

**T.C.  
ISTANBUL AYDIN UNIVERSITY  
INSTITUTE OF SOCIAL SCIENCES**



**THE EFFECT OF PROJECT MANAGEMENT ON ORGANIZATIONAL  
PERFORMANCE – THE CASE OF NGOs IN AFGHANISTAN**

**MBA THESIS**

**Mohammad Jawad Aslami**

**Department of Business  
Business Administration Program**

**Thesis Advisor: Dr. Ali KURT**

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İSTANBUL AYDIN ÜNİVERSİTESİ  
SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜ



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## **DECLARATION**

I hereby declare that all information in this thesis document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results, which are not original to this thesis.

**Mohammad Jawad Aslami**

## **FOREWORD**

First of all I would like to thank Allah who gave me the courage to do my thesis. After that I am really thankful to my father, My mother deserves a particular note of extra thanks for her wise counsel, kindness and her prayers. I would like to thanks my Brother who's supported me in every possible way and it would be impossible without his support. I would like to thank my supervisor for his excellent guidance and support during my thesis. I thank all of the respondents without whose cooperation I would not have been able to conduct my research. I would like to thank all my colleagues at university for their wonderful cooperation as well.

**April, 2019**

**Mohammad Jawad ASLAMI**

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## **THE EFFECT OF PROJECT MANAGEMENT ON ORGANIZATIONAL PERFORMANCE – THE CASE OF NGOs IN AFGHANISTAN**

### **ABSTRACT**

Nowadays, most of the non-profit organizations are managing projects in a very complex environment. Development of new products, implementation of new policies and outsourcing, proper system of implementation and development are considered as the key project initiatives of an organization. For this purpose, implementation of projects in business entities is undertaken through various practices of project management which are carried out by different project managers every day. The capability to successfully complete the project is considered as the achievement of organizational performance.

Cost, time and quality are considered as most important objectives which are important in all projects and all these factors are important to consider for analyzing the success of any project. In order to fulfill the purpose of this research, a questionnaire was adopted from previous research studies and then distributed to employees of NGOs that were working at various hierarchical levels. In total, 260 questionnaires were distributed to those employees who were working at top management level, middle management level, and low management level in targeted NGOs operating in Afghanistan. In total, 260 survey forms were distributed among the respondents whereas out of 230 returned questionnaires, 210 were retained for data analysis.

The questionnaires were also used in establishing which project management practices significantly influence organizational performance and measured time, cost and quality performances of projects of the organization leading to greater organizational performance. Analysis of the impact of project management practices on organizational performance was done using confirmatory factor analysis (CFA) and structural equation modelling (SEM) data analysis using SPSS 20 and AMOS version 23 to determine the relationship between the significant project management practices and organizational performance.

The key findings from the research were that it was important to link the various project management practices to realize successful completion of projects leading to better organizational performance. It was also discovered that all project management practices were found to be significant to realize better organizational performance however project cost management followed by project scope management were the most significant. Time performance lagged behind whereas the cost and quality performance trends were generally as expected and very important in realizing improved organizational performance.

The study showed that engaging in project management practices had a positive impact on organizational performance as benefits accrued improved organizational performance. The study finally provided recommendations for improvement in project management practices and more organization performance metrics recently developed in other research works like benefit to end users, benefit to national infrastructure should be included for performance

measurement. Recommendations were also made on areas for further studies on adoption of project management practices in all sectors in addition to the NGOs.

**Keywords:** *Non-governmental organizations, Organizational performance, project management practices, project cost management, Afghanistan.*

## PROJE YÖNETİMİNİN ORGANİZASYON PERFORMANSI ÜZERİNDEKİ ETKİSİ - AFGANİSTAN STK ÖRNEK ÇALIŞMASI

### ÖZET

Günümüzde, kar amacı gütmeyen kuruluşlar çoğu çok karmaşık bir ortamda projelerini yönetmektedir. Yeni ürünlerin geliştirilmesi, yeni politikaların uygulanması ve dış kaynak kullanımı, uygulama ve geliştirme için uygun sistem, organizasyonun proje girişimlerinin kilit noktaları olarak kabul edilir. Bu amaçla, işletmelerde projelerin uygulanması, farklı proje yöneticileri tarafından yürütülen çeşitli proje yönetimi uygulamaları ile gerçekleştirilir. Projeyi başarıyla tamamlama yeteneği, organizasyonel performansın başarısı olarak kabul edilir. Maliyet, zaman ve performans kalitesi tüm projelerde en önemli hedef olarak kabul edilir ve tüm bu faktörler herhangi bir projenin başarısını analiz etmek için dikkate alınması büyük önem teşkil etmektedir. Bu araştırmanın amacını yerine getirmek için önceki araştırma çalışmalarından bir anket alınmış ve çeşitli hiyerarşik seviyelerde çalışan NGO çalışanlarına anket uygulanmıştır. 260 anket Afganistan'da sivil toplum örgütü üst, orta ve düşük yönetim seviyesinde NGO da çalışanlara dağıtıldı.

Toplamda, 260 anket formu dağıtılmış, geri gönderilen 230 anketten 210'u veri analizi için tutulmuştur. Anketler ayrıca hangi proje yönetimi uygulamalarının organizasyonel performansı önemli ölçüde etkilediğini ve organizasyonun daha yüksek organizasyonel performansa yol açan organizasyon projelerinin zaman, maliyet ve kalite performanslarını ölçmede kullanılmıştır. Proje yönetimi uygulamalarının örgütsel performans üzerindeki etkisinin analizi, önemli proje yönetimi uygulamaları ile örgütsel performans arasındaki ilişkiyi belirlemek için SPSS 20 ve AMOS versiyon 23 kullanılarak doğrulayıcı faktör analizi (CFA) ve yapısal eşitlik modellemesi (SEM) veri analizi kullanılarak yapılmıştır. Araştırmadan elde edilen en önemli bulgular, daha iyi organizasyonel performansa yol açan projelerin başarılı bir şekilde tamamlanmasını sağlamak için çeşitli proje yönetimi uygulamalarını birbirine bağlamanın önemli olduğu. Ayrıca, tüm proje yönetimi eğitiminin daha iyi organizasyon el performans elde etmek için önemli olduğu tespit edildi. Zaman performansı gerisinde kalırken, maliyet ve kalite performans trendleri genel olarak beklendiği gibi gelişmiş organizasyonel performansın gerçekleştirilmesinde önemliydi. Bu Çalışma, proje yönetimi uygulamalarına dahil olmanın faydaların organizasyonel performansı artırması nedeniyle organizasyonel performans üzerinde olumlu bir etkisi olduğunu göstermiştir. Çalışma nihayet proje yönetimi uygulamalarında iyileştirme önerileri sunmuş ve son kullanıcılara fayda sağlamak gibi diğer araştırma çalışmalarında yakın zamanda geliştirilen daha fazla organizasyon performans ölçütünü sağlamıştır, performans ölçümüne ulusal altyapıya fayda sağlanmalıdır. NGO'lara ek olarak, tüm sektörlerde proje yönetimi uygulamalarının benimsenmesine ilişkin daha fazla çalışma için önerilerde bulunulmuştur.

**Anahtar Kelimeler:** *Sivil toplum kuruluşları, Örgütsel performans, proje yönetimi uygulamaları, proje maliyet yönetimi, Afganistan.*

## **1. INTRODUCTION**

### **1.1 Background and Context of Study**

Nowadays, businesses are searching for better opportunities for achieving competitive advantages in the market; a capacity of every functional area to make the performance of an organization better is under examination. Nowadays, most of the non-profit organizations are managing projects in a very complex environment. Development of new products, implementation of new policies and outsourcing, proper system of implementation and development are considered as the key project initiatives of an organization. For this purpose, implementation of projects in non-profit organizations and business entities is undertaken through using various practices of project management which are executed by different project managers every day. There could be many different objectives within a project which can be obtained upon the completion of the project. The capability to successfully complete implementation of a project is considered as the achievement of organizational performance.

Cost, time and quality are considered as most important objectives which are important in all projects and all these factors are important to consider for analyzing the success of any project (Walker, 1995; Belassi and Tukel, 1996). Most of the project management practices are examined and experimented as they have been collected from the lessons and experiences which have been continuously practiced and developed to produce better results and thereafter they are recognized and documented as the examples, measurements, and baselines (Karim, 2012).

Those organizations which successfully execute their projects apply effective and practical project management practices as tools to obtain objectives and goals of the business. The strategic impact which successful projects have on organizations and business require effective management practices which measure risks and progress and to make sure that the right projects can be

delivered by aligning organizational priorities to realize improved organizational performance. Cost, quality and time are considered the most important objectives which are crucial in all kinds of projects; furthermore, all these factors are essential to be considered in analyzing and measuring the successful implementation of any project (Belassi and Tukel, 1996; Walker, 1995).

## **1.2 Statement of the Problem**

This research study mostly focuses to highlight key project management practices which are most suitable for the environment of NGOs and to highlight those practices which leave a positive impact on the organizational performance of NGOs. NGOs require a moderate type of project management practices through the contribution of their limited resources following the purpose to increase organizational performances in terms of enhanced sustainability. Over many years, the project management practices have been matured but the main interest of NGOs is focused upon project management and projects. In conventional organizations, management of projects have different characteristics and practices (Turner, et al, 2010). NGOs do not need bureaucratic systems of management with greater flexibility. For this research study, we have selected five NGOs from Afghanistan. These NGOs are Human Rights Research, Afghan Health and Development Services, Advocacy Consortium, Independent Human Rights Commission, Coordination of Humanitarian Assistance and Afghan Technical Consultants.

## **1.3 Purpose of the Study**

Every research study follows some specific purpose. The main and solely purpose of this study is to illustrate the impacts and effects of project management practices on organizational performance, which are measured and stated considering the costs, time, and quality of executed and delivered projects by NGOs that have been implemented in Afghanistan.

## **1.4 Research Objectives**

This research consists many objectives but few are listed below as the main objectives of this study:

- To observe the importance of linking different practices of project management and to make sure better performance of organizations.
- To find out which practices of project management significantly influences the performance of an organization.
- To analyze the impacts of projects' costs, time, and delivered quality on the performance of organizations.
- To measure the impacts of project management practices on the performance of organizations.

## **1.5 Research Questions**

Considering the research objectives, followings are the research questions to be answered:

- To what extent is it important to link a variety of project management practices in order to achieve a prominent organizational performance? These practices include:
  - Defining project scope and objectives
  - Defining the project deliverables
  - Project planning
  - Communication
  - Tracking and reporting project progress
  - Change management
  - Risk management
- What sort of project management practices used by NGOs in Afghanistan significantly impact on organizational performance?
- To what extent costs (unit cost, cost growth, intensity), time (project speed, schedule growth) and quality (turnover quality, system quality) are effective on organizational performance of NGOs in Afghanistan?

- What are the impacts of project management practices on organizational performance?

### **1.6 Research Contribution**

Conducting research study in the areas such as project management is crucial for policy makers to both private and public organizations. The approaches for project management practices application is gradually becoming an important issue and more challenging for both public and private organizations in the developing economies where currently there are various projects executing in terms of structure and size. The purpose and main focus of this study is to reveal the right application and uses of various project management practices in an essential and applicable management approach for policy makers of both private and public organizations in order to understand the best way to perform while implementing projects.

In addition, this research intends to find out and suggest more effective project management practices that suits NGOs the best and enable them to use their resources efficiently. Consequently, it can provide services which can create benefit to public in a large scale. Furthermore, academicians, researchers, and students who are interested to study further and gain more knowledge in this area, can benefit for this research as it develops theoretical correlations in project management field.

### **1.7 Definition of Significant Terms**

- **Cost Performance:** The degree to which a project's cost objective is achieved and measured as a unit cost.
- **Project Communication Management:** The knowledge area that utilizes the processes which are required to make sure appropriate and timely generation, storage, distribution, retrieval, collection, and ultimate disposition of project information.
- **Project:** A temporary process, which has a clearly defined start and end time, a set of tasks, and a budget, that is developed to accomplish a well-defined goal or objective.

