

# Challenging Factors Facing Monitoring and Evaluation in the World Bank Education Projects-Yemen

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## Abstract:

This study focuses on the challenging factors facing Monitoring and Evaluation in the World Bank Education Projects in Yemen. A closed-ended questionnaire consisting of (73) items (Challenges) was designed as a tool for collecting data for this research. Its validity and reliability were determined following the appropriate procedures. A purposive sample was selected consisting of (80) individuals involved in projects implementation and Monitoring and Evaluation processes. The data collected were analyzed utilizing SPSS and using the appropriate statistical methods. The results indicate that respondents tend to agree to about half of the items as representing challenges facing M&E in education projects and somewhat agree to the other half as representing challenges facing M&E in their projects. The results also show that challenges relating to “Technical capacity to implement M&E” represents the highest on the list of challenges and could be considered as the 1st challenging factor, followed by the challenges relating to “Stakeholders participation in project M&E”. While the challenges concerned with “M&E contribution to project’s success” come in the 3rd place representing the 3rd challenging factor, challenges relating to “Monitoring and Evaluation System” come

in the 4th place. In the 5th place come the challenges relating to “Project management support and response to M&E results” and least challenges facing M&E in the World Bank Education projects in Yemen were those challenges relating to “Reporting requirements by donors (W.B) as it occupied the 6th and the last place. In general, the results indicated that all kinds of challenges were important except the challenges associated with “Reporting requirements by donors (W.B)” which were considered to be challenges of medium importance facing M&E in the World Bank projects in Yemen.

## INTRODUCTION

The Republic of Yemen is one of the poorest and least developed countries in the world. According to the UNDP’s Human Development Report 2013, Yemen ranks 160 of 172 countries and an estimated 50 percent of the people are poor. In 2012, the U.N. Office for the Coordination of Humanitarian Affairs estimated that half of the population lives in extreme poverty (Bertelsmann Stiftung, BTI, 2014).

Health indicators in Yemen are on the low side by the Middle East and North Africa Region (MENA) and Sub-Saharan Africa standards (The World Bank (W.B), 2013). High rates of dropout particularly among females in primary education is observed and low quality at the primary and secondary education levels. The higher education sector is expanding, but its quality and relevance lingers at low levels (The World Bank, 2010).

Several donors support Yemen’s development in various fields. The World Bank is one of the largest donors supporting development efforts in Yemen not only in terms of the amount of lending it provides, but also in administering and managing some of the other donors’ funds (The World Bank Information Center (BIC), 2013).

It can be said that the World Bank is a key influencer of the development process in Yemen, currently funding 36 active projects in Education (Basic and Higher Education), Health care, infrastructural development (Roads, Ports), Electricity, Water, and Institutional support and Capacity building. These projects are currently in the implementation phase costing in total US\$

(1.687.320.000) in which the World Bank's contribution amounting to US\$ (1.016.840.000). (BIC, <http://www.bankinformationcenter.org>, 2015)

Although the funds that were provided to Yemen have been supporting projects that have been designed to respond to the development challenges, the country has not been able to absorb all the money that the Bank has given it and the World Bank is considering canceling unsuccessful projects where it was pointed out in a study prepared by the BIC (2013) that the Bank plans to re-evaluate and restructure its existing portfolio in the country keeping the "good" projects and canceling others that were not seeing success (BIC, 2013).

Project management has the task of establishing sufficient controls over a project to ensure that it stays on track towards the achievement of its objectives. This is done by monitoring (internal), which is the systematic and continuous collection, analysis and use of information for management control and decision-making. Project monitoring is an integral part of day-to-day management. It provides information by which management can identify and solve implementation problems, and assess progress.

Although, project success is achieved as a result of various contributing factors, one of the major factors leading to project success is monitoring and evaluation. There seems to be a consensus by various scholars that monitoring and evaluation is one of the contributing factors to project success. In a study by Kamau, and Bin Mohamed, (2015), it was concluded that a number of projects that fail were as a result of weak monitoring and evaluation function which was partly contributed by lack of management support (Kamau, & Bin Mohamed, 2015).

Monitoring is defined by the World Bank (2007) as a "continuing function that aims primarily to provide the management and main stakeholders of an ongoing intervention with early indications of progress, or lack thereof, in the achievement of results". (World Bank, 2007, para. 2) Further the United Nations Development Program (UNDP) (2002) defines Monitoring as "a continuous assessment aiming at providing all stakeholders, with early detailed information on the progress or delay of the ongoing assessed

activity” (UNDP, 2002, p.6). The Organization for Economic Co-operation and Development (OECD) (2010) defines monitoring and evaluation as a “continuous function that uses the systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds” (OECD, 2010, p. 27).

According to the World Bank, regular collection of information through continuous monitoring assist project managers in making timely decisions, guarantee accountability, and provide the basis for evaluation and learning. The purpose of carrying out monitoring is to enhance accountability by management on the resources employed and the results achieved and to make informed decisions on the project.

World Bank (2007) defined evaluation as “the systematic and objective assessment of an ongoing or completed project and its design, implementation and results” ( World Bank, 2007, para. 5). The aim of evaluation is to determine the relevance and fulfillment of objectives, project efficiency, effectiveness, impact, and sustainability. According to the World Bank, an effective evaluation should provide information that is plausible and helpful, enabling the integration of lessons learned into the decision making process of both project management and donors. Evaluation is also described by UNDP (2002) as “a systematic and objective examination concerning the relevance, effectiveness, efficiency and impact of activities in the light of specified objectives” (UNDP, 2002, p.6).

Evaluation is described as a rigorous and independent assessment of either completed or ongoing activities to determine the extent to which they are achieving stated objectives and contributing to decision making. (UNDP, 2009).

A good evaluation process helps the project managers to draw conclusions about relevance, value, competence, impact and sustainability of a project and is carried out at various stages of project implementation.

## Research Problem

It can be noticed that huge amount of funds are provided by the World Bank either in the form of grants or loans to projects that can play a big role in the development in the country. However, it was pointed out by BIC that Yemen has not been able to absorb all the money that the Bank has provided and that certain projects have had more success than others with respect to implementation and results. Consequently, the Bank plans to re-evaluate and restructure its existing portfolio in the country keeping the “good” projects and canceling others that were not seeing success (BIC, 2013).

Needless to say that Education projects are of utmost importance in the development process since education can serve as a powerful instrument in the human and societal development. The current education projects contribute very much in assisting the Government of Yemen in improving student learning and equitable access to basic education and in creating the enabling conditions for the enhancement of the quality of specific university programs and graduate employability in government universities. As well as assisting and supporting the Ministry of Education (MoE) in providing equal opportunities for males and females, in the urban and rural areas by means of building new schools to serve well the students, repairing and improving educational facilities, improving educational environment to become motivating and supporting to the students' growth and encouraging for enrolment and stability in the school, adding classrooms and service buildings for existing facilities to mitigate denseness and furnish and equip educational buildings that enable better performance and more stability for the educational process.

Success in the implementation of education projects and the attainment of their objectives for which the funds were allocated are vital in promoting development and improving the welfare and wellbeing of the Yemeni people. However, proper projects management that pays adequate attention to the implementation of projects is crucial to utilize the resources provided by the World Bank and to ensure success of the projects. One of the most crucial management tools is Monitoring and Evaluation, and whose effectiveness

contributes enormously to projects success (Kusek, et al. (2004). As a management tool, effective Monitoring and Evaluation is needed to determine whether the resources provided by the World Bank are being used efficiently and effectively, whether the projects are within schedule and to determine any problems that may be hindering the successful implementation.

Since M&E during implementation leads to projects success, researchers in another countries have paid a lot of attention to determinants of effective projects M&E (Otieno,2014), (Wanjiru,2013), others have explored the factors affecting the effectiveness of M&E (Mwangi, etal, 2015), (Mutua, 2015), and some researchers have focused on issues and challenges in projects M&E (Justine, 2015), (Mark, 2007).

Although proper M&E leads to project success, there are still projects not seeing success in Yemen according to the World Bank Information Center (BIC, 2013) despite the presence of M&E activities. This raises the question as to whether the M&E employed is effective enough to achieve projects success. Therefore, to enhance the effectiveness of World Bank education projects M&E practices and to promote projects success there is a need for an exploration of the challenging factors facing M&E in World Bank education projects in Yemen, especially in the absence of scientific studies on the M&E of World Bank projects in general and education projects in particular.

