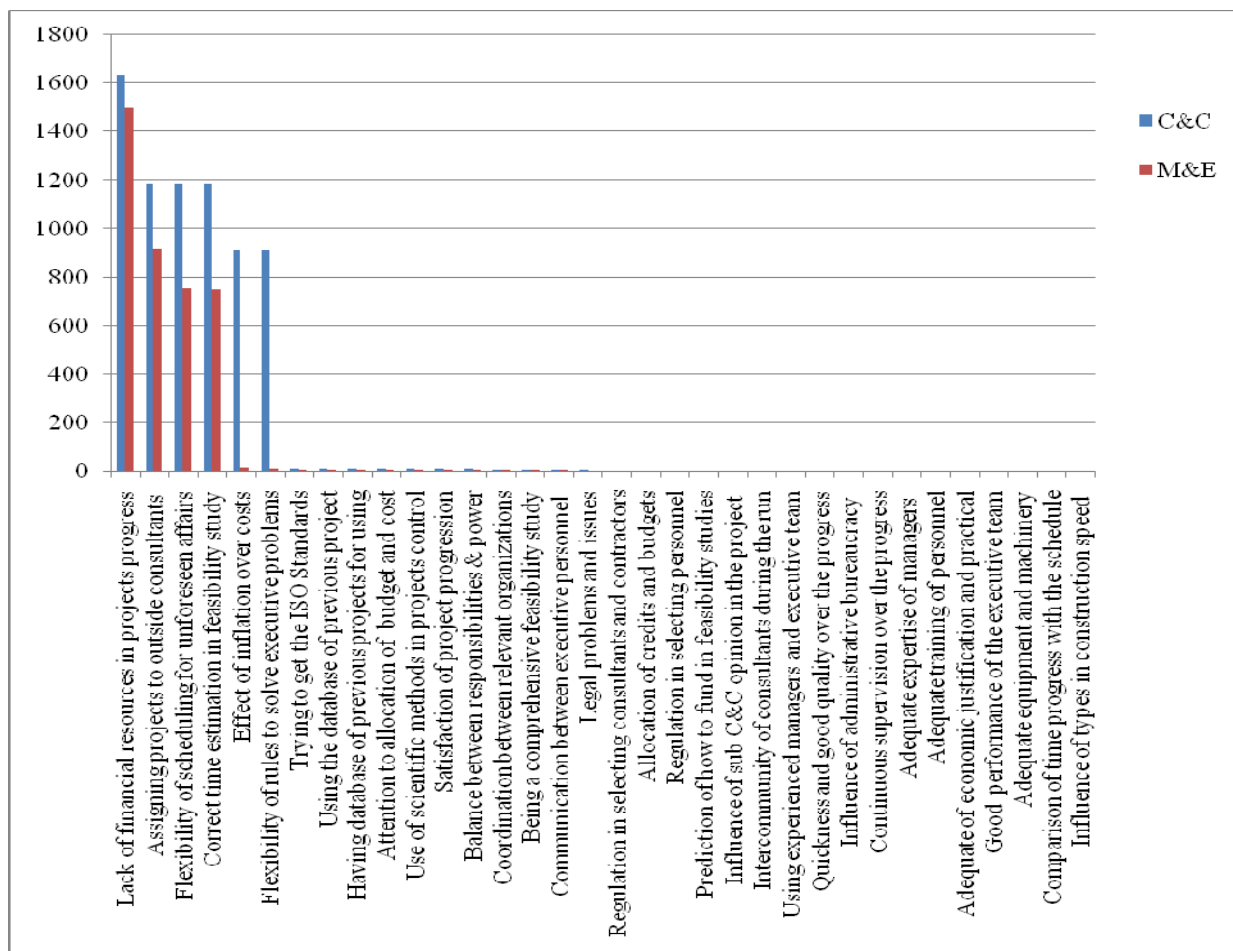


Chart 1- Results of the M&E and the C&C groups

## 4. Discussion

Surveys show that all phases of small projects are approximately designed and implemented by the organization's technical agencies but large-scale projects were outsourced to independent consultants. In the management system of Iran, sport and recreational projects ought not to have financial returns or economic justification and in fact the intention of officials is to supply the society with more sports and recreational

centers. Hence, most of the practitioners emphasize is on fulfilling the societies need to sports and recreational centers; and in their opinion these categories are prior to economic justification.