- **Project Cost Management:** A series of activities for allocating, controlling and estimating costs within the project.
- **Project Management:** Application of knowledge, skills, tools, and techniques to a broad range of activities in order to meet the requirements of a particular project.
- **Project Management Practices:** Administrative and management activities and to make decisions from the “cradle” to the “grave” of a project.
- **Project Performance:** The totality of cost, time and quality performance of a project.
- **Project Risk Management:** Structured approach for the assessment, identification, and prioritization of undesirable events; which are followed by planning of resources to monitor, monitor, and to control the impact and probability of all these events.
- **Project Scope Management:** The sum of processes required to makes sure a project containing all the required work, and only the work required, to complete the project successfully and are related with controlling and defining what is included and what is not included in the project.
- **Quality Performance:** The degree to which a project’s quality objective is attained which is subjectively measured on a ranking scale.

## **2. LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK**

### **2.1 Introduction**

In this chapter, related theories are reviewed for the better understand and comprehension of various practices of project management. Different practices of project management are defined and described containing concepts of miscellaneous practices of project management as well as analyzing the impacts and effects of those practices on the performance of an organization. For this purpose, some significant theories which are relative and directly impact the practices of project management on organizational performance have been reviewed. The background of practices of project management is principally derived and gleaned from the Project Management Body of Knowledge (PMBOK), which is published by PMI (2004, 2008).

### **2.2 Project Management Concepts**

Managing projects is an ancient, oldest and the most valued achievements of humankind performed by the accomplishment of the architects of ancient buildings and cities, the constructors of Egypt pyramids, the craftsmen and masons of Great Wall of China and many other wonders and fascinations around the globe. Project approximately makeup fifty percent of overall tasks carried out, and consequently is considered the fuel for running the engine in order to attain organizational growth. Implementation of a project by the application, integration and correct practice of the project management process of initiating, planning, implementing, monitoring, controlling, and closing is known as project management (Peter, 2005).

Project management progressively combines all these functions throughout the projects' life cycle aiming to satisfy the constituents and stakeholders according to projects' pre-established requirements. Those who own a direct stake and/or share in the project are known as the stakeholders and constituents of the project

are those who might be affected and see the impacts of the project's consequences. Project success begets when the constituents and stakeholders express mutual satisfaction based on their involvement degree throughout the project life. Furthermore, project management contains planning the activities, organizing, executing and controlling them in order to motivate what are generally the most valuable resources of the project. Project management needs to be discussed in every stages and milestone of a project's life cycle and it is essentially regarding managing a project from conception to completion. One can view a project as a dynamic system which is ever changing from one stage to another throughout the life cycle (Atkinson, 1999).

Considering a common project as a case, its status varies and demonstrates some changes from the initial concept or idea through to its feasibility study, implementation and ultimately completion. Nowadays projects are far more complex and complicated than before. Projects require large capital investment and encompass numerous disciplines, tighter schedule, broadly spread project participants, strict quality standard, experienced experts and so on. This associated with rapid development of Information and Communication Technology (ICT); have greatly impacted project management practices in order to take the advantages of lately developed management tools and high-technology. Project management concept is generic and universal. It cuts across all natural, logistics and cultural barriers. Some of the corporate and communal cultures are quite more supportive than others in terms of advantaging from project techniques. High level managers, who are planning to determine and introduce project management disciplines and wish to advance the existing project implementation performance, need to be aware of practical, structural, cultural and personal elements.

In the view of the fact that project management requires good quality information, goal achievement, discipline and demands sufficient working experience and skills rather than strict functional divisions, it preliminary focuses on what tasks need to be done, and by who, rather than the past achievements. It is all regarding mobilizing energies of a team with diverse members as it's more about techniques, tools and more importantly procedures (Harvey, 1999).

In accordance to PMI definition of project, a project is a temporary effort that is undertaken to provide a unique service, a useful product, and/or a satisfactory result. By this particular version of definition in which the word 'temporary' is mentioned, it means that there is predetermined starting and ending date for the project. In addition, when the predetermined objectives of the project is achieved, it could mean that the implementation is done, unless there could be some other reasons for ending the project which no longer can meet that predetermined objectives.

According to Pritchard, project is a temporary effort determined with a starting and an ending, which is usually compelled by funding and deliverables and mostly time constrained (Pritchard, 2006). A project starts to achieve unique objectives and goals, and bring necessary and beneficial changes (Sebastian, 2007). The essence and nature of a project is being "temporary" and it differs comparing to a business that is mainly related to the flow of operations permanently (Dinsmore, 2005). Businesses are repetitive, permanent or semi-permanent functional activities to provide services or produce products. At the same time, management practices of them are different from one another as well. It requires specialized technical skills and different management strategies.

According to PMI project is defined as an endeavour while Sadeh et al (2001) believes that it is a temporary organization within organization. This nature or essence of a project is acknowledged by PMI too, because they realized that a project team rarely outlives or stay longer than the project itself. PRINCE2, which means and stands for the "projects in controlled environments" is broadly acknowledged and practiced project management methods as well as gives a project definition which seems to be a combination of the two above-mentioned definitions. According to PRINCE2, a project is considered as a temporary organization established to produce a predefined and unique result or outcome at a specific period of time, through using allocated resources (Office of Government Commerce, 2002).

According to a research by Messeghem; small and medium enterprises (SMEs) usually refer to simple structures of organizations, the owner-manager play a prime role as a driving force, implicit strategy, essential local market and

control and planning (Messeghem, 2003). They have limited resources and very narrow and simple strategic options (Pearce II & Robinson Jr. 1984, p. 128). Also, vitality and importance of project must not be underestimated to any organization, it is not solely for large organizations but also even more important for SMEs. SMEs play a crucial role in the development of economies in many countries by implementing various projects (Bowen, Mureithi and Morara 2009). SMEs in Kenya, provided over 50% of new jobs in 2005 which were created through implementation of various projects (Wanjohi, 2009). Definitely SMEs are the most effective drivers of economy in Kenya.

According to the European Competitiveness Report and a previous research study, the impacts and effects of projects run by SMEs on the economy in general and companies specifically are significant (Turner, Ledwith and Kelly, 2010). Based on the statements of authorities, SMEs created 99.8 percent of the overall companies in the European Union. Next to this, in these types of organizations projects' turnovers account for almost twenty percent of the economy. Considering the improvements regarding project management reflected in literature, quite less is published or written regarding project management practices in SMEs. All their focus and emphasize are on mainly on the management of large project rather than SMEs (Turner, et al, 2010).

The traditional methods of project management practices will not hold and are not supporting SMEs for the reason that the characterization of large projects do not support and hold for small projects. In case of processes for instance; mostly processes are bureaucratic and formal, in case of procedures; it encourages formalities and specialized decision making, and roles are traditional and well-defined, management of project stifles people and innovation; traditional practices of project management concentrates on system instead of focusing on people. Considering the above-mentioned characteristics, it can be acclaimed that literature mostly ignored this important fact that all the projects are not similar and a worldwide set of managerial characteristic of project does not exist (Sadeh et al, 2001). In fact, many authors and writers have expressed and explained their disappointment on the universal 'one-size-fits-all' opinion.

### **2.3 Project Management Procedures in NGOs**

In the last few year, aid operations through project implementations have been increased excessively, together with a concern regarding the real impacts and effects of its initiatives (Crawford & Bruce, 2003). In 1990s efforts have been made to support NGOs and a huge amount of funds have been allocated to this sector all over the globe. These investments and funds are announced in figures by scholars who suggest increasing trends of providing fund and investments in years ahead (Siegel & Yancey, 2002; Gray, Bebbington& Collison, 2006; Faber & McCarthy, 2001).

Apart from the large amount of investment and fund raising which have been already made and so many projects have already been implemented, the expected changes to address serious and alarming issues world-wide are evaluated thoroughly inefficient and inconsistent (Jepson, 2005). Consequently, some prominent donors are demanding that NGO need to give evidence of their legitimate their cause and achievements. At the moment, during international debates, for example the one presented in United Nations in the year 2007, it was discussed that reputation of NGOs' are falling down along with the reliability and trust of communities on their capabilities. Managerial competences of NGOs are being criticized and are growing up day by day. At this stage, it is crucial for NGOs to provide and prove their evidence of expertise by showing the significant effects and impacts of their work. It is noticeable for the professional management on accountability day which can evaluate the work done; they need to provide all the data and information for sponsors, donors and public to demonstrate the value of what they have done(SustainAbility, 2003; Ebrahim, 2003; The Earth Watch Institute, 2006).

There are numerous factors that differentiate the aid industry which is unique within the project management environment, for instance the nature of the aimed impact and the social accountability (Crawford & Bruce, 2003). Goals and objectives of projects are correlated with social transformation which differs from the projects that main concentration is on predetermined and standardized quality procedure, time and cost. Through implementing projects, NGOs are expecting to change the perception of community, and see a positive change in environment, legal acceptability and social impacts. So the

measurement of performance of projects aren't straight forward, it can be conceptually complex(The Earth Watch Institute, 2006). Therefore, the standard practices of project management might not be appropriate in the context of NGOs' projects. It may require some special managerial skills (Crawford & Pollack, 2004).

There are numerous methods of project management which are seemed to be customized for the requirement of NGOs and most of them are used already. The most applicable among all these method is Logic Frame Work (LFW). This is considered as a methodology for appraisal and planning of projects and it can be requirement for funding from many different international fund agencies. Along its significance, there is rising discussion about the limitations of LFW, especially in the methodology of project management. Main focus and concentration of this system is on the processes evaluation rather than focusing on impacts which can legitimate the activities of NGOs (The Earth Watch Institute, 2006).

Moreover, it poorly differentiates the special requirements of NGOs and it involves complex process of evaluation and monitoring in the implementation. Therefore, it has been observed that once a project is granted, the initial planning for the project has not been followed, which obviously can be seen through the results of the implemented project and it also blur the capability of an organization to express its impacts. Managers may be enquired about the legality of their organization and also the impact and accountability of the projects. This empirical research was conducted to understand how NGOs' managers are dealing with issues and challenges related to accountability and execution of projects (Gasper, 2000; Crawford & Bruce, 2003).

## **2.4 Project Management Practices**

### **2.4.1 Introduction**

Based on the ASCE Quality manual (1987), project management is defined as follows:

“Project management is the art of directing and coordinating human and material resources throughout the life of a project by using modern management

techniques to achieve predetermined objectives of scope, cost, time, quality and participation satisfaction.”

Also the Project Manager, the heart of the project management process is described as:

“A qualified individual or a firm authorized by the owner to be responsible for the day-to-day management and administration and for coordinating time, equipment, money tasks and people for all or specified portions of a specific project.”

However quality management is a portion of the whole project management, the idea in the study of Das et al. (2000) defining quality management practices is worth to be noted:

Quality management practices are defined as *“the decisions and actions involving quality planning and leadership, quality training etc.”* In this definition, the emphasis is the concept of management including actions and decisions.

According to Oxford Advanced Learner’s Dictionary, the definition of "Practices" is “Ways of doing something that is the usual or expected way in a particular organization or situation.”

Considering the above-mentioned concepts we can give a description of Project Management Practices as following in this research: *"The day-to-day ways of carrying out management and administrative activities and decisions that are the usual or expected ways of directing and coordinating projects resources by an authorized firm or an individual construction professional for the purpose of achieving set project performance in terms of the time, cost and quality objectives."*

In a building project the management team is comprised of construction professionals who are part of one of the parties. In construction industry, the main contract parties (contractor, consultant and client) form the project management team. These parties work in close collaboration to meet project requirements.

According to Sharma and Gadenne (2002) investigation regarding the inter-industry comparison of quality management practices and organizational performance explained that there is a strong relationship between performance and quality management practices. This finding furnishes ample evidence regarding the impact that project management practices put on project performance. This relationship requires more research though.

#### **2.4.2 The differences in PM practices**

Management practices differ from one organization to another and the performance of the results is what makes a practice optimum (Bryde, 2003). In the project management practices, the cause of variation might not only be based on the kind of organization but also the purpose and type of the project and more important; the level of desired performance. This observation and conclusion are in harmony with the finding and conclusion made by Sharma and Gadenne (2002) based on their investigation regarding the impacts of quality management practices on performance. In an inter-industry survey covering 140 participants' respondents, containing 20 surveys from the construction sector, 62 surveys from the manufacturing sector, and 58 surveys from the service sector, the conclusion obtained from quality management practices varied moderately from organization to organization and industry to industry.

The primary purpose of the research was regarding quality performance rather than overall project performance. In addition, in the empirical research covering 449 system managers, Gowan and Mathieu (2005) found out and concluded that good Information Systems and project performance relates to a greater degree on the intervention of specific project management practices. Here, the project performance was mainly evaluated based on project timelines only.