In light of the above background, the problem of the current study can be stated by the following question:

What are the challenging factors facing Monitoring and Evaluation in the World Bank education projects in Yemen.

### **Significance of the Study**

1. This study will provide the World Bank, projects management, with information that could assist them in understanding the challenges that make it difficult to use M&E effectively as a powerful management tool to improve projects performance and hence help them find ways of addressing or tackling those challenges to improve M&E and make it more effective to achieve projects success.

2. The findings of this study could also be provided to projects implementing entities to improve the M&E of their projects and consequently improve the performance of the projects and their accountability to the stakeholders in terms of resource use and impact of the projects they implement.
3. It will be a source for researchers and a reference material that could be used by them and would provide a foundation of empirical knowledge on the basis of which it would be possible to generate areas for further research in the field of M&E in particular and project management in general.

### **Objectives of the Study**

This study aims at achieving the following objectives:

1. To find out the challenges facing Monitoring and Evaluation in the World Bank education projects in Yemen.
2. To determine the challenging factors that affect the effective use of monitoring and evaluation in the World Bank education projects in Yemen.

### **Research Questions**

Based on the problem statement, the research questions are set forward to further guide research. The main research question the current study sought to answer can be stated as follows:

What are the challenging factors facing the Monitoring and Evaluation in the World Bank projects in Yemen?

From the above main question the following sub questions can be stated:

1. What are the challenges related to “Monitoring and Evaluation System”?
2. What are the challenges related to “Stakeholders participation in project M&E”?
3. What are the challenges related to “technical capacity to implement M&E”?
4. What are the challenges related to “reporting requirements by donors (W.B)”?



5. What are the challenges related to “Project managementsupportfor M&E and responding to its findings”
6. What are the challenges related to “M&E contribution to project’s success”

### **Delimitations of the Study**

The research is limited to studying the challenges facing monitoring and evaluation in the World Bank education projects implemented in Yemen.

### **Definitions of Terms**

The key terms used in the study are defined within the context of the research in this study as follows:

#### **Challenges**

The word “Challenge” is defined by the Cambridge English Dictionary as (difficult job), (The situation of being faced with) that needs great mental or physical effort in order to be done successfully and then test person’s ability. (Cambridge English Dictionary, 2015): <http://dictionary.cambridge.org>

For the purpose of this study challenges are defined as any difficulty, obstacle, and constraint facing M&E and making it ineffective.

#### **Factors**

The word “Factor” is defined by the Cambridge English Dictionary as a (circumstance, fact, or influence) that contributes to a result or outcome.

For the purpose of this study challenging factors will be defined as any circumstance, fact, or an influence that involves difficulties, obstacles, or constraints contributing to M&E ineffectiveness of the World Bank funded projects implemented in Yemen.

#### **Monitoring**

Monitoring is the routine continuous collection and analysis of information to track project implementation progress against set plans with the aim of providing the project management and main stakeholders with early indications of progress, or lack thereof, in the achievement of results and to assist project management in taking any corrective actions, making timely decisions, guarantee accountability, and provide the basis for evaluation and learning.



## Evaluation

Evaluation is “the systematic and objective assessment of an ongoing or completed project, its design, implementation and results” to determine the relevance and fulfillment of objectives, development efficiency, effectiveness, impact, and sustainability (World Bank, 2007). Evaluation is not a continuous activity as the case with monitoring; it is usually carried out midterm and at end of the project.

## World Bank

The term "World Bank" refers only to the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA). The term "World Bank Group" incorporates five closely associated entities that work collaboratively toward poverty reduction: the World Bank (IBRD and IDA), and three other agencies, the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA), and the International Centre for Settlement of Investment Disputes (ICSID) (The World Bank Group (<http://web.worldbank.org>)).

## Project

Project in the context of this research is defined as a temporary endeavor to achieve an objective Project Management Institute (Project Management Institute (PMI), 2004). Temporary means the project has a time frame within which it should have achieved its set objective within a fixed budget, usually funded by the W.B.

## Education Projects

Education Projects in the context of this research is defined as temporary endeavors to achieve certain objectives relating to public basic education and higher education in Yemen. Temporary means the projects have time frames within which they should have achieved their set objectives within fixed budgets, usually funded by the W.B.

## Previous Studies

There are a number of studies which seem to be related to the current study. This section is dedicated to summarizing and briefly discussing these studies.

**1. Mark (2007)**, in his study, entitled “Monitoring and Evaluation Practices and Challenges of Gaborone Based Local NGOs Implementing HIV/Aids Projects in Botswana” sought to investigate the ‘M&E practices of the NGOs and compared them with the best practices. It also sought to identify the challenges the NGOs faced in carrying out M&E. A questionnaire was administered to project managers and M&E officials of the NGOs. The results of the study show that the M&E practices of the local NGOs fell short of the best practices. Planning for M&E was inadequately done and inconsistently by respondents. Implementing the monitoring and evaluation process was not effectively done by the respondents. The study also identified quite a number of challenges the NGOs faced in carrying out M&E of the projects. The most significant ones included; inadequate finances, lack of expertise, stringent and multi-donor reporting requirements, lack of baseline data.

**2. Mugambi (2013)** carried out a study entitled “Determinants of Effective Monitoring and Evaluation of Strategy Implementation of Community Based Projects”. The study aimed at determining factors affecting monitoring and evaluation of community based projects. Desk research was used in carrying out this study. The findings indicate that M&E of community based projects is affected by factors such as; lack of and understanding of the importance of monitoring and evaluation, poor skills on results-based monitoring and evaluation, the purposes of evaluation, the actual M&E process and objectives of monitoring and evaluation. Field visits and budgeting also determine the effectiveness of M&E. Communicating M&E results can also affect the effectiveness of M&E.

**3. Wanjiru (2013)** conducted a study entitled “Determinants of Effective Monitoring and Evaluation Systems in Non-Governmental Organizations within Nairobi County, Kenya” which looked at the determinants influencing the effectiveness of M&E systems in NGO’s within Nairobi County, Kenya. A questionnaire was administered to the project managers or the M&E staff from each NGO through a stratified random sample from 200 NGOs. The findings indicated that there are difficulties in the application of the M&E systems, which was mainly attributed to the tools and techniques used. The

role of management in the operations of the M&E system also affects the effectiveness of the M&E system. Training in the M&E systems contributed to the effectiveness of the M&E system as well as to the competence of the staff. The M&E training was also found to be an important contributor towards induction of local M&E experts in addition to increasing the quality and quantity of the M&E human resource. The technical expertise of the team even though termed as one of the least factor contributing to difficulties in using M&E systems, it determines the echelon of success of the M&E system. The respondents advocated for M&E training as the best approach to improve effectiveness in M&E system.

**4. Karani et al (2014)** conducted a study entitled “Effective use of Monitoring and Evaluation Systems in Managing HIV/AIDS Related Projects: A case study of local NGOS in Kenya” have sought to determine how effectively the HIV/AIDS projects implemented by NGOs in Kenya are monitored and evaluated as laid down by the current National HIV/AIDS M&E Framework found in the Kenya National AIDS Strategic Plan 2009-10/13/2012 (KNASP III). The research considered several factors that affect the effective use of M&E by project managers in NGOs with HIV/AIDS projects in Kenya. These include lack of commitment by the project managers, incompetency on the use of the Monitoring and Evaluation systems by project managers, stringent donor requirements and capacity constraints of the NGOs. The study showed that M&E plan has been a success with stakeholders being involved in the planning. The Project M&E process implementation has helped in ensuring that the funds are properly used and the staff has adequate training to enable them tackle health issues. These have helped reduce the challenges being faced by these projects.

**5. Otieno (2014)** also conducted a case study on the “Determinants of Effective Monitoring and Evaluation Systems in the National Youth Service Empowerment Projects (Nairobi region)”, aimed at finding out factors influencing effective M&E of the National Youth Service empowerment projects. Data were collected using questionnaire which was administered to managers and supervisors. The data were analyzed using descriptive and

inferential statistics. The main findings of the study show that M&E practices of the NYS fell short of the best practices. Planning of the monitoring and evaluation was adequately and consistently done by the respondents. The study also identified quite a number of the challenges the NYS faced in carrying out monitoring and evaluation of the youth empowerment projects. These challenges made it hard for the NYS to effectively monitor and evaluate the projects they implement. The most significant challenges include inadequate funds, lack of expertise, and lack of baseline data.

