

Influence of Monitoring and Evaluation on Project Success in Non-Governmental Organizations - Aden, Yemen: Staff Perspectives

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Abstract

Introduction:8 Effective project management depends on identifying project success critical factors. Monitoring and evaluation (M&E) is one of the critical success factors, which effectively contributes to project success. This study aimed to provide insights into the influence of M&E on projects success and to assess the M&E staff perspectives about the influence of M&E team strength, M&E approach and allocated budget as well as the three project success parameters (time, cost and quality).

Methods: A cross-sectional study was conducted from March to May 2024, targeting M&E officers, project officers, and project managers across 63 non-governmental organizations (NGOs) in Aden. A self-administered questionnaire with three sections was used for data collection: respondent characteristics, M&E variables (team strength, approach, budget), and project success parameters (time, cost, quality). A five-point Likert scale was employed to assess perspectives.

Results: Out of 100 eligible participants, 77 completed the questionnaires, giving a 77.0% response rate. The findings indicate a high level of agreement among respondents regarding the influence of M&E variables on project success. The M&E approach showed the highest mean score (3.7 ± 1.15), followed by M&E team strength (3.6 ± 1.13), and M&E budget allocation (3.5 ± 1.12). For project success parameters, project quality showed the highest mean agreement (3.7 ± 1.09), while project cost had the least (3.5 ± 1.09).

Conclusion: There is a high level of agreement of M&E related staff on the influence of M&E team strength, M&E approach used and M&E budget on project success among NGOs in Aden. Therefore, NGOs should continue developing their M&E systems, regularly practice M&E technical activities with clear action plans and utilize specific tools and methodologies to achieve project objectives.

Keywords: Monitoring and Evaluation, Project Success, NGOs, Aden.

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تأثير المتابعة والتقييم على نجاح المشاريع في المنظمات غير الحكومية في عدن-اليمن-من منظور موظفي المتابعة والتقييم

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ملخص الدراسة

المقدمة: يعتمد نجاح إدارة المشاريع بشكل فعال على تحديد عوامل النجاح الحاسم حيث تُعد أنشطة المتابعة والتقييم (M&E) من بين هذه العوامل الحاسمة التي تسهم بشكل كبير في نجاح المشاريع. تهدف هذه الدراسة إلى تقديم رؤية حول تأثير أنشطة المتابعة والتقييم على نجاح المشاريع، من خلال تقييم منظور موظفي المتابعة والتقييم بشأن قوة فريق المتابعة والتقييم، والأسلوب المستخدم، والميزانية المخصصة، بالإضافة إلى آرائهم حول ثلاثة معايير رئيسية لنجاح المشاريع: الوقت، التكلفة، والجودة.

المنهجية: أجريت دراسة مقطع عرضي في الفترة من مارس إلى مايو 2024 استهدفت موظفي المتابعة والتقييم، ومسؤولي المشاريع، ومديري المشاريع في 63 منظمة غير حكومية في مدينة عدن. تم جمع البيانات باستخدام استبيان ذاتي التعبئة مكون من ثلاثة أقسام: خصائص المشاركين، متغيرات المتابعة والتقييم (قوة الفريق، الأسلوب، الميزانية)، ومعايير نجاح المشاريع (الوقت، التكلفة، الجودة). وقد تم استخدام مقياس ليكرت الخماسي لتقييم وجهات النظر.

النتائج: من بين 100 مشارك، استجاب 77 مشاركًا للاستبيان، بنسبة استجابة بلغت 77.0%. أظهرت النتائج وجود مستوى عالٍ من الاتفاق بين المشاركين حول تأثير عناصر المتابعة والتقييم على نجاح المشاريع. حصل أسلوب المتابعة والتقييم على أعلى متوسط (3.7±1.15)، تلاه قوة فريق المتابعة والتقييم (3.6±1.13)، ثم الميزانية المخصصة (3.5±1.12). أما بالنسبة لمعايير نجاح المشاريع، فقد حصلت الجودة على أعلى متوسط اتفاق (3.7±1.09)، في حين حصلت التكلفة على أدنى متوسط (3.5±1.09).