The findings indicate that project management practices adopted on any project varies from organization to organization. Therefore, it will also have a subsequent impact on the composition of the project management team. It should be noted that the practices within various organizations would need further examination. Subsequently, it would be highly necessary to determine the influence of those practices on the performance of the projects implemented. It is important to meet the basic objectives of a project which are time, cost and

quality when the matter of performance is the primary focus. It does not have to be time only or cost only.

Now it is time to understand what the best practices are when they vary from project to project and organization to organization. Ramabadron et al. (1997) describe best practices in project management as optimum ways of performing works to achieve higher performance. The goal of every project manager is to achieve satisfactory performance and it is for this purpose that certain practices are undertaken. In determining whether certain practices are best or not, the need to measure the performance of the projects executed under such a set of practices is highly imperative.

### **2.4.3 Certain organizational practices and attributes**

Certain practices and attributes have been identified via several researches that could be implied within an organization particularly in a project management team. These practices are adopted in order to successfully manage projects. In a research conducted into the organizational learning practices in project management environment, it was concluded that project organizations should focus on building knowledge because increased knowledge is associated with increased project performance (Kotnour, 2000). Increased knowledge means avoiding similar problems occurring again and again. This knowledge would support the organization to professionally plan and organize a project to meet performance requirements, schedule and cost. The feedback and lessons learned from an executed project should be shared and included in the learning process. In support of this practice Loo (2003) stresses that taking feedbacks from projects and learning from experiences have a significant influence on project performance. How important therefore do project managers take knowledge building as an important practice in the management of projects? Statistics show that there are many problems that occur in projects over and over again which means that few work is usually done on knowledge building.

Successful project management is enhanced by the identification of best practices within an organization. Here comes the question of what those best practices could be. Based on the researches of Jawaharnesan and Price (1997) in the construction industry of UK, the highly ranked tasks are “preparing and

organizing” and “developing project definition”. However, taking a look at Bryde’s (2003) assertion, that: “it is the performance that makes a practice optimum”, measurement of project performance is required for determination of optimum practices within a given organization.

#### **2.4.3.1 Practices in management of project funding**

Client organizations managing project funds are considered to be important organs in project management processes. Efficient management of project funds is crucial to ensure satisfactory project performance. In a research study into the management of UK Local competitive funding, it was found out that increasing bureaucratic processes put an excessive demand on time and resources (Loader, 2002). Therefore, it is necessary to effectively manage funds that are applied for project implementation. There are a few factors that may be of importance to contractors prior to bidding for projects one of which could be the level of bureaucracy. In order to set strategies for managing building projects, it is necessary to have prior information regarding the nature of funding sources. Any oversight to digging deep in finding out about funding sources could lead to poor performance if the contractor is in dire need of bidding for projects. Indeed, performance will be compromised if payments are not processed in a timely manner. When it comes to quality performance, the type of practice in managing funding sources becomes of significant importance.

Loader (2002) observed that due to fast-tracking projects and tight timescales to prepare bid packages, there would be flaws and ambiguities within project scope and coordination of project funding. This situation mostly happens when funds are appointed from their sources within a short time limit. Therefore, project consultants would be stressed in preparing bids for rapid tender. These types of crashed schedules would bring limitations on preparing bid packages that will ultimately result in the reduction of quality meanwhile hindering project progress due to frequent change orders.

Loader (2002) has identified a few factors associated with the allocation of project funds. And some of these factors are said to be obstacles in the practices required for proper coordination of funding sources. Some of those factors include:

- Frequent lateness on approvals of application for funding;
- Infrastructure cost not fully estimated in bids and so underfunded
- The increasing burden of monitoring successful projects
- Unrealistic management expectations

The existence of some or all of the above-mentioned factors in a client's firm has the inclination to produce project management practices sophisticated with the view of restricting the constraints postured. Therefore, it is important to consider the influence of those practices on performance while looking for project success.

#### **2.4.4 Project management functions as practices**

The main purpose of project management functions is to manage projects in way to attain satisfactory project performance. Each team is assigned a specific function involved in project management processes. The blend of all these functions will produce advanced practices within the lifecycle of the project. Therefore, the learning of project management practices can be done with understanding the functions of project management which exist in construction industry.

##### **2.4.4.1 The function of project definition**

It is extremely important to know the function of the project definition. There are several requirements that need to be accomplished at this phase of project development. According to "The Project Definition Rating Index (PDRI) for Building Projects" a project definition, which comes at the pre-project stage, must be adequate and cater for the type of building project too (PDRI, 1999). In the meantime, PDRI gives a checklist of suggested actions and milestones to outline a project scope, which is envisioned to enhance best practices in the construction industry. Harris and McCaffery (2005) emphasize that safety measure is established during the definition phase of the project. Therefore, best practices are accomplished through the comprehensive definition of a project carried out by a project manager. However, the construction industry lacks the witnessing this function in many ways.

In order to define the project functions, the scope must be well known to all parties and each team player is expected to understand how to work to achieve those needs. Therefore, the frequency and extent of the collaboration of construction professionals involved in the preconstruction phase are the important practices in project management. More research is required to understand the views of each party with regards to the significance of the project definition towards project performance.

#### **2.4.4.2 The function of setting organizational matters**

It is extremely important to establish structure in order to manage projects and achieve project goals. Peter Drucker (1996) defines management as the function which includes getting things done by other people. Organizational matters involve the following:

- Getting staff with competence and appropriate skills
- Getting Managers with leadership capabilities
- Placing responsibilities on people for successful completion of the project
- Defining proper communication lines
- Establishing clear delegated authorities

Since these delineated duties related to the things involved with internal organizational execution, it might be argued that they are only for the purpose of developing organizational performance solely. Kotnour (2000) explains that part of internal organizational matters like organizational learning practices can increase the possibility of project success too.

All the organizations tend to have project success and this tendency is increasing day-by-day. Therefore, it is all relevant to the capability of the manager to adopt and apply specific strategies within the organization. For instance, setting an organizational structure for smooth implementation of projects is one of the main organizational concerns that its impact on project performance might be significant.

Worth to be mentioned that it is not solely the construction companies that need to set up organizational structure for managing a project. The functions and nature of organizational structures adopted by partner organizations particularly structures that are responsible to do the payments to contractors; therefore,

demand critical analysis in order to determine and identify their impacts on project success.

#### **2.4.4.3 The function of programming**

In order to attain success, the process of managing construction projects need monitoring and development of the program for the activities involved. Harris and McCaffer (2005) explain that as far as the main concern is the achievement of project success, both establishing an achievable and challenging program and operating the project to that program are crucial activities to be done.

The monitoring and assessment of the program in order to obtain projects' objectives oftentimes experience bottlenecks, whilst setting up of works program at the primary stage of the project is normally carried out quickly. Furthermore, the system of monitoring the progress of activities might have a linkage with the management method of a project in order to achieve project goals. It is so important to investigate the method of monitoring the work progress.

#### **2.4.4.4 The function of quality management**

Based on Das et al. (2000) investigation, quality management practices include two sets of tasks; the first set includes actions and decisions within the organization, the second set deals or coordinates with external organizations. Among the actions and decisions which are comprised in the first set, quality planning, quality procedures and leadership are prominent.

Regarding the quality management, Crosby (1979) also determined 14 steps in which some them might be present within the construction industry including:

- Establishing quality improvement teams,
- Having the commitment of management,
- Measuring quality,
- Creating quality awareness within the organization,
- Evaluation of the cost of quality,
- Embarking on regular corrective actions,
- Training of supervisors and error cause removal.

Sometimes project managers develop and set up their own unique methods of managing to obtain better quality. These kinds of practices are related to the performance of projects. Deming (1986) acclaimed that in order to have a successful execution of quality management practices, outsourcing largely based on price must be discouraged.

Although the main focus of particular project clients might not be broadly based on the project's quality mainly at the pre-contract stage. Therefore, the cost aspect of giving a contract plays an important role in determining certain criteria for awarding contracts. The suggestion by Deming (1986) regarding the improving upon the projects' quality is recommended to be deeply considered by construction specialists. When the client's expectation on project's quality is commonly high, the practice of outsourcing based on price criteria might not increase the expected performance of the project.

## **2.5 Project Management Practices – Knowledge Areas as Practices**

Practices of project management that refers to the best and efficient approach to achieve goals and objectives are currently identified by the project management industry. There is an opinion which verifies that some methods, techniques, and processes which can be found by application and research, exist. And it is more efficient at delivering a specific outcome or result than other techniques, processes or methods for implementation of a project (PMI, 2004).

The Project Management Body of Knowledge (PMBok) explains the processes of project management and outlines 9 various knowledge areas that are typical for all projects, despite the methodology adopted in the project management. These areas comprise, integration management of a project, scope management of a project, cost management of a project, quality management of a project, communication management of a project, time management of a project, risk management of a project, human resource management of a project, and procurement management of a project.

In this research, the researcher focus is on four different knowledge areas which include scope management of a project, cost management of a project, communication management of project and risk management of a project as key

management practices of a project which affect the organizational performance of NGOs.

### **2.5.1 Project scope management**

In this section, models and definitions of project scope management have been discussed. According to Kerzner (2009) research investigation, the scope of project as a result of identifying needs why the particular project has been prioritizing needs and how it has been established; the sum of needs for a project. However project scopes could be studied in the very originating point of a project. It also should consider the unexpected works, deliverables and consequently the outcomes. Similarly, according to the research of Brandon (2006), project work is performed to achieve desired results.

According to Cuganesan et al. (1997), the project scope definition asserts that each project is implemented with a bunch of deliverables. It has a predetermined estimated closure date and time, and there are estimated tasks and activities to be completed successfully prior to the closure date and time. These tasks and activities comprise the scope of a project. In 2014, Project Management Institute (PMI) as the provider of comprehensive project methodology described scope as the sum of services, products, and outputs to be presented as a project. PMI describes scope management as a combination of processes that are required in order to make sure a project comprises all the necessary work for successful completion and delivery.

Primarily, project scope management is concerned with controlling and defining what activities are and what activities are not included in a project. As per PMI definition, the followings are considered as the projects' scope building blocks: product and project objective, service or product characteristics and requirements, criteria of accepting the product, boundaries of project, project constraints and assumptions, initial organization of project, defined risks, initial Work Breakdown Structure (WBS), schedule milestones, order of magnitude cost estimate, approval requirements and management requirements.

### **2.5.2 Project cost management**

PMI describes project cost management as a process in order to make assure that a project will be implemented within an estimated and approved budget comprising cost estimation, cost allocation, cost budgeting, resource planning, and cost controlling within the project. A research study by Langfield& Smith et al. (2006) defines project cost management as *“an improvement of the cost-effectiveness of an organization by managing and understanding the real causes of cost during the life cycle of a project.”*They also clarified that however, a dominant concentration in cost management is on costs itself, and it also tries to increase other performance aspects such as delivery and quality.

In the year 2008, Durry describes project cost management are those taken actions by which a project manager can decrease cost of a project contributing to a process which is more efficient and effective, and has significant outcomes on reduction of costs, process developments and where an idyllic condition is to take those steps and actions which decreases costs of projects and improve a higher satisfaction of customer. According to the research of Hilton et al (2001) the cost management of a project is the philosophy of pursuing increased client value at a decreased cost. Also, seeking an approach that the whole project costs are made by the decision management as well as a certain set of methods and techniques that can increase value and decrease costs of projects.

For this research study, cost management of a project is defined as an action which is practiced by the project executivestoforecast, allocate, and controlthe overall costs within a project.

### **2.5.3 Project communication management**

Project Communication Management can be defined as a knowledge area which uses the required processes to make sure appropriate and timely collection, storage, generation, distribution, and final disposal of project information. According to the research of Gould (2009), the organization and information control are transmitted to satisfy the requirements and needs of a project and it comprises processes of receiving, understanding, transmitting and filtering information by adopting appropriate skills to the application of a project environment.

According to PMI, communication of projects involves executing, planning and controlling the dissemination and acquisition of overall information which is relevant to the requirements of all stakeholders of the project. Information includes accomplishments, status, events which can affect other projects or stakeholders. Similarly, based on Heerkens (2011) investigation, the main communication of project management includes planning and determining the communications and information which is required by stakeholders; which information is needed, when they need it, who need it, and how the informationshould be given to them.