**6. Kariuki (2014)** in his paper entitled “An Exploration of the Guiding Principles, Importance and Challenges of Monitoring and Evaluation of Community Development Projects and Programs” has analysed the purposes and steps in monitoring of community development projects/programs. Using desk review and his wide experiences in M&E of community development projects, the writer analyses the importance and challenges of monitoring and evaluating development projects. Various approaches, principles, techniques, purposes and importance of project/program monitoring and evaluation are discussed. The paper concludes that M&E is part of ensuring project accountability and ensuring projects meet the intended purpose. However M&E neither present the total picture of effectiveness of development projects nor is it a panacea for the challenges facing development projects. Given that M&E has become one of the most important topics in community development studies and in program planning and project management, this paper provides an important implications in community development theory and practice.

**7. Mwangi et al (2015)** carried out a study entitled “Factors Affecting the Effectiveness of Monitoring and Evaluation of Constituency Development Fund Projects In Kenya: A Case of Laikipia West Constituency” which sought to establish the factors affecting M&E on the (CDF) projects with reference to technical capacity, political influence, stakeholders’ participation, and budgetary allocation of CDF projects in Kenya. Data was collected from a stratified random sample using questionnaires. Descriptive and inferential statistics were used. Mean, standard deviation, correlation, ANOVA and

Multiple regression analysis was used to determine the effectiveness of Monitoring and evaluation for CDF projects. The model was able to explain 85.6% of the variances in Effectiveness in Monitoring and evaluation thus it's a significant tool on CDF projects at 5%. This implies that the monitoring and evaluation will be ineffective if there was no technical persons involved, no stakeholder participation and no budgetary allocation for capacity building and monitoring and evaluation activities.

**8. Mutua (2015)** in his study entitled "Factors Affecting the Effectiveness of Monitoring and Evaluation of Constituency Development Fund Projects in Changamwe Constituency, Kenya". The research had five guiding objectives. These were to determine the influence of level of training, budgetary allocation, stakeholder participation, politics and institutional framework on effective M&E of CDF projects. A descriptive survey research using questionnaire design was used to collect data from purposively targeted 31 respondents. Data were analyzed using descriptive statistics. The results showed that there were several factors affecting effective M&E of Constituencies Development Fund. These included lack of training of those tasked with M&E activities, other factors included not incorporating monitoring and evaluation budget into project budgets, limited involvement or primary stakeholders and political interference.

**9. Kamau et al. (2015)**, in their study entitled "Efficacy of Monitoring and Evaluation Function in Achieving Project Success in Kenya: A Survey of County Government's Projects", have examined the efficiency of M&E function and its effect in achieving project success. This was done by assessing whether various attributes M&E such as; strength of monitoring, monitoring approach adopted, political influence and project lifecycle stage affects project success. Each of these attributes was regressed against the project success. The study found out that all the M&E attributes assessed had some impact in achieving the Project success. This study concluded that a number of projects that fail were as a result of weak M&E function which was partly contributed by lack of management support. The study established that projects may be unsuccessful despite having M&E function due to the

weakness of M&E, lack of management support on the project functions, and political interference especially in Africa and developing countries.

## Discussion

From the previous studies presented above it can be concluded that most of the previous studies tended to agree to a large extent on the objectives of the focused on. They aimed at determining factors affecting M&E of the projects studied. Only two studies focused on various aspects related to M&E: “M&E Practices and Challenges” (Mark, 2007), “Guiding Principles, Importance and Challenges of M&E” (Kariuki, 2014), but they tended to share a common objective i.e. identifying the challenges faced in carrying out M&E. The remaining two studies assessed the effectiveness of monitoring and evaluating projects (Karani et al, 2014). Or assessed whether various attributes affect project success (Kamau et. al, 2015).

The current study tends to differ to a large extent from the above studies in terms of objective and the type of projects subjected to the investigation. It is totally focusing on the challenging factors facing M&E in the World Bank Education Projects in a different context with a broad view to the challenging factors (any circumstance, fact, or an influence that involves difficulties, obstacles, or constraints contributing to M&E ineffectiveness of the World Bank funded projects implemented in Yemen) in relation to wider aspects than those dealt with in the studies reviewed.

The research methodology employed by the majority of previous studies was descriptive survey research method using structured questionnaires as data collecting instruments.

Most of the previous studies that used surveys with questionnaires as the research tools used purposive sampling methods in selecting respondents or participants (Mark, 2007), (Karani et al, 2014), Otieno (2014), (Mwangi et al, 2015), or they used stratified sampling method (Wanjiru, 2013).

Most of the previous studies that used questionnaires as data gathering instruments the researchers analyzed the data using descriptive statistics such as Percentages, Means, Mode, Median, Standard Deviations and correlations.

However, some of them used a combination of both descriptive and inferential statistics such as Regression Analysis and Analysis of Variance (ANOVA).

Generally speaking the previous studies represented a general framework that directed and helped the researchers in determining the position of this study among those studies. Specifically, previous studies have benefited the researchers in different aspects: they provided the researchers with an insight that helped in deciding on the suitable research instrument for this study, helped in identifying and determining the dimensions adopted for the research instrument and helped in its design. The results of previous studies helped the researchers in analyzing the data and discussing the results of the current study.

### Research Methodology

The research method that was used is descriptive survey method through which information concerning the current status of the phenomena was obtained (Gliner, etal, 2009), because it is an appropriate for collecting data from a large population besides the structured questionnaire was used as a research instrument for data collection.

### Study Population

The target population of the study includes four World Bank Education Projects in Yemen as shown in the following table (1)

Table (1) target population of the study

Name of the Project	No. of projects employees
Second Basic Education Development Project ((BEDP	42
Higher Education Quality Improvement Project ((HEQIP	55
(Public Works Project (PWP	90
(Social Fund for Development (SFD	300
Total Sample	487

Source: Projects

However, it was not possible to include the four Education projects, where



Social Fund Project for Development (SFD) was excluded from participation in the survey due to lack of cooperation with the researcher. Therefore, the individuals involved in the implementation in the three projects (Second Basic Education Development Project (BEDP), Higher Education Quality Improvement Project (HEQIP) and Public Works Project (PWP)) formed the accessible population from which the sample was selected.

### Study Sample

Having had three Education Projects with a total of (187) employees, a purposive sample from each project was selected including those individuals who could provide the information needed to answer the research questions. The purposive sample consisted of (80) individuals involved in projects implementation and being involved in M&E processes in one way or another. The numbers of the purposive samples selected from each project are shown in table (2).

Table (2) size of the purposive study sample

Name of the Project	Number of participants
Second Basic Education Development Project	25
Higher Education Quality Improvement Project	25
Public Works Project	30
Total Sample	80

### Study Instrument

The closed-ended questionnaire was used because structured or closed-ended questions are convenient easy and take less time to answer since a list of alternatives that include all the possible responses are available to the respondents from which they select options that best describe or reflect their feelings, opinions, attitudes, or situation. The structured questions also facilitate data analysis (Gay, L.R., 1996). The design of the questionnaire went through the following steps:

Step 1 Reviewing the available literature and previous studies for the purpose of identifying the questionnaire's dimensions. Six dimensions were identified for this purpose.

Step 2 An open-ended questionnaire was developed included a number

of unstructured questions to generate challenges i.e. constraints, difficulties and obstacles facing M&E in Education projects in relation to the following dimensions:

- a) Monitoring and Evaluation system.
- b) Stakeholders' participation in monitoring and evaluating the project.
- c) Technical capacity to implement Monitoring and Evaluation.
- d) Reporting requirement by donors (W.B).
- e) Project management' support and response to M&E results.
- f) M&E contribution to project's success.

**Step 3** A pilot study was conducted using the open-ended questionnaire where it was administered to (11) persons from different education projects and World Bank staff overseeing education projects in Yemen.

**Step 4** On the basis of the results obtained from the pilot study and the literature review (90) items were generated that represent possible challenges facing M&E in World Bank Education Projects in Yemen.

These items were grouped under the above identified (6) dimensions: "Monitoring and Evaluation System" (15) items, "stakeholders participation in project M&E" (16) items, "technical capacity to implement M&E" (13) items, "reporting requirements by donors (W.B)" (9) items, "project management support and response to M&E results" (16) items, and "M&E contribution to project's success" (21) items.