الخلاصة: هناك اتفاق كبير بين موظفي المتابعة والتقييم على تأثير قوة فريق المتابعة والتقييم، والأسلوب المستخدم، والميزانية المخصصة على نجاح المشاريع في منظمات المجتمع المدني غير الحكومية في عدن. وبناءً عليه، ينبغي على هذه المنظمات تعزيز أنظمة المتابعة والتقييم الخاصة بها، وممارسة الأنشطة الفنية بشكل منتظم، ووضع خطط عمل واضحة، واستخدام أدوات ومنهجيات محددة لضمان تحقيق أهداف المشاريع.

الكلمات المفاحية: المتابعة والتقييم، نجاح المشروع، المنظمات غير الحكومية، عدن.

ضابط رقابة وتقييم، منظمة الصحة العالمية عدن

Introduction

Projects have been defined as a unique temporary endeavor undertaken to deliver a specific product or service [1] and identified as vehicles by which nations; particularly developing countries, promote their social and economic development [2]. They mainly contribute to reducing problems of poverty, poor health, and unemployment, which predominant in many developing countries. Project management involves the application of knowledge, skills, tools and techniques to project activities to meet project requirements [3]. This entails identifying the most critical and urgent needs, completing the project within time and budget. The accomplishment of project success requires undertaking several project management practices ranging from project initiation to project controlling and closing [2,4].

Non-governmental organizations (NGOs) are acknowledged as independent groups that were established for charitable and developmental reasons but are neither governmental nor intergovernmental. They are a portion of civic society [5]. NGOs, which can be international, national, or even local, are driven by people who share a passion for advancing the common good. Development aid is given to NGOs in developing countries with the intention of improving the living conditions of the population they are targeting [6] and supporting national efforts in crucial sectors including health, education, livelihoods, and other areas [7].

NGOs are not new to project planning, management and evaluation as they regularly look at their projects' efficiency and effectiveness. Since most NGOs are project-based, it is of critical importance to understand the various factors that determine project success or failure [8,9]. Efficient and effective project management depends on identifying key determinants of project success, that are usually termed as critical success factors [10], which can be grouped into project context, technical and behavioral dimensions [11].

Monitoring and evaluation (M&E) are among the technical factors that could explain the success of projects. There are no doubts that M&E is one of the critical success factors which effectively contributes to project success [12,13]. Evidently, project success depends on many factors both within and outside the control of the project team. One of the aspects within the control of the project team is M&E [14].

In Yemen, many NGOs have been carrying out M&E as a formality just because it is one of the requirements to get funds from donors and in others NGOs, M&E activities are considered as part of ordinary projects' activities, but it is not acknowledged as a valuable management tool with an allocated autonomy and resources to ensure management effectiveness [15].

Due to the limited published data on such issue, this study aims to provide insights into the influence of M&E on projects success and to assess the

M&E staff perspectives about the influence of M&E team strength, M&E approach and allocated budget on project success as well as the three project success parameters (time, cost and quality).

Methods

Study design and setting

An institution-based cross-sectional study was conducted during March to May 2024 at NGOs distributed in all districts of Aden city including national and international organizations.

Target population

The target population was all staff who are actively engaged directly or indirectly in the monitoring and evaluation process of the projects as a management function and tool within all NGOs in Aden city.