PMI indicates fives processes to the communication management of a project which involve planning communication, distributing information, ascertaining stakeholders, managing stakeholders' expectations, and finally reporting the performance.

#### **2.5.4 Project risk management**

Risk management is considered as an activity for managing a project that is day-by-day obtaining more significance as businesses are globalizing and competition is increasing in the markets (Ahmed et al., 2007). The process of risk management includes many different steps that are establishing the context, analyzing, identifying, treating, assessing, communicating and monitoring risk that provides a constant decision making improvement (Standards Australia, 1999). Worth to be mentioned that risk management of a project is an organized and structured approach for the evaluation, prioritization, and identification of risks which are accompanied by the resources' planning in order to monitor, control and minimize the probabilities and effects of undesirable happenings (Smith and Merritt, 2002).

PMBOK describes the risk management as a systematic process of analyzing, responding and identifying of project risks. It comprises maximizing the consequences and probabilities of positive happenings, minimizing the outcomes and probabilities of happenings which are opposing for the objectives of the project (PMI, 2004).

## **2.6 Project Management Practices and Organizational Performance**

There are two main constructs to measure the organizational performance which include business performance and project performance. In case of performance of project, the success of a project is measured or considered by the completion of the project within the allocated time, cost effective implementation and quality performance of the project. Ever since projects are carrying out by teams, the most crucial factor for measuring the success is response the question; to what extent team members were satisfied while working on project together (Doolen et al., 2003). Efficiency and effectiveness are measured when actual performance meets the budgeted and scheduled goals and objectives of a project. According to these researches, project performance is measured using two main constructs that are so prominent; project efficiency and effectiveness. Project efficiency is met when the actual performance meets the time allocated and the budget targets. Effectiveness of project include meeting expectations of customer and satisfaction of working team (Dvir et al., 2006).

Based on Nahm et al (2004) study, the performance of an organization measures by growth of sales, market share gains, return on investment, and overall organization's position in a market. Similarly, Divr et al. (2006) is using the same tools to measure a project success. For instance, if the project succeeded to provide a new product or service line, if the project caused significant growth in sales, success in internal and external factors of the organization, benefits and savings of a project, and overall performance of an organization in comparing to previous years' performances.

Nowadays, management of project is considered as unique method to effectively manage activities of a business (Filippov and Mooi, 2010). Adoption of a useful project management practices is considered as the most important strategy to improve the performance of organization by executing successful and well-managed projects (Rooij, 2009). When it comes to assure satisfaction of customers, most of the project executives are considered in the front-line. Therefore, it is really important to emphasize on the significance role of project management for successful execution of a project (Kirsila et al., 2007).

### **2.6.1 Project scope management relevance in organizational performance**

Managing and a better definition of the scope of project can actually influence the overall success of a project (PMI, 2004). PMI argues that on process area of controlling a scope of project which is related with influencing the factors that cause some changes in project scope and also the impacts of those changes. Moreover, scope management is maintained by PMI which is responsible to make sure that projected changes have been processed and applied using change control process. Scope management has many functions and the important one is to manage the process responsibility and the actual changes that come along with the implementation process which are actually not related have any connection to the organizational change management. Another function of scope management is the necessary changes to the other controlling process. Uncontrolled changes are known as “scoop creep” by PMI. The scoop creep is considered as unwanted byproduct which has been managed badly by a project. They often lead to major difficulties and challenges in the projects and mostly they are the reason for losing customers and profit reduction and finally project failure for companies (Dekkers & Forselius, 2007).

### **2.6.2 Project cost management and organizational performance**

The main focus of project cost management which demonstrate organizational performance is knowing the sum of the costs need to start a business, run it efficiently, and maintain profitability (Drury, 2008). Base on his research, costs of a project has directly influences and affects the performance of an organization. Financially sustainable and successful organizations strictly control their project costs. Costs consider as a major metric for measuring the success of a project and a factor to increase the performance of an organization through increasing profitability (Mullay, 2005). By managing the costs of a project, the performance of that organization can be improved. It can cause an increase in controlling the resources and transparency and consequently it can be the cause to decrease project risks (Cicmil et al, 2009).

### **2.6.3 Project communication management and organizational performance**

It has been analyzed that approximately 60% of project fails are due to lack of having a smooth and well-organized communication system within the

organization (PMI, 2004). Those projects which are having poor communication system within their organization are doomed to failure. They will not be able to achieve the goals and objectives of the project and get distance from the project purpose as a result. There are numerous factors that causes a project failure such as over-run costs or being unable to accomplish the project's tasks within the time scheduled. To conclude, having a well-organized project communication system is a crucial element which determines a project's success or failure. A smooth project communication system can significantly be used to obtain project goals, to affect a better performance of the organization, and to complete implementation within the time and budget allocated (PMI, 2004).

In his research study, Kerzner (2009), focused on the important of communication management of a project and concluded that success of project depends greatly on effective management of a project communication.

#### **2.6.4 Project risk management and organizational performance**

In the last decades, risk management has always been an issue for organizations and business entities. Risk is considered the most important concern of organizations especially to SMEs which are trying to earn a competitive advantage in the markets. In many organizations, risk management function typically reposes with the evaluation of owners' opportunities and the threats related to enterprises (Watt, 2007). Based on the study results by Howell et al (2010), effective risk management which is a crucial factor in project implementation process, make sure that all possible risks have been reduced to minimum and/or eradicated completely. While implementing a project, all the organizations need to make sure that all the project beneficiaries are satisfied by the outcome of the project, and the project is implemented successfully and in a significant way that also enhances the financial performance of an organization. In order to execute any project efficiently, organizations are obliged to ensure that the project will be completed in-time, also obliged to ensure that it makes profit for the organization which vital to be analyzed and control the risks (Howell et al., 2010).

## **2.7 Organizational Performance Measurement**

In the current study, the measurement of project success is an approximation. Project success is measured by considering the results and outcome of the project management practices being used in the organization with flexibility by finding out exactly which project management practice is best fit for a given organization. The overall organizational performance of a business entity or NGO will be determined and measured by the performance of project objectives and activities individually; cost, time, and quality performance. Two main studies have been conducted and developed a formula to measure organizational performance.

Firstly, Chan and Chan (2004) developed some Key Performance Indicators (KPIs) in a research study and then made use of it to measure a project success. For the measurement of a project performance, four major areas were specified and determined to be measured among the others. The chosen area represents the dimension which was adopted to measure the performance. Four main dimensions for which the formula was required to calculate performances are indicated in the table below (Table 2.1). At least one indicator is required for the measurement of each dimension's performances.

Secondly, in a research Ling et al. (2002), developed a model to predict and measure the performance of design-build as well as design-bid-build projects and used performance metrics for the project performance measurement.

Similar to the study conducted by Chan and Chan (2004) the adopted formulas to measure project performance are shown in the tables below:

**Table 2.1: Project Performance Measurement**

<b>Dimensions</b>	<b>Key Performance Indicators</b>	<b>Definition</b>
Time	Project time	Project completion date – project commencement date
	Speed of project	Project time
	Time variation	(Project time-revised contract)*100/(revised contract period)
Cost	Unit cost	Final contract
	Percent net variable	((Net value of variations) * 100)/ (final contract sum)
Value and Profit	Net present value	$\sum_{time\ t}^N (NCF)t/(1+r)t$
Health and Safety	Accident rate	(Total number of reportable accidents)/ (total number of workers employed or man-hours worked on a specific project)* 1,000

Source: Chan A. P. C. and Chan A. P. L. 2004

**Table 2.2: Project Performance Measurement Formulae**

<b>Dimension</b>	<b>Performance Metrics</b>
Time	Project Speed
	Delivery Speed
	Schedule Growth
Cost	Unit Cost
	Cost Growth
	Intensity
Quality	Turnover quality
	System quality
	Equipment quality
Others	Owner's satisfaction
	Owner's administrative burden

Source: Adopted from Ling et al. (2002)

### 2.7.1 Effects of time performance

Time performance is related to time frame of a project. Projects mostly experience delays in starting stage or while execution. Based on the research paper by Merledge et al. (1996) at Royal Institution of Chartered Surveyors

(RICS) in which 215 projects data were collected from industrial and commercial projects, it was found that 63% of projects were not delivered within the time frame and had delay. It was acclaimed that reason for late deliveries of projects were mainly the unrealistic time allocation and expectation of beneficiaries and clients regarding the duration of pre-project stage. Furthermore, Ward et al. (1991) as well recognized that expectations of clients mostly are based on either advises from 'specialist advisors' or their experiences from similar works.

This act of clients might be a sign of rejection or adherence to project consultants' advises who are experts and employed formally to lead the project implementation. In some specific situations in which project consultants are meant to be the project executive experts and play a significant role in the allocation of project time and budget allocation; the impact on project performance might be different. Therefore, all parties' actions are crucial in the project performance.

A web-based research has been used to collect data related to impacts of variables on time overrun in business projects. The questionnaires were sent to CEO's of 100 randomly chosen companies. As a result, delays in progress payments were identified as the main cause for projects' time over-run (Phatak and Choudhury, 2004). In the light of this, the characteristics of source and the nature of funds, and the main area by which project installments are mostly allocated for executing projects, require a complete investigation to determine and indicate a number of project management practices that causes delay in progress payments.

Even though postponed or delayed progress payments have been recognized as the main cause of project time over-run, the capabilities of contractors' project manager to cope with this issue is significant in the time performance of a project as well. Therefore, those types of practices which contractors are engaged to control the time aspect of project needs to be identified. In a research on project time performance in Australia by Walker (1995) followings are recognized as the main factors that affect project time performance:

- Effectiveness of project management team,

- Effectiveness of clients' representative team,
- The scope of works.

Thus, it is highly recommended to develop certain characteristics and combination of characters in project team such as; their skills, knowledge, experience, and competence.

### **2.7.2 Effects of cost performance**

Scholars have defined cost performance as the degree that general circumstances support the complete execution of a project spending the forecasted budget (Almohawis and Bubashit, 1994). The allocated budget covers all the costs that incurs from the beginning till the delivery of projects. This shows the importance which needs to be enclosed with the project proposal for smooth management of project activities and milestones carried out in every single stage of project till completion. Also, Chan and Chan (2004) states that project cost is not solely confined to a tender sum, but it is sum of all the costs that occurs from inception till the completion of a project. It also includes any cost occurring from variations and modifications within the project life. The mentioned variables of costs will give an indication of some further practices in which engaged during a project management process. Also, it will have direct and indirect impacts on the cost performance of a project.

During the project implementation, the numbers and the manner by which variation orders are issued by project consultants are significant practices to look at. Those clients who have the habit of provoking many changes before the practical completion of the project, play an important role in effecting the project costs. In addition, responses and reaction of contractors to the possible variation orders might also have effects on the project performance. Ling et al. (2002) also indentifies some variables which can affect cost performance while predicting and estimating the performance of design-bid-build and design-build projects. This contains the extent or proportion of design completion while bids are invited, a number of repetitious elements included in a project, and the paid up capital level of engaged contractors.

Clients' manner toward the project costs will determine if the client will stay loyal and follow the given advise by project designers regarding the advantage

of having repetitious elements in terms of costs in designs. The way that contractors are elected (mostly selects by negotiated tendering and/or competitive tendering) will control the type of contractor who is hired to implement the project.

Having some specific characteristics in a contract particularly will determine the type of contractors who are interested to tender for the project and eventually win. For example, having some facilities like advance payments by client for a building project contract might have some attraction on the contractors who owe low level of paid up capital and/or low level of ability in order to pre-finance a project. The financial ability of contract winner would have bearing on the performance of a project.

### **2.7.3 Effects of quality performance**

According to Parfit and Sanvido (1993) who gave a quite good description of quality performance, it is defined as “*the totality of the features required to satisfy a given need; fitness for purpose*”. Also, the degree that projects are evaluated and monitored, project consultants’ experience, contractors’ past performance and quality records and the quantity of variation orders issued; all will affect the quality of performance (Kashiwagi and Parmar, 2004). Furthermore, the way all the mentioned factors can be effectively coordinated could be relevant to obtaining a satisfactory and reasonable quality performance.