**Step 5** A draft closed ended questionnaire including the above (90) items was validated to determine its suitability for collecting data on the challenging factors facing M&E using "Content Validity Method" where it was reviewed by (5) referees who have experience in projects. As a result of the experts review, the items were reduced from (90) to (74).

**Step 6** Closed-ended questionnaire including (74) item was developed requesting respondents to respond to each item in the questionnaire on a five-point scale: Strongly Agree (5), Agree (4), Fairly Agree (3), Disagree (2), Strongly Disagree (1).

**Step 7** For further examination of the research instrument's validity it was subjected to "Internal Consistency" where the data of (40) respondents

were used to compute correlation coefficients between the score of each item and the total score of the questionnaire and between the score of each item and the total score of the dimension it belongs to. Pearson's Correlation Coefficient between each item's score and the total score of the questionnaire are shown in the following table (3).

Table (3) Correlation coefficients between total score of the Questionnaire and each item's scores

Item No	Pearson	Sig	ItemNo	Pearson	Sig	Item No	Pearson	Sig
1	**695.	000.	26	**441.	005.	51	**637.	000.
2	**522.	001.	27	128.	437.	52	8*593.	000.
3	**687.	000.	28	**728.	000.	53	**687.	000.
4	**616.	000.	29	**732.	000.	54	**690.	000.
5	**657.	000.	30	**496.	002.	55	**513.	001.
6	**745.	000.	31	**533.	001.	56	**656.	000.
7	*392.	012.	32	**429.	007.	57	**670.	000.
8	**677.	000.	33	**483.	002.	58	**526.	000.
9	**416.	008.	34	**496.	001.	59	**587.	000.
10	**549.	000.	35	**602.	000.	60	**717.	000.
11	**688.	000.	36	**647.	000.	61	**538.	000.
12	**645.	000.	37	*404.	011.	62	**552.	000.
13	**617.	000.	38	*351.	026.	63	**590.	000.
14	**692.	000.	39	**720.	000.	64	**573.	000.
15	**669.	000.	40	**750.	000.	65	**601.	000.
16	**574.	000.	41	**527.	000.	66	**445.	005.
17	*393.	015.	42	**504.	000.	67	**555.	000.
18	**417.	008.	43	**618.	000.	68	**558.	000.
19	**515.	001.	44	**607.	000.	69	**608.	000.
20	**604.	000.	45	**620.	000.	70	**597.	000.
21	*356.	026.	46	**425.	008.	71	**678.	000.
22	*344.	032.	47	**622.	000.	72	*356.	026.
23	**503.	001.	48	**560.	000.	73	*364.	021.
24	**452.	004.	49	**751.	000.	74	*372.	018.
25	**578.	000.	50	**641.	000.			

\*\*Correlation is significant at the 0.01 level (2-tailed)

\* Correlation is significant at the 0.05 level (2-tailed)

The results indicate clearly that all the correlation coefficients are significant at 0.01 or 0.05 except item number (27) which was not correlated with the total score of the questionnaire. Therefore, it was deleted from the questionnaire.

Correlation coefficients were also calculated between the scores of the items and the total scores of each dimension to which they belong. The results are shown in the following table ( 4 ).

Table (4) Correlation coefficients between total score of each Dimension and its items

Dimension	Item No	Pearson	Sig	Item No	Pearson	Sig
<b>D1</b> Monitoring and Evaluation System (14) items	1	**680.	000.	8	**733.	000.
	2	**599.	000.	9	**419.	007.
	3	**639.	000.	10	**606.	000.
	4	**654.	000.	11	**724.	000.
	5	**775.	000.	12	**655.	000.
	6	**783.	000.	13	**647.	000.
	7	*383.	015.	14	**709.	000.
<b>D2</b> Stakeholders participation in project M&E (13) items	15	**754.	000.	22	**819.	000.
	16	**770.	000.	23	**837.	000.
	17	**754.	000.	24	**710.	000.
	18	**621.	000.	25	516.	001.
	19	**841.	000.	26	**642.	000.
	20	**756.	000.	27	**552.	000.
	21	**666.	000.			
<b>D3</b> Technical capacity to implement M&E (11) item	28	**694.	000.	34	**695.	000.
	29	**710.	000.	35	**775.	000.
	30	**515.	001.	36	**578.	000.
	31	**590.	000.	37	**430.	006.
	32	*389.	016.	38	**486.	001.

	33	**698.	000.			
<b>D4</b> Reporting requirements by donors (W.B) (6) items	39	**838.	000.	42	**845.	000.
	40	**852.	000.	43	**733.	000.
	41	**716.	000.	44	**650.	000.
<b>D5</b> Project management support and response to M&E results” (13) items	45	**797.	000.	52	**773.	000.
	46	**604.	000.	53	**694.	000.
	47	**692.	000.	54	**785.	000.
	48	**675.	000.	55	**669.	000.
	49	**648.	000.	56	**822.	000.
	50	681.	000.	57	601.	000.
	51	**720	000.			
<b>D6</b> M&E contribution to project’s success (17) item	58	**637.	000.	67	**704.	000.
	59	**674.	000.	68	**784.	000.
	60	**701.	000.	69	**739.	000.
	61	**655.	000.	70	**750.	000.
	62	**638.	000.	71	**805.	000.
	63	**624.	000.	72	**427.	007.
	64	**681.	000.	73	**651.	000.
	65	**660.	000.	74	**581.	000.
	66	**598.	000.			

\*\*Correlation is significant at the 0.01 level (2-tailed)

\* Correlation is significant at the 0.05 level (2-tailed)

Looking at the correlation coefficients between dimensions’ scores and items’ scores belonging to them it can be noticed that all the correlation coefficients are significant at (0.01) or (0.05). This indicates that each dimension of the questionnaire has an internal consistency and hence it can be concluded that the items in each dimension are suitable for data collection.

### Instrument Reliability

Reliability was computed by two methods, Cronbach's Alpha and Split Have method using SPSS. The value of Cronbach's Alpha was computed for the questionnaire and its dimensions. The values computed are shown in the

following table (5).

Table (5) Values of Cronbach's Alpha for the total questionnaire and its Dimensions

Questionnaire Dimensions	Cronbach's Alpha	Number of items	Questionnaire Dimensions	Cronbach's Alpha	Number of items
D1	0.92	14	D4	0.88	6
D2	0.93	13	D5	0.93	13
D3	0.87	11	D6	0.94	17
Total Questionnaire	0.98	74			

It can be seen from the above table that the Cronbach's values for the questionnaire dimensions ranges between (0.88) and (0.98) which are appropriate values indicating the reliability of the questionnaire.

The value of reliability coefficient resulted from using Split have method was (0.887), which also indicates that the questionnaire in general is characterized by a high degree of reliability.

It should be pointed out that the total number of the final closed-ended questionnaire's items become (73) representing challenges that might face M&E in the World Bank Education Projects in Yemen. These items were distributed on the six dimensions: "Monitoring and Evaluation System" (14) items, "stakeholders' participation in project M&E" (12) items, "technical capacity to implement M&E" (11) items, "reporting requirements by donors (W.B)" (6) items, "project management support and response to M&E results" (13) items, and "M&E contribution to project's success" (17) items.

### Data Analysis

The data were analyzed using SPSS where the following statistical methods were used: Means, standard deviations, One Sample T-Test Pearson correlation coefficients, Cronbach's Alpha and Split Have Method.

### Results and discussion

For the purpose of generalizability of the challenges descriptive statistics, Means and Standard Deviations were computed for each item (Challenge) for the total sample and were rank ordered from the highest to the lowest mean of the scores as shown in the following table ( 6 ).