Sample size and sampling technique

The primary study unit in this study was the NGO and the eligible individual staff in each NGO was the respondent and the unit of analysis. All 63 working NGOs [16], both national and international in the city were targeted. Accordingly, by this universal sampling technique, the respondents were recruited from the eligible staff (those actively engaged directly or indirectly in the M&E process of the projects) in each of the 63 working NGOs during the period of data collection. The eligible staff were identified as M&E officer, project officer and project manager in each NGO. Based on the universal sampling technique, the researcher initiated the necessary professional contacts with all NGOs seeking their consent to administer the questionnaires to their respective staff

members. At the second stage, all eligible staff members from both national and international NGOs in Aden were recruited by using a convenient sampling technique. Then each member was approached, and the study aims and processes were explained to her/hem. After the consent to participate, the self-administered questionnaire was offered to each one of eligible staff to complete it.

Data collection

A pre-determined structured self-administered questionnaire of closed-ended questions with three sections was used to gather data from the respondents. The first section in the questionnaire consisted of 6 questions related to respondent characteristics, second section of 16 questions about M&E and this further subdivided into 6 questions related to M&E team strength, and 5 questions about M&E approach and 5 questions about M&E allocated budget. The third section was the project success of 13 questions covering the issues of time, cost and the project quality. A Likert scale with five options whose range is between strongly agree to strongly disagree was employed to assess the respondents' perspectives about the influence of M&E team strength, M&E approach and allocated budget on project success as well as their perspectives about the three project success parameters (time, cost and quality). Respondents' responses were assessed for each of the 29 (16 and 13). The overall mean of respondents' perspectives for each of the assessed three M&E variables and of the three project success parameters are categorized into four levels as the following:

Range of mean	Score level
1 - 1.8	Very Low
> 1.8 - 2.6	Low
> 2.6 - 3.4	Moderate
> 3.4 - 4.2	High
> 4.2 – 5	Very High

Statistical analysis

After data sorting and cleaning, it was processed and analyzed by using the IBM Statistical software SPSS (the Statistical Package for the Social Sciences) version 23. Descriptive data was expressed through frequency and percentages as well as mean and standard deviations. The study was presented in figures and tables.

Ethical consideration

The study was approved by the Research Ethics Committee of the Faculty of Medicine and Health Sciences, University of Aden. The questionnaires and informed consent were given to the respondents in all NGOs. Respondents were assured of utmost privacy and that all their information was kept strictly confidential.

Results**Response Rate**

Among the 63 allocated NGOs, from a total of 100 eligible staff received the questionnaire, 77 completed the questionnaires and their responses

were received. This gives an average response rate of 77.0%.

Respondents' characteristics

Based on data shown in the Table (1), more than two thirds of the respondents (68.8%) are affiliated with international NGOs, 51.9% were males, the mean age was 35.8 ± 4.48 years and the mean years of experience was 4.5 ± 2.1 years. The distribution of work roles among respondents reveals that M&E managers and project managers constitute 26.0% and 24.6% respectively, followed by project officers at 16.9% and M&E officers account for 16.5%.

According to the data presented in Table (1), the prevailing level of education among participants in the study is a bachelor's degree, with a majority percentage of 68.8%. The subsequent educational attainments reported by them include a master's degree (26.0%) and a diploma (5.2%).

Respondents' Perspective towards M&E and Project Success**M&E team strength**

In Table (2), all six items garnered more or less high level of agreement. This is supported by a mean value ranged from 3.5 to 3.7. The aggregate data for M&E team strength, encompassing all relevant components, exhibits a mean value of 3.6 ± 1.13 .

Table 1: Respondents' Characteristics in the NGOs in Aden (n=77)

Respondents' characteristics	No.	%
Type of NGOs		
International	53	68.8
National	24	31.2
Age (years)	Mean $\pm$ SD (35.8 $\pm$ 4.48) years	
Sex		
Male	40	51.9
Female	37	48.1
Position		
Project officer	13	16.9
Project manager	19	24.6
M&E officer	15	16.5
M&E manager	20	26.0
Others	10	13.0
Work Experience (years)	Mean $\pm$ SD (4.5 $\pm$ 2.07) years	
Educational qualification		
Diploma	4	5.2
Bachelor	53	68.8
Master	20	26.0