The C&C group believes that the root of problems is in the weaknesses of feasibility studies and dissatisfaction with the execution process. On the whole, 13% of the practitioners have considered that the feasibility studies are sufficient; while 52% of them have assessed it normal and 35% have assessed it inadequate. Considering the opinions, it appears that the feasibility studies of projects are in undesirable conditions. On the whole, 43% of practitioners think that training of experts and other staff are adequate and 43% have evaluated it average and nearly 13% of them evaluated it poor. The majority of experts expressed satisfaction in the process of training and implementation, since most of the small projects were designed by qualified engineers. On the other hand, managers have complained on the lack of specialist consultants in design and implementation of sport and recreational projects in Iran.

Most of the practitioners evaluated legal issues poor because of the problems in the legal affairs and ownership. About 13% of practitioners believe that the coordination between the executive team is good, 48% have evaluated it as average and about 39% of them evaluated it poor. These statistics indicate that in these cases, the projects are in desirable conditions. The statistics shows that the coordination between the relevant organizations is poor. About 45% of the C&C have evaluated “the selecting consultants and contractors on the approved guidelines” as poor, however, only 25% of the M&E have evaluated it poor. On overall, 26% of practitioners evaluated it good and 44% of them evaluated it poor.

Both the M&E and the C&C groups complain on the influence of administrative bureaucracy and the flexibility of rules in solving executive problems and evaluated them as poor. In the discussions on the correct estimation of the project’s duration in feasibility analysis phase, 70% of practitioners evaluated it poor & very poor. This indicates that the duration of the projects was not predicted correctly. Both the M&E group and the C&C group believe that the scheduling of programs is not sufficiently accurate and correspondingly the project lasts more than a reasonable and the predicted time. Both the M&E and the C&C have evaluated the flexibility of scheduling for unforeseen affairs poor and very poor.

Entirely, practitioners have confidence in the satisfaction of the project’s executive team and consider only a few specific projects as projects that have problems. About, 48% of the M&E evaluate the project’s progress poor and very poor. The majority of practitioners believe that the considering similar and type projects with respect to climate, ecological, cultural and regional conditions is a positive factor in accelerating and improving the quality of execution.

Failure in accurate calculation and on time allocation of budget is a factor that both the M&E and the C&C groups considered it as the main cause of delay in projects. This weakness has been more noticeable comparing to the cost of credit allocated to each project. About a quarter of managers and executives have evaluated the funds allocated to the project good while others believe that this issue is poor. This indicates the major effect of this cause in the prolongation of sport and recreational projects. As shown in the table and chart the inflation is a very important problem that has affected the cost and the duration of projects.

According to the statistics obtained from the questionnaires, most of practitioners believe that scientific management and control system were not used in these projects. It is understood that the supervision of organization experts and project managers is in appropriate level. *Using the experts’ experiences* can be one of the items which help improving the development of projects. About 35% of the practitioners have expressed relative satisfaction with this issue and the rest of them have determined this issue in the average level or in poor level.

On overall, 13% of the practitioners have evaluated the availability of information and documentation reports of similar projects desirable and 52% have believed that it was insufficient. About 45% of the C&C group evaluated the equipment and machinery of these projects good however 25% of the M&E group evaluated it good. On the whole, practitioners are satisfied from the adequate equipment and machinery. According to the M&E and the C&C, the Sports and Recreational Administration have not acted reasonably in achieving the ISO standard.

## 5. Summary

In total, this paper presents the prioritization of the problems based on the answers of the practitioners. There may be several implications here. First of all, based on the opinions of the both groups 'lack of financial resources in the project's execution' is the most important factor in the progress of the projects. It seems that this indicator has played the most problematic role in the progress of projects. Secondly the 'effect of inflation over costs' is an important problem in projects' delay. In addition, it appears that 'attention to allocation of budget and cost', and 'prediction of supplying the fund in feasibility studies' have an important role in projects' delay. This may reveal that in the idea of the both groups financial indicators play an important role over progress of projects and they are significant according to the ideas of both groups.

## 6. Conclusion

In order to investigate the fundamentals of project management and its challenges, a field research was conducted in the sport and recreational projects in Fars province. The aim was to convey the awareness on how to deal with the different components of project management in their respective organizations. Our results show that in many of the defined indicators, projects are in desirable conditions in the feasibility study and planning. Additionally, it seems that projects are in appropriate conditions in manpower training indicators, supervision of the projects progress, supervision of the administrative performance, legal issues, registration and documentation, and coordination of legal authority.

On the other hand, the sport and recreational projects have been outlasted over the predicted time. Based on our findings, the reason for this delay can be some factors such as the lack of financial resources, the effect of inflation and the lack of accurate estimates on the duration of implementation.

It appears that among these factors, the allocation of funds and the effect of inflation on the cost of projects have been more effective than other causes in prolonging projects of Fars province.

## 7. Acknowledgements

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