Table (6) Means and Standard Deviations (ST) for questionnaire items rank ordered from the highest to the lowest means for the responses of the sample

Rank	Item	Mean	ST	Rank	Item	Mean	ST
1	Item71	4.16	1.137	38	Item10	3.41	990.
2	Item16	3.97	847.	39	Item3	3.40	1.098
3	Item72	3.94	979.	40	Item6	3.39	962.
4	Item18	3.86	916.	41	Item67	3.38	993.
5	Item33	3.84	940.	42	Item62	3.37	969.
6	Item17	3.83	889.	43	Item42	3.37	955.
7	Item37	3.82	958.	44	Item30	3.37	1.094
8	Item32	3.78	929.	45	Item14	3.37	978.
9	Item48	3.75	967.	46	Item7	3.37	1.015
10	Item36	3.75	980.	47	Item12	3.35	1.004
11	Item54	3.74	1.050	48	Item1	3.34	1.008
12	Item57	3.73	970.	49	Item13	3.33	996.
13	Item73	3.66	918.	50	item23	3.32	1.000
14	Item66	3.64	953.	51	Item52	3.27	1.089
15	Item35	3.64	1.009	52	Item25	3.27	1.040
16	Item22	3.63	1.123	53	Item45	3.26	1.110
17	Item70	3.62	871.	54	Item5	3.25	1.080
18	Item34	3.62	970.	55	Item50	3.24	1.034
19	Item47	3.61	971.	56	Item68	3.24	1.100
20	Item26	3.61	993.	57	Item20	3.24	1.168
21	Item69	3.60	972.	58	Item11	3.23	891.
22	Item9	3.60	989.	59	Item8	3.22	1.094
23	Item59	3.58	1.081	60	Item29	3.16	947.
24	Item58	3.57	1.046	61	Item40	3.13	1.068
25	Item19	3.57	1.046	62	Item21	3.13	1.136
26	Item43	3.53	1.096	63	Item65	3.12	1.206
27	Item28	3.53	990.	64	Item2	3.12	1.139
28	Item63	3.52	998.	65	Item41	3.11	1.053
29	item27	3.49	1.054	66	Item64	2.99	1.000



30	Item31	3.47	977.	67	Item51	2.97	1.063
31	Item4	3.46	1.101	68	Item55	2.97	1.112
32	Item15	3.46	1.010	69	Item53	2.97	1.045
33	Item60	3.46	1.072	70	Item44	2.96	1.186
34	Item24	3.46	971.	71	Item61	2.95	1.153
35	Item46	3.43	1.074	72	Item39	2.91	1.157
36	Item49	3.42	1.026	73	Item38	2.85	1.111
37	item56	3.42	1.105				

It can be seen from the above table that the means of the scores of the (73) items ranged between (2.85) "Fairly Agree" and (4.16) "Agree" and that the above results show that none of the means fall in any of the other responses i.e. "Strongly Agree", "Disagree", "Strongly Disagree".

The means in the above table show clearly that respondents tend to "agree" to (34) items representing about (47%) of the total items as challenges facing M&E in their projects where the means of these items ranged between (3.46) and (4.16). The means of the remaining (39) items, representing (53%) of the items, indicate that respondents tend to "Fairly Agree" that they represent challenges where their means ranged between (2.85) and (3.43).

Having presented a very general picture of the results in terms of the means of all items' scores without examining the nature and type of the challenges, the results below are presented and discussed sequentially according to the research questions.

#### 1. Challenges related to "Monitoring and Evaluation System":

The first dimension "Monitoring and Evaluation System" consisted of (14) items (challenges). Means and Standard Deviations for these items were computed, rank ordered from highest to lowest mean and included in the following table (7).

Table (7) Means and Standard Deviations of the challenges related to M&amp;E system rank ordered from the highest to the lowest means

Rank	Item No	Item (Challenge)	Mean	ST
1	Item9	Lack of involvement of project's staff in the development of monitoring and evaluation .plan	3.60	989.
2	Item4	.Weak link of M&E system to reality	3.46	1.101
3	Item10	The difficulty of understanding the M&E matrix of projects by some of the staff, especially the results framework, objectives and outputs	3.41	990.
4	Item3	Lack of effective management information .(system (MIS	3.40	1.098
5	Item6	Deficiencies in determining the desired information to be collected through .monitoring and evaluation	3.39	962.
6	Item14	Lack of appropriateness of some of the data .collection tools with performance indicators	3.37	978.
7	Item7	Weakness in paying attention to electronic management information systems by project .working teams	3.37	1.015
8	Item12	The absence of periodic review of the .monitoring and evaluation system	3.35	1.004
9	Item1	Not continually verifying that performance .indicators are specific and measurable	3.34	1.008
10	Item13	Non-compliance with the data collection tools determined by M&E system when .collecting the data	3.33	996.
11	Item5	The presence of unmeasurable targets or .indicators	3.25	1.080
12	Item11	The difficulty of collecting some of the specified data in monitoring and evaluation .system	3.23	891.
13	Item8	Weakness of the continuous monitoring of .the project's performance	3.22	1.094

14	Item2	The lack of timely specified performance indicators	3.12	1.139
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From the results shown in the above table (7), it can be noticed that the means of the (14) items ranged between (3.12) and (3.60). Item (9) has the highest mean (3.60) within this dimension indicating that respondents tend to agree that “Lack of involvement of project staff in the development of M&E plan” represents a challenge. All the means of the remaining (13) items indicate that respondents tend to agree to some extent that they represent challenges relating to M&E system.

When examining the focus of these items it can be observed that they are challenges concerning the weak link of M&E system to reality, the difficulty of understanding the projects’ M&E matrix by some officials, and the lack of effective management information system (MIS). Also among the items that respondents tend to agree to some extent that they represent challenges facing M&E come the shortcoming in determining the desired information to be collected through M&E, lack of appropriateness of some of the data collection tools with performance indicators, weak attention to electronic MIS by project’s team and the absence of periodic review of the M&E system. Next in order come the challenges that are concerned with the lack of continually verifying that performance indicators are specific and measurable, the non-compliance with the data collection tools determined by M&E system when collecting the data, the presence of unmeasurable targets or indicators, the difficulty of collecting some of the specified data in M&E system, the weakness in continuous monitoring of the project’s performance and the lack of timely specified performance indicators.

Such results might indicate shortcomings regarding the involvement of project staff in the development of M&E plan. They also could be attributed to project staff negligence on the study and understanding of project documentation as well as the deficiencies in staff training.

Some of the findings revealed by this study tend to agree with some findings of previous studies such as the study of Wanjiru (2013) where his findings indicated that there are difficulties in the application of the M&E

systems. The findings of this study are supported by the study of Karani et al. (2014) which showed that M&E plan has been a success with stakeholders being involved in the planning.

## 2. Challenges related to “Stakeholders participation in project M&E”:

The dimension “Stakeholders participation in project M&E” consisted of (12) items. Means and Standard Deviations for these items were computed and rank ordered in the following table (8).

Table (8) Means and Standard Deviations of the challenges related to stakeholders participation in M&E rank ordered from the highest to the lowest mean

Rank	Item No	Item (Challenge)	Mean	ST
1	Item16	Misconception among many beneficiaries, which makes monitoring and evaluation as an audit function and not a tool to ensure the achievement of project objectives	3.97	847.
2	Item18	The absence of a clear understanding of the beneficiaries of the benefits from their provision of data	3.86	916.
3	Item17	Deficiencies in the provision of beneficiaries the required data on time	3.83	889.
4	Item22	Negative feeling among some beneficiaries that they are not responsible for the success of the project as long as they are not assigned official duties	3.63	1.123
5	Item26	The disagreements between the beneficiaries on the implementation of the project	3.61	993.
6	Item19	Weak sense of ownership of the beneficiaries of the project as a result of not involving them in the process of monitoring and evaluation	3.54	1.141

7	Item15	Lack of clarity in the procedures contained in the project management processes to ensure the continued participation of the beneficiaries in the monitoring and .evaluation process	3.46	1.010
8	Item24	The negative impression of the beneficiaries that M&E reports are not being used .seriously in taking correct actions	3.46	971.
9	item23	Limited opportunities for beneficiaries to provide constructive views on the progress of work, which may contribute to the .improved performance	3.32	1.000
10	Item25	Negligence of beneficiaries' views and .suggestions, if any	3.27	1.040
11	Item20	Non- involvement of project beneficiaries .in the planning process	3.24	1.168
12	Item21	Non-involvement of the projects .beneficiaries in the implementation process	3.13	1.136

From the results shown in the above table it is clear that the respondents tend to agree that the majority of the items relating to "Stakeholders participation in project M&E" where the means of (8) out of (12) items, representing (67%) of the items ranged between (3.46) and (3.97). When looking at the nature of these items it is clear that they are challenges concerning the beneficiaries' misconception of M&E function, the unclear understanding of the beneficiaries of the benefits from their provision of data, deficiencies in the provision of the required data by beneficiaries on time, and the negative feeling among some beneficiaries that they are not responsible for the success of the project. Come next the challenges concerned with the disagreements between the beneficiaries on the implementation of the project, weak sense of ownership of the beneficiaries of the project, lack of clarity in the procedures contained in the project management processes to ensure the continued participation of the beneficiaries in the M&E process and the negative impression of the beneficiaries that M&E reports are not being used seriously in taking corrective actions.