Table 2: Respondents' Agreement to the Items of M&E Team Strength Influence (n=77)

Item	No.	%	Mean	SD
Our monitoring and evaluation M&E team has helped significantly to improve our project success	61	79.2	3.7	1.15
A strong M&E team with sufficient staff is key to achieving project success in our organization.	59	76.6	3.7	1.13
We have qualified Monitoring and Evaluation (M&E) staff members with relevant education and training contributing to better project monitoring, control and evaluation.	59	76.6	3.6	1.13
We plan well for M&E activities which has resulted in timely monitoring	58	75.3	3.7	1.16
We use management information system (MIS) for data entry, analysis, reporting and storage improving decision making concerning projects	57	74.0	3.6	1.16
We regularly have project M&E capacity building seminars, workshops and meetings improving project team skills and capabilities	53	68.8	3.5	1.04
Mean score of M&E team strength			3.6	1.13

M&E approach

Generally, Table (3) reveals that all five items of M&E approach had higher means than those reported about M&E team strength. Item 4 (at our organization, we use both quantitative and qualitative data to track project progress which has

helped improve on project success rate.) has the highest level of agreement (Mean $\pm$ SD= 3.8 $\pm$ 1.10). The overall mean for M&E approach is 3.7 $\pm$ 1.15. This indicates that the overall level of agreement for the M&E approach is little bet better.

Table 3: Respondents' Agreement to the Items of M&E Approach Influence (n=77)

Item	No.	%	Mean	SD
At our organization, we use a logical framework, results-based framework and or any other M&E framework to guide implementation, track progress and evaluate project success	63	81.8	3.7	1.24
At our organization, we develop project indicators before commencing the implementation of projects.	61	79.2	3.7	1.19
At our organization, we use both quantitative and qualitative data to track project progress, which has helped improve on project success rate.	60	77.9	3.8	1.10
At our organization, project interventions and activities are driven by data demand and information use	56	72.7	3.7	1.03
We appropriately choose monitoring and evaluation (M&E) approaches, tools and methods helping to significantly improve our project success rate	56	72.7	3.7	1.18
Mean score of M&E approach			3.7	1.15

M&E budget allocation

Based on Table (4), it is clear that the items of budget allocation had a lower mean than those reported about M&E team strength and approach. The item 2 (our organization always engages in M&E) teams while planning and budgeting for projects) has the highest level of agreement (3.6±1.14)

and the item 5 (we always allocate 5% to 10% of the total project budget to M&E activities has the lowest level of agreement (3.4±1.03). The overall mean for M&E budget allocation is 3.5±1.12.

Table 4: Respondents' Agreement to the Items of M&E Budget Allocation Influence (n=77)

Item	No.	%	Mean	SD
Our organization allocates budget for monitoring and evaluation (M&E) during project planning for all projects	53	68.9	3.6	1.14
Our organization always engages monitoring and evaluation (M&E) teams while planning and budgeting for projects	53	68.9	3.6	1.14
We are always guided by planned monitoring and evaluation (M&E) activities while allocating budget for M&E	52	67.6	3.6	1.10
We always allocate sufficient financial resources which ensures quality monitoring and evaluation (M&E) of projects in our organization	49	63.7	3.5	1.17
We always allocate 5% to 10% of the total project budget to Monitoring and evaluation (M&E) activities	48	62.3	3.4	1.03
Mean score of M&E budget allocation			3.5	1.12

The study showed that there was a high level of agreement (mean ranged from 3.5 to 3.7) with the three M&E variables used to measure the influence on project success. Among these three variables, the variable

with the highest mean score (3.7±1.15) being the M&E approach, closely followed in the second rank was M&E team strength with a mean score of 3.6±1.13 and M&E budget allocation had the least mean score of 3.5±1.12 as shown in Table (5) below.