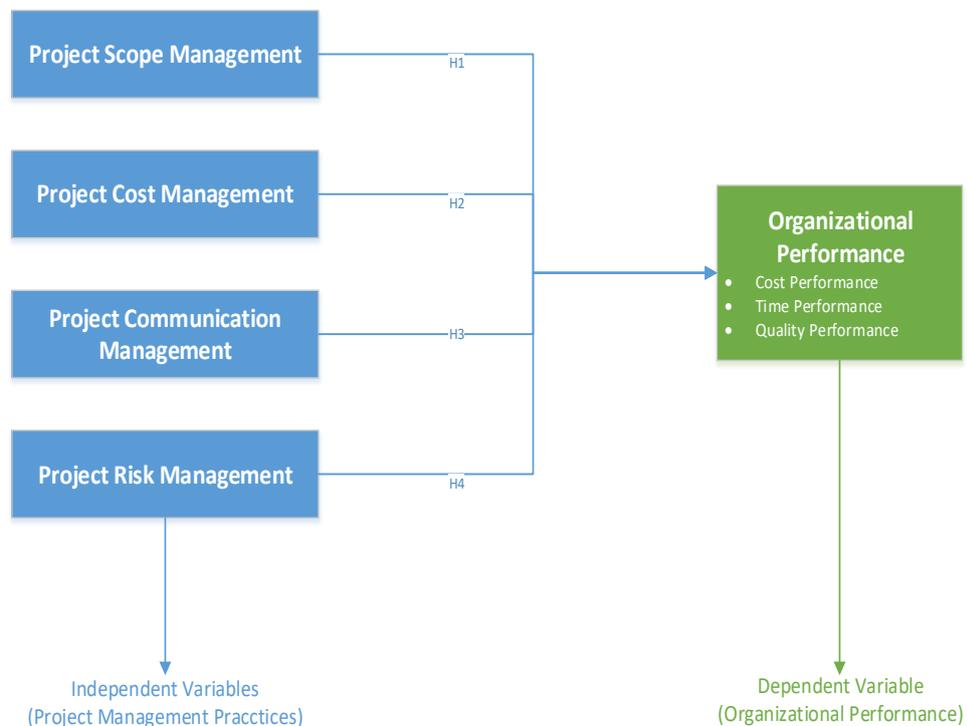
Team leaders of projects have to ensure that the mentioned factors are combined well to generate a good quality performance. Quality performance as an important factor, considered as the function of adopted procedures throughout the project implementation (Alarcon and Serpell, 1998).

That kind of procedures involve the procurement form concept and the final closure tendering method that will cause a project to be completed successfully. Its attention is on the procedures and process that have an impact on the project’s quality. The consequent issue that occurs is that a project manager how often has a sense of every project's uniqueness, combine specific practices of project management to be compatible with the project’s uniqueness in order to generate a good quality performance.

According to a research study in regards with those factors which affect projects' quality performance, Tam and Chan (2000), by use of stepwise regression analysis along with factor analysis, found that project management practices by a project management team is the strongest forecaster of customer's satisfaction and happiness with quality. Thus, it requires to be given emphasis to those project management practices which habitually are chosen by members of a project management team for the quality management of a project.

## 2.8 Conceptual Framework

Following the above discussion which describe the theoretical foundation of a study, a conceptual framework for this research study was developed in which practices of project management were kept under consideration to the project management knowledge areas as an independent variable. The framework of this research study mainly focus and emphasizes four knowledge areas such as project scope management, project communication management, project cost management and project risk management of an organization or business entity as the dependent variable.



**Figure 2.1:** Conceptual Framework of the Study

Based on a framework that is designed for this research study, practices of project management include cost, scope, risk and communication management which are used to obtain satisfactory project performance by a better cost performance, quality performance and time performance which consequently results in a better organizational performance. Every single member of a project has specific function and role to perform in the processes of project management. An aggregate using all of these practices may result in a set of practices which are evolved within the project life. When an organization or business entity adopts these practices, it creates an environment where each employee or team member understands what must be delivered as well as how and individual performance can affect organizational performance as a whole. This approach prevents the uncertainty that permeates and affects a project at the stage of getting close to the critical delivery time. In addition, this remarkable method combines the deliverables of a project and demonstrate its contribution to the outcomes of performances done by an organization.

Based of conceptual framework, main purpose of this research is to test following hypotheses that are formulated on the basis of theoretical foundations which are developed in this chapter:

H<sub>1</sub>: There is a positive relationship between project scope management and organizational performance of NGOs operating in Afghanistan.

H<sub>2</sub>: There is a positive relationship between project cost management and organizational performance of NGOs operating in Afghanistan.

H<sub>3</sub>: There is a positive relationship between project communication management and organizational performance of NGOs operating in Afghanistan.

H<sub>4</sub>: There is a positive relationship between project risk management and organizational performance of NGOs operating in Afghanistan.

## **2.9 Summary**

Project management practices involve and require handling daily management of tasks and decisions in order to obtain aims and objectives of a project. The practices adopted may differ from one organization to another. According to the research of Hobday (2000), “one size does not fit all.” These practices are for

small and medium companies and NGOs. These necessitate the outcomes of a relationship between performance and management practices of a project. Performance of a project is tied to the success of a project and this is linked with organizational objectives and its performance. Performance of a project and/or an organization is measured practicing certain criteria which are developed and applied in accordance to the objectives and aims of the project. Performance of project has been measured by many different dimensions such as time, cost, quality, and also its benefits to the public, its positive impact on infrastructure, its benefits to project users, its impact on safety and health requirements, and environmental impacts.

In this research, three main objectives are selected to measure and determine the performance of a project which includes cost, time and quality. All these three factors are considered as overarching criteria for evaluating the performance of a project as well as the subsequent performance of an organization.

### **3. RESEARCH METHODOLOGY**

#### **3.1 Introduction**

By selecting an appropriate and accurate methodology for research, it becomes easy to achieve significant results, assess and develop the research findings. The method of research should be opposite and applicable to the context of research (Venkatesh et al, 2013). It is important to make sure before selecting a research method that it complements with the subject of research. There are certain questions that are essential to be considered before selecting and applying a research method. For instance; who will be in-charge of data collection? What kind of research – quantitative or qualitative – needs to be conducted? Which method of research is the best fit to answer the research questions properly? What kind of data is required and what methods are linked with the methodology? This chapter will provide all the important elements of research design which are used in this research study.

#### **3.2 Research Philosophy**

A philosophy of research illustrates how data for a particular research study must be collected and analyzed. It also defines the assumptions and beliefs of the researcher from viewing and observing this world. This view and observation forms the foundation and the strategy used to carry out the research (Collins, 2010). There are three common research philosophies namely; positivism, realism, and interpretivist.

Positivist research conducts based on law such as generalizations believes. While investigating on a similar factual issue, the might obtain parallel results despite applying statistical tests so cautiously and using the same research process of examination (Wahyuni, 2012). An approach of positivism mainly focuses on achieving objective knowledge using different scientific methods for

an investigation. This is the reason it is used when the method of the research study is quantitative by its nature.

On the other hand, the philosophy of interpretivism considers that the reality is influenced and created by people's perceptions and with their environment and surroundings and mostly it comes from their own background and experience. In this philosophy, individual perspective is subjective, thus, social realities transform gradually and for the accurate presentation of the reality, interpretivism concentrates on subjective analysis. Therefore, when research method is qualitative by nature, this particular philosophy of research will be adopted (Wahyuni, 2012).

Similarly, according to the realism philosophy approach, things are within the mind of people and the reality is independent of it. It is usually considered as the concept that strengthens qualitative research (Saunders et al, 2012).

All these three types of research are important based on their own aspects and it is important to understand all those approaches before selecting any particular approach for research. Realism is different comparing to other two research philosophies. Usually, researchers prefer this philosophy for the observation and collection of data.

Considering the nature of the current research study, the positivism approach has been chosen. The purpose of choosing positivism philosophy is that it is in compliance with a deductive research method that is adopted in this research study. The views, observations, and perceptions of previous researchers have been consulted and discussed to develop a conceptual framework. And also some of them have been tested for the observation and collection of data.

### **3.3 Research Approach**

Any scientific methodology that sets instructions and guidelines for researchers is recognized as a research approach. There is two most commonly used approach of research which includes deductive and inductive.

An inductive research method condenses the raw data to a proper short statement which establishes clear linkages along with the objectives of the research and emphasizes general experiences that are noticeable in the raw data

(Thomas, 2006). In this particular approach, in the beginning, observations are made and theories are proposed thereafter toward the end of the research (Blanche, et al, 2006). It is so important to take in mind that this particular approach doesn't imply disregarding of the theories when research goal and questions are formulated. On the other hand, a deductive approach is making deductions from the outcomes and results that are obtained after testing a hypothesis (Bryman, 2015).

Thus, this particular approach is adopted to measure the propositions of an existing theory in order to further verify its outcomes. The difference between the inductive and deductive approach that lies in research is “conceiving a theory”. In the next step, research uses the deductive approach to elaborate a theory by applying the hypothesis. Theories are constructed based on logic and various concepts are altered. In the last step, the research outcome justifies the theory. In this step, the theory is evaluated and tested using inductive reasoning (Wayne & Muntermann, 2011).

For this particular research study, we have selected the deductive research approach. As the theoretical framework of this research has been derived from previous researches. The framework would be validated by the survey findings. The top-down research approach is considered to be the most appropriate approach for conducting this research.

### **3.4 Research Design**

Research design can be defined as a detailed and thorough plan of how it will be handled and carried out. There are some common research designs namely; explanatory design, exploratory design, analytical design, and descriptive design. Exploratory research is used to identify and explore new insights and ideas. This type of research is used when the researcher has an opinion regarding the situation and uses various methods, for instance, interviews, trials and so on (Strydom, 2014).

Similarly, descriptive research is carried out to identify the characteristics and qualities of services, products and in some cases people. Descriptive research sets to collect quantifiable data which can be used to process, analyze and

announce the outcome of the study. Analytical research is used for evaluating information and critical thinking and facts which are related to the research issue (Kelley, 2003).

All these four research designs are different according to suitable situation and preference. Exploratory approach attracts marketing persons and consumer's dealers whereas most of the full-time researchers prefer explanatory approach. In scientific field analytical approaches are used and whenever a collection of data is required descriptive approach is used.

In the current research study, an explanatory design of research is selected in order to identify the impacts of performance appraisal strategies on employees' motivation. In this research, it was essential to select a research design by which the research can simply be conducted and shouldn't be outside of the researcher limitations. Selection of a particular research design clearly impacts the judgment about the effective factors and causes. Explanatory design of research was the most significant to verify the conceptual framework of this research study.

### **3.5 Research Strategy**

A research strategy is considered as the methodology which is used to examine the research issues. In this research, the two main methods which are employed by the researcher are; a survey along with a case study. A case study contains a detailed study regarding individuals, a group, or a specific situation. On the other hand, in case of applying a survey, necessary data and information is gathered from the population under the coverage of the research to understand the opinion of different people in a specific situation. A case study is used in case of qualitative research whereas survey comprises of numerical data and are used in case of quantitative research (Gable, 1994).

The strategy which is used in the current research study is surveying as the main focus is interviewing and gathering the perceptions of organizations' employees regarding the performance appraisal strategies that are currently been using by respective organizations. By adopting the survey strategy, researchers can

gather information from several employees in an organized way to make the analysis process simple by using statistical frequency analysis distribution.

### **3.6 Sampling Technique**

Generally, in order to identify the target group or audience for a research study, different sampling methods can be adopted by a researcher. There are two main methods to determine our target sample; probability sampling and non-probability sampling. In the case of probability sampling, every single member of a target population needs to have a non-zero probability for being chosen. For instance, systematic sampling, stratified sampling, and random sampling.

On the other hand, in the case of non-probability sampling, there is an equal distribution of characteristics in the target population. This means that the target sample could not be chosen randomly like the one in the probability sampling. Compared to non-probability sampling, probability samples are more accurate and reliable. For example, in the case of probability sampling, research randomly selects the participants for the experiment.

On the other hand, the bases of non-probability sampling are quota sampling and convenience sampling. Another common difference between the two sampling schemes is that the degree to which the sample differs from the population in probability sampling and it is considered as the sampling error. Whereas, in non-probability sampling, this error cannot be calculated (Barreiro & Albandoz, 2001).

In the current research study, the random sampling method is used to determine the respondents of the survey. In simple random sampling case, every single member of the population will have equal chances of selection. However, it is quite difficult to determine every member of the population, thus, the results and outcome obtained will be biased.