The means of (4) of the items ranged between (3.13) and (3.32) indicating that respondents tended to agree to some extent that they represent challenges. These challenges include the limited opportunities for beneficiaries to provide constructive views on the progress of projects work, the negligence of beneficiaries' views and suggestions, non-involvement of project beneficiaries in the planning and the implementation processes.

Such findings could be attributed in some aspects to the lack of beneficiaries' awareness regarding their roles in the project implementation process and the lack of understanding the purposes of M&E and the position of project M&E as important components of the projects' functions. Also some of the above results could be due to lack of effective involvement of beneficiaries in M&E and project implementation processes.

The results revealed by this study regarding the challenges concerned with "Stakeholders participation in project M&E" generally agreed with the study done by Mutua (2015) which revealed that the limited involvement of primary stakeholders as one of the factors affecting M&E. The challenges identified by this study are also partially supported by Karani et al. (2014) where they found that M&E plan has been a success with stakeholders being involved in the planning.

### 3. Challenges related to "technical capacity to implement M&E":

Eleven items were included under this dimension "Technical capacity to implement M&E". Means of the respondents' scores on these items were computed and rank ordered in the following table (9).

Table (9) Means and Standard Deviations of the challenges related to "Technical Capacity to Implement M&E rank ordered from the highest to the lowest mean

Rank	Item No	Item (Challenge)	Mean	ST
1	Item33	Limited training for the monitoring and .evaluation staff	3.84	940.
2	Item37	The weakness of beneficiaries' awareness .and knowledge of the importance of M&E	3.82	958.

3	Item32	The limited financial resources allocated for the training of the M&E staff	3.78	929.
4	Item36	Lack of adequate training of beneficiaries on projects M&E	3.75	980.
5	Item35	The Limited human resources assigned for the implementation of M&E activities	3.64	1.009
6	Item34	The inadequacy of the financial resources allocated for M&E process	3.62	970.
7	Item28	Lack of experience of those who work in M&E of projects	3.53	990.
8	item27	Weakness of the analysis capacity and skills of many of those working in the M&E	3.49	1.054
9	Item31	The low level of awareness and knowledge of the project team in M&E system	3.47	977.
10	Item30	Inadequacy of external training courses that are held for some of those engaged in the M&E for their needs	3.37	1.094
11	Item29	The lack of willingness in self-learning in the field of M&E	3.16	947.

The means in the above table show clearly that the majority of items relating to the “Technical Capacity to Implement M&E” occupy the top in rank order where respondents tend to agree to (9) out of the (11) items as representing challenges where means ranged between (3.47) and (3.84). When examining the nature of these items, it was found that on top of these items come the challenges of the limited training for the M&E staff followed by the weakness of beneficiaries’ awareness and knowledge of the importance of M&E, the limited financial resources allocated for the training of the M&E staff and the lack of adequate training of beneficiaries on projects M&E. Next come the challenges concerning the limited human resources assigned for the implementation of M&E activities, the inadequacy of the financial resources allocated for M&E process and the lack of experience of those who work in projects M&E. Finally, among the items respondents agree as representing challenges in this dimension, come the weakness of the analysis capacity and



skills of many of those working in the M&E and the low level of awareness and knowledge of the project team in M&E system.

The remaining 2 items rank ordered 10<sup>th</sup> and 11<sup>th</sup>, as the means indicate (3.37) and (3.16) respectively, respondents tend to agree to some extent that they represent challenges. They are concerned with inadequacy of external training for the needs of those working in M&E and the lack of willingness in self-learning in the field of M&E.

Some of the above findings in relation to “Technical Capacity to Implement M&E” could be attributed by the researcher to the insufficient attention given by projects to capacity building of those involved in M&E activities.

This study in terms of the results found tend to agree with the findings of several previous studies such as Mark's study (2007), which revealed that the lack of expertise as one of the most significant challenges, Mugambi' s study (2013) which found poor skills on results-based M&E, Otieno' s study (2014) which found that the lack of expertise was among the most significant challenges and Mutua' s study (2015) which also found that among the factors affecting effective M&E lack of training of those tasked with M&E activities.

#### 4. Challenges related to “Reporting Requirements by Donors (W.B)”:

Means and Standard Deviations for the (6) items composing this dimension were computed and their means were rank ordered from highest to lowest mean and presented in the following table (10)

Table (10) Means and Standard Deviations of the challenges related to ‘Reporting Requirements by donors (W.B) rank ordered from the highest to the lowest mean

Rank	Item No	Item (Challenge)	Mean	ST
1	Item43	The avoidance of highlighting the shortcomings that might lead to reducing .the chances of learning from lessons	3.53	1.096
2	Item42	The difficulty in obtaining information that meets certain reporting requirements in .some cases	3.37	955.

3	Item40	Reporting requirements in English cast a .burden on M&E officer	3.13	1.068
4	Item41	Non-adherence to constant pattern and .requirements for the preparation of reports	3.11	1.053
5	Item39	The lack of models with the Bank for reports preparation in the light of which .the task of M&E staff is facilitated	2.91	1.157
6	Item38	The lack of consensus between the donor and the project management about the requirements for obtaining a meaningful .M&E report	2.85	1.111

The results presented in the above table show that the means of the (6) items ranged between (2.85) and (3.53) indicating that they fall under the responses “Agree” and “Fairly agree”. However only one item among the (6) items which came on top of the items belonging to ‘Reporting Requirements by Donors (W.B)’ that respondents tended to agree as representing a challenge. It is concerned with the avoidance of those reporting M&E results to highlight the shortcomings that might lead to reducing the chances of learning from lessons.

As for the remaining 5 items the means indicate that respondents tended to agree to some extent that they represent challenges. These items are concerned with the difficulty in obtaining information that meet certain reporting requirements in some cases, reporting requirements in English cast a burden on M&E officer, non-adherence to constant pattern and requirements for the preparation of reports, the lack of models with the Bank for reports preparation in the light of which the task of M&E staff is facilitated and the lack of consensus between the donor and the project management about the requirements for obtaining a meaningful report.

Although most of the items of this dimension do not seem to be considered as major challenges by respondents, results shown in this dimension might reflect projects’ staff misconception of the role and objectives of M&E including learning from lessons.

5. Challenges related to “Project Management Support for M&E and

Response to its Findings”:

This dimension consisted of (13) items. Means and Standard Deviations were computed for these items and were rank ordered from highest to lowest and presented in the following table (11).

Table (11) Means and Standard Deviations of the challenges related to “Project Management Support and Response to M&E Results” rank ordered from the highest to the lowest mean

Rank	Item No	Item (Challenge)	Mean	ST
1	Item48	Lack of specialists within project management in policies and strategies formulation to improve performance and to contribute to the change and improvement .decisions in the light of M&E results	3.75	967.
2	Item54	Lack of taking reward and punishment actions according to the results of M&E .reports	3.74	1.050
3	Item47	The failure of the steering committee to search for treatments and solutions for problems to assist project management in .decision-making	3.61	971.
4	Item46	Failure to review the M&E reports by the .Steering Committee	3.43	1.074
5	Item49	The weakness of the project management’s enthusiasm for M&E reports as they often .focus on the negative deviations	3.42	1.026
6	item56	Engagement of project management in .routine operational tasks	3.42	1.105
7	Item52	Lack of addressing project’s deviations and failures shown by M&E process by the .project management	3.27	1.089
8	Item45	Poor cooperation from staff and colleagues .with M&E officer	3.26	1.110
9	Item50	The weakness of teamwork by the project .management and M&E staff	3.24	1.034

10	Item51	Not enabling M&E staff to perform their .duties as they should	2.97	1.063
11	Item55	Weakness of project management conviction of the benefit from M&E information and its impact on the success .of the project	2.97	1.112
12	Item53	Lack of project management reliance on information provided by the M&E in the .decision-making	2.97	1.045
13	Item44	Weakness of project manager's commitment to oversee and provide the .necessary support for M&E process	2.96	1.186

From the results presented above it can be noticed that the means of the (13) items ranged between (2.96)- Fairly Agree and (3.75)- Agree. However, among the (13) items listed in the table above, the means show that only (3) items respondents tended to agree as representing challenges facing M&E in W.B Education Projects. These challenges have to do with the lack of specialists within project management in policies and strategies formulation to improve performance and to contribute to the change and improvement decisions in the light of monitoring and evaluation results, the lack of taking reward and punishment actions according to the results of M&E reports and the failure of the steering committee to search for treatments and solutions for problems to assist project management in decision-making.