Table 5: Summary of Mean Scores of M&E Team Strength, Approach and Allocated Budget (n=77)

Independent Variable	Mean Score	SD
M&E Approach	3.7	1.15
Strength of M&E Team	3.6	1.13
M&E Budget Allocation	3.5	1.12

Project Success

Project success was assessed regarding the time and cost of the project performance as well as project quality.

Project Time

Table (6), shows that item 2 (we improved project delivery time as a result of appropriate M&E approaches, methods and tools)

garnered the highest level of agreement (3.7 ± 1.06). Conversely, item 3 (We completed projects on schedule because we have sufficient budget allocated for M&E) garnered the least amount of agreement (3.4 ± 1.18). The aggregated data for all items of project performance time had a mean value of 3.6 ± 1.10 .

Table 6: Responses of Respondents' Agreement to the Items of Project Time (n=77)

Item	No.	%	Mean	SD
We completed projects on schedule because we had the support of the monitoring and evaluation team(s)	55	71.4	3.57	1.151
We improved project delivery time as a result of appropriate monitoring and evaluation approaches, methods and tools	58	75.3	3.72	1.059
We completed projects on schedule because we have sufficient budget allocated for monitoring and evaluation	50	64.9	3.44	1.175
We completed key project milestones and activities as per planned dates as guided by monitoring and evaluation	55	71.4	3.66	1.008
Mean score of project time			3.60	1.10

Project Cost

Generally, Table (7) reveals that all three items of project cost had also high level of agreement with mean

ranged from 3.5 to 3.6 and the overall mean is 3.5 ± 1.09 .

Table 7: Responses of Respondents' Agreement to the Items of Project Cost (n=77)

Item	No.	%	Mean	SD
At our organization, we implemented projects within originally planned cost (budget) because we had the support of monitoring and evaluation (M&E) teams	53	68.8	3.5	1.03
We implemented projects activities within planned budget/cost guided by appropriate monitoring and evaluation (M&E) approaches, methods and tools	53	68.8	3.6	1.08
At our organization, we implemented projects without budget overruns since we had allocated sufficient funds for monitoring and evaluation (M&E) activities	52	67.5	3.5	1.14
Mean score of project cost			3.5	1.09

Project Quality

Table (8) shows that the six items of project success in light of quality had a satisfactory result with the mean

ranged between 3.6 and 3.7 reflecting the high degree of respondents' agreement and the overall mean for project quality is 3.7 ± 1.09 .

Table 8: Responses of Respondents' Agreement to the Items of Project Quality (n=77)

Item	No.	%	Mean	SD
All the projects we implemented met set quality standards	60	77.9	3.7	1.05
We met donor contractual requirements because we had monitoring and evaluation team supporting the projects	59	76.6	3.7	1.12
We made informed and right project decisions due to use of appropriate monitoring and evaluation (M&E) approaches, methods and tools	59	76.6	3.7	1.05
We delivered projects meeting needs of beneficiaries	58	75.3	3.7	1.11
We achieved project goals and objectives which was attributed monitoring and evaluation team(s)	58	75.3	3.7	1.06
We delivered sustainable projects as we had incorporated monitoring and evaluation during implementation	58	75.3	3.6	1.09
Mean score of project quality			3.7	1.09

Discussion

Successful completion of projects is an essential goal for all project-based organizations. Most organizations, however, struggle with the internal and external processes and face demands for continuous improvement in project implementation in order to achieve the main objectives of their respective clients [17].

The present study aimed to assess the M&E staff perspectives about the influence of M&E team strength, M&E approach and allocated budget on project success as well as their perspectives about the three project success parameters (time, cost and quality).

The Strength of M&E Team and Project Success

The overall mean for M&E Team Strength in this study is 3.6 ± 1.13 . Although it is lower than the overall mean 3.9 ± 0.59 that found by Mahyoub (2023) in Yemen [15], both studies indicate high overall level of

agreement for the influence of M&E team capacity on project performance and success.