The sampling technique of this research ensures that any employee can be chosen from the organizations that can provide the researcher the chance of taking different opinions from randomly chosen participants instead of having responses from employees and workers of the same organization with same perceptions.

### **3.7 Data Collection Method**

In the current research study, both primary and secondary data collection methods are used. To develop the conceptual framework of the study, secondary research has been used. To validate the data primary research have been used. For collection of secondary data, many different scholarly articles and researches have been consulted. These articles and researches are obtained with the help of internet from different web browsers such as Google scholar. A survey questionnaire has been developed and used for carrying out the primary research. The developed questionnaire was distributed to those employees who were working with NGOs at different levels. Approximately 150 questionnaire was distributed among employees who were working in NGOs of Afghanistan including top, middle and lower management.

The instrument for the survey was designed using 5-point Likert Scale that contained the options:

- Strongly Disagree,
- Disagree,
- Neutral,
- Agree,
- = Strongly Agree,

The main purpose for using a closed-ended survey form is its simplicity that it can provide for the analysis of data. By using these types of questionnaires it becomes easy for the researcher to obtain comprehensive responses of the target group in minimum time. Thus, the strategy of doing a survey is considered the most suitable comparing to other methods for collecting data such as focus groups and interviews.

### **3.8 Ethical Stance**

Ethics are considered as norms for conduct which differentiate unacceptable and acceptable behavior. Especially when dealing with humans. This research involves cooperation and coordination among the employees and researcher. So the ethical stance is considered in every step. For a researcher, it is quite important to consider the ethical norms as it makes sure that bias-free findings

are presented without bothering the partakers and participants of research in any way.

## **4. DATA ANALYSIS AND FINDINGS**

### **4.1 Introduction**

In this chapter, the results conducted out of the collected data are examined and evaluated in this chapter. Considering the research problem that is to identify the effects and impacts of project management practices on the organization performance of NGOs operating in Afghanistan. Results of the current research study are presented by focusing on mainly four areas that corresponded to the way and manner by which the research questionnaire is developed. The first focused area was to evaluate the extent to which it was important to create a linkage between different practices of project management. The second area was to identify and determine a project management practice that remarkably affects the organizational performance. The third area was to identify the impacts of costs, time, and the quality performances of projects on organizational performance. At last, the focus area was to evaluate and analyze the effects of project management practices on organizational performance.

In order to fulfill the purpose of this research, the questionnaire was adopted from previous research studies and then distributed to employees of NGOs that were working at various hierarchical levels. In total, 260 questionnaires were distributed to those employees who were working at top management level, middle management level, and low management level in targeted NGOs operating in Afghanistan. In total, 260 survey forms were distributed among the respondents whereas out of 230 returned questionnaires, 210 were retained for data analysis. The questionnaire was divided into two segments. The first part of the distributed questionnaire is regarding the demographic profile and other general information of the respondents; this was collected only for general purpose as it has nothing to do with the analysis. The second segment was comprised of questions covering each research variable. Also, the convenience sample method is used to obtain a statistical sample due to lack of access to the whole statistical society.

The questionnaire is designed using 5-point Likert Scale that contains the options:

- Strongly Disagree,
- Disagree,
- Neutral,
- Agree,
- Strongly Agree,

The reason behind using a closed-ended questionnaire is its simplicity associated with the analysis of data. Using this questionnaire helped the researcher to collect comprehensive responses consuming the minimum time possible. Henceforth, the survey strategy was considered to be more reasonable to collect data comparing other methods like focus groups and interviews.

#### 4.2 Variable Coding

In order to effectively run the CFA and SEM results, following coding conventions were used in the data analysis.

**Table 4.1:** Variable Coding Conventions Used in the Analysis

Variable	Label	Value
Project Scope Management Symbol: PSM Total Items (7)	Strongly Disagree	1
	Disagree	2
	Neutral	3
	Agree	4
	Strongly Agree	5
Project Cost Management Symbol: PCM Total Items (9)	Strongly Disagree	1
	Disagree	2
	Neutral	3
	Agree	4
	Strongly Agree	5
Project Communication Management Symbol: PCOM Total Items (8)	Strongly Disagree	1
	Disagree	2
	Neutral	3
	Agree	4
	Strongly Agree	5
Project Risk Management Symbol = PRM Total Items (8)	Strongly Disagree	1
	Disagree	2
	Neutral	3
	Agree	4
	Strongly Agree	5
Organizational Performance Symbol: OP Total Items (5)	Strongly Disagree	1
	Disagree	2
	Neutral	3
	Agree	4
	Strongly Agree	5

### 4.3 Reliability Test

Reliability refers to the consistency of the substances used to measure the variables and the extent to which the scale used reflects the problem of interest (Kalaycı, 2009: 43). Cronbach's Alpha ( $\alpha$ ) (coefficient alpha) is the most widely used among other methods (Ural and Kılıç, 2011: 286). Cronbach's alpha ( $\alpha$ ), developed and used in 1951 by Lee Cronbach, measures "Reliability" or "Internal Consistency". Reliability means how well a test measures what it should. For instance, an organization may ask their employees to fill a job satisfaction survey. High reliability means it measures job satisfaction, while low reliability means it measures something else or possibly nothing at all (Tavakol and Dennick, 2011).

Cronbach's alpha tests to perceive whether the multiple-questions in Likert scale questionnaire are reliable. This type of question measures latent variables, hidden variables or unobservable variables. For example, a person's openness, conscientiousness, or neurosis. In real life, these variables are quite difficult to measure. Cronbach's alpha test, tells whether the tests are correctly measuring the variable of interest. Cronbach's alpha is used to measure the internal reliability of scales in the context of the study. The test shows that three variables exceeded 0.70 which is the standard of Cronbach's alpha value. According to Cronbach, over 0.70 value is considered as reliable, values between 0.60 - 0.69 is considered moderately reliable (Robinson, Shaver, & Wrightsman, 1991). Thus, all items are retained for more analysis.

Reliability of variables in the current research study is shown in table 4.4 below:

**Table 4.2:** Reliability Results of Variables

<b>Variables</b>	<b>n</b>	<b>Cornbach's Alpha <math>\alpha</math></b>
Project Scope Management (PSM)	7	0.670
Project Cost Management(PCM)	9	0.778
Project Communication Management (PCOM)	8	0.764
Project Rish Management (PRM)	8	0.786
Organizational Performance( OP)	5	0.754

(N=210)

## 4.4 Model Fit

### 4.4.1 Metrics

In order to measure the goodness of fit, there are specific criteria to that can calculate to determine it and the metrics that should be reported are shown in table 4.5 including their acceptable thresholds, appropriate comments, and results of this research study. The goodness of fit is conversely correlated to the number of variables and sample size in the model. Therefore, the below thresholds are just a guideline. The thresholds placed in the table 4.5 are developed by Hu and Bentler (1999).

**Table 4.3:** Metrics

Measure	Threshold	Results of this Study	Remarks
Chi-square/df(cmin/df)	<3 good;< 5 sometimes permissible	1.399	Good
p-value for the model	>.05	0.001	Good
CFI	>.95 great;>.90 traditional;>.80 sometimes permissible	0.954	Great
GFI	>.95	0.909	Permissible
AGFI	>.80	0.874	Great
SRMR	<.09	0.049	Great
RMSEA	<.05 good; .05- .10 moderate;>.10 bad	0.043	Good
PCLOSE	>.05	0.796	Great

From the above table, it is evident that CMIN/DF is well under the threshold value of 3, which is 1.399 and this indicates the good fit. The p-value of .001 is less than the threshold value of .05 or greater which indicates a bad p-value for the model. CFI value of .954 is great since it is greater than the threshold of .95. GFI value of .909 is slightly under the threshold but is still permissible.

AGFI, SRMR, RMSEA, and PCLOSE values are all above their respective threshold values and therefore are great fit for the model.

#### 4.4.2 Validity and reliability

It is very essential to establish discriminant and convergent validity along with reliability while doing a CFA. For establishing reliability and validity there are few useful measures that can be used. Name, Average Variance Extracted (AVE), Composite Reliability (CR), Average Shared Variance (ASV), and Maximum Shared Variance (MSV). The threshold for these values is as following:

Reliability

- $CR > 0.7$

Convergent Validity

- $AVE > 0.5$

Discriminant Validity

- $MSV < AVE$

The table below shows the results of the reliability and validity of this research:

**Table 4.4:** Validity and Reliability Results

	CR	AVE	MSV	Max R (H)	OP	PSM	PCM	PCOM	PRM
OP	0.834	0.503	0.429	0.808	1.00000				
PSM	0.777	0.333	0.276	0.758	0.436	1.000			
PCM	0.834	0.360	0.397	0.719	0.475	0.472	1.000		
PCOM	0.829	0.383	0.421	0.687	0.541	0.456	0.630	1.000	
PRM	0.841	0.401	0.433	0.707	0.648	0.525	0.237	0.487	1.000

The composite reliability (CR) values of organizational performance (OP), Project Scope Management (PSM), Project Cost Management (PCM) and Project Risk Management (PRM) are 0.834, 0.834, 0.841 and 0.707 respectively. This means that the CR of all these variables is greater than the threshold value of 0.7, hence their CR is acceptable. The CR of Project Communication Management (PCOM) is 0.829 which is slightly lower than the threshold value of 0.7.

The Average Variance Extracted (AVE) values of OP, PSM, PCOM and PRM are .503, .333, .383 and .401 respectively. AVE of all these variables is acceptable as the values are greater than the threshold value of 0.5. On the other hand, the AVE value of PCM is .456 which indicates that this value is slightly lower than the threshold value of 0.5.

For Discriminant Validity, the Maximum Shared Variance (MSV) values of all variables, OP, PSM, PCM, PCOM, and PRM are .429, .276, .397, .421 and .433 respectively. This indicates that all values are less than the threshold value of 0.5 (AVE) which means they are acceptable.

#### **4.5 Structural Equation Modelling (SEM)**

This technique determines if a thesis research model reasonably fits the collected data and assesses the contribution of dependent variables to each independent variable. Adopting SEM for analyzing data allow a researcher to compare substitute and alternative models and assess the differences amongst groups. SEM is a statistical and quantitative method which is developed to provide a solution for methodological desires. It combines the benefits of factor analysis, path analysis, and multiple regression analysis. (Jöreskog&Sörbom, 1984, 1993; Tabachnick&Fidell, 1996).

In addition, SEM is established based on correlational statistics. For example, the common variance in-between the variables, and the linear relationships among them form the foundation of the analysis. Also, SEM presents and analyzes the degree of relationship amongst variables in case of explained variances. A hypothesized model is tested in a simultaneous analysis of the whole system of variables in order to determine the extent to which the

correlation or the covariance matrix specified by the model, and it is consistent with the matrix base on the experimental data. If the statistical goodness of fit between to compared matrixes is sufficient, the model can represent the relation between variables which are specified by the researcher.

#### **4.5.1 Normality assessment**

A normality test, in statistics, is used to determine if the data set is modeled for normal distribution. Most of the statistical functions require a normal or at least a nearly normal distribution. For evaluating normality, there are two methods of normality evaluation; graphical normality test and statistical normality test. Both are defined as following:

- A graphical method of normality test includes a normality plot and the histogram.
- In a statistical method of testing normality, two numerical measures of shape (kurtosis, and skewness) can be used. If the outcome of none of these values were not close to 0, it means the data set is not normally distributed.

In statistical distribution, skewness is asymmetry in which the curve appears skewed or distorted either to the right or left. Skewness can be shown statistically to define the extent to which a distribution varies from a normal distribution. Also, skewness tells us the direction and amount of skew. Skewness value can be negative, positive, and also undefined. If the value of skewness is zero, it means data is absolutely symmetrical however it is unlikely for real-world data. As a general rule of thumb:

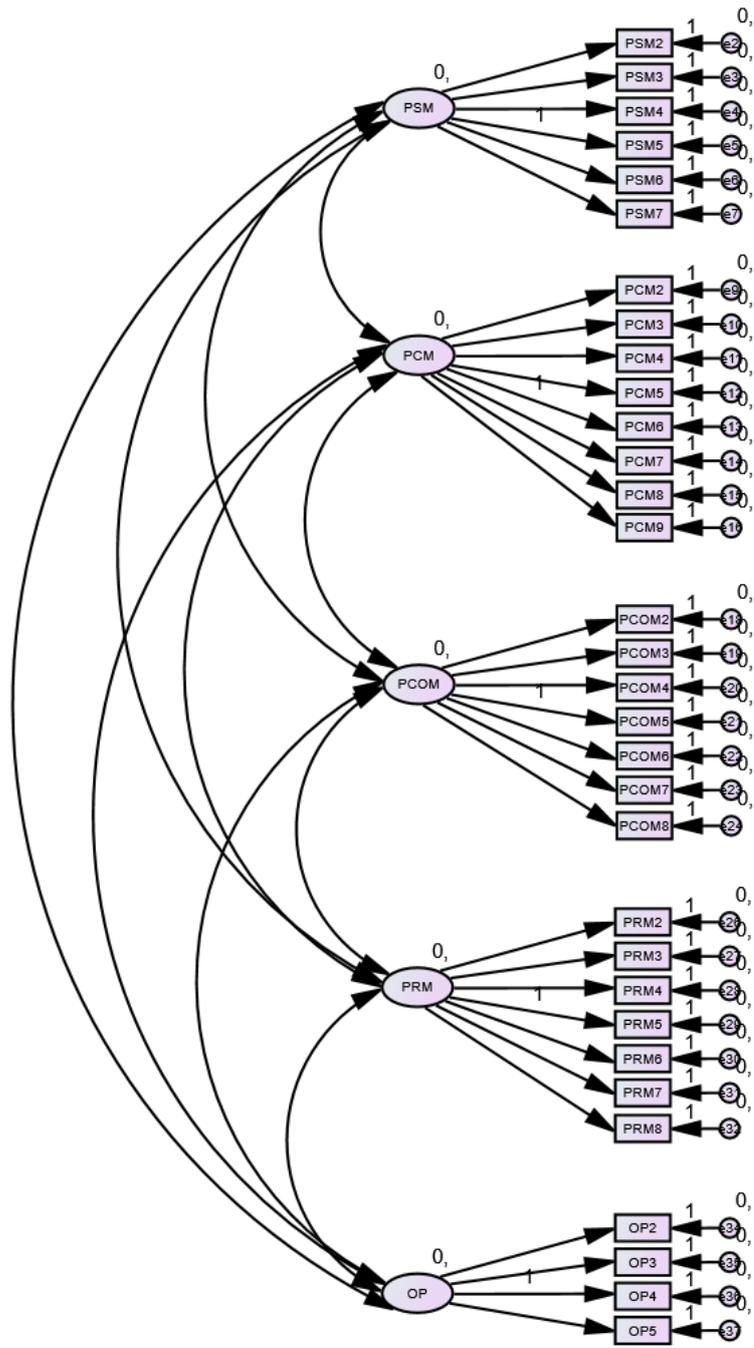
- If the skewness is greater than 1 or less than -1, means that the distribution is highly skewed.
- If the skewness is between 0.5 and 1 or between -1 and -0.5, it means that the distribution is moderately skewed.
- If the skewness is between -0.5- and 0.5, it means that the distribution is approximately symmetric.

On the other hand, Kurtosis tells and describes the sharpness and height of the central peak related to a standard bell curve. The main assumption of SEM is that the data are multivariate normal. According to statistics, skewness measures

normality of the distribution function. Skewness of a totally normal distribution is zero, the skewness of an asymmetric distribution with elongation towards higher values is positive and skewness of asymmetric distribution with slippage to smaller values is negative. The standard kurtosis index value is 3. This value is usually rescaled through a statistical program to zero. A positive value means that the peak of the desired distribution is higher than normal and a negative value means the peak is lower than the peak of a normal distribution. Generally, when skewness and kurtosis are not between -2 and 2, the data is not a normal distribution West & Finch & Curran, 1995). Appendix B shows the values of kurtosis and skewness in this research study.

#### **4.5.2 Confirmatory factor analysis (CFA)**

Confirmatory factor analysis varies from exploratory factor analysis. The aim of confirmatory factor analysis is to show the researcher how well the specification of a factor matches an actual data. According to Schumacker & Lomax (2004) researchers can specify a particular quantity of factors with a confirmatory factor analysis that are correlated, also uses the observed variables to determine and measure every factor before the results can be generated. This result is obtained by evaluating the confirmatory factor analysis models.



**Figure 4.1:** Hypothesis CAF Model

There are total 32 observed items for total of 5 variables. PSM is measured with 6 items, PCM with 8 items, PCOM with 7 items, PRM with 7 items and OP with 4 items.

**Table 4.5:** Selected AMOS Output, CFA Model: Goodness-of-Fit Statistics

Measure	Threshold	Results of this Study	Remarks
GFI	>.80	0.909	Good Fit
AGFI	>.80	0.874	Good Fit
PGFI	>.50->.90	0.657	Good Fit
CFI	>.95 great;>.90 traditional;>80 sometimes permissible	0.954	Good Fit
PCFI	>.50- >.90	0.758	Good Fit
RMSEA	<.05 good;.05 - .10 moderate; >.10 bad	0.043	Good Fit

- The AGFI and GFI are classified as the absolute indexes of fit. Because the AGFI and GFI primarily compare the hypothesized or theorized model with no model at all. Both indexes' range are from 0 to 1.00, yet values are near to 1.00. A value of more than 0.8 is indicative of good fit (Byrne, 2010). Considering this model, the AGFI and GFI values which are shown in the table above are 0.874 and 0.909 respectively, this confirms that the hypothesized model, fits our collected data properly.
- The Parsimony Goodness-of-Fit Index (PGFI) tells us the issue of parsimony in SEM. It is recommended to have lower values than the threshold level. Generally, lower value perceives as an acceptable value for average indexes of fit (Byrne, 2010). Considering the value of PGFI (0.657) in the above table, it seems to be consistent and reliable with our previous fit statistics.
- The CFI shows if the model fitted the data properly. CFI value from 0 to 1.00, thus, a value which is close to 1.00 indicates good fit (Byrne, 2010). In our case, the value of CFI which is shown in the above table is 0.954 that proves it is acceptable.
- Respectively another measure of fit indexes is relative to the issue of model parsimony. This model is considered for the evaluation of model fit. In the current research, the PCFI value shows 0.758 which falls in the category of expected value.
- The final set of fit focuses on the Root Mean Square Error of Approximation (RMSEA). Normally, value of the RMSEA must be lower than 0.1 and it

would perfect that the value would be lower 0.05 (Byrne, 2010). Considering 0.043 value given in the table above means that the hypothesized model fits the data properly.

### 4.5.3 Hypothesis testing

In the current research, considering the data from 210 responses for the prepared questionnaire, a confirmatory factor analysis was performed using the Smart PLS, AMOS (Instantaneous Structure Analysis) and in 32 items that are examined by Smart PLS and AMOS analysis using SPSS application and the structural model presented in Figure 5.2 and Table 5.6 proves the goodness of fit statistics. Table 5.6 reveals that except the times like "Trust" and "Ease of Use" all the factor loading are significant with the value of  $p < 0.05$ .

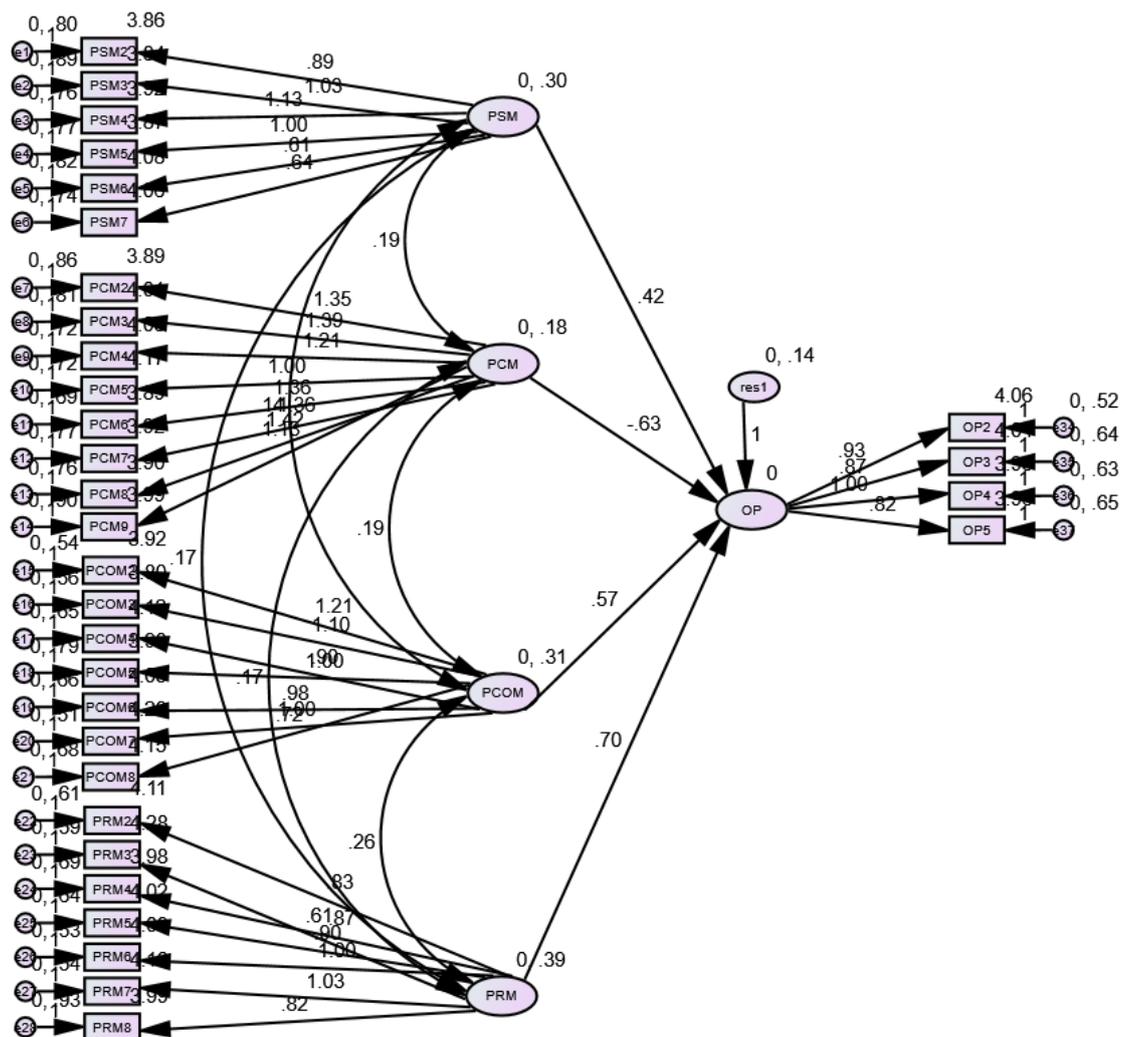


Figure 4.2: Hypothesis Model

**Table 4.6:** Regression Weights

			<b>Estimate</b>	<b>S.E.</b>	<b>C.R.</b>	<b>P</b>	<b>Label</b>
OP	<---	PSM	.418	.405	1.034	.301	
OP	<---	PCM	-.625	.776	-.806	.420	
OP	<---	PCOM	.570	.423	1.350	.177	
OP	<---	PRM	.696	.193	3.600	.725	

According to the results of hypothesis testing shown in table 5.6, the following inferences are made:

- Project Scope Management (PSM) is not positively related to Organizational Performance (OP) thus it has no significant impact on the organizational performance of the NGOs operating in Afghanistan. In the case of the relationship of PSM  $\rightarrow$  OP, the estimated value ( $\beta$ ) is .418, standard error (S.E) is .405 and P value is .301 that is greater than the threshold value of 0.05, therefore:

H<sub>1</sub>: There is a positive relationship between project scope management and organizational performance of the NGOs operating in Afghanistan = *Not Supported*

- Project Cost Management (PCM) is not positively related to Organizational Performance (OP) thus it has no significant impact on the organizational performance of the NGOs operating in Afghanistan. In the case of the relationship of PCM  $\rightarrow$  OP, the estimated value ( $\beta$ ) is -.625, standard error (S.E) is .776 and P value is .420, that is greater than the threshold value of 0.05, therefore:

H<sub>2</sub>: There is a positive relationship between project cost management and organizational performance of the NGOs operating in Afghanistan = *Not Supported*

- Project Communication Management (PCOM) is not positively related to Organizational Performance (OP) thus it has no significant impact on the organizational performance of the NGOs operating in Afghanistan. In the case of the relationship of PCOM  $\rightarrow$  OP, the estimated value ( $\beta$ ) is .570,

standard error (S.E) is .423 and P value is .177, that is greater than the threshold value of 0.05, therefore:

H<sub>3</sub>: There is a positive relationship between project communication management and organizational performance of the NGOs operating in Afghanistan = *Not Supported*

Project Risk Management (PRM) is positively related to the Organizational Performance (OP) thus it has a remarkable impact on the organizational performance of NGOs operating in Afghanistan. In the case of the relationship of PRM -> OP, the estimated value ( $\beta$ ) is .696, standard error (S.E) is .193 and P value is 0.725, which means it is between the range of 0.01 and 0.05 and it is within the acceptable range, therefore:

H<sub>4</sub>: There is a positive relationship between project risk management and organizational performance of NGOs operating in Afghanistan = *Supported*

## **5. SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

The main purpose of this study is to find out the impact of project management practices on the organization performance of NGOs. Therefore, four research questions and objectives were set to obtain this purpose within the literature context written in chapter two.

The current chapter highlights and discusses the findings of the study and also it includes suggestions and recommendations in this regard for future studies.

### **5.2 Discussions**

As previously mentioned, the main concentration of this research is to highlight a key project management practice that suits for NGOs' and consequently could possibly have a positive impact on their organizational performance. Normally NGOs require to overtake a lighter version of project management practices considering their resource limitations in order to enhance the performance of organizations in terms of increased sustainability. Project management practices in NGOs have matured over several years. The most interests have been focused on implementing more projects rather than a good fit or a project management practice that suits NGOs. In conventional organizations, project management has a totally different characteristics than that of project management practices executed by NGOs (Turner, et al, 2010). NGOs comparing to other type organizations require less bureaucratic management methods along with greater flexibility. To obtain the purpose and aims of this research, five NGOs operating in Afghanistan are selected as a case study. NGOs covered under our case study are:

- Human Rights Research and Advocacy Consortium
- Afghan Technical Consultants
- Afghanistan Independent Human Rights Commission

- Afghan Health and Development Services
- Coordination of Humanitarian Assistance

The previous chapter the detailed results of the statistical analysis taken out of the collected data has been presented and explained thoroughly. The data were collected using a structured questionnaire from the selected employees of NGOs operating in Afghanistan. The items and variables in the questionnaire were adopted from Chan & Tam (2000) and Ainin et al. (2015) studies.

The statistical analysis was comprised of reliability testing, model fit, structural equation modeling (SEM), normality assessment and confirmatory factor analysis (CFA). The reliability test is carried out to test the reliability of the variables in this research, and also to test the reliability of Project Cost Management, Project Scope Management, Project Risk Management, Project Communication Management, and Organizational Performance. The results of the reliability tests showed that the reliability of all study variables was within the acceptable range, thus all variables were retained for further data analysis.

The study aimed to test the relationship between all dependent and the independent variables of organizational performance. Confirmatory factor analysis was carried out using IBM SPSS AMOS to test the study hypotheses that were formulated to test the relationship between independent and dependent variables.

The results outlined in the previous chapter showed that the first three hypotheses were not supported based on the values of P which were greater than the threshold value. Based on the results obtained, it is inferred that there was a positive relationship only between project risk management and organizational performance. However, a negative relationship was found between project communication management, project cost management, and project scope management, therefore the associated hypotheses were not supported as a result of this study.

### **5.3 Conclusions**

The main purpose of the current study is to determine the impact and effects of project management practices on the organizational performance considering

the factors like; costs, time and quality performance of projects being implemented by NGOs in Afghanistan. In order to obtain this purpose, four questions have been posed to be answered by end of the study. The first question is "To what extent is it important to link a variety of project management practices in order to achieve a prominent organizational performance?" Based on the key findings of our study, it is essential to establish a linkage with different project management practices in order to realize the successful closing and completion of projects and could lead organizations to a better performance.

The second question posed is "What sort of project management practices used by NGOs in Afghanistan significantly impact on organizational performance?" As we found, all the project management practices significantly impact the organizational performance, however, cost management and project scope management are more significant respectively.

The third question posed is "To what extent costs (unit cost, cost growth, intensity), time (project speed, schedule growth) and quality (turnover quality, system quality) are effective on organizational performance of NGOs in Afghanistan?" The findings of the study show that the time performance falls behind while the cost and quality performances are commonly as expected and quite essential in recognizing enhanced organizational performance.

The last question posed is "What are the impacts of project management practices on organizational performance?" According to the key findings, we found that adopting project management practices which best fits the organization can have a positive impact on the performance of organization.

#### **5.4 Recommendations**

The purpose of this section is to provide necessary recommendations which could be applied to the scope of this study in order to enhance the effectiveness and productiveness of project management practices on overall performance of organizations. It is also recommended that the project management practices need to be systematically applied within a project cycle thoroughly from the stage of initiation till the project closure, in order to realize prominent benefits.

Another notable recommendation is that project management practices have remarkable influence and impact on organizational performance thus, more attention must be paid on adopting and organizing this important. Worth to emphasize that project scope management and cost management should be prioritized due to the greater impacts it could have on projects and consequently on organizational performance.

It is vital for an organization to put more efforts on having an effective communication system and flow of information along with greater plan for reducing risks and overall risk management while implementing projects. For better measurement of performances, more performance metrics have been developed recently by researchers, for instance, benefit to national infrastructure and benefit to end users must be included in the list while measuring performance.

Furthermore, projects don't have to necessarily be organization based solely. This way it could be more useful and productive to all of its stakeholders. Adopting a tactical method in order to engage in project management practices is highly recommended by conducting client satisfaction meetings, evaluation forms, surveys, analyzing turnaround time for pending issues as well as informally by observing, listening and discussing with relevant parties.

## **5.5 Future Research**

Research studies are conducted to solve a problem and find solutions for the issues we are facing. Thus, during conducting this study, certain areas have been recognized for potential studies in the future. This little study material is also available for evaluating the impacts of project management practices on the organizational performance of NGOs. Further studies in these areas would benefit project management in order to organize productive project plans to fit small and medium organizations with limited resources. Also, for further research studies, I highly recommend investigating the concepts of improving project management practices in the fields of business strategy, business integration, business plans, and business evaluations. Last but not least, more study is required to evaluate and examine the impacts of project management

practices on organizational performance in the NGOs of different sizes throughout all sectors in Afghanistan.

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## **APPENDICES**

### **APPENDIX A: Questionnaire**

**APPENDIX A: Questionnaire**

**“The Effect of Project Management on Organizational Performance – The Case of NGOs in Afghanistan”**

**QUESTIONNAIRE**

**SECTION- I**

***General Information***

***date:***

Responding Person’s Name: (	
Contact Number: ( optional)	
E-mail: ( optional)	
Name of NGO	
Location of NGO	
Which of the following best describes your role in projects	<input type="checkbox"/> Project Consultant <input type="checkbox"/> Project Leader <input type="checkbox"/> Project Team Member

**Guidelines:**

Please answer this questionnaire to gauge how well the project management practices are correlated with organizational performance of the NGOs. Given below are various statements which show the level of a company’s organizational performance. To respond these, you need to tick mark in the appropriate box (on a 5-point scale as given below) against each statement that best represents your view point.

**Scale:**

**1=Not Significant, 2=Slightly Significant, 3=Moderately Significant, 4=Very Significant, 5=Exceedingly Significant**

## SECTION - II

Sr.#	<b>Variable Tested: Project Scope Management Adopted from Chan and Tam (2000)</b>	1	2	3	4	5
1	Project authorization confirmed with higher authority					
2	Identifying project objectives, deliverables, constraints and principal work activities					
3	Establishing designated measurable project benefits and outcomes to enable quantified evaluation of project performance					
4	Developing scope management plans and implementing them to ensure clarity of understanding and ongoing management of project scope					
5	Managing the impact of scope change within established time, cost and quality constraints to meet project objectives					
6	Reviewing progress and the results recorded to assess the effectiveness of scope management procedures					
7	Ensuring scope management issues and recommended improvements are identified, documented and passed on to higher project authority for application in future projects					
<b>Variable Tested: Project Cost Management Adopted from Chan and Tam (2000)</b>						
8	Determining resource requirements for individual tasks to provide a basis for attributing expenditure					
9	Ensuring project costs are estimated to enable budgets to be developed and agreed cost management processes implemented at an appropriate level throughout the project life cycle					
10	Ensuring cost management plans are developed and implemented to ensure clarity of understanding and ongoing management of project finances					
11	Implementing agreed financial management procedures and processes to monitor actual expenditure and to control costs					
12	Selecting cost analysis methods and tools to identify cost variations, evaluate options and recommend actions to higher project authority					
13	Implementing agreed actions, monitoring and modifying them, to maintain financial and overall project objectives, throughout the project life cycle					
14	Conducting activities to signify financial completion					

15	Reviewing project outcomes to determine the effectiveness of cost management processes and procedures					
16	Ensuring cost management issues and recommended improvements are identified, documented and passed on to higher project authority for application in future projects					
<b>Variable Tested: Project Communication Management Adopted from Chan and Tam (2000)</b>						
17	Identifying Information requirements and ensure they are documented and analyzed as the basis of communications planning					
18	Implementing the designated project management information system, structure and procedures to ensure the quality, validity, timeliness and integrity of information and communication					
19	Managing the generation, gathering, storage, retrieval, analysis and dissemination of information by project staff and stakeholders within established systems and procedures to aid decision making processes throughout the project life cycle					
20	Ensuring designated information validation processes are monitored and controlled, and agreed modifications implemented to optimize quality and accuracy of data					
21	Implementing processes to promote continuous improvement of staff and overall project effectiveness					
22	Maintaining customer relationships within established guidelines to ensure clarity of understanding of objectives and to reduce conflict throughout the project life cycle					
23	Ensuring finalization activities are conducted to ascertain agreed ownership of and responsibility for information					
24	Ensuring project outcomes are reviewed to determine the effectiveness of management information and communications processes and procedures					
<b>Variable Tested: Project Risk Management Adopted from Chan and Tam (2000)</b>						
25	Identifying potential, perceived and actual risk events as the basis for risk management planning					
26	Using established risk management techniques and tools to analyses risk events, assess options and recommend preferred risk approaches					
27	Developing plans agreed with stakeholders and communicating to ensure clarity of understanding and					

	ongoing management of risk factors					
28	Ensuring the project is managed in accordance with established project and risk management plans					
29	Monitoring progress against project plans to identify variances and recommend responses to higher project authority for remedial action					
30	Ensuring agreed risk responses are implemented and plans modified to reflect changing project objectives in an environment of uncertainty					
31	Ensuring project outcomes are reviewed to determine effectiveness of risk management processes and procedures					
32	Ensuring risk issues and recommended improvements are identified and documented					
<b>Variable Tested: Organizational Performance Adopted from Ainin et al. (2015)</b>						
33	Project management practices reduce project delivery costs					
34	Project management practices brings higher degree of project successes					
35	Project management practices brings better understanding of project requirement leading to motivated staff					
36	Project management practices produce quality deliverables					
37	Project management practices provides customer advantage arising from meeting their expectations					

**Thank you so much for kind response!**

## **RESUME**

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### **Education:**

2001-2006 Jabali High School Herat- Afghnistan 12<sup>th</sup> grade

2009-2013 BBA( Bechelor of Business Administration) Kateb University  
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### **Work Experience:**

2006-2015 - Director of Khatamul Anbia Cultural & Service Organization  
(KACSO)-Afghanistan

2015-2017- Business Advisor Horasan Contruction and Industry LTD. Istanbul-  
Turkey

2018- – Senior Infrasturcture Expert 2<sup>nd</sup> Vice President of Afghanistan

### **Languages:**

-Dari: Native Language

-English: Advanced

-Turkish: Intermediate

### **Skills:**

-Communication, Teamwork, Problem Solving, Flexibility, Creativity, Knowledge of MDG, CEDAW National and International Documents, Mobilization and communication with community.

- Computer skills ( Microsoft Office,Graphics ) and others

-Word Processing/Spreadsheet/Database skills: Word, Excel, Access, Progress, Hardware and Website design.