All the remaining ten items that relate to "Project Management Support for M&E and Response to its findings" seem to fall within the response 'Fairly Agree' indicating they are to some extent considered by respondents as representing challenges. These challenges involve failure to review the M&E reports by the Steering Committee, the weakness of the project management's enthusiasm for M&E reports as they often focus on the negative deviations, the engagement of project management in routine operational tasks, the lack of addressing project's deviations and failures shown by M&E process by the project management and poor cooperation from staff and colleagues with M&E officer. Then come next the challenges

that are connected with the weakness of teamwork by the project management and M&E staff, not enabling M&E staff to perform their duties as they should, the weakness of project management conviction of the benefit from M&E information and its impact on the success of the project, the lack of project management reliance on information provided by the M&E in the decision-making and the weakness of project manager's commitment to oversee and provide the necessary support for M&E process.

Results revealed by this study seem to reflect management non utilization of M&E results in taking corrective actions as well as the lack of understanding of the importance of monitoring and evaluation and its objectives in improving projects' performance.

Some of the results regarding the challenges in this dimension "Project management support for M&E and response to its findings" tend to agree with the results of the study conducted by Wanjiru (2013) whose findings indicated that the role of management in the operations of the M&E affects the effectiveness of the M&E.

#### 6. Challenges related to "M&E contribution to project's success":

This dimension consisted of (17) items. Means and Standard Deviations were computed for these items and were rank ordered from highest to lowest mean and presented in the following table (12)

Table (12) Means and Standard Deviations of the items related to M&E contribution to project's success rank ordered from the highest to the lowest mean

Rank	Item No	Item (Challenge)	Mean	ST
1	Item71	Difficult security conditions, conflicts and wars in the country	4.16	1.137
2	Item72	Irregular field visits to ascertain the quality of works and that they are going properly	3.94	979.
3	Item57	.Lack of identifying risks in a timely manner	3.73	970.
4	Item73	Deficiencies in the quality of data collected that help make sound decisions	3.66	918.

5	Item66	The absence of integration between M&E and the rest of the project's departments and non-reliance of each department on other .department's outputs	3.64	953.
6	Item70	The lack of benefit from the accumulated data and information from previous M&E .activities	3.62	871.
7	Item69	The absence of documentation of lessons .learned from the M&E process	3.60	972.
8	Item59	Lack of assessing the challenges in a realistic .way	3.58	1.081
9	Item58	.Lack of following up pending issues	3.57	1.046
10	Item63	The absence of a clear mechanism for the use of information produced by the M&E efforts to determine progress toward achieving the goals and objectives of the .project	3.52	998.
11	Item60	Failure to prepare the required reports in a .timely manner	3.46	1.072
12	Item67	Non-receipt of project implementing entities effective feedback from the results of M&E .for use in the planning process	3.38	993.
13	Item62	Weakness in communication mechanisms of the results of M&E activities to the .beneficiaries	3.37	969.
14	Item68	Lack of communication between the .management of information and M&E staff	3.24	1.100
15	Item65	The dissemination of M&E reports in English prevents the project's beneficiaries .benefiting from them	3.12	1.206
16	Item64	M&E process does not provide adequate information for the purpose of preparing the .annual project plan	2.99	1.000
17	Item61	Failure to involve M&E staff in management's meetings with concerned .officials	2.95	1.153

As it can be seen from the results of the above table (12) the means of the items listed ranged between (2.95)- Fairly Agree and (4.16)- Agree. Among the seventeen items comprising the above dimension, (11) items are positioned within the response “Agree” where their means ranged between (3.46) and (4.16) indicating respondents’ consent that they represent challenges relating to M&E contribution to project’s success. Among these (11) challenges comes, as the means indicate, the “difficult security conditions, conflicts and wars” to occupy the first challenge in this dimension followed by the challenges regarding the irregular field visits to ascertain the quality of works and that they are going properly, the lack of identifying risks in a timely manner, the deficiencies in the quality of data collected that help in taking sound decisions and the absence of integration between M&E and the rest of the project’s departments and the non-reliance of each department on other department’s outputs. Next come the challenges that are concerned with the lack of benefit from the accumulated data and information from previous M&E, the absence of documentation of lessons learned from the M&E process, lack of assessing the challenges facing project implementation in a realistic way, lack of following up pending issues. Finally, among the (11) challenges, come the challenges concerning the absence of a clear mechanism for the use of information produced by the M&E efforts to determine progress toward achieving the goals and objectives of the project and the failure to prepare the required reports in a timely manner.

With regard to the remaining (6) items relating to “M&E contribution to project’s success’ it can be noticed that their means ranged between (2.95) and (3.38) indicating that respondents agreed to some extent that they represent challenges. These challenges revolve around the non-receipt of project implementing entities effective feedback from the results of M&E for use in the planning process, the weakness in communication mechanisms of the results of M&E activities to the beneficiaries, the lack of communication between the management of information and M&E staff, the dissemination of M&E reports in English prevents the project’s beneficiaries benefiting from them, M&E process not providing adequate information for the purpose of



preparing the annual project plan and the failure to involve M&E staff in management's meetings with concerned officials.

The results shown by this study on the challenges relating to "M&E contribution to project's success" could be partly explained by the limited opportunities and practices that might limit the effective contribution of M&E to projects success such as the political situation in the country, the inappropriate implementation of M&E, not benefiting from M&E results in and efforts in improving decision making' the inappropriate communication and dissemination of M&E results, and above all the lack of understanding of the role that M&E can play in improving projects management.

Having explored the challenges within each dimension through answering the research questions, it might be useful to explore the relative agreement of respondents at the level of the total scores of the questionnaire and each dimension. Therefore means of the total score of each dimension were computed and the mean of each dimension was divided by the number of items belonging to it for the purpose of obtaining means that correspond to the questionnaire's responses i.e. Strongly Agree (5), Agree (4), Fairly Agree (3), Disagree (2), Strongly Disagree (1) so that rank ordering them becomes meaningful. On the basis of this process the dimensions were rank ordered from the highest to the lowest mean in the following table (4.8).

Table (13) Means and Standard Deviations of the dimensions' total scores rank ordered from the highest to the lowest mean

Rank	D. No	Name and No of	Total scores Mean	Response Mean	ST
1	D3	Technical capacity to	38.71	3.52	7.08
2	D2		41.66	3.47	9.34
3	D6	M&E	58.16	3.42	11.96
4	D1		45.95	3.28	10.08
5	D5	Project	41.55	3.20	11.70

6	D4	Reporting	18.18	3.03	5.62
The questionnaire as a whole	244.21	3.35	43.77		

From the results shown in the above table (13) it can be observed that the means of the dimensions' total scores show that (2) dimensions occupy the highest rank in the order of respondents' agreement indicating that "Technical capacity to implement M&E" represents the 1st challenging factor and "Stakeholders participation in project M&E" representing the 2nd challenging factor with means (3.52), (3.47) respectively.

The other (4) dimensions come next in terms of the relative agreement of respondents where their means ranged between (3.03) and (3.42) indicating overall agreement by respondents that they represent to some extent challenging factors. However, as it appears from the above results, these challenging factors come in order i.e. "M&E contribution to project's success" occupies the 3rd challenging factor, "Monitoring and Evaluation System" represents the 4th challenging factor. While the 5th challenging factor is "Project management support and response to M&E results", the least challenging factor is "Reporting requirements by donors (W.B) as it occupies the 6th and last in rank order of the means.

## Conclusions

On the basis of the findings of this study, some conclusions can be drawn by the researchers as follows:

- The findings of this study demonstrated the high level of respondents' assent to almost half of the challenges as representing challenges and an assent to some extent that the other half as representing challenges facing M&E in the World Bank education projects.
- From the study findings, it can be concluded that M&E in the World Bank Education Projects in Yemen faced several challenging factors with some varying degrees.
- The findings demonstrated that the first factor in which the challenges facing M&E in Education projects were prominent was "Technical

capacity to implement M&E”. It was the most challenging factor in terms of the inadequate quantity and quality of M&E staff and the limited training opportunities provided.