The high percentages of respondents in this study (ranged from 68.8% to 79.2%) are agreed that strong M&E team, with adequate staffing, was a crucial factor for project success. Additionally, factors such as providing relevant training for M&E staff, regular capacity-building initiatives, utilizing MIS for data management, and planning M&E activities in advance were also found to be important. This suggests that the greater the strength of the M&E team in terms of size, skills, and resources, the higher the chance of achieving improved project success. Our findings agreed with Watkins (2004) who had indicated that strengthened M&E teams were able to come up with innovative strategies to achieve project success [18] and aligned with Mbithi (2020) findings who demonstrated that the strength of the M&E team has a statistically significant influence on project success [19].

The M&E Approach and Project Success

The overall mean for M&E approach in our and Mahyoub (2023) study [15] is 3.7 ± 4.01 respectively, which reflect high overall level of agreement for the influence of M&E approach in project performance and success.

The present study found that high percentages of respondents (79.2%) agreed that organizations should develop indicators before starting project implementation and 81.8% agreed that their organizations using M&E frameworks, which are crucial tools for planning and tracking progress when applied properly. This finding is also noted in the study of Wachaiyu (2015) in Starehe Sub-County Kenya that found a positive and significant relationship between the selection of tools and success of the project [20]. Similarly, Muchelule (2018) study examining the influence of monitoring practices on the performance of state corporations in Kenya, found that M&E tools and techniques have significant role [21].

The Budgetary Allocation for M&E and Project Success

The overall mean level of respondents' agreement for the influence of M&E budget allocation was lower in this study (3.5 ± 1.12) and in Mahyoub 2023 (3.6 ± 0.62) study [15] than the overall mean of M&E team strength (3.6 ± 1.13) and of M&E approach (3.7 ± 1.15).

This study found that the respondents in most of surveyed organizations preferred to allocate financial resources for M&E during the planning stage of their projects. Additionally, the majority of organizations involved M&E staff early in the planning process, which helped guide the project team in

refining frameworks and selecting the most appropriate M&E approach. However, despite many organizations allocating finances for M&E, only a few allocated the recommended 5% to 10% of the total project budget, as suggested by the International Federation of Red Cross and Red Crescent Societies in 2001 [22].

The findings of this study align with those of Marangu (2012) [23] and Gyorkos (2003) [24], who emphasized that adequate financial resources should be integrated into the overall project budget and appropriately allocated to ensure the quality of M&E activities. Sufficient budget allocation is essential for strengthening and sustaining high-quality M&E systems, as noted by the United Nations Programme on HIV/AIDS (UNAIDS) [25]. It enables the facilitation of M&E activities, including meetings, stationery, data entry, and infrastructure acquisition. Therefore, it is logical to link adequate budget allocation with the effective application of M&E approaches and the presence of a strong M&E team, as these factors collectively contribute to improved project success for NGOs.

Project Success Parameters

Respondents' perspectives about the three project success parameters (time, cost and quality) were assessed through their responses for 13 questions. According to the data presented in this study, it is evident that items of project quality garnered the highest level of agreement. This is supported by an overall mean value of 3.7 ± 1.09 . Conversely, the items of project cost garnered the least amount of agreement with an overall mean value of 3.5 ± 1.09 . Similarly,

Mahyoub 2023 study [15] reveals that item of project quality, garnered the highest level of agreement with a mean value of 4.0 ± 0.72 but item of project time (schedule) garnered the least amount of agreement with a mean value of 3.9 ± 0.87 .

Conclusion

There is a high level of agreement (agree and strongly agree) of M&E related staff on the influence of M&E team strength, M&E approach used and M&E budget on project success among NGOs in Aden, Yemen. Therefore, NGOs should continue developing their M&E system and should practice M&E technical activities in regular basis, with clear action plans, using specific tools and methodologies, which helps the project achieve its objective.

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