- Stakeholders’ participation in project M&E is another dominant challenging factor which was manifested in beneficiaries’ misunderstanding, practices, behavior and attitudes towards M&E function in the World Bank education projects.
- M&E contribution to project’s success is another challenging factor facing M&E in Education Projects. It was the third challenging factor in order including challenges that might limit project’s success in terms of the political and security environment, shortcomings in M&E function and project management practices and function.
- A fourth challenging factor, in importance, facing M&E in education projects was “Monitoring and Evaluation System” in terms of lack of understanding of M&E logical framework by projects’ staff, inappropriateness of some performance indicators and some of the data collection tools and M&E systems not being subjected to periodic review.
- Another challenging factor that came fifth in importance is “Project Management Support and Response to M&E Results” through challenges associated with the lack of some competencies of project management and some negative practices and attitudes towards M&E.
- “Reporting requirements by donors (W.B)” represented the least challenging factor facing M&E in the World Bank Education Projects in Yemen with challenges relating to nonfulfillment of and nonadherence to some reporting requirements.

## Recommendations

Upon the conclusion of the study and after careful examination of the findings, the researchers recommend the following:

1. M&E staff in education projects should be trained so as to contribute to the effectiveness of the Monitoring and Evaluation in their projects. Training should be tailored towards the knowledge and skills needed

including M&E tools, methods, approach and concepts. Such training should be done more often so as to cope with the ever changing project environment and changing challenges.

2. The project managers should ensure that they employ staff with the required technical expertise with the required number for the implementation of M&E activities and offer them the necessary training to carry out the M&E function effectively.
3. Raising the level of awareness and knowledge of the project teams as well as beneficiaries on projects monitoring and evaluation to be more supportive and responsive to M&E results and requirements.
4. Awareness and understanding among the beneficiaries of the purposes of M&E and of the importance and benefits of the data they provide should be established and ensured.
5. Creating strong sense of ownership of the beneficiaries of the project and involving them in the process of M&E to share the responsibility for the success of the project and assist the long term sustainability
6. Project management should ensure clarity in the procedures contained in the project management processes to ensure the continued participation of the beneficiaries in the M&E process.
7. Careful identification of risks in a timely manner, assessment the challenges in a realistic way and following up pending issues.
8. Documentation of lessons learned from the monitoring and evaluation process.
9. A mechanism for the use of information produced by the M&E efforts should be established and followed to determine progress toward achieving the goals and objectives of the project.
10. Transparency in highlighting the shortcomings that might lead to reducing the chances of learning from lessons.

## Recommendation for Further Research

1. As this study explored the challenges facing M&E in the World Bank Education projects in Yemen, Further research needs to be carried out to explore the challenges facing other World Bank projects in Yemen in order to obtain more holistic information on these challenges.
2. A study could be conducted to investigate how to strengthen primary stakeholders in education projects particularly how to ensure the beneficiaries can participate effectively in monitoring and evaluating their projects.
3. Another study could be carried out using a qualitative approach to understand the challenges facing M&E in the World Bank Education projects in Yemen to obtain in-depth views of the challenges.

## References

1. Bank Information Center (BIC) (2013). An Overview of the World Bank in Yemen and Civil Society's Role. Available from: <http://www.bankinformationcenter.org>
2. The World Bank Information Center (BIC) BIC (2015). <http://www.bankinformationcenter.org>.
3. Bertelsmann Stiftung, BTI (2014). Yemen Country Report. Gütersloh: Bertelsmann Stiftung, 2014.
4. Cambridge English Dictionary Available from: <http://dictionary.cambridge.org/dictionary/english/challenge> retrieved on September, 28, 2015.
5. Gay, L.R., (1996). Educational Resaearch Competencies for Analysis and Application (5<sup>th</sup> Edition). New Jersey: Prentice-Hall, Inc.
6. Gliner, J. A.; Morgan, G. A.; Leech, N.L. (2009). Research Methods in Applied Settings( 2<sup>nd</sup>ed). New York: Tylor & Francis Group.
7. Kamau, C. G. and Bin Mohamed, H. (2015). Efficacy of Monitoring and Evaluation Function in Achieving Project Success in Kenya: A Survey of County Government's Projects. International Journal of Advances in Management and Economics. | Vol.4 | Issue 3 |168-179 168. Available

online at: [www.managementjournal.info](http://www.managementjournal.info).

8. Karani, F. N. ;Bichanga, W. O. and Kamau,C. G. (2014). Effective use of monitoring and evaluation systems inmanaging HIV/AIDS related projects: A case study of localNGOS in Kenya. *Science Journal of Business and Management*. Vol. 2, No. 2, 2014, pp. 6776-.
9. Kariuki, J. G. (2014). An Exploration of the Guiding Principles, Importance and Challenges of Monitoring and Evaluation of Community Development Projects and Programmes. *International Journal of Business and Social Science* Vol. 5 No. 1; January 2014.
10. Mark, M. (2007). Monitoring and Evaluation Practices and Challenges of Gaborone Based Local NGOs Implementing HIV/Aids Projects in Botswana. Master Thesis. University of Botswana.
11. Mugambi, F. and Kanda, E. (2013). Determinants Of Effective Monitoring And Evaluation Of Strategy Implementation Of Community Based Projects. *International Journal of innovative Research and Development*. [www.ijird.com](http://www.ijird.com) November, 2013 Vol 2 Issue 11. ISSN: 2278 – 0211 (Online).
12. Mutua, N. (2013). Factors Affecting the Effectiveness of Monitoring and Evaluation of Constituency Development Fund in Changamwe Constituency, Kenya. *Journal of International Academic Research for Multidisciplinary*. Retrieved on: 11 September 2015.
13. Mwangi, J.K.; wara, Ben MaisibaNyang, W. B; Ole Kulet, Jackson Lemomo (2015). Factors Affecting the Efectiveness of Monitoring and Evaluation of Constituency Development Fund Projects In Kenya: A Case of Laikipia West Constituency. *IOSR Journal of Economics and Finance (IOSR-JEF)* e-ISSN: 2321-5933, p-ISSN: 2321-5925. Volume 6, Issue 1. Ver. I (Jan.-Feb. 2015), PP 74-87 [www.iosrjournals.org](http://www.iosrjournals.org)
14. OECD Development Assistance Committee (DAC) (2010). Glossary of Key Terms in Evaluation and Results Based Management. Paris
15. [http://www.oecd.org/document/210,3343,en\\_2649\\_34435\\_40381973\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/210,3343,en_2649_34435_40381973_1_1_1_1,00.html)
16. Otieno, O. S.(2014). Determinant of effective monitoring and evaluation

- systems a case study of national youth service empowerment projects (Nairobi region). Available from:URI: <http://ir-library.ku.ac.ke/handle/12345678911865/>
17. Project Management Institute (PMI) (2004). A Guide to the Project Management Body of Knowledge. 3rd Edition (PMBOK Guide) an American National Standard.
  18. United Nations Development Programme (UNDP) (2009). Handbook on Planning, Monitoring and Evaluating for Development Results United Nations Development Programme UNDP 2009, Handbook Web site: <http://www.undp.org/eo/handbook>.
  19. United Nations Development Programme (UNDP2002()) Evaluation Office - Handbook on Monitoring and Evaluating for Results. New York, USA available from: <http://web.undp.org/evaluation/documents/handbook/me-handbook.pdf>
  20. USAID ( 2014). Yemen Country Development Strategy 20142016-.
  21. Wanjiru, W.E. (2013). Determinants of Effective Monitoring and Evaluation Systems in Non-Governmental Organizations within Nairobi County, Kenya. Master Degree. Kenyatta University.
  22. The World Bank (2007) Monitoring and Evaluation: Tips for Strengthening Organizational Capacity, Available from <http://siteresources.worldbank.org/INTBELARUS/Resources/M&E.pdf>.
  23. The World Bank and the Republic of Yemen (2010). Republic of Yemen Education Status Report: Challenges and Opportunities: Summary.
  24. The World Bank (2013). World Development Indicators 2013. Available from: <http://databank.worldbank